

ANALYTICAL REPORT

PREPARED FOR

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JOB DESCRIPTION

RED-HILL
Weekly PFAS

JOB NUMBER

380-146125-1

Eurofins Eaton Analytical Pomona

Job Notes

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

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

Compliance Statement

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

Authorization



Authorized for release by
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Definitions/Glossary

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

Qualifiers

LCMS

Qualifier	Qualifier Description
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
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: RED-HILL

Job ID: 380-146125-1

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Job Narrative 380-146125-1

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

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 4/16/2025 10:20 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

EPA 537.1 and EPA 533 are two distinct methods for the analysis of PFAS in drinking water. The analyses are conducted on differing instrumentation, with calibrations, extraction solvents and sample preservatives being dissimilar among the two methods. Therefore it is probable and not unexpected to see the methods having slight variations in analytical results.

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

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Detection Summary

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

Client Sample ID: MOANALUA WELLS (331-223-TP202)
PWSID Number: HI0000331

Lab Sample ID: 380-146125-1

No Detections.

Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1
(331-206-TP065)
PWSID Number: HI0000331

Lab Sample ID: 380-146125-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanesulfonic acid (PFHxS)	2.7		2.0	ng/L	1		533	Total/NA
Perfluorohexanoic acid (PFHxA)	2.5		2.0	ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.4		2.0	ng/L	1		533	Total/NA
Perfluoropentanoic acid (PFPeA)	2.8		2.0	ng/L	1		533	Total/NA

Client Sample ID: AIEA GULCH WELLS PUMP 1
(331-201-TP071)
PWSID Number: HI0000331

Lab Sample ID: 380-146125-3

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanesulfonic acid (PFOS)	2.4		2.0	ng/L	1		537.1	Total/NA
Perfluorohexanoic acid (PFHxA)	2.4		2.0	ng/L	1		537.1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.7		2.0	ng/L	1		537.1	Total/NA

Client Sample ID: AIEA GULCH WELLS PUMP 2
(331-202-TP072)
PWSID Number: HI0000331

Lab Sample ID: 380-146125-4

No Detections.

Client Sample ID: FB Moanalua Wells
PWSID Number: HI0000331

Lab Sample ID: 380-146125-5

No Detections.

Client Sample ID: FB Halawa Wells Units 1&2
PWSID Number: HI0000331

Lab Sample ID: 380-146125-6

No Detections.

Client Sample ID: FB Aiea Gulch Wells Pump 1
PWSID Number: HI0000331

Lab Sample ID: 380-146125-7

No Detections.

Client Sample ID: FB Aiea Gulch Wells Pump 2
PWSID Number: HI0000331

Lab Sample ID: 380-146125-8

No Detections.

This Detection Summary does not include radiochemical test results.

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Client Sample Results

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

Client Sample ID: MOANALUA WELLS (331-223-TP202)

Lab Sample ID: 380-146125-1

Date Collected: 04/14/25 09:33

Matrix: Drinking Water

Date Received: 04/16/25 10:20

PWSID Number: HI0000331

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		04/18/25 07:31	04/19/25 02:06	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9CI-PF3ONS)	<2.0		2.0	ng/L		04/18/25 07:31	04/19/25 02:06	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		04/18/25 07:31	04/19/25 02:06	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		04/18/25 07:31	04/19/25 02:06	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		04/18/25 07:31	04/19/25 02:06	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		04/18/25 07:31	04/19/25 02:06	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		04/18/25 07:31	04/19/25 02:06	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		04/18/25 07:31	04/19/25 02:06	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		04/18/25 07:31	04/19/25 02:06	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		04/18/25 07:31	04/19/25 02:06	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		04/18/25 07:31	04/19/25 02:06	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		04/18/25 07:31	04/19/25 02:06	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		04/18/25 07:31	04/19/25 02:06	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		04/18/25 07:31	04/19/25 02:06	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		04/18/25 07:31	04/19/25 02:06	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		04/18/25 07:31	04/19/25 02:06	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		04/18/25 07:31	04/19/25 02:06	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		04/18/25 07:31	04/19/25 02:06	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		04/18/25 07:31	04/19/25 02:06	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		04/18/25 07:31	04/19/25 02:06	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		04/18/25 07:31	04/19/25 02:06	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		04/18/25 07:31	04/19/25 02:06	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		04/18/25 07:31	04/19/25 02:06	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		04/18/25 07:31	04/19/25 02:06	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		04/18/25 07:31	04/19/25 02:06	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	84		50 - 200	04/18/25 07:31	04/19/25 02:06	1
13C6 PFDA	87		50 - 200	04/18/25 07:31	04/19/25 02:06	1
13C5 PFHxA	94		50 - 200	04/18/25 07:31	04/19/25 02:06	1
13C4 PFHpA	94		50 - 200	04/18/25 07:31	04/19/25 02:06	1
13C8 PFOA	86		50 - 200	04/18/25 07:31	04/19/25 02:06	1
13C9 PFNA	88		50 - 200	04/18/25 07:31	04/19/25 02:06	1
13C7 PFUnA	87		50 - 200	04/18/25 07:31	04/19/25 02:06	1
13C2 PFDoA	84		50 - 200	04/18/25 07:31	04/19/25 02:06	1
13C4 PFBA	97		50 - 200	04/18/25 07:31	04/19/25 02:06	1
13C5 PFPeA	93		50 - 200	04/18/25 07:31	04/19/25 02:06	1
13C3 PFBS	101		50 - 200	04/18/25 07:31	04/19/25 02:06	1
13C3 PFHxS	106		50 - 200	04/18/25 07:31	04/19/25 02:06	1
13C8 PFOS	103		50 - 200	04/18/25 07:31	04/19/25 02:06	1

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Client Sample Results

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

Client Sample ID: MOANALUA WELLS (331-223-TP202)

Lab Sample ID: 380-146125-1

Date Collected: 04/14/25 09:33

Matrix: Drinking Water

Date Received: 04/16/25 10:20

PWSID Number: HI0000331

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	121		50 - 200	04/18/25 07:31	04/19/25 02:06	1
13C2-6:2-FTS	121		50 - 200	04/18/25 07:31	04/19/25 02:06	1
13C2-8:2-FTS	113		50 - 200	04/18/25 07:31	04/19/25 02:06	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:07	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:07	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:07	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:07	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:07	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:07	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:07	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:07	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:07	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:07	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:07	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:07	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:07	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:07	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:07	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:07	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:07	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	96		70 - 130			04/17/25 15:35	04/19/25 00:07	1
13C2 PFHxA	107		70 - 130			04/17/25 15:35	04/19/25 00:07	1
13C2 PFDA	102		70 - 130			04/17/25 15:35	04/19/25 00:07	1
13C3-GenX	98		70 - 130			04/17/25 15:35	04/19/25 00:07	1

Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)

Lab Sample ID: 380-146125-2

Date Collected: 04/14/25 10:05

Matrix: Drinking Water

Date Received: 04/16/25 10:20

PWSID Number: HI0000331

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		04/18/25 07:37	04/18/25 20:00	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:00	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:00	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:00	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:00	1

Eurofins Eaton Analytical Pomona

Client Sample Results

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

**Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1
(331-206-TP065)**

Lab Sample ID: 380-146125-2

Date Collected: 04/14/25 10:05

Matrix: Drinking Water

Date Received: 04/16/25 10:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:00	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:00	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:00	1
Perfluorohexanesulfonic acid (PFHxS)	2.7		2.0	ng/L		04/18/25 07:37	04/18/25 20:00	1
Perfluorohexanoic acid (PFHxA)	2.5		2.0	ng/L		04/18/25 07:37	04/18/25 20:00	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:00	1
Perfluorooctanesulfonic acid (PFOS)	2.4		2.0	ng/L		04/18/25 07:37	04/18/25 20:00	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:00	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:00	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:00	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:00	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:00	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:00	1
Nonfluoro-3,6-dioxahexanoic acid (NFDHA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:00	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:00	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:00	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:00	1
Perfluoropentanoic acid (PFPeA)	2.8		2.0	ng/L		04/18/25 07:37	04/18/25 20:00	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:00	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:00	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	86		50 - 200	04/18/25 07:37	04/18/25 20:00	1
13C6 PFDA	95		50 - 200	04/18/25 07:37	04/18/25 20:00	1
13C5 PFHxA	97		50 - 200	04/18/25 07:37	04/18/25 20:00	1
13C4 PFHpA	97		50 - 200	04/18/25 07:37	04/18/25 20:00	1
13C8 PFOA	90		50 - 200	04/18/25 07:37	04/18/25 20:00	1
13C9 PFNA	93		50 - 200	04/18/25 07:37	04/18/25 20:00	1
13C7 PFUnA	91		50 - 200	04/18/25 07:37	04/18/25 20:00	1
13C2 PFDoA	85		50 - 200	04/18/25 07:37	04/18/25 20:00	1
13C4 PFBA	100		50 - 200	04/18/25 07:37	04/18/25 20:00	1
13C5 PFPeA	99		50 - 200	04/18/25 07:37	04/18/25 20:00	1
13C3 PFBS	103		50 - 200	04/18/25 07:37	04/18/25 20:00	1
13C3 PFHxS	102		50 - 200	04/18/25 07:37	04/18/25 20:00	1
13C8 PFOS	103		50 - 200	04/18/25 07:37	04/18/25 20:00	1
13C2-4:2-FTS	133		50 - 200	04/18/25 07:37	04/18/25 20:00	1
13C2-6:2-FTS	129		50 - 200	04/18/25 07:37	04/18/25 20:00	1
13C2-8:2-FTS	112		50 - 200	04/18/25 07:37	04/18/25 20:00	1

Eurofins Eaton Analytical Pomona

Client Sample Results

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

**Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1
(331-206-TP065)**

Lab Sample ID: 380-146125-2

Date Collected: 04/14/25 10:05

Matrix: Drinking Water

Date Received: 04/16/25 10:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:57	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:57	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:57	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:57	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:57	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:57	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:57	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:57	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:57	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:57	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:57	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:57	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:57	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:57	1
Perfluorotridecanoic acid (PFTTrDA)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:57	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:57	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:57	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	97		70 - 130			04/17/25 15:35	04/18/25 23:57	1
13C2 PFHxA	102		70 - 130			04/17/25 15:35	04/18/25 23:57	1
13C2 PFDA	103		70 - 130			04/17/25 15:35	04/18/25 23:57	1
13C3-GenX	98		70 - 130			04/17/25 15:35	04/18/25 23:57	1

**Client Sample ID: AIEA GULCH WELLS PUMP 1
(331-201-TP071)**

Lab Sample ID: 380-146125-3

Date Collected: 04/14/25 10:33

Matrix: Drinking Water

Date Received: 04/16/25 10:20

PWSID Number: HI0000331

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		04/18/25 07:37	04/18/25 20:21	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:21	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:21	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:21	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:21	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:21	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:21	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:21	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:21	1

Eurofins Eaton Analytical Pomona

Client Sample Results

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

**Client Sample ID: AIEA GULCH WELLS PUMP 1
(331-201-TP071)**

Lab Sample ID: 380-146125-3

Date Collected: 04/14/25 10:33

Matrix: Drinking Water

Date Received: 04/16/25 10:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:21	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:21	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:21	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:21	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:21	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:21	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:21	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:21	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:21	1
Nonafluoro-3,6-dioxahexanoic acid (NFDHA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:21	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:21	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:21	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:21	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:21	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:21	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:21	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	75		50 - 200	04/18/25 07:37	04/18/25 20:21	1
13C6 PFDA	93		50 - 200	04/18/25 07:37	04/18/25 20:21	1
13C5 PFHxA	85		50 - 200	04/18/25 07:37	04/18/25 20:21	1
13C4 PFHpA	89		50 - 200	04/18/25 07:37	04/18/25 20:21	1
13C8 PFOA	86		50 - 200	04/18/25 07:37	04/18/25 20:21	1
13C9 PFNA	89		50 - 200	04/18/25 07:37	04/18/25 20:21	1
13C7 PFUnA	96		50 - 200	04/18/25 07:37	04/18/25 20:21	1
13C2 PFDoA	92		50 - 200	04/18/25 07:37	04/18/25 20:21	1
13C4 PFBA	84		50 - 200	04/18/25 07:37	04/18/25 20:21	1
13C5 PFPeA	84		50 - 200	04/18/25 07:37	04/18/25 20:21	1
13C3 PFBS	101		50 - 200	04/18/25 07:37	04/18/25 20:21	1
13C3 PFHxS	102		50 - 200	04/18/25 07:37	04/18/25 20:21	1
13C8 PFOS	101		50 - 200	04/18/25 07:37	04/18/25 20:21	1
13C2-4:2-FTS	137		50 - 200	04/18/25 07:37	04/18/25 20:21	1
13C2-6:2-FTS	125		50 - 200	04/18/25 07:37	04/18/25 20:21	1
13C2-8:2-FTS	123		50 - 200	04/18/25 07:37	04/18/25 20:21	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:46	1
Perfluorooctanesulfonic acid (PFOS)	2.4		2.0	ng/L		04/17/25 15:35	04/18/25 23:46	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:46	1

Eurofins Eaton Analytical Pomona

Client Sample Results

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

**Client Sample ID: AIEA GULCH WELLS PUMP 1
(331-201-TP071)**

Lab Sample ID: 380-146125-3

Date Collected: 04/14/25 10:33

Matrix: Drinking Water

Date Received: 04/16/25 10:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:46	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:46	1
Perfluorohexanoic acid (PFHxA)	2.4		2.0	ng/L		04/17/25 15:35	04/18/25 23:46	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:46	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:46	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:46	1
Perfluorohexanesulfonic acid (PFHxS)	2.7		2.0	ng/L		04/17/25 15:35	04/18/25 23:46	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:46	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:46	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:46	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:46	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:46	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:46	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:46	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	96		70 - 130			04/17/25 15:35	04/18/25 23:46	1
13C2 PFHxA	103		70 - 130			04/17/25 15:35	04/18/25 23:46	1
13C2 PFDA	99		70 - 130			04/17/25 15:35	04/18/25 23:46	1
13C3-GenX	95		70 - 130			04/17/25 15:35	04/18/25 23:46	1

**Client Sample ID: AIEA GULCH WELLS PUMP 2
(331-202-TP072)**

Lab Sample ID: 380-146125-4

Date Collected: 04/14/25 10:54

Matrix: Drinking Water

Date Received: 04/16/25 10:20

PWSID Number: HI0000331

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		04/18/25 07:37	04/18/25 20:32	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:32	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:32	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:32	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:32	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:32	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:32	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:32	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:32	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:32	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:32	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:32	1

Eurofins Eaton Analytical Pomona

Client Sample Results

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

**Client Sample ID: AIEA GULCH WELLS PUMP 2
(331-202-TP072)**

Lab Sample ID: 380-146125-4

Date Collected: 04/14/25 10:54

Matrix: Drinking Water

Date Received: 04/16/25 10:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:32	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:32	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:32	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:32	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:32	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:32	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:32	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:32	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:32	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:32	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:32	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:32	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:32	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	81		50 - 200	04/18/25 07:37	04/18/25 20:32	1
13C6 PFDA	93		50 - 200	04/18/25 07:37	04/18/25 20:32	1
13C5 PFHxA	91		50 - 200	04/18/25 07:37	04/18/25 20:32	1
13C4 PFHpA	88		50 - 200	04/18/25 07:37	04/18/25 20:32	1
13C8 PFOA	88		50 - 200	04/18/25 07:37	04/18/25 20:32	1
13C9 PFNA	94		50 - 200	04/18/25 07:37	04/18/25 20:32	1
13C7 PFUnA	95		50 - 200	04/18/25 07:37	04/18/25 20:32	1
13C2 PFDoA	89		50 - 200	04/18/25 07:37	04/18/25 20:32	1
13C4 PFBA	88		50 - 200	04/18/25 07:37	04/18/25 20:32	1
13C5 PFPeA	88		50 - 200	04/18/25 07:37	04/18/25 20:32	1
13C3 PFBS	102		50 - 200	04/18/25 07:37	04/18/25 20:32	1
13C3 PFHxS	103		50 - 200	04/18/25 07:37	04/18/25 20:32	1
13C8 PFOS	101		50 - 200	04/18/25 07:37	04/18/25 20:32	1
13C2-4:2-FTS	125		50 - 200	04/18/25 07:37	04/18/25 20:32	1
13C2-6:2-FTS	123		50 - 200	04/18/25 07:37	04/18/25 20:32	1
13C2-8:2-FTS	109		50 - 200	04/18/25 07:37	04/18/25 20:32	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:35	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:35	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:35	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:35	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:35	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:35	1

Eurofins Eaton Analytical Pomona

Client Sample Results

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

**Client Sample ID: AIEA GULCH WELLS PUMP 2
(331-202-TP072)**

Lab Sample ID: 380-146125-4

Date Collected: 04/14/25 10:54

Matrix: Drinking Water

Date Received: 04/16/25 10:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:35	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:35	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:35	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:35	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:35	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:35	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:35	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:35	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:35	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:35	1
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:35	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		04/17/25 15:35	04/18/25 23:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	95		70 - 130			04/17/25 15:35	04/18/25 23:35	1
13C2 PFHxA	101		70 - 130			04/17/25 15:35	04/18/25 23:35	1
13C2 PFDA	100		70 - 130			04/17/25 15:35	04/18/25 23:35	1
13C3-GenX	95		70 - 130			04/17/25 15:35	04/18/25 23:35	1

Client Sample ID: FB Moanalua Wells

Lab Sample ID: 380-146125-5

Date Collected: 04/14/25 09:33

Matrix: Water

Date Received: 04/16/25 10:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:41	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:41	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:41	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:41	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:41	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:41	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:41	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:41	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:41	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:41	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:41	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:41	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:41	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:41	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:41	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:41	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:41	1

Eurofins Eaton Analytical Pomona

Client Sample Results

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

Client Sample ID: FB Moanalua Wells

Lab Sample ID: 380-146125-5

Date Collected: 04/14/25 09:33

Matrix: Water

Date Received: 04/16/25 10:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:41	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:41	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:41	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:41	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:41	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:41	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:41	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:41	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	94		50 - 200			04/18/25 07:37	04/18/25 20:41	1
13C6 PFDA	103		50 - 200			04/18/25 07:37	04/18/25 20:41	1
13C5 PFHxA	107		50 - 200			04/18/25 07:37	04/18/25 20:41	1
13C4 PFHpA	104		50 - 200			04/18/25 07:37	04/18/25 20:41	1
13C8 PFOA	100		50 - 200			04/18/25 07:37	04/18/25 20:41	1
13C9 PFNA	103		50 - 200			04/18/25 07:37	04/18/25 20:41	1
13C7 PFUnA	101		50 - 200			04/18/25 07:37	04/18/25 20:41	1
13C2 PFDoA	97		50 - 200			04/18/25 07:37	04/18/25 20:41	1
13C4 PFBA	104		50 - 200			04/18/25 07:37	04/18/25 20:41	1
13C5 PFPeA	100		50 - 200			04/18/25 07:37	04/18/25 20:41	1
13C3 PFBS	99		50 - 200			04/18/25 07:37	04/18/25 20:41	1
13C3 PFHxS	102		50 - 200			04/18/25 07:37	04/18/25 20:41	1
13C8 PFOS	102		50 - 200			04/18/25 07:37	04/18/25 20:41	1
13C2-4:2-FTS	120		50 - 200			04/18/25 07:37	04/18/25 20:41	1
13C2-6:2-FTS	126		50 - 200			04/18/25 07:37	04/18/25 20:41	1
13C2-8:2-FTS	116		50 - 200			04/18/25 07:37	04/18/25 20:41	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:18	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:18	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:18	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:18	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:18	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:18	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:18	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:18	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:18	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:18	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:18	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:18	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:18	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:18	1

Eurofins Eaton Analytical Pomona

Client Sample Results

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

Client Sample ID: FB Moanalua Wells

Lab Sample ID: 380-146125-5

Date Collected: 04/14/25 09:33

Matrix: Water

Date Received: 04/16/25 10:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:18	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:18	1
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:18	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	98		70 - 130			04/17/25 15:35	04/19/25 00:18	1
13C2 PFHxA	106		70 - 130			04/17/25 15:35	04/19/25 00:18	1
13C2 PFDA	105		70 - 130			04/17/25 15:35	04/19/25 00:18	1
13C3-GenX	93		70 - 130			04/17/25 15:35	04/19/25 00:18	1

Client Sample ID: FB Halawa Wells Units 1&2

Lab Sample ID: 380-146125-6

Date Collected: 04/14/25 10:05

Matrix: Water

Date Received: 04/16/25 10:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:51	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:51	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:51	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:51	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:51	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:51	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:51	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:51	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:51	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:51	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:51	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:51	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:51	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:51	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:51	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:51	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:51	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:51	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:51	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:51	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:51	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:51	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:51	1

Eurofins Eaton Analytical Pomona

Client Sample Results

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

Client Sample ID: FB Halawa Wells Units 1&2

Lab Sample ID: 380-146125-6

Date Collected: 04/14/25 10:05

Matrix: Water

Date Received: 04/16/25 10:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:51	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 20:51	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	92		50 - 200			04/18/25 07:37	04/18/25 20:51	1
13C6 PFDA	102		50 - 200			04/18/25 07:37	04/18/25 20:51	1
13C5 PFHxA	109		50 - 200			04/18/25 07:37	04/18/25 20:51	1
13C4 PFHpA	104		50 - 200			04/18/25 07:37	04/18/25 20:51	1
13C8 PFOA	100		50 - 200			04/18/25 07:37	04/18/25 20:51	1
13C9 PFNA	103		50 - 200			04/18/25 07:37	04/18/25 20:51	1
13C7 PFUnA	100		50 - 200			04/18/25 07:37	04/18/25 20:51	1
13C2 PFDoA	93		50 - 200			04/18/25 07:37	04/18/25 20:51	1
13C4 PFBA	103		50 - 200			04/18/25 07:37	04/18/25 20:51	1
13C5 PFPeA	100		50 - 200			04/18/25 07:37	04/18/25 20:51	1
13C3 PFBS	98		50 - 200			04/18/25 07:37	04/18/25 20:51	1
13C3 PFHxS	99		50 - 200			04/18/25 07:37	04/18/25 20:51	1
13C8 PFOS	97		50 - 200			04/18/25 07:37	04/18/25 20:51	1
13C2-4:2-FTS	126		50 - 200			04/18/25 07:37	04/18/25 20:51	1
13C2-6:2-FTS	120		50 - 200			04/18/25 07:37	04/18/25 20:51	1
13C2-8:2-FTS	107		50 - 200			04/18/25 07:37	04/18/25 20:51	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:29	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:29	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:29	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:29	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:29	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:29	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:29	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:29	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:29	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:29	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:29	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:29	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:29	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:29	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:29	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:29	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:29	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	98		70 - 130			04/17/25 15:35	04/19/25 00:29	1
13C2 PFHxA	108		70 - 130			04/17/25 15:35	04/19/25 00:29	1

Eurofins Eaton Analytical Pomona

Client Sample Results

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

Client Sample ID: FB Halawa Wells Units 1&2

Lab Sample ID: 380-146125-6

Date Collected: 04/14/25 10:05

Matrix: Water

Date Received: 04/16/25 10:20

PWSID Number: HI0000331

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFDA	102		70 - 130	04/17/25 15:35	04/19/25 00:29	1
13C3-GenX	97		70 - 130	04/17/25 15:35	04/19/25 00:29	1

Client Sample ID: FB Aiea Gulch Wells Pump 1

Lab Sample ID: 380-146125-7

Date Collected: 04/14/25 10:33

Matrix: Water

Date Received: 04/16/25 10:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:01	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:01	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:01	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:01	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:01	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:01	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:01	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:01	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:01	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:01	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:01	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:01	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:01	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:01	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:01	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:01	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:01	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:01	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:01	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:01	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:01	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:01	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:01	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:01	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:01	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	94		50 - 200			04/18/25 07:37	04/18/25 21:01	1
13C6 PFDA	101		50 - 200			04/18/25 07:37	04/18/25 21:01	1
13C5 PFHxA	106		50 - 200			04/18/25 07:37	04/18/25 21:01	1
13C4 PFHpA	108		50 - 200			04/18/25 07:37	04/18/25 21:01	1

Eurofins Eaton Analytical Pomona

Client Sample Results

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

Client Sample ID: FB Aiea Gulch Wells Pump 1

Lab Sample ID: 380-146125-7

Date Collected: 04/14/25 10:33

Matrix: Water

Date Received: 04/16/25 10:20

PWSID Number: HI0000331

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 PFOA	98		50 - 200	04/18/25 07:37	04/18/25 21:01	1
13C9 PFNA	103		50 - 200	04/18/25 07:37	04/18/25 21:01	1
13C7 PFUnA	103		50 - 200	04/18/25 07:37	04/18/25 21:01	1
13C2 PFDoA	96		50 - 200	04/18/25 07:37	04/18/25 21:01	1
13C4 PFBA	103		50 - 200	04/18/25 07:37	04/18/25 21:01	1
13C5 PFPeA	100		50 - 200	04/18/25 07:37	04/18/25 21:01	1
13C3 PFBS	98		50 - 200	04/18/25 07:37	04/18/25 21:01	1
13C3 PFHxS	100		50 - 200	04/18/25 07:37	04/18/25 21:01	1
13C8 PFOS	102		50 - 200	04/18/25 07:37	04/18/25 21:01	1
13C2-4:2-FTS	126		50 - 200	04/18/25 07:37	04/18/25 21:01	1
13C2-6:2-FTS	127		50 - 200	04/18/25 07:37	04/18/25 21:01	1
13C2-8:2-FTS	106		50 - 200	04/18/25 07:37	04/18/25 21:01	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:40	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:40	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:40	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:40	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:40	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:40	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:40	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:40	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:40	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:40	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:40	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:40	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:40	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:40	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:40	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:40	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:40	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	93		70 - 130			04/17/25 15:35	04/19/25 00:40	1
13C2 PFHxA	103		70 - 130			04/17/25 15:35	04/19/25 00:40	1
13C2 PFDA	103		70 - 130			04/17/25 15:35	04/19/25 00:40	1
13C3-GenX	95		70 - 130			04/17/25 15:35	04/19/25 00:40	1

Client Sample Results

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

Client Sample ID: FB Aiea Gulch Wells Pump 2

Lab Sample ID: 380-146125-8

Date Collected: 04/14/25 10:54

Matrix: Water

Date Received: 04/16/25 10:20

PWSID Number: HI0000331

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		04/18/25 07:37	04/18/25 21:10	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9CI-PF3ONS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:10	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:10	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:10	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:10	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:10	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:10	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:10	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:10	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:10	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:10	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:10	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:10	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:10	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:10	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:10	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:10	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:10	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:10	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:10	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:10	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:10	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:10	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:10	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		04/18/25 07:37	04/18/25 21:10	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	96		50 - 200	04/18/25 07:37	04/18/25 21:10	1
13C6 PFDA	104		50 - 200	04/18/25 07:37	04/18/25 21:10	1
13C5 PFHxA	109		50 - 200	04/18/25 07:37	04/18/25 21:10	1
13C4 PFHpA	105		50 - 200	04/18/25 07:37	04/18/25 21:10	1
13C8 PFOA	103		50 - 200	04/18/25 07:37	04/18/25 21:10	1
13C9 PFNA	104		50 - 200	04/18/25 07:37	04/18/25 21:10	1
13C7 PFUnA	102		50 - 200	04/18/25 07:37	04/18/25 21:10	1
13C2 PFDoA	97		50 - 200	04/18/25 07:37	04/18/25 21:10	1
13C4 PFBA	108		50 - 200	04/18/25 07:37	04/18/25 21:10	1
13C5 PFPeA	106		50 - 200	04/18/25 07:37	04/18/25 21:10	1
13C3 PFBS	101		50 - 200	04/18/25 07:37	04/18/25 21:10	1
13C3 PFHxS	101		50 - 200	04/18/25 07:37	04/18/25 21:10	1
13C8 PFOS	101		50 - 200	04/18/25 07:37	04/18/25 21:10	1

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Client Sample Results

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

Client Sample ID: FB Aiea Gulch Wells Pump 2

Lab Sample ID: 380-146125-8

Date Collected: 04/14/25 10:54

Matrix: Water

Date Received: 04/16/25 10:20

PWSID Number: HI0000331

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	120		50 - 200	04/18/25 07:37	04/18/25 21:10	1
13C2-6:2-FTS	123		50 - 200	04/18/25 07:37	04/18/25 21:10	1
13C2-8:2-FTS	107		50 - 200	04/18/25 07:37	04/18/25 21:10	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:50	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:50	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:50	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:50	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:50	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:50	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:50	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:50	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:50	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:50	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:50	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:50	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:50	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:50	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:50	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:50	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:50	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		04/17/25 15:35	04/19/25 00:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	95		70 - 130	04/17/25 15:35	04/19/25 00:50	1
13C2 PFHxA	98		70 - 130	04/17/25 15:35	04/19/25 00:50	1
13C2 PFDA	101		70 - 130	04/17/25 15:35	04/19/25 00:50	1
13C3-GenX	93		70 - 130	04/17/25 15:35	04/19/25 00:50	1

Action Limit Summary

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

Client Sample ID: MOANALUA WELLS (331-223-TP202)

Lab Sample ID: 380-146125-1

PWSID Number: HI0000331

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

Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1

Lab Sample ID: 380-146125-2

(331-206-TP065)

PWSID Number: HI0000331

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)	2.7		ng/L	10	2.0	533	Total/NA
Perfluorononanoic acid (PFNA)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.4		ng/L	4	2.0	533	Total/NA
Perfluorooctanoic acid (PFOA)	<2.0		ng/L	4	2.0	533	Total/NA
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		ng/L	10	2.0	537.1	Total/NA
Perfluorooctanesulfonic acid (PFOS)	<2.0		ng/L	4	2.0	537.1	Total/NA
Perfluorooctanoic acid (PFOA)	<2.0		ng/L	4	2.0	537.1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	<2.0		ng/L	10	2.0	537.1	Total/NA
Perfluorononanoic acid (PFNA)	<2.0		ng/L	10	2.0	537.1	Total/NA

Client Sample ID: AIEA GULCH WELLS PUMP 1

Lab Sample ID: 380-146125-3

(331-201-TP071)

PWSID Number: HI0000331

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	537.1	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.4		ng/L	4	2.0	537.1	Total/NA

Eurofins Eaton Analytical Pomona

Action Limit Summary

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

Client Sample ID: AIEA GULCH WELLS PUMP 1
(331-201-TP071) (Continued)
PWSID Number: HI0000331

Lab Sample ID: 380-146125-3

Compliance Check

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

Analyte	Result	Qualifier	Unit	EPAMCL Limit	RL	Method	Prep Type
Perfluorooctanoic acid (PFOA)	<2.0		ng/L	4	2.0	537.1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.7		ng/L	10	2.0	537.1	Total/NA
Perfluorononanoic acid (PFNA)	<2.0		ng/L	10	2.0	537.1	Total/NA

Client Sample ID: AIEA GULCH WELLS PUMP 2
(331-202-TP072)
PWSID Number: HI0000331

Lab Sample ID: 380-146125-4

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

Client Sample ID: FB Moanalua Wells
PWSID Number: HI0000331

Lab Sample ID: 380-146125-5

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

Eurofins Eaton Analytical Pomona

Action Limit Summary

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

Client Sample ID: FB Halawa Wells Units 1&2

Lab Sample ID: 380-146125-6

PWSID Number: HI0000331

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

Client Sample ID: FB Aiea Gulch Wells Pump 1

Lab Sample ID: 380-146125-7

PWSID Number: HI0000331

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

Client Sample ID: FB Aiea Gulch Wells Pump 2

Lab Sample ID: 380-146125-8

PWSID Number: HI0000331

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

Eurofins Eaton Analytical Pomona

Action Limit Summary

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

Client Sample ID: FB Aiea Gulch Wells Pump 2 (Continued)
PWSID Number: HI0000331

Lab Sample ID: 380-146125-8

Compliance Check

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

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

Surrogate Summary

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

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

Matrix: Drinking 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)
380-146125-1	MOANALUA WELLS (331-223-T	96	107	102	98
380-146125-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	97	102	103	98
380-146125-3	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	96	103	99	95
380-146125-4	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	95	101	100	95

Surrogate Legend

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

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

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)
380-146118-B-1-A MSD	Matrix Spike Duplicate	105	100	96	98
380-146118-C-1-A MS	Matrix Spike	96	109	104	98
380-146125-5	FB Moanalua Wells	98	106	105	93
380-146125-6	FB Halawa Wells Units 1&2	98	108	102	97
380-146125-7	FB Aiea Gulch Wells Pump 1	93	103	103	95
380-146125-8	FB Aiea Gulch Wells Pump 2	95	98	101	93
LCS 380-147967/3-A	Lab Control Sample	97	96	99	94
MBL 380-147967/1-A	Method Blank	97	106	103	100
MRL 380-147967/2-A	Lab Control Sample	95	101	98	93

Surrogate Legend

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

Isotope Dilution Summary

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

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

Matrix: Drinking 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)
380-146125-1	MOANALUA WELLS (331-223-T	84	87	94	94	86	88	87	84
380-146125-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	86	95	97	97	90	93	91	85
380-146125-3	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	75	93	85	89	86	89	96	92
380-146125-4	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	81	93	91	88	88	94	95	89

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)
380-146125-1	MOANALUA WELLS (331-223-T	97	93	101	106	103	121	121	113
380-146125-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	100	99	103	102	103	133	129	112
380-146125-3	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	84	84	101	102	101	137	125	123
380-146125-4	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	88	88	102	103	101	125	123	109

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

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)
380-145986-B-1-A MS	Matrix Spike	111	113	111	113	104	113	116	108
380-145986-C-1-A MSD	Matrix Spike Duplicate	105	109	105	108	99	107	109	100
380-146047-E-1-A MS	Matrix Spike	116	111	119	115	108	99	102	101
380-146047-F-1-A MSD	Matrix Spike Duplicate	95	92	101	107	99	97	93	84
380-146125-5	FB Moanalua Wells	94	103	107	104	100	103	101	97
380-146125-6	FB Halawa Wells Units 1&2	92	102	109	104	100	103	100	93
380-146125-7	FB Aiea Gulch Wells Pump 1	94	101	106	108	98	103	103	96
380-146125-8	FB Aiea Gulch Wells Pump 2	96	104	109	105	103	104	102	97
LCS 380-148112/22-A	Lab Control Sample	102	109	111	111	108	110	110	99
LCS 380-148113/22-A	Lab Control Sample	100	110	109	110	106	110	110	100

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Isotope Dilution Summary

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

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

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)
MBL 380-148112/20-A	Method Blank	92	106	111	110	103	106	104	99
MBL 380-148113/20-A	Method Blank	100	107	110	110	106	108	105	97
MRL 380-148112/21-A	Lab Control Sample	99	104	113	107	101	107	103	95
MRL 380-148113/21-A	Lab Control Sample	97	107	108	106	103	109	107	98

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)
380-145986-B-1-A MS	Matrix Spike	106	110	104	101	104	116	114	111
380-145986-C-1-A MSD	Matrix Spike Duplicate	105	103	98	99	100	115	110	108
380-146047-E-1-A MS	Matrix Spike	119	102	107	108	106	138	119	117
380-146047-F-1-A MSD	Matrix Spike Duplicate	105	189	81	97	100	125	140	123
380-146125-5	FB Moanalua Wells	104	100	99	102	102	120	126	116
380-146125-6	FB Halawa Wells Units 1&2	103	100	98	99	97	126	120	107
380-146125-7	FB Aiea Gulch Wells Pump 1	103	100	98	100	102	126	127	106
380-146125-8	FB Aiea Gulch Wells Pump 2	108	106	101	101	101	120	123	107
LCS 380-148112/22-A	Lab Control Sample	106	104	104	104	102	119	126	110
LCS 380-148113/22-A	Lab Control Sample	105	103	99	101	102	122	123	111
MBL 380-148112/20-A	Method Blank	106	106	103	107	105	127	133	119
MBL 380-148113/20-A	Method Blank	104	103	100	104	101	131	122	120
MRL 380-148112/21-A	Lab Control Sample	107	105	103	102	101	123	121	106
MRL 380-148113/21-A	Lab Control Sample	109	110	102	103	103	125	124	114

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: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

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

Lab Sample ID: MBL 380-148112/20-A

Matrix: Water

Analysis Batch: 148275

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 148112

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3OUdS)	<0.30		2.0	ng/L		04/18/25 07:31	04/18/25 22:19	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9CI-PF3ONS)	<0.30		2.0	ng/L		04/18/25 07:31	04/18/25 22:19	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0	ng/L		04/18/25 07:31	04/18/25 22:19	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<1.0		2.0	ng/L		04/18/25 07:31	04/18/25 22:19	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0	ng/L		04/18/25 07:31	04/18/25 22:19	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	ng/L		04/18/25 07:31	04/18/25 22:19	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	ng/L		04/18/25 07:31	04/18/25 22:19	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0	ng/L		04/18/25 07:31	04/18/25 22:19	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0	ng/L		04/18/25 07:31	04/18/25 22:19	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0	ng/L		04/18/25 07:31	04/18/25 22:19	1
Perfluorononanoic acid (PFNA)	<0.40		2.0	ng/L		04/18/25 07:31	04/18/25 22:19	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0	ng/L		04/18/25 07:31	04/18/25 22:19	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0	ng/L		04/18/25 07:31	04/18/25 22:19	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0	ng/L		04/18/25 07:31	04/18/25 22:19	1
Perfluorobutanoic acid (PFBA)	<0.69		2.0	ng/L		04/18/25 07:31	04/18/25 22:19	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.38		2.0	ng/L		04/18/25 07:31	04/18/25 22:19	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.37		2.0	ng/L		04/18/25 07:31	04/18/25 22:19	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<0.48		2.0	ng/L		04/18/25 07:31	04/18/25 22:19	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<0.47		2.0	ng/L		04/18/25 07:31	04/18/25 22:19	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<0.25		2.0	ng/L		04/18/25 07:31	04/18/25 22:19	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.46		2.0	ng/L		04/18/25 07:31	04/18/25 22:19	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.15		2.0	ng/L		04/18/25 07:31	04/18/25 22:19	1
Perfluoropentanoic acid (PFPeA)	<0.38		2.0	ng/L		04/18/25 07:31	04/18/25 22:19	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.36		2.0	ng/L		04/18/25 07:31	04/18/25 22:19	1
Perfluoropentanesulfonic acid (PFPeS)	<0.39		2.0	ng/L		04/18/25 07:31	04/18/25 22:19	1

Isotope Dilution	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	92		50 - 200	04/18/25 07:31	04/18/25 22:19	1
13C6 PFDA	106		50 - 200	04/18/25 07:31	04/18/25 22:19	1
13C5 PFHxA	111		50 - 200	04/18/25 07:31	04/18/25 22:19	1
13C4 PFHpA	110		50 - 200	04/18/25 07:31	04/18/25 22:19	1
13C8 PFOA	103		50 - 200	04/18/25 07:31	04/18/25 22:19	1
13C9 PFNA	106		50 - 200	04/18/25 07:31	04/18/25 22:19	1
13C7 PFUnA	104		50 - 200	04/18/25 07:31	04/18/25 22:19	1
13C2 PFDoA	99		50 - 200	04/18/25 07:31	04/18/25 22:19	1
13C4 PFBA	106		50 - 200	04/18/25 07:31	04/18/25 22:19	1
13C5 PFPeA	106		50 - 200	04/18/25 07:31	04/18/25 22:19	1
13C3 PFBS	103		50 - 200	04/18/25 07:31	04/18/25 22:19	1
13C3 PFHxS	107		50 - 200	04/18/25 07:31	04/18/25 22:19	1

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QC Sample Results

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

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

Lab Sample ID: MBL 380-148112/20-A

Matrix: Water

Analysis Batch: 148275

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 148112

Isotope Dilution	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 PFOS	105		50 - 200	04/18/25 07:31	04/18/25 22:19	1
13C2-4:2-FTS	127		50 - 200	04/18/25 07:31	04/18/25 22:19	1
13C2-6:2-FTS	133		50 - 200	04/18/25 07:31	04/18/25 22:19	1
13C2-8:2-FTS	119		50 - 200	04/18/25 07:31	04/18/25 22:19	1

Lab Sample ID: LCS 380-148112/22-A

Matrix: Water

Analysis Batch: 148275

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 148112

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	60.2	54.4		ng/L		90	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	60.2	54.9		ng/L		91	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	60.2	58.9		ng/L		98	70 - 130
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	60.2	58.1		ng/L		96	70 - 130
Perfluorobutanesulfonic acid (PFBS)	60.2	58.7		ng/L		98	70 - 130
Perfluorodecanoic acid (PFDA)	60.2	58.1		ng/L		96	70 - 130
Perfluorododecanoic acid (PFDaA)	60.2	59.1		ng/L		98	70 - 130
Perfluoroheptanoic acid (PFHpA)	60.2	57.8		ng/L		96	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	60.2	59.7		ng/L		99	70 - 130
Perfluorohexanoic acid (PFHxA)	60.2	57.9		ng/L		96	70 - 130
Perfluorononanoic acid (PFNA)	60.2	57.1		ng/L		95	70 - 130
Perfluorooctanesulfonic acid (PFOS)	60.2	60.1		ng/L		100	70 - 130
Perfluorooctanoic acid (PFOA)	60.2	60.2		ng/L		100	70 - 130
Perfluoroundecanoic acid (PFUnA)	60.2	56.8		ng/L		94	70 - 130
Perfluorobutanoic acid (PFBA)	60.2	58.3		ng/L		97	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	60.2	64.2		ng/L		107	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	60.2	62.4		ng/L		104	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	60.2	59.3		ng/L		99	70 - 130
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	60.2	51.1		ng/L		85	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEA)	60.2	63.2		ng/L		105	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	60.2	59.9		ng/L		99	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	60.2	57.4		ng/L		95	70 - 130
Perfluoropentanoic acid (PFPeA)	60.2	57.7		ng/L		96	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	60.2	60.6		ng/L		101	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

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

Lab Sample ID: LCS 380-148112/22-A

Matrix: Water

Analysis Batch: 148275

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 148112

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoropentanesulfonic acid (PFPeS)	60.2	58.0		ng/L		96	70 - 130
	LCS	LCS					
Isotope Dilution	%Recovery	Qualifier	Limits				
13C3 HFPO-DA	102		50 - 200				
13C6 PFDA	109		50 - 200				
13C5 PFHxA	111		50 - 200				
13C4 PFHpA	111		50 - 200				
13C8 PFOA	108		50 - 200				
13C9 PFNA	110		50 - 200				
13C7 PFUnA	110		50 - 200				
13C2 PFDoA	99		50 - 200				
13C4 PFBA	106		50 - 200				
13C5 PFPeA	104		50 - 200				
13C3 PFBS	104		50 - 200				
13C3 PFHxS	104		50 - 200				
13C8 PFOS	102		50 - 200				
13C2-4:2-FTS	119		50 - 200				
13C2-6:2-FTS	126		50 - 200				
13C2-8:2-FTS	110		50 - 200				

Lab Sample ID: MRL 380-148112/21-A

Matrix: Water

Analysis Batch: 148275

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 148112

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.00	2.00	J	ng/L		100	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.00	1.93	J	ng/L		96	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.00	2.00	J	ng/L		100	50 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.00	1.90	J	ng/L		95	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.00	2.07	J	ng/L		103	50 - 150
Perfluorodecanoic acid (PFDA)	2.00	2.06	J	ng/L		103	50 - 150
Perfluorododecanoic acid (PFDoA)	2.00	2.24	J	ng/L		112	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.00	2.06	J	ng/L		103	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.00	2.09	J	ng/L		104	50 - 150
Perfluorohexanoic acid (PFHxA)	2.00	2.07	J	ng/L		103	50 - 150
Perfluorononanoic acid (PFNA)	2.00	2.05	J	ng/L		102	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.00	2.11	J	ng/L		105	50 - 150
Perfluorooctanoic acid (PFOA)	2.00	2.19	J	ng/L		109	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.00	2.14	J	ng/L		107	50 - 150
Perfluorobutanoic acid (PFBA)	2.00	2.14	J	ng/L		107	50 - 150

Eurofins Eaton Analytical Pomona

QC Sample Results

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

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

Lab Sample ID: MRL 380-148112/21-A

Matrix: Water

Analysis Batch: 148275

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 148112

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	2.00	2.18	J	ng/L		109	50 - 150
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	2.00	2.24	J	ng/L		112	50 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	2.00	2.39	J	ng/L		119	50 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2.00	1.72	J	ng/L		86	50 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	2.00	2.14	J	ng/L		107	50 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.00	2.01	J	ng/L		100	50 - 150
Perfluoro-4-methoxybutanoic acid (PFMBA)	2.00	2.00	J	ng/L		100	50 - 150
Perfluoropentanoic acid (PFPeA)	2.00	2.05	J	ng/L		102	50 - 150
Perfluoroheptanesulfonic acid (PFHpS)	2.00	1.96	J	ng/L		98	50 - 150
Perfluoropentanesulfonic acid (PFPeS)	2.00	2.06	J	ng/L		103	50 - 150

Isotope Dilution	%Recovery	MRL Qualifier	MRL Limits
13C3 HFPO-DA	99		50 - 200
13C6 PFDA	104		50 - 200
13C5 PFHxA	113		50 - 200
13C4 PFHpA	107		50 - 200
13C8 PFOA	101		50 - 200
13C9 PFNA	107		50 - 200
13C7 PFUnA	103		50 - 200
13C2 PFDoA	95		50 - 200
13C4 PFBA	107		50 - 200
13C5 PFPeA	105		50 - 200
13C3 PFBS	103		50 - 200
13C3 PFHxS	102		50 - 200
13C8 PFOS	101		50 - 200
13C2-4:2-FTS	123		50 - 200
13C2-6:2-FTS	121		50 - 200
13C2-8:2-FTS	106		50 - 200

Lab Sample ID: 380-146047-E-1-A MS

Matrix: Water

Analysis Batch: 148300

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 148112

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		60.2	62.9		ng/L		104	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		60.2	63.0		ng/L		105	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		60.2	65.4		ng/L		109	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-146047-E-1-A MS

Matrix: Water

Analysis Batch: 148300

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 148112

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide	<2.0		60.2	60.8		ng/L		101	70 - 130
Dimer Acid (HFPO-DA/GenX)									
Perfluorobutanesulfonic acid (PFBS)	2.8		60.2	68.8		ng/L		109	70 - 130
Perfluorodecanoic acid (PFDA)	<2.0		60.2	65.0		ng/L		107	70 - 130
Perfluorododecanoic acid (PFDoA)	<2.0		60.2	62.1		ng/L		103	70 - 130
Perfluoroheptanoic acid (PFHpA)	3.3		60.2	66.1		ng/L		104	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	2.1		60.2	65.1		ng/L		105	70 - 130
Perfluorohexanoic acid (PFHxA)	7.4		60.2	71.4		ng/L		106	70 - 130
Perfluorononanoic acid (PFNA)	<2.0		60.2	64.6		ng/L		106	70 - 130
Perfluorooctanesulfonic acid (PFOS)	11		60.2	76.6		ng/L		108	70 - 130
Perfluorooctanoic acid (PFOA)	3.6		60.2	67.7		ng/L		106	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		60.2	64.3		ng/L		107	70 - 130
Perfluorobutanoic acid (PFBA)	8.5		60.2	70.5		ng/L		103	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		60.2	65.5		ng/L		108	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		60.2	66.0		ng/L		110	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	8.1		60.2	76.7		ng/L		114	70 - 130
Nonafluoro-3,6-dioxahexanoic acid (NFDHA)	<2.0		60.2	60.5		ng/L		100	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		60.2	66.6		ng/L		111	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0	F1 F2	60.2	35.3	F1	ng/L		59	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		60.2	68.3		ng/L		113	70 - 130
Perfluoropentanoic acid (PFPeA)	8.0		60.2	72.2		ng/L		107	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		60.2	67.0		ng/L		111	70 - 130
Perfluoropentanesulfonic acid (PFPeS)	<2.0		60.2	66.8		ng/L		111	70 - 130

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
13C3 HFPO-DA	116		50 - 200
13C6 PFDA	111		50 - 200
13C5 PFHxA	119		50 - 200
13C4 PFHpA	115		50 - 200
13C8 PFOA	108		50 - 200
13C9 PFNA	99		50 - 200
13C7 PFUnA	102		50 - 200
13C2 PFDoA	101		50 - 200
13C4 PFBA	119		50 - 200
13C5 PFPeA	102		50 - 200
13C3 PFBS	107		50 - 200
13C3 PFHxS	108		50 - 200
13C8 PFOS	106		50 - 200

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QC Sample Results

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-146047-E-1-A MS

Matrix: Water

Analysis Batch: 148300

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 148112

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
13C2-4:2-FTS	138		50 - 200
13C2-6:2-FTS	119		50 - 200
13C2-8:2-FTS	117		50 - 200

Lab Sample ID: 380-146047-F-1-A MSD

Matrix: Water

Analysis Batch: 148275

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 148112

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		60.1	55.6		ng/L		92	70 - 130	12	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<2.0		60.1	57.4		ng/L		96	70 - 130	9	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		60.1	55.9		ng/L		93	70 - 130	16	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		60.1	59.6		ng/L		99	70 - 130	2	30
Perfluorobutanesulfonic acid (PFBS)	2.8		60.1	63.7		ng/L		101	70 - 130	8	30
Perfluorodecanoic acid (PFDA)	<2.0		60.1	61.2		ng/L		101	70 - 130	6	30
Perfluorododecanoic acid (PFDaA)	<2.0		60.1	60.5		ng/L		101	70 - 130	3	30
Perfluoroheptanoic acid (PFHpA)	3.3		60.1	63.4		ng/L		100	70 - 130	4	30
Perfluorohexanesulfonic acid (PFHxS)	2.1		60.1	64.9		ng/L		104	70 - 130	0	30
Perfluorohexanoic acid (PFHxA)	7.4		60.1	68.8		ng/L		102	70 - 130	4	30
Perfluorononanoic acid (PFNA)	<2.0		60.1	60.2		ng/L		99	70 - 130	7	30
Perfluorooctanesulfonic acid (PFOS)	11		60.1	73.0		ng/L		102	70 - 130	5	30
Perfluorooctanoic acid (PFOA)	3.6		60.1	63.5		ng/L		100	70 - 130	6	30
Perfluoroundecanoic acid (PFUnA)	<2.0		60.1	63.0		ng/L		105	70 - 130	2	30
Perfluorobutanoic acid (PFBA)	8.5		60.1	69.1		ng/L		101	70 - 130	2	30
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		60.1	63.8		ng/L		106	70 - 130	3	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		60.1	64.1		ng/L		107	70 - 130	3	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	8.1		60.1	71.5		ng/L		105	70 - 130	7	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		60.1	57.1		ng/L		95	70 - 130	6	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEA)	<2.0		60.1	76.6		ng/L		127	70 - 130	14	30
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0	F1 F2	60.1	88.5	F1 F2	ng/L		147	70 - 130	86	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		60.1	63.4		ng/L		105	70 - 130	7	30
Perfluoropentanoic acid (PFPeA)	8.0		60.1	69.6		ng/L		102	70 - 130	4	30
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		60.1	62.1		ng/L		103	70 - 130	8	30
Perfluoropentanesulfonic acid (PFPeS)	<2.0		60.1	61.1		ng/L		102	70 - 130	9	30

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QC Sample Results

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

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

Isotope Dilution	MSD MSD		Limits
	%Recovery	Qualifier	
13C3 HFPO-DA	95		50 - 200
13C6 PFDA	92		50 - 200
13C5 PFHxA	101		50 - 200
13C4 PFHpA	107		50 - 200
13C8 PFOA	99		50 - 200
13C9 PFNA	97		50 - 200
13C7 PFUnA	93		50 - 200
13C2 PFDoA	84		50 - 200
13C4 PFBA	105		50 - 200
13C5 PFPeA	189		50 - 200
13C3 PFBS	81		50 - 200
13C3 PFHxS	97		50 - 200
13C8 PFOS	100		50 - 200
13C2-4:2-FTS	125		50 - 200
13C2-6:2-FTS	140		50 - 200
13C2-8:2-FTS	123		50 - 200

Lab Sample ID: MBL 380-148113/20-A

Matrix: Water

Analysis Batch: 148243

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 148113

Analyte	MBL MBL		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<0.30		2.0	ng/L		04/18/25 07:37	04/18/25 17:43	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<0.30		2.0	ng/L		04/18/25 07:37	04/18/25 17:43	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0	ng/L		04/18/25 07:37	04/18/25 17:43	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<1.0		2.0	ng/L		04/18/25 07:37	04/18/25 17:43	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0	ng/L		04/18/25 07:37	04/18/25 17:43	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	ng/L		04/18/25 07:37	04/18/25 17:43	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	ng/L		04/18/25 07:37	04/18/25 17:43	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0	ng/L		04/18/25 07:37	04/18/25 17:43	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0	ng/L		04/18/25 07:37	04/18/25 17:43	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0	ng/L		04/18/25 07:37	04/18/25 17:43	1
Perfluorononanoic acid (PFNA)	<0.40		2.0	ng/L		04/18/25 07:37	04/18/25 17:43	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0	ng/L		04/18/25 07:37	04/18/25 17:43	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0	ng/L		04/18/25 07:37	04/18/25 17:43	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0	ng/L		04/18/25 07:37	04/18/25 17:43	1
Perfluorobutanoic acid (PFBA)	<0.69		2.0	ng/L		04/18/25 07:37	04/18/25 17:43	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.38		2.0	ng/L		04/18/25 07:37	04/18/25 17:43	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.37		2.0	ng/L		04/18/25 07:37	04/18/25 17:43	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<0.48		2.0	ng/L		04/18/25 07:37	04/18/25 17:43	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<0.47		2.0	ng/L		04/18/25 07:37	04/18/25 17:43	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<0.25		2.0	ng/L		04/18/25 07:37	04/18/25 17:43	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.46		2.0	ng/L		04/18/25 07:37	04/18/25 17:43	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.15		2.0	ng/L		04/18/25 07:37	04/18/25 17:43	1

Eurofins Eaton Analytical Pomona

QC Sample Results

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

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

Lab Sample ID: MBL 380-148113/20-A

Matrix: Water

Analysis Batch: 148243

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 148113

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoropentanoic acid (PFPeA)	<0.38		2.0	ng/L		04/18/25 07:37	04/18/25 17:43	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.36		2.0	ng/L		04/18/25 07:37	04/18/25 17:43	1
Perfluoropentanesulfonic acid (PFPeS)	<0.39		2.0	ng/L		04/18/25 07:37	04/18/25 17:43	1

Isotope Dilution	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	100		50 - 200	04/18/25 07:37	04/18/25 17:43	1
13C6 PFDA	107		50 - 200	04/18/25 07:37	04/18/25 17:43	1
13C5 PFHxA	110		50 - 200	04/18/25 07:37	04/18/25 17:43	1
13C4 PFHpA	110		50 - 200	04/18/25 07:37	04/18/25 17:43	1
13C8 PFOA	106		50 - 200	04/18/25 07:37	04/18/25 17:43	1
13C9 PFNA	108		50 - 200	04/18/25 07:37	04/18/25 17:43	1
13C7 PFUnA	105		50 - 200	04/18/25 07:37	04/18/25 17:43	1
13C2 PFDoA	97		50 - 200	04/18/25 07:37	04/18/25 17:43	1
13C4 PFBA	104		50 - 200	04/18/25 07:37	04/18/25 17:43	1
13C5 PFPeA	103		50 - 200	04/18/25 07:37	04/18/25 17:43	1
13C3 PFBS	100		50 - 200	04/18/25 07:37	04/18/25 17:43	1
13C3 PFHxS	104		50 - 200	04/18/25 07:37	04/18/25 17:43	1
13C8 PFOS	101		50 - 200	04/18/25 07:37	04/18/25 17:43	1
13C2-4:2-FTS	131		50 - 200	04/18/25 07:37	04/18/25 17:43	1
13C2-6:2-FTS	122		50 - 200	04/18/25 07:37	04/18/25 17:43	1
13C2-8:2-FTS	120		50 - 200	04/18/25 07:37	04/18/25 17:43	1

Lab Sample ID: LCS 380-148113/22-A

Matrix: Water

Analysis Batch: 148243

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 148113

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	120	116		ng/L		97	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	120	115		ng/L		96	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	120	117		ng/L		97	70 - 130
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	120	126		ng/L		104	70 - 130
Perfluorobutanesulfonic acid (PFBS)	120	125		ng/L		104	70 - 130
Perfluorodecanoic acid (PFDA)	120	120		ng/L		99	70 - 130
Perfluorododecanoic acid (PFDoA)	120	119		ng/L		99	70 - 130
Perfluoroheptanoic acid (PFHpA)	120	117		ng/L		98	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	120	122		ng/L		101	70 - 130
Perfluorohexanoic acid (PFHxA)	120	125		ng/L		104	70 - 130
Perfluorononanoic acid (PFNA)	120	116		ng/L		96	70 - 130
Perfluorooctanesulfonic acid (PFOS)	120	121		ng/L		101	70 - 130
Perfluorooctanoic acid (PFOA)	120	121		ng/L		101	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

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

Lab Sample ID: LCS 380-148113/22-A

Matrix: Water

Analysis Batch: 148243

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 148113

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoroundecanoic acid (PFUnA)	120	118		ng/L		99	70 - 130
Perfluorobutanoic acid (PFBA)	120	122		ng/L		101	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	120	122		ng/L		101	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	120	119		ng/L		99	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	120	116		ng/L		96	70 - 130
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	120	121		ng/L		101	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	120	137		ng/L		114	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	120	124		ng/L		103	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	120	122		ng/L		102	70 - 130
Perfluoropentanoic acid (PFPeA)	120	118		ng/L		98	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	120	120		ng/L		100	70 - 130
Perfluoropentanesulfonic acid (PFPeS)	120	121		ng/L		100	70 - 130

Isotope Dilution	LCS		Limits
	%Recovery	Qualifier	
13C3 HFPO-DA	100		50 - 200
13C6 PFDA	110		50 - 200
13C5 PFHxA	109		50 - 200
13C4 PFHpA	110		50 - 200
13C8 PFOA	106		50 - 200
13C9 PFNA	110		50 - 200
13C7 PFUnA	110		50 - 200
13C2 PFDoA	100		50 - 200
13C4 PFBA	105		50 - 200
13C5 PFPeA	103		50 - 200
13C3 PFBS	99		50 - 200
13C3 PFHxS	101		50 - 200
13C8 PFOS	102		50 - 200
13C2-4:2-FTS	122		50 - 200
13C2-6:2-FTS	123		50 - 200
13C2-8:2-FTS	111		50 - 200

Lab Sample ID: MRL 380-148113/21-A

Matrix: Water

Analysis Batch: 148243

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 148113

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.01	2.11	J	ng/L		105	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.01	2.01	J	ng/L		100	50 - 150

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QC Sample Results

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

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

Lab Sample ID: MRL 380-148113/21-A

Matrix: Water

Analysis Batch: 148243

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 148113

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.01	2.14	J	ng/L		107	50 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.01	2.20	J	ng/L		110	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.01	2.15	J	ng/L		107	50 - 150
Perfluorodecanoic acid (PFDA)	2.01	2.15	J	ng/L		107	50 - 150
Perfluorododecanoic acid (PFDoA)	2.01	2.21	J	ng/L		110	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.01	2.17	J	ng/L		108	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.01	2.15	J	ng/L		107	50 - 150
Perfluorohexanoic acid (PFHxA)	2.01	2.31	J	ng/L		115	50 - 150
Perfluorononanoic acid (PFNA)	2.01	2.05	J	ng/L		102	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.01	2.39	J	ng/L		119	50 - 150
Perfluorooctanoic acid (PFOA)	2.01	2.29	J	ng/L		114	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.01	2.14	J	ng/L		107	50 - 150
Perfluorobutanoic acid (PFBA)	2.01	2.20	J	ng/L		109	50 - 150
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	2.01	2.35	J	ng/L		117	50 - 150
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	2.01	2.31	J	ng/L		115	50 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	2.01	2.41	J	ng/L		120	50 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2.01	2.02	J	ng/L		101	50 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	2.01	2.35	J	ng/L		117	50 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.01	2.23	J	ng/L		111	50 - 150
Perfluoro-4-methoxybutanoic acid (PFMBA)	2.01	2.15	J	ng/L		107	50 - 150
Perfluoropentanoic acid (PFPeA)	2.01	2.21	J	ng/L		110	50 - 150
Perfluoroheptanesulfonic acid (PFHpS)	2.01	2.02	J	ng/L		101	50 - 150
Perfluoropentanesulfonic acid (PFPeS)	2.01	2.12	J	ng/L		106	50 - 150

Isotope Dilution	MRL %Recovery	MRL Qualifier	Limits
13C3 HFPO-DA	97		50 - 200
13C6 PFDA	107		50 - 200
13C5 PFHxA	108		50 - 200
13C4 PFHpA	106		50 - 200
13C8 PFOA	103		50 - 200
13C9 PFNA	109		50 - 200
13C7 PFUnA	107		50 - 200
13C2 PFDoA	98		50 - 200
13C4 PFBA	109		50 - 200
13C5 PFPeA	110		50 - 200
13C3 PFBS	102		50 - 200
13C3 PFHxS	103		50 - 200

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QC Sample Results

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

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

Lab Sample ID: MRL 380-148113/21-A

Matrix: Water

Analysis Batch: 148243

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 148113

Isotope Dilution	MRL %Recovery	MRL Qualifier	Limits
13C8 PFOS	103		50 - 200
13C2-4:2-FTS	125		50 - 200
13C2-6:2-FTS	124		50 - 200
13C2-8:2-FTS	114		50 - 200

Lab Sample ID: 380-145986-B-1-A MS

Matrix: Water

Analysis Batch: 148243

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 148113

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	112		ng/L		93	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	117		ng/L		97	70 - 130
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		120	117		ng/L		97	70 - 130
Perfluorobutanesulfonic acid (PFBS)	<2.0		120	117		ng/L		97	70 - 130
Perfluorodecanoic acid (PFDA)	18		120	135		ng/L		97	70 - 130
Perfluorododecanoic acid (PFDaA)	<2.0		120	114		ng/L		95	70 - 130
Perfluoroheptanoic acid (PFHpA)	130		120	248	E	ng/L		97	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	2.0		120	124		ng/L		101	70 - 130
Perfluorohexanoic acid (PFHxA)	190	E	120	308	E	ng/L		97	70 - 130
Perfluorononanoic acid (PFNA)	25		120	142		ng/L		97	70 - 130
Perfluorooctanesulfonic acid (PFOS)	120		120	247	E	ng/L		104	70 - 130
Perfluorooctanoic acid (PFOA)	290	E	120	408	E	ng/L		100	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		120	119		ng/L		99	70 - 130
Perfluorobutanoic acid (PFBA)	93		120	213	E	ng/L		99	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	14		120	137		ng/L		103	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		120	118		ng/L		98	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	3.4		120	121		ng/L		97	70 - 130
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		120	116		ng/L		95	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		120	129		ng/L		107	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		120	129		ng/L		107	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		120	122		ng/L		101	70 - 130
Perfluoropentanoic acid (PFPeA)	140		120	247	E	ng/L		92	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		120	116		ng/L		95	70 - 130

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QC Sample Results

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-145986-B-1-A MS

Matrix: Water

Analysis Batch: 148243

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 148113

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoropentanesulfonic acid (PFPeS)	<2.0		120	121		ng/L		100	70 - 130
	MS %Recovery	MS Qualifier	Limits						
13C3 HFPO-DA	111		50 - 200						
13C6 PFDA	113		50 - 200						
13C5 PFHxA	111		50 - 200						
13C4 PFHpA	113		50 - 200						
13C8 PFOA	104		50 - 200						
13C9 PFNA	113		50 - 200						
13C7 PFUnA	116		50 - 200						
13C2 PFDoA	108		50 - 200						
13C4 PFBA	106		50 - 200						
13C5 PFPeA	110		50 - 200						
13C3 PFBS	104		50 - 200						
13C3 PFHxS	101		50 - 200						
13C8 PFOS	104		50 - 200						
13C2-4:2-FTS	116		50 - 200						
13C2-6:2-FTS	114		50 - 200						
13C2-8:2-FTS	111		50 - 200						

Lab Sample ID: 380-145986-C-1-A MSD

Matrix: Water

Analysis Batch: 148243

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 148113

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	113		ng/L		94	70 - 130	1	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<2.0		120	117		ng/L		97	70 - 130	2	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		120	120		ng/L		99	70 - 130	2	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		120	123		ng/L		102	70 - 130	5	30
Perfluorobutanesulfonic acid (PFBS)	<2.0		120	127		ng/L		105	70 - 130	8	30
Perfluorodecanoic acid (PFDA)	18		120	141		ng/L		102	70 - 130	5	30
Perfluorododecanoic acid (PFDoA)	<2.0		120	119		ng/L		99	70 - 130	4	30
Perfluoroheptanoic acid (PFHpA)	130		120	259	E	ng/L		106	70 - 130	4	30
Perfluorohexanesulfonic acid (PFHxS)	2.0		120	125		ng/L		102	70 - 130	1	30
Perfluorohexanoic acid (PFHxA)	190	E	120	321	E	ng/L		108	70 - 130	4	30
Perfluorononanoic acid (PFNA)	25		120	146		ng/L		100	70 - 130	3	30
Perfluorooctanesulfonic acid (PFOS)	120		120	262	E	ng/L		117	70 - 130	6	30
Perfluorooctanoic acid (PFOA)	290	E	120	437	E	ng/L		124	70 - 130	7	30
Perfluoroundecanoic acid (PFUnA)	<2.0		120	122		ng/L		101	70 - 130	2	30
Perfluorobutanoic acid (PFBA)	93		120	219	E	ng/L		104	70 - 130	3	30

Eurofins Eaton Analytical Pomona

QC Sample Results

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-145986-C-1-A MSD

Matrix: Water

Analysis Batch: 148243

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 148113

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	14		120	137		ng/L		103	70 - 130	0	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		120	124		ng/L		103	70 - 130	5	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	3.4		120	129		ng/L		104	70 - 130	7	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		120	117		ng/L		96	70 - 130	1	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		120	135		ng/L		112	70 - 130	4	30
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		120	134		ng/L		111	70 - 130	4	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		120	129		ng/L		107	70 - 130	6	30
Perfluoropentanoic acid (PFPeA)	140		120	263	E	ng/L		106	70 - 130	6	30
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		120	123		ng/L		101	70 - 130	6	30
Perfluoropentanesulfonic acid (PFPeS)	<2.0		120	123		ng/L		102	70 - 130	2	30

Isotope Dilution	MSD %Recovery	MSD Qualifier	MSD Limits
13C3 HFPO-DA	105		50 - 200
13C6 PFDA	109		50 - 200
13C5 PFHxA	105		50 - 200
13C4 PFHpA	108		50 - 200
13C8 PFOA	99		50 - 200
13C9 PFNA	107		50 - 200
13C7 PFUnA	109		50 - 200
13C2 PFDoA	100		50 - 200
13C4 PFBA	105		50 - 200
13C5 PFPeA	103		50 - 200
13C3 PFBS	98		50 - 200
13C3 PFHxS	99		50 - 200
13C8 PFOS	100		50 - 200
13C2-4:2-FTS	115		50 - 200
13C2-6:2-FTS	110		50 - 200
13C2-8:2-FTS	108		50 - 200

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

Lab Sample ID: MBL 380-147967/1-A

Matrix: Water

Analysis Batch: 148138

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 147967

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		04/17/25 15:35	04/18/25 20:44	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0	ng/L		04/17/25 15:35	04/18/25 20:44	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0	ng/L		04/17/25 15:35	04/18/25 20:44	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<0.58		2.0	ng/L		04/17/25 15:35	04/18/25 20:44	1

Eurofins Eaton Analytical Pomona

QC Sample Results

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

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

Lab Sample ID: MBL 380-147967/1-A

Matrix: Water

Analysis Batch: 148138

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 147967

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<0.42		2.0	ng/L		04/17/25 15:35	04/18/25 20:44	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0	ng/L		04/17/25 15:35	04/18/25 20:44	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	ng/L		04/17/25 15:35	04/18/25 20:44	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0	ng/L		04/17/25 15:35	04/18/25 20:44	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	ng/L		04/17/25 15:35	04/18/25 20:44	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0	ng/L		04/17/25 15:35	04/18/25 20:44	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0	ng/L		04/17/25 15:35	04/18/25 20:44	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0	ng/L		04/17/25 15:35	04/18/25 20:44	1
Perfluorononanoic acid (PFNA)	<0.40		2.0	ng/L		04/17/25 15:35	04/18/25 20:44	1
Perfluorotetradecanoic acid (PFTA)	<0.54		2.0	ng/L		04/17/25 15:35	04/18/25 20:44	1
Perfluorotridecanoic acid (PFTDA)	<0.36		2.0	ng/L		04/17/25 15:35	04/18/25 20:44	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<0.30		2.0	ng/L		04/17/25 15:35	04/18/25 20:44	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUS)	<0.30		2.0	ng/L		04/17/25 15:35	04/18/25 20:44	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0	ng/L		04/17/25 15:35	04/18/25 20:44	1

Surrogate	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	97		70 - 130	04/17/25 15:35	04/18/25 20:44	1
13C2 PFHxA	106		70 - 130	04/17/25 15:35	04/18/25 20:44	1
13C2 PFDA	103		70 - 130	04/17/25 15:35	04/18/25 20:44	1
13C3-GenX	100		70 - 130	04/17/25 15:35	04/18/25 20:44	1

Lab Sample ID: LCS 380-147967/3-A

Matrix: Water

Analysis Batch: 148138

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 147967

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	50.0	44.8		ng/L		90	70 - 130
Perfluorooctanesulfonic acid (PFOS)	50.0	49.4		ng/L		99	70 - 130
Perfluoroundecanoic acid (PFUnA)	50.0	48.4		ng/L		97	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	50.0	47.0		ng/L		94	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	50.0	46.1		ng/L		92	70 - 130
Perfluorohexanoic acid (PFHxA)	50.0	46.7		ng/L		93	70 - 130
Perfluorododecanoic acid (PFDoA)	50.0	48.1		ng/L		96	70 - 130
Perfluorooctanoic acid (PFOA)	50.0	50.3		ng/L		101	70 - 130
Perfluorodecanoic acid (PFDA)	50.0	48.1		ng/L		96	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	50.0	48.9		ng/L		98	70 - 130
Perfluorobutanesulfonic acid (PFBS)	50.0	45.2		ng/L		90	70 - 130
Perfluoroheptanoic acid (PFHpA)	50.0	48.8		ng/L		98	70 - 130
Perfluorononanoic acid (PFNA)	50.0	48.9		ng/L		98	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

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

Lab Sample ID: LCS 380-147967/3-A

Matrix: Water

Analysis Batch: 148138

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 147967

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorotetradecanoic acid (PFTA)	50.0	46.5		ng/L		93	70 - 130
Perfluorotridecanoic acid (PFTrDA)	50.0	46.5		ng/L		93	70 - 130
9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid(9Cl-PF3ONS)	50.0	48.3		ng/L		97	70 - 130
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	50.0	43.3		ng/L		87	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	50.0	48.6		ng/L		97	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
d5-NEtFOSAA	97		70 - 130				
13C2 PFHxA	96		70 - 130				
13C2 PFDA	99		70 - 130				
13C3-GenX	94		70 - 130				

Lab Sample ID: MRL 380-147967/2-A

Matrix: Water

Analysis Batch: 148138

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 147967

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.00	1.92	J	ng/L		96	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.00	1.95	J	ng/L		97	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.00	2.10	J	ng/L		105	50 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2.00	1.88	J	ng/L		94	50 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2.00	1.91	J	ng/L		95	50 - 150
Perfluorohexanoic acid (PFHxA)	2.00	2.10	J	ng/L		105	50 - 150
Perfluorododecanoic acid (PFDoA)	2.00	2.05	J	ng/L		102	50 - 150
Perfluorooctanoic acid (PFOA)	2.00	2.00	J	ng/L		100	50 - 150
Perfluorodecanoic acid (PFDA)	2.00	1.98	J	ng/L		99	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.00	2.09	J	ng/L		104	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.00	1.92	J	ng/L		96	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.00	2.19	J	ng/L		109	50 - 150
Perfluorononanoic acid (PFNA)	2.00	1.96	J	ng/L		98	50 - 150
Perfluorotetradecanoic acid (PFTA)	2.00	2.03	J	ng/L		101	50 - 150
Perfluorotridecanoic acid (PFTrDA)	2.00	1.94	J	ng/L		97	50 - 150
9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid(9Cl-PF3ONS)	2.00	1.91	J	ng/L		95	50 - 150

Eurofins Eaton Analytical Pomona

QC Sample Results

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

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

Lab Sample ID: MRL 380-147967/2-A

Matrix: Water

Analysis Batch: 148138

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 147967

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.00	1.92	J	ng/L		96	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.00	1.94	J	ng/L		97	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
d5-NEtFOSAA	95		70 - 130
13C2 PFHxA	101		70 - 130
13C2 PFDA	98		70 - 130
13C3-GenX	93		70 - 130

Lab Sample ID: 380-146118-B-1-A MSD

Matrix: Water

Analysis Batch: 148138

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 147967

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		50.2	47.0		ng/L		94	70 - 130	2	30
Perfluorooctanesulfonic acid (PFOS)	<2.0		50.2	51.7		ng/L		102	70 - 130	2	30
Perfluoroundecanoic acid (PFUnA)	<2.0		50.2	48.9		ng/L		97	70 - 130	0	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		50.2	49.9		ng/L		99	70 - 130	6	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		50.2	50.8		ng/L		101	70 - 130	9	30
Perfluorohexanoic acid (PFHxA)	<2.0		50.2	49.5		ng/L		97	70 - 130	6	30
Perfluorododecanoic acid (PFDaA)	<2.0		50.2	47.5		ng/L		95	70 - 130	5	30
Perfluorooctanoic acid (PFOA)	<2.0		50.2	49.4		ng/L		97	70 - 130	3	30
Perfluorodecanoic acid (PFDA)	<2.0		50.2	47.0		ng/L		94	70 - 130	5	30
Perfluorohexanesulfonic acid (PFHxS)	<2.0		50.2	51.8		ng/L		102	70 - 130	6	30
Perfluorobutanesulfonic acid (PFBS)	<2.0		50.2	50.0		ng/L		99	70 - 130	4	30
Perfluoroheptanoic acid (PFHpA)	2.0		50.2	49.5		ng/L		98	70 - 130	2	30
Perfluorononanoic acid (PFNA)	<2.0		50.2	48.0		ng/L		96	70 - 130	2	30
Perfluorotetradecanoic acid (PFTA)	<2.0		50.2	43.3		ng/L		86	70 - 130	9	30
Perfluorotridecanoic acid (PFTrDA)	<2.0		50.2	46.5		ng/L		93	70 - 130	1	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<2.0		50.2	49.7		ng/L		99	70 - 130	3	30
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		50.2	46.9		ng/L		93	70 - 130	6	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		50.2	49.4		ng/L		98	70 - 130	4	30

QC Sample Results

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-146118-B-1-A MSD

Matrix: Water

Analysis Batch: 148138

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 147967

Surrogate	MSD %Recovery	MSD Qualifier	Limits
d5-NEtFOSAA	105		70 - 130
13C2 PFHxA	100		70 - 130
13C2 PFDA	96		70 - 130
13C3-GenX	98		70 - 130

Lab Sample ID: 380-146118-C-1-A MS

Matrix: Water

Analysis Batch: 148138

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 147967

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide	<2.0		50.1	47.9		ng/L		96	70 - 130
Dimer Acid (HFPO-DA/GenX)									
Perfluorooctanesulfonic acid (PFOS)	<2.0		50.1	50.4		ng/L		100	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		50.1	48.8		ng/L		97	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		50.1	47.0		ng/L		94	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		50.1	46.4		ng/L		93	70 - 130
Perfluorohexanoic acid (PFHxA)	<2.0		50.1	52.8		ng/L		104	70 - 130
Perfluorododecanoic acid (PFDaA)	<2.0		50.1	50.1		ng/L		100	70 - 130
Perfluorooctanoic acid (PFOA)	<2.0		50.1	48.0		ng/L		95	70 - 130
Perfluorodecanoic acid (PFDA)	<2.0		50.1	49.2		ng/L		98	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	<2.0		50.1	48.9		ng/L		96	70 - 130
Perfluorobutanesulfonic acid (PFBS)	<2.0		50.1	51.8		ng/L		103	70 - 130
Perfluoroheptanoic acid (PFHpA)	<2.0		50.1	50.2		ng/L		99	70 - 130
Perfluorononanoic acid (PFNA)	<2.0		50.1	48.9		ng/L		98	70 - 130
Perfluorotetradecanoic acid (PFTA)	<2.0		50.1	47.6		ng/L		95	70 - 130
Perfluorotridecanoic acid (PFTrDA)	<2.0		50.1	45.8		ng/L		91	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		50.1	48.0		ng/L		96	70 - 130
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		50.1	44.0		ng/L		88	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		50.1	47.4		ng/L		95	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
d5-NEtFOSAA	96		70 - 130
13C2 PFHxA	109		70 - 130
13C2 PFDA	104		70 - 130
13C3-GenX	98		70 - 130

QC Association Summary

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

LCMS

Prep Batch: 147967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-146125-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Drinking Water	537.1 DW	
380-146125-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	537.1 DW	
380-146125-3	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	Total/NA	Drinking Water	537.1 DW	
380-146125-4	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Total/NA	Drinking Water	537.1 DW	
380-146125-5	FB Moanalua Wells	Total/NA	Water	537.1 DW	
380-146125-6	FB Halawa Wells Units 1&2	Total/NA	Water	537.1 DW	
380-146125-7	FB Aiea Gulch Wells Pump 1	Total/NA	Water	537.1 DW	
380-146125-8	FB Aiea Gulch Wells Pump 2	Total/NA	Water	537.1 DW	
MBL 380-147967/1-A	Method Blank	Total/NA	Water	537.1 DW	
LCS 380-147967/3-A	Lab Control Sample	Total/NA	Water	537.1 DW	
MRL 380-147967/2-A	Lab Control Sample	Total/NA	Water	537.1 DW	
380-146118-B-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	537.1 DW	
380-146118-C-1-A MS	Matrix Spike	Total/NA	Water	537.1 DW	

Prep Batch: 148112

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-146125-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Drinking Water	533	
MBL 380-148112/20-A	Method Blank	Total/NA	Water	533	
LCS 380-148112/22-A	Lab Control Sample	Total/NA	Water	533	
MRL 380-148112/21-A	Lab Control Sample	Total/NA	Water	533	
380-146047-E-1-A MS	Matrix Spike	Total/NA	Water	533	
380-146047-F-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	533	

Prep Batch: 148113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-146125-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	533	
380-146125-3	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	Total/NA	Drinking Water	533	
380-146125-4	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Total/NA	Drinking Water	533	
380-146125-5	FB Moanalua Wells	Total/NA	Water	533	
380-146125-6	FB Halawa Wells Units 1&2	Total/NA	Water	533	
380-146125-7	FB Aiea Gulch Wells Pump 1	Total/NA	Water	533	
380-146125-8	FB Aiea Gulch Wells Pump 2	Total/NA	Water	533	
MBL 380-148113/20-A	Method Blank	Total/NA	Water	533	
LCS 380-148113/22-A	Lab Control Sample	Total/NA	Water	533	
MRL 380-148113/21-A	Lab Control Sample	Total/NA	Water	533	
380-145986-B-1-A MS	Matrix Spike	Total/NA	Water	533	
380-145986-C-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	533	

Analysis Batch: 148138

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-146125-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Drinking Water	537.1	147967
380-146125-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	537.1	147967
380-146125-3	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	Total/NA	Drinking Water	537.1	147967
380-146125-4	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Total/NA	Drinking Water	537.1	147967
380-146125-5	FB Moanalua Wells	Total/NA	Water	537.1	147967
380-146125-6	FB Halawa Wells Units 1&2	Total/NA	Water	537.1	147967
380-146125-7	FB Aiea Gulch Wells Pump 1	Total/NA	Water	537.1	147967
380-146125-8	FB Aiea Gulch Wells Pump 2	Total/NA	Water	537.1	147967
MBL 380-147967/1-A	Method Blank	Total/NA	Water	537.1	147967
LCS 380-147967/3-A	Lab Control Sample	Total/NA	Water	537.1	147967
MRL 380-147967/2-A	Lab Control Sample	Total/NA	Water	537.1	147967

Eurofins Eaton Analytical Pomona

QC Association Summary

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

LCMS (Continued)

Analysis Batch: 148138 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-146118-B-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	537.1	147967
380-146118-C-1-A MS	Matrix Spike	Total/NA	Water	537.1	147967

Analysis Batch: 148243

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-146125-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	533	148113
380-146125-3	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	Total/NA	Drinking Water	533	148113
380-146125-4	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Total/NA	Drinking Water	533	148113
380-146125-5	FB Moanalua Wells	Total/NA	Water	533	148113
380-146125-6	FB Halawa Wells Units 1&2	Total/NA	Water	533	148113
380-146125-7	FB Aiea Gulch Wells Pump 1	Total/NA	Water	533	148113
380-146125-8	FB Aiea Gulch Wells Pump 2	Total/NA	Water	533	148113
MBL 380-148113/20-A	Method Blank	Total/NA	Water	533	148113
LCS 380-148113/22-A	Lab Control Sample	Total/NA	Water	533	148113
MRL 380-148113/21-A	Lab Control Sample	Total/NA	Water	533	148113
380-145986-B-1-A MS	Matrix Spike	Total/NA	Water	533	148113
380-145986-C-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	533	148113

Analysis Batch: 148275

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-146125-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Drinking Water	533	148112
MBL 380-148112/20-A	Method Blank	Total/NA	Water	533	148112
LCS 380-148112/22-A	Lab Control Sample	Total/NA	Water	533	148112
MRL 380-148112/21-A	Lab Control Sample	Total/NA	Water	533	148112
380-146047-F-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	533	148112

Analysis Batch: 148300

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-146047-E-1-A MS	Matrix Spike	Total/NA	Water	533	148112

Lab Chronicle

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

Client Sample ID: MOANALUA WELLS (331-223-TP202)

Lab Sample ID: 380-146125-1

Date Collected: 04/14/25 09:33

Matrix: Drinking Water

Date Received: 04/16/25 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			148112	XTD8	EA POM	04/18/25 07:31
Total/NA	Analysis	533		1	148275	Y5FM	EA POM	04/19/25 02:06
Total/NA	Prep	537.1 DW			147967	E2HD	EA POM	04/17/25 15:35
Total/NA	Analysis	537.1		1	148138	Y5FM	EA POM	04/19/25 00:07

Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)

Lab Sample ID: 380-146125-2

Date Collected: 04/14/25 10:05

Matrix: Drinking Water

Date Received: 04/16/25 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			148113	XTD8	EA POM	04/18/25 07:37
Total/NA	Analysis	533		1	148243	Y5FM	EA POM	04/18/25 20:00
Total/NA	Prep	537.1 DW			147967	E2HD	EA POM	04/17/25 15:35
Total/NA	Analysis	537.1		1	148138	Y5FM	EA POM	04/18/25 23:57

Client Sample ID: AIEA GULCH WELLS PUMP 1 (331-201-TP071)

Lab Sample ID: 380-146125-3

Date Collected: 04/14/25 10:33

Matrix: Drinking Water

Date Received: 04/16/25 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			148113	XTD8	EA POM	04/18/25 07:37
Total/NA	Analysis	533		1	148243	Y5FM	EA POM	04/18/25 20:21
Total/NA	Prep	537.1 DW			147967	E2HD	EA POM	04/17/25 15:35
Total/NA	Analysis	537.1		1	148138	Y5FM	EA POM	04/18/25 23:46

Client Sample ID: AIEA GULCH WELLS PUMP 2 (331-202-TP072)

Lab Sample ID: 380-146125-4

Date Collected: 04/14/25 10:54

Matrix: Drinking Water

Date Received: 04/16/25 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			148113	XTD8	EA POM	04/18/25 07:37
Total/NA	Analysis	533		1	148243	Y5FM	EA POM	04/18/25 20:32
Total/NA	Prep	537.1 DW			147967	E2HD	EA POM	04/17/25 15:35
Total/NA	Analysis	537.1		1	148138	Y5FM	EA POM	04/18/25 23:35

Client Sample ID: FB Moanalua Wells

Lab Sample ID: 380-146125-5

Date Collected: 04/14/25 09:33

Matrix: Water

Date Received: 04/16/25 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			148113	XTD8	EA POM	04/18/25 07:37
Total/NA	Analysis	533		1	148243	Y5FM	EA POM	04/18/25 20:41

Eurofins Eaton Analytical Pomona

Lab Chronicle

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

Client Sample ID: FB Moanalua Wells

Lab Sample ID: 380-146125-5

Date Collected: 04/14/25 09:33

Matrix: Water

Date Received: 04/16/25 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	537.1 DW			147967	E2HD	EA POM	04/17/25 15:35
Total/NA	Analysis	537.1		1	148138	Y5FM	EA POM	04/19/25 00:18

Client Sample ID: FB Halawa Wells Units 1&2

Lab Sample ID: 380-146125-6

Date Collected: 04/14/25 10:05

Matrix: Water

Date Received: 04/16/25 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			148113	XTD8	EA POM	04/18/25 07:37
Total/NA	Analysis	533		1	148243	Y5FM	EA POM	04/18/25 20:51
Total/NA	Prep	537.1 DW			147967	E2HD	EA POM	04/17/25 15:35
Total/NA	Analysis	537.1		1	148138	Y5FM	EA POM	04/19/25 00:29

Client Sample ID: FB Aiea Gulch Wells Pump 1

Lab Sample ID: 380-146125-7

Date Collected: 04/14/25 10:33

Matrix: Water

Date Received: 04/16/25 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			148113	XTD8	EA POM	04/18/25 07:37
Total/NA	Analysis	533		1	148243	Y5FM	EA POM	04/18/25 21:01
Total/NA	Prep	537.1 DW			147967	E2HD	EA POM	04/17/25 15:35
Total/NA	Analysis	537.1		1	148138	Y5FM	EA POM	04/19/25 00:40

Client Sample ID: FB Aiea Gulch Wells Pump 2

Lab Sample ID: 380-146125-8

Date Collected: 04/14/25 10:54

Matrix: Water

Date Received: 04/16/25 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			148113	XTD8	EA POM	04/18/25 07:37
Total/NA	Analysis	533		1	148243	Y5FM	EA POM	04/18/25 21:10
Total/NA	Prep	537.1 DW			147967	E2HD	EA POM	04/17/25 15:35
Total/NA	Analysis	537.1		1	148138	Y5FM	EA POM	04/19/25 00:50

Laboratory References:

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

Accreditation/Certification Summary

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

Laboratory: Eurofins Eaton Analytical Pomona

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

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

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

Method Summary

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

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

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

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

Sample Summary

Client: City & County of Honolulu
Project/Site: RED-HILL

Job ID: 380-146125-1
SDG: Weekly PFAS

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	PWSID Number
380-146125-1	MOANALUA WELLS (331-223-TP202)	Drinking Water	04/14/25 09:33	04/16/25 10:20	HI0000331
380-146125-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	Drinking Water	04/14/25 10:05	04/16/25 10:20	HI0000331
380-146125-3	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	Drinking Water	04/14/25 10:33	04/16/25 10:20	HI0000331
380-146125-4	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Drinking Water	04/14/25 10:54	04/16/25 10:20	HI0000331
380-146125-5	FB Moanalua Wells	Water	04/14/25 09:33	04/16/25 10:20	HI0000331
380-146125-6	FB Halawa Wells Units 1&2	Water	04/14/25 10:05	04/16/25 10:20	HI0000331
380-146125-7	FB Aiea Gulch Wells Pump 1	Water	04/14/25 10:33	04/16/25 10:20	HI0000331
380-146125-8	FB Aiea Gulch Wells Pump 2	Water	04/14/25 10:54	04/16/25 10:20	HI0000331

Monrovia, CA (Suite 100)
750 Royal Oaks Drive Suite 100
Monrovia, CA 91016
Phone (626) 386-1100

Chain of Custody Record



Environment Testing
America

Client Information		Lab PW: Arada, Rachelle		Carrier Tracking No(s):		COC No: 380-27941-2757.2													
Client Contact: Kirk Iwamoto		Phone: +1 808 748 5840		State of Origin:		Page: Page 2 of 2													
Company: City & County of Honolulu		PWSID:		Analysis Requested		Job #:													
Address: 630 South Beretania Street, Chemistry Lab		Due Date Requested:		Total Number of Containers		Preservation Codes:													
City: Honolulu		TAT Requested (days):		380-146125 COC		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other													
State, Zip: HI, 96843		Compliance Project: Δ No		8015B_GRO_LL - (MOD) GRO		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Y - Trizma Z - other (specify)													
Phone: 808-748-5840 (tel)		PO #: C20525101 exp 05312023		8015B_GRO_LL - C8 - HNL Ranges: C10-C24/C24-C38/C8															
Email: kiwamoto@hbws.org		WO #: 38001111		8015B_GRO_LL - (MOD) PLUS TICs															
Project Name: RED-HILL/HBWS sites Event Desc: RUSH Weekly Red Hill		Project #: 38001111		637.1_DW_PREC - 637.1 Full Lat															
Site:		SSOW#:		633 - All Analytes															
Sample Identification		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (Inwater, Onsolid, Onsoild, Onsoild, Onsoild)		Field Filtered Sample (Yes or No)		Perform HPLC/MSD (Yes or No)		SUBCONTRACT - 625 PAH Physic LL (EAL) + TICs		Total Number of Containers		Special Instructions/Note:	
Moanalua Wells		14-Apr-2025		0933		G		Water		X		X		R		3		chlorinated	
Halawa Wells Units 1&2 P1		14-Apr-2025		1005		G		Water								3			
Aiea Gulch Wells Pump 1		14-Apr-2025		1033		G		Water								3		chlorinated	
Aiea Gulch Wells Pump 2		14-Apr-2025		1054		G		Water								3		chlorinated	
FB Moanalua Wells		14-Apr-2025		0933												1			
FB Halawa Wells Units 1&2		14-Apr-2025		1005												1			
FB Aiea Gulch Wells Pump 1		14-Apr-2025		1033												1			
FB Aiea Gulch Wells Pump 2		14-Apr-2025		1054												1			
Possible Hazard Identification		☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		☐ Return To Client ☐ Disposal By Lab ☐ Archive For Months													
Deliverable Requested: I, II, III, IV, Other (specify)																			
Empty Kit Relinquished by		Date: 6/21/2025		Time: 1400		Company: HBWS		Received by: [Signature]		Date/Time: 04/16/25 10:20		Company: EEAR		Method of Shipment: FEDEX 880574380971					
Relinquished by		Date/Time:		Company:		Received by:		Date/Time:		Company:		Received by:		Date/Time:		Company:			
Custody Seals Intact: Δ Yes Δ No		Custody Seal No..		Cooler Temperature(s) °C and Other Remarks: (751A) 2.1°-0.0°=2.1° (REL) Ver 01/16/2019															

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-146125-1

SDG Number: Weekly PFAS

Login Number: 146125

List Source: Eurofins Eaton Analytical Pomona

List Number: 1

Creator: Gerfen, Chris

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	