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ANALYTICAL REPORT

PREPARED FOR

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JOB DESCRIPTION

RED-HILL
Weekly PFAS

JOB NUMBER

380-131761-1

Eurofins Eaton Analytical Pomona

Job Notes

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

Compliance Statement

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

Authorization



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Definitions/Glossary

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

Job ID: 380-131761-1
SDG: Weekly PFAS

Qualifiers

LCMS

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

Glossary

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

Case Narrative

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

Job ID: 380-131761-1

Job ID: 380-131761-1

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Job Narrative 380-131761-1

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 1/23/2025 9:37 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 1.6°C, 2.5°C and 3.4°C.

PFAS

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

Detection Summary

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

Job ID: 380-131761-1
SDG: Weekly PFAS

Client Sample ID: HALAWA WELLS UNITS 1&2 P1

Lab Sample ID: 380-131761-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanesulfonic acid (PFHxS)	2.5		2.0	ng/L	1		533	Total/NA
Perfluorohexanoic acid (PFHxA)	2.1		2.0	ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.3		2.0	ng/L	1		533	Total/NA
Perfluoropentanoic acid (PFPeA)	2.4		2.0	ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.2		2.0	ng/L	1		537.1	Total/NA
Perfluorohexanoic acid (PFHxA)	2.0		2.0	ng/L	1		537.1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.3		2.0	ng/L	1		537.1	Total/NA

Client Sample ID: AIEA GULCH WELLS PUMP 1

Lab Sample ID: 380-131761-2

No Detections.

Client Sample ID: AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-131761-3

No Detections.

Client Sample ID: AIEA WELLS PUMPS 1&2 (260) P2

Lab Sample ID: 380-131761-4

No Detections.

Client Sample ID: KA'AMILO WELLS

Lab Sample ID: 380-131761-5

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanesulfonic acid (PFHxS)	2.3		2.0	ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.5		2.0	ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.3		2.0	ng/L	1		537.1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.2		2.0	ng/L	1		537.1	Total/NA

Client Sample ID: FB: HALAWA WELLS UNITS 1&2 P1

Lab Sample ID: 380-131761-6

No Detections.

Client Sample ID: FB: AIEA GULCH WELLS PUMP 1

Lab Sample ID: 380-131761-7

No Detections.

Client Sample ID: FB: AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-131761-8

No Detections.

Client Sample ID: FB: AIEA WELLS PUMPS 1&2 (260) P2

Lab Sample ID: 380-131761-9

No Detections.

Client Sample ID: FB: KA'AMILO WELLS

Lab Sample ID: 380-131761-10

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: 380-131761-1
SDG: Weekly PFAS

Client Sample ID: HALAWA WELLS UNITS 1&2 P1

Lab Sample ID: 380-131761-1

Date Collected: 01/21/25 09:50

Matrix: Water

Date Received: 01/23/25 09:37

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosfluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:26	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:26	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:26	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:26	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:26	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:26	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:26	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:26	1
Perfluorohexanesulfonic acid (PFHxS)	2.5		2.0	ng/L		01/24/25 07:21	01/25/25 06:26	1
Perfluorohexanoic acid (PFHxA)	2.1		2.0	ng/L		01/24/25 07:21	01/25/25 06:26	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:26	1
Perfluorooctanesulfonic acid (PFOS)	2.3		2.0	ng/L		01/24/25 07:21	01/25/25 06:26	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:26	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:26	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:26	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:26	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:26	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:26	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:26	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:26	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:26	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:26	1
Perfluoropentanoic acid (PFPeA)	2.4		2.0	ng/L		01/24/25 07:21	01/25/25 06:26	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:26	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:26	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	120		50 - 200	01/24/25 07:21	01/25/25 06:26	1
13C6 PFDA	110		50 - 200	01/24/25 07:21	01/25/25 06:26	1
13C5 PFHxA	105		50 - 200	01/24/25 07:21	01/25/25 06:26	1
13C4 PFHpA	109		50 - 200	01/24/25 07:21	01/25/25 06:26	1
13C8 PFOA	110		50 - 200	01/24/25 07:21	01/25/25 06:26	1
13C9 PFNA	112		50 - 200	01/24/25 07:21	01/25/25 06:26	1
13C7 PFUnA	106		50 - 200	01/24/25 07:21	01/25/25 06:26	1
13C2 PFDoA	109		50 - 200	01/24/25 07:21	01/25/25 06:26	1
13C4 PFBA	109		50 - 200	01/24/25 07:21	01/25/25 06:26	1
13C5 PFPeA	113		50 - 200	01/24/25 07:21	01/25/25 06:26	1
13C3 PFBS	109		50 - 200	01/24/25 07:21	01/25/25 06:26	1
13C3 PFHxS	121		50 - 200	01/24/25 07:21	01/25/25 06:26	1

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Client Sample Results

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

Job ID: 380-131761-1
SDG: Weekly PFAS

Client Sample ID: HALAWA WELLS UNITS 1&2 P1

Lab Sample ID: 380-131761-1

Date Collected: 01/21/25 09:50

Matrix: Water

Date Received: 01/23/25 09:37

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 PFOS	116		50 - 200	01/24/25 07:21	01/25/25 06:26	1
13C2-4:2-FTS	126		50 - 200	01/24/25 07:21	01/25/25 06:26	1
13C2-6:2-FTS	111		50 - 200	01/24/25 07:21	01/25/25 06:26	1
13C2-8:2-FTS	102		50 - 200	01/24/25 07:21	01/25/25 06:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 15:52	1
Perfluorooctanesulfonic acid (PFOS)	2.2		2.0	ng/L		01/24/25 02:15	01/24/25 15:52	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 15:52	1
N-methylperfluorooctanesulfonamideacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 15:52	1
N-ethylperfluorooctanesulfonamideacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 15:52	1
Perfluorohexanoic acid (PFHxA)	2.0		2.0	ng/L		01/24/25 02:15	01/24/25 15:52	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 15:52	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 15:52	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 15:52	1
Perfluorohexanesulfonic acid (PFHxS)	2.3		2.0	ng/L		01/24/25 02:15	01/24/25 15:52	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 15:52	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 15:52	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 15:52	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 15:52	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 15:52	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 15:52	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 15:52	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 15:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	94		70 - 130			01/24/25 02:15	01/24/25 15:52	1
13C2 PFHxA	100		70 - 130			01/24/25 02:15	01/24/25 15:52	1
13C2 PFDA	103		70 - 130			01/24/25 02:15	01/24/25 15:52	1
13C3-GenX	99		70 - 130			01/24/25 02:15	01/24/25 15:52	1

Client Sample ID: AIEA GULCH WELLS PUMP 1

Lab Sample ID: 380-131761-2

Date Collected: 01/21/25 10:19

Matrix: Water

Date Received: 01/23/25 09:37

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		01/24/25 07:21	01/25/25 06:35	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:35	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:35	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-131761-1
SDG: Weekly PFAS

Client Sample ID: AIEA GULCH WELLS PUMP 1

Lab Sample ID: 380-131761-2

Date Collected: 01/21/25 10:19

Matrix: Water

Date Received: 01/23/25 09:37

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:35	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:35	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:35	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:35	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:35	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:35	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:35	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:35	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:35	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:35	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:35	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:35	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:35	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:35	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:35	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:35	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:35	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:35	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:35	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:35	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:35	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:35	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	123		50 - 200	01/24/25 07:21	01/25/25 06:35	1
13C6 PFDA	112		50 - 200	01/24/25 07:21	01/25/25 06:35	1
13C5 PFHxA	107		50 - 200	01/24/25 07:21	01/25/25 06:35	1
13C4 PFHpA	111		50 - 200	01/24/25 07:21	01/25/25 06:35	1
13C8 PFOA	116		50 - 200	01/24/25 07:21	01/25/25 06:35	1
13C9 PFNA	112		50 - 200	01/24/25 07:21	01/25/25 06:35	1
13C7 PFUnA	109		50 - 200	01/24/25 07:21	01/25/25 06:35	1
13C2 PFDoA	111		50 - 200	01/24/25 07:21	01/25/25 06:35	1
13C4 PFBA	111		50 - 200	01/24/25 07:21	01/25/25 06:35	1
13C5 PFPeA	112		50 - 200	01/24/25 07:21	01/25/25 06:35	1
13C3 PFBS	105		50 - 200	01/24/25 07:21	01/25/25 06:35	1
13C3 PFHxS	118		50 - 200	01/24/25 07:21	01/25/25 06:35	1
13C8 PFOS	116		50 - 200	01/24/25 07:21	01/25/25 06:35	1
13C2-4:2-FTS	114		50 - 200	01/24/25 07:21	01/25/25 06:35	1
13C2-6:2-FTS	102		50 - 200	01/24/25 07:21	01/25/25 06:35	1
13C2-8:2-FTS	98		50 - 200	01/24/25 07:21	01/25/25 06:35	1

Client Sample Results

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

Job ID: 380-131761-1
SDG: Weekly PFAS

Client Sample ID: AIEA GULCH WELLS PUMP 1

Lab Sample ID: 380-131761-2

Date Collected: 01/21/25 10:19

Matrix: Water

Date Received: 01/23/25 09:37

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		01/24/25 02:15	01/24/25 16:02	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:02	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:02	1
N-methylperfluorooctanesulfonamide acetic acid (NMeFOSAA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:02	1
N-ethylperfluorooctanesulfonamide acetic acid (NEtFOSAA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:02	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:02	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:02	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:02	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:02	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:02	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:02	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:02	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:02	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:02	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:02	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:02	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:02	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	89		70 - 130			01/24/25 02:15	01/24/25 16:02	1
13C2 PFHxA	96		70 - 130			01/24/25 02:15	01/24/25 16:02	1
13C2 PFDA	97		70 - 130			01/24/25 02:15	01/24/25 16:02	1
13C3-GenX	92		70 - 130			01/24/25 02:15	01/24/25 16:02	1

Client Sample ID: AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-131761-3

Date Collected: 01/21/25 10:34

Matrix: Water

Date Received: 01/23/25 09:37

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		01/24/25 07:21	01/25/25 06:55	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:55	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:55	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:55	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:55	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:55	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:55	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:55	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:55	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:55	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:55	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:55	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-131761-1
SDG: Weekly PFAS

Client Sample ID: AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-131761-3

Date Collected: 01/21/25 10:34

Matrix: Water

Date Received: 01/23/25 09:37

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		01/24/25 07:21	01/25/25 06:55	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:55	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:55	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:55	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:55	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:55	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:55	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:55	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:55	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:55	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:55	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:55	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 06:55	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	114		50 - 200	01/24/25 07:21	01/25/25 06:55	1
13C6 PFDA	106		50 - 200	01/24/25 07:21	01/25/25 06:55	1
13C5 PFHxA	105		50 - 200	01/24/25 07:21	01/25/25 06:55	1
13C4 PFHpA	110		50 - 200	01/24/25 07:21	01/25/25 06:55	1
13C8 PFOA	110		50 - 200	01/24/25 07:21	01/25/25 06:55	1
13C9 PFNA	110		50 - 200	01/24/25 07:21	01/25/25 06:55	1
13C7 PFUnA	106		50 - 200	01/24/25 07:21	01/25/25 06:55	1
13C2 PFDoA	107		50 - 200	01/24/25 07:21	01/25/25 06:55	1
13C4 PFBA	110		50 - 200	01/24/25 07:21	01/25/25 06:55	1
13C5 PFPeA	111		50 - 200	01/24/25 07:21	01/25/25 06:55	1
13C3 PFBS	111		50 - 200	01/24/25 07:21	01/25/25 06:55	1
13C3 PFHxS	118		50 - 200	01/24/25 07:21	01/25/25 06:55	1
13C8 PFOS	112		50 - 200	01/24/25 07:21	01/25/25 06:55	1
13C2-4:2-FTS	112		50 - 200	01/24/25 07:21	01/25/25 06:55	1
13C2-6:2-FTS	107		50 - 200	01/24/25 07:21	01/25/25 06:55	1
13C2-8:2-FTS	105		50 - 200	01/24/25 07:21	01/25/25 06:55	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		01/24/25 02:15	01/24/25 16:12	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:12	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:12	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:12	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:12	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:12	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:12	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-131761-1
SDG: Weekly PFAS

Client Sample ID: AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-131761-3

Date Collected: 01/21/25 10:34

Matrix: Water

Date Received: 01/23/25 09:37

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:12	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:12	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:12	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:12	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:12	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:12	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:12	1
Perfluorotridecanoic acid (PFTTrDA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:12	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:12	1
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:12	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	91		70 - 130			01/24/25 02:15	01/24/25 16:12	1
13C2 PFHxA	91		70 - 130			01/24/25 02:15	01/24/25 16:12	1
13C2 PFDA	90		70 - 130			01/24/25 02:15	01/24/25 16:12	1
13C3-GenX	87		70 - 130			01/24/25 02:15	01/24/25 16:12	1

Client Sample ID: AIEA WELLS PUMPS 1&2 (260) P2

Lab Sample ID: 380-131761-4

Date Collected: 01/21/25 10:55

Matrix: Water

Date Received: 01/23/25 09:37

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		01/24/25 07:21	01/25/25 07:04	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:04	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:04	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:04	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:04	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:04	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:04	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:04	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:04	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:04	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:04	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:04	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:04	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:04	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:04	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:04	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:04	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:04	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-131761-1
SDG: Weekly PFAS

Client Sample ID: AIEA WELLS PUMPS 1&2 (260) P2

Lab Sample ID: 380-131761-4

Date Collected: 01/21/25 10:55

Matrix: Water

Date Received: 01/23/25 09:37

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:04	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:04	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:04	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:04	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:04	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:04	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:04	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	104		50 - 200			01/24/25 07:21	01/25/25 07:04	1
13C6 PFDA	92		50 - 200			01/24/25 07:21	01/25/25 07:04	1
13C5 PFHxA	91		50 - 200			01/24/25 07:21	01/25/25 07:04	1
13C4 PFHpA	92		50 - 200			01/24/25 07:21	01/25/25 07:04	1
13C8 PFOA	97		50 - 200			01/24/25 07:21	01/25/25 07:04	1
13C9 PFNA	95		50 - 200			01/24/25 07:21	01/25/25 07:04	1
13C7 PFUnA	68		50 - 200			01/24/25 07:21	01/25/25 07:04	1
13C2 PFDoA	54		50 - 200			01/24/25 07:21	01/25/25 07:04	1
13C4 PFBA	103		50 - 200			01/24/25 07:21	01/25/25 07:04	1
13C5 PFPeA	99		50 - 200			01/24/25 07:21	01/25/25 07:04	1
13C3 PFBS	107		50 - 200			01/24/25 07:21	01/25/25 07:04	1
13C3 PFHxS	115		50 - 200			01/24/25 07:21	01/25/25 07:04	1
13C8 PFOS	107		50 - 200			01/24/25 07:21	01/25/25 07:04	1
13C2-4:2-FTS	113		50 - 200			01/24/25 07:21	01/25/25 07:04	1
13C2-6:2-FTS	106		50 - 200			01/24/25 07:21	01/25/25 07:04	1
13C2-8:2-FTS	92		50 - 200			01/24/25 07:21	01/25/25 07:04	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		01/24/25 02:15	01/24/25 16:21	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:21	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:21	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:21	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:21	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:21	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:21	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:21	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:21	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:21	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:21	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:21	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:21	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:21	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:21	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-131761-1
SDG: Weekly PFAS

Client Sample ID: AIEA WELLS PUMPS 1&2 (260) P2

Lab Sample ID: 380-131761-4

Date Collected: 01/21/25 10:55

Matrix: Water

Date Received: 01/23/25 09:37

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:21	1
11-Chloroeicosafuoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:21	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	93		70 - 130			01/24/25 02:15	01/24/25 16:21	1
13C2 PFHxA	94		70 - 130			01/24/25 02:15	01/24/25 16:21	1
13C2 PFDA	100		70 - 130			01/24/25 02:15	01/24/25 16:21	1
13C3-GenX	91		70 - 130			01/24/25 02:15	01/24/25 16:21	1

Client Sample ID: KA'AMILO WELLS

Lab Sample ID: 380-131761-5

Date Collected: 01/21/25 11:22

Matrix: Water

Date Received: 01/23/25 09:37

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafuoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:14	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:14	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:14	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:14	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:14	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:14	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:14	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:14	1
Perfluorohexanesulfonic acid (PFHxS)	2.3		2.0	ng/L		01/24/25 07:21	01/25/25 07:14	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:14	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:14	1
Perfluorooctanesulfonic acid (PFOS)	2.5		2.0	ng/L		01/24/25 07:21	01/25/25 07:14	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:14	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:14	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:14	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:14	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:14	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:14	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:14	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:14	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:14	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:14	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-131761-1
SDG: Weekly PFAS

Client Sample ID: KA'AMILO WELLS

Lab Sample ID: 380-131761-5

Date Collected: 01/21/25 11:22

Matrix: Water

Date Received: 01/23/25 09:37

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:14	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:14	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:14	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	119		50 - 200			01/24/25 07:21	01/25/25 07:14	1
13C6 PFDA	108		50 - 200			01/24/25 07:21	01/25/25 07:14	1
13C5 PFHxA	103		50 - 200			01/24/25 07:21	01/25/25 07:14	1
13C4 PFHpA	109		50 - 200			01/24/25 07:21	01/25/25 07:14	1
13C8 PFOA	111		50 - 200			01/24/25 07:21	01/25/25 07:14	1
13C9 PFNA	110		50 - 200			01/24/25 07:21	01/25/25 07:14	1
13C7 PFUnA	105		50 - 200			01/24/25 07:21	01/25/25 07:14	1
13C2 PFDoA	109		50 - 200			01/24/25 07:21	01/25/25 07:14	1
13C4 PFBA	112		50 - 200			01/24/25 07:21	01/25/25 07:14	1
13C5 PFPeA	118		50 - 200			01/24/25 07:21	01/25/25 07:14	1
13C3 PFBS	111		50 - 200			01/24/25 07:21	01/25/25 07:14	1
13C3 PFHxS	119		50 - 200			01/24/25 07:21	01/25/25 07:14	1
13C8 PFOS	114		50 - 200			01/24/25 07:21	01/25/25 07:14	1
13C2-4:2-FTS	114		50 - 200			01/24/25 07:21	01/25/25 07:14	1
13C2-6:2-FTS	115		50 - 200			01/24/25 07:21	01/25/25 07:14	1
13C2-8:2-FTS	100		50 - 200			01/24/25 07:21	01/25/25 07:14	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		01/24/25 02:15	01/24/25 16:31	1
Perfluorooctanesulfonic acid (PFOS)	2.3		2.0	ng/L		01/24/25 02:15	01/24/25 16:31	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:31	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:31	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:31	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:31	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:31	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:31	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:31	1
Perfluorohexanesulfonic acid (PFHxS)	2.2		2.0	ng/L		01/24/25 02:15	01/24/25 16:31	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:31	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:31	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:31	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:31	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:31	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:31	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:31	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:31	1

Client Sample Results

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

Job ID: 380-131761-1
SDG: Weekly PFAS

Client Sample ID: KA'AMILO WELLS

Lab Sample ID: 380-131761-5

Date Collected: 01/21/25 11:22

Matrix: Water

Date Received: 01/23/25 09:37

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	90		70 - 130	01/24/25 02:15	01/24/25 16:31	1
13C2 PFHxA	98		70 - 130	01/24/25 02:15	01/24/25 16:31	1
13C2 PFDA	96		70 - 130	01/24/25 02:15	01/24/25 16:31	1
13C3-GenX	93		70 - 130	01/24/25 02:15	01/24/25 16:31	1

Client Sample ID: FB: HALAWA WELLS UNITS 1&2 P1

Lab Sample ID: 380-131761-6

Date Collected: 01/21/25 09:50

Matrix: Water

Date Received: 01/23/25 09:37

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafuoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:23	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:23	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:23	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:23	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:23	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:23	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:23	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:23	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:23	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:23	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:23	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:23	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:23	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:23	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:23	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:23	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:23	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:23	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:23	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:23	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:23	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:23	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:23	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:23	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:23	1
Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
13C3 HFPO-DA	111		50 - 200	01/24/25 07:21	01/25/25 07:23	1		
13C6 PFDA	92		50 - 200	01/24/25 07:21	01/25/25 07:23	1		
13C5 PFHxA	101		50 - 200	01/24/25 07:21	01/25/25 07:23	1		

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-131761-1
SDG: Weekly PFAS

Client Sample ID: FB: HALAWA WELLS UNITS 1&2 P1

Lab Sample ID: 380-131761-6

Date Collected: 01/21/25 09:50

Matrix: Water

Date Received: 01/23/25 09:37

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFHpA	106		50 - 200	01/24/25 07:21	01/25/25 07:23	1
13C8 PFOA	107		50 - 200	01/24/25 07:21	01/25/25 07:23	1
13C9 PFNA	101		50 - 200	01/24/25 07:21	01/25/25 07:23	1
13C7 PFUnA	76		50 - 200	01/24/25 07:21	01/25/25 07:23	1
13C2 PFDoA	70		50 - 200	01/24/25 07:21	01/25/25 07:23	1
13C4 PFBA	106		50 - 200	01/24/25 07:21	01/25/25 07:23	1
13C5 PFPeA	107		50 - 200	01/24/25 07:21	01/25/25 07:23	1
13C3 PFBS	107		50 - 200	01/24/25 07:21	01/25/25 07:23	1
13C3 PFHxS	120		50 - 200	01/24/25 07:21	01/25/25 07:23	1
13C8 PFOS	114		50 - 200	01/24/25 07:21	01/25/25 07:23	1
13C2-4:2-FTS	116		50 - 200	01/24/25 07:21	01/25/25 07:23	1
13C2-6:2-FTS	111		50 - 200	01/24/25 07:21	01/25/25 07:23	1
13C2-8:2-FTS	97		50 - 200	01/24/25 07:21	01/25/25 07:23	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		01/24/25 02:15	01/24/25 16:41	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:41	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:41	1
N-methylperfluorooctanesulfonamide acetic acid (NMeFOSAA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:41	1
N-ethylperfluorooctanesulfonamide acetic acid (NEtFOSAA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:41	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:41	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:41	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:41	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:41	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:41	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:41	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:41	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:41	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:41	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:41	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:41	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:41	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	95		70 - 130	01/24/25 02:15	01/24/25 16:41	1
13C2 PFHxA	98		70 - 130	01/24/25 02:15	01/24/25 16:41	1
13C2 PFDA	99		70 - 130	01/24/25 02:15	01/24/25 16:41	1
13C3-GenX	93		70 - 130	01/24/25 02:15	01/24/25 16:41	1

Client Sample Results

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

Job ID: 380-131761-1
SDG: Weekly PFAS

Client Sample ID: FB: AIEA GULCH WELLS PUMP 1

Lab Sample ID: 380-131761-7

Date Collected: 01/21/25 10:19

Matrix: Water

Date Received: 01/23/25 09:37

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		01/24/25 07:21	01/25/25 07:33	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:33	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:33	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:33	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:33	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:33	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:33	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:33	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:33	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:33	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:33	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:33	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:33	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:33	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:33	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:33	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:33	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:33	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:33	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:33	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:33	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:33	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:33	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:33	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		01/24/25 07:21	01/25/25 07:33	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	106		50 - 200	01/24/25 07:21	01/25/25 07:33	1
13C6 PFDA	108		50 - 200	01/24/25 07:21	01/25/25 07:33	1
13C5 PFHxA	103		50 - 200	01/24/25 07:21	01/25/25 07:33	1
13C4 PFHpA	109		50 - 200	01/24/25 07:21	01/25/25 07:33	1
13C8 PFOA	113		50 - 200	01/24/25 07:21	01/25/25 07:33	1
13C9 PFNA	107		50 - 200	01/24/25 07:21	01/25/25 07:33	1
13C7 PFUnA	108		50 - 200	01/24/25 07:21	01/25/25 07:33	1
13C2 PFDoA	106		50 - 200	01/24/25 07:21	01/25/25 07:33	1
13C4 PFBA	105		50 - 200	01/24/25 07:21	01/25/25 07:33	1
13C5 PFPeA	107		50 - 200	01/24/25 07:21	01/25/25 07:33	1
13C3 PFBS	111		50 - 200	01/24/25 07:21	01/25/25 07:33	1
13C3 PFHxS	120		50 - 200	01/24/25 07:21	01/25/25 07:33	1
13C8 PFOS	113		50 - 200	01/24/25 07:21	01/25/25 07:33	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-131761-1
SDG: Weekly PFAS

Client Sample ID: FB: AIEA GULCH WELLS PUMP 1

Lab Sample ID: 380-131761-7

Date Collected: 01/21/25 10:19

Matrix: Water

Date Received: 01/23/25 09:37

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	115		50 - 200	01/24/25 07:21	01/25/25 07:33	1
13C2-6:2-FTS	114		50 - 200	01/24/25 07:21	01/25/25 07:33	1
13C2-8:2-FTS	102		50 - 200	01/24/25 07:21	01/25/25 07:33	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		01/24/25 02:15	01/24/25 16:50	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:50	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:50	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:50	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:50	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:50	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:50	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:50	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:50	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:50	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:50	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:50	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:50	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:50	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:50	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:50	1
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:50	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 16:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	89		70 - 130			01/24/25 02:15	01/24/25 16:50	1
13C2 PFHxA	92		70 - 130			01/24/25 02:15	01/24/25 16:50	1
13C2 PFDA	91		70 - 130			01/24/25 02:15	01/24/25 16:50	1
13C3-GenX	89		70 - 130			01/24/25 02:15	01/24/25 16:50	1

Client Sample ID: FB: AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-131761-8

Date Collected: 01/21/25 10:34

Matrix: Water

Date Received: 01/23/25 09:37

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:07	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:07	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:07	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:07	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:07	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:07	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-131761-1
SDG: Weekly PFAS

Client Sample ID: FB: AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-131761-8

Date Collected: 01/21/25 10:34

Matrix: Water

Date Received: 01/23/25 09:37

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:07	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:07	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:07	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:07	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:07	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:07	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:07	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:07	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:07	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:07	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:07	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:07	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:07	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:07	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:07	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:07	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:07	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:07	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:07	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	110		50 - 200	01/24/25 07:27	01/25/25 13:07	1
13C6 PFDA	110		50 - 200	01/24/25 07:27	01/25/25 13:07	1
13C5 PFHxA	106		50 - 200	01/24/25 07:27	01/25/25 13:07	1
13C4 PFHpA	113		50 - 200	01/24/25 07:27	01/25/25 13:07	1
13C8 PFOA	116		50 - 200	01/24/25 07:27	01/25/25 13:07	1
13C9 PFNA	112		50 - 200	01/24/25 07:27	01/25/25 13:07	1
13C7 PFUnA	109		50 - 200	01/24/25 07:27	01/25/25 13:07	1
13C2 PFDoA	111		50 - 200	01/24/25 07:27	01/25/25 13:07	1
13C4 PFBA	111		50 - 200	01/24/25 07:27	01/25/25 13:07	1
13C5 PFPeA	117		50 - 200	01/24/25 07:27	01/25/25 13:07	1
13C3 PFBS	109		50 - 200	01/24/25 07:27	01/25/25 13:07	1
13C3 PFHxS	115		50 - 200	01/24/25 07:27	01/25/25 13:07	1
13C8 PFOS	113		50 - 200	01/24/25 07:27	01/25/25 13:07	1
13C2-4:2-FTS	108		50 - 200	01/24/25 07:27	01/25/25 13:07	1
13C2-6:2-FTS	106		50 - 200	01/24/25 07:27	01/25/25 13:07	1
13C2-8:2-FTS	97		50 - 200	01/24/25 07:27	01/25/25 13:07	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		01/24/25 02:15	01/24/25 17:11	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:11	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:11	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-131761-1
SDG: Weekly PFAS

Client Sample ID: FB: AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-131761-8

Date Collected: 01/21/25 10:34

Matrix: Water

Date Received: 01/23/25 09:37

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		01/24/25 02:15	01/24/25 17:11	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:11	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:11	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:11	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:11	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:11	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:11	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:11	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:11	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:11	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:11	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:11	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:11	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:11	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	105		70 - 130			01/24/25 02:15	01/24/25 17:11	1
13C2 PFHxA	98		70 - 130			01/24/25 02:15	01/24/25 17:11	1
13C2 PFDA	101		70 - 130			01/24/25 02:15	01/24/25 17:11	1
13C3-GenX	93		70 - 130			01/24/25 02:15	01/24/25 17:11	1

Client Sample ID: FB: AIEA WELLS PUMPS 1&2 (260) P2

Lab Sample ID: 380-131761-9

Date Collected: 01/21/25 10:55

Matrix: Water

Date Received: 01/23/25 09:37

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		01/24/25 07:27	01/25/25 13:16	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:16	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:16	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:16	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:16	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:16	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:16	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:16	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:16	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:16	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:16	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:16	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:16	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:16	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:16	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-131761-1
SDG: Weekly PFAS

Client Sample ID: FB: AIEA WELLS PUMPS 1&2 (260) P2

Lab Sample ID: 380-131761-9

Date Collected: 01/21/25 10:55

Matrix: Water

Date Received: 01/23/25 09:37

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-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:16	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:16	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:16	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:16	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:16	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:16	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:16	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:16	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:16	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:16	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	104		50 - 200	01/24/25 07:27	01/25/25 13:16	1
13C6 PFDA	107		50 - 200	01/24/25 07:27	01/25/25 13:16	1
13C5 PFHxA	105		50 - 200	01/24/25 07:27	01/25/25 13:16	1
13C4 PFHpA	108		50 - 200	01/24/25 07:27	01/25/25 13:16	1
13C8 PFOA	110		50 - 200	01/24/25 07:27	01/25/25 13:16	1
13C9 PFNA	108		50 - 200	01/24/25 07:27	01/25/25 13:16	1
13C7 PFUnA	104		50 - 200	01/24/25 07:27	01/25/25 13:16	1
13C2 PFDoA	106		50 - 200	01/24/25 07:27	01/25/25 13:16	1
13C4 PFBA	113		50 - 200	01/24/25 07:27	01/25/25 13:16	1
13C5 PFPeA	113		50 - 200	01/24/25 07:27	01/25/25 13:16	1
13C3 PFBS	112		50 - 200	01/24/25 07:27	01/25/25 13:16	1
13C3 PFHxS	116		50 - 200	01/24/25 07:27	01/25/25 13:16	1
13C8 PFOS	112		50 - 200	01/24/25 07:27	01/25/25 13:16	1
13C2-4:2-FTS	114		50 - 200	01/24/25 07:27	01/25/25 13:16	1
13C2-6:2-FTS	114		50 - 200	01/24/25 07:27	01/25/25 13:16	1
13C2-8:2-FTS	99		50 - 200	01/24/25 07:27	01/25/25 13:16	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		01/24/25 02:15	01/24/25 17:22	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:22	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:22	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:22	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:22	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:22	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:22	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:22	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:22	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:22	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-131761-1
SDG: Weekly PFAS

Client Sample ID: FB: AIEA WELLS PUMPS 1&2 (260) P2

Lab Sample ID: 380-131761-9

Date Collected: 01/21/25 10:55

Matrix: Water

Date Received: 01/23/25 09:37

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:22	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:22	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:22	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:22	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:22	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:22	1
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:22	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	97		70 - 130			01/24/25 02:15	01/24/25 17:22	1
13C2 PFHxA	92		70 - 130			01/24/25 02:15	01/24/25 17:22	1
13C2 PFDA	96		70 - 130			01/24/25 02:15	01/24/25 17:22	1
13C3-GenX	87		70 - 130			01/24/25 02:15	01/24/25 17:22	1

Client Sample ID: FB: KA'AMILO WELLS

Lab Sample ID: 380-131761-10

Date Collected: 01/21/25 11:22

Matrix: Water

Date Received: 01/23/25 09:37

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		01/24/25 07:27	01/25/25 13:26	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:26	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:26	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:26	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:26	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:26	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:26	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:26	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:26	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:26	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:26	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:26	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:26	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:26	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:26	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:26	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:26	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:26	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:26	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:26	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-131761-1
SDG: Weekly PFAS

Client Sample ID: FB: KA'AMILO WELLS

Lab Sample ID: 380-131761-10

Date Collected: 01/21/25 11:22

Matrix: Water

Date Received: 01/23/25 09:37

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:26	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:26	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:26	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:26	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		01/24/25 07:27	01/25/25 13:26	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	117		50 - 200			01/24/25 07:27	01/25/25 13:26	1
13C6 PFDA	112		50 - 200			01/24/25 07:27	01/25/25 13:26	1
13C5 PFHxA	111		50 - 200			01/24/25 07:27	01/25/25 13:26	1
13C4 PFHpA	112		50 - 200			01/24/25 07:27	01/25/25 13:26	1
13C8 PFOA	117		50 - 200			01/24/25 07:27	01/25/25 13:26	1
13C9 PFNA	112		50 - 200			01/24/25 07:27	01/25/25 13:26	1
13C7 PFUnA	107		50 - 200			01/24/25 07:27	01/25/25 13:26	1
13C2 PFDoA	107		50 - 200			01/24/25 07:27	01/25/25 13:26	1
13C4 PFBA	111		50 - 200			01/24/25 07:27	01/25/25 13:26	1
13C5 PFPeA	117		50 - 200			01/24/25 07:27	01/25/25 13:26	1
13C3 PFBS	116		50 - 200			01/24/25 07:27	01/25/25 13:26	1
13C3 PFHxS	123		50 - 200			01/24/25 07:27	01/25/25 13:26	1
13C8 PFOS	113		50 - 200			01/24/25 07:27	01/25/25 13:26	1
13C2-4:2-FTS	115		50 - 200			01/24/25 07:27	01/25/25 13:26	1
13C2-6:2-FTS	111		50 - 200			01/24/25 07:27	01/25/25 13:26	1
13C2-8:2-FTS	100		50 - 200			01/24/25 07:27	01/25/25 13:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:32	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:32	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:32	1
N-methylperfluorooctanesulfonamide acid (NMeFOSAA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:32	1
N-ethylperfluorooctanesulfonamide acid (NEtFOSAA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:32	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:32	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:32	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:32	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:32	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:32	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:32	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:32	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:32	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:32	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:32	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:32	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:32	1

Client Sample Results

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

Job ID: 380-131761-1
 SDG: Weekly PFAS

Client Sample ID: FB: KA'AMILO WELLS

Lab Sample ID: 380-131761-10

Date Collected: 01/21/25 11:22

Matrix: Water

Date Received: 01/23/25 09:37

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/24/25 02:15	01/24/25 17:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	90		70 - 130			01/24/25 02:15	01/24/25 17:32	1
13C2 PFHxA	98		70 - 130			01/24/25 02:15	01/24/25 17:32	1
13C2 PFDA	104		70 - 130			01/24/25 02:15	01/24/25 17:32	1
13C3-GenX	91		70 - 130			01/24/25 02:15	01/24/25 17:32	1

Action Limit Summary

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

Job ID: 380-131761-1
SDG: Weekly PFAS

Client Sample ID: HALAWA WELLS UNITS 1&2 P1

Lab Sample ID: 380-131761-1

Compliance Check

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

Analyte	Result	Qualifier	Unit	EPAMCL	RL	Method	Prep Type
				Limit			
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.5		ng/L	10	2.0	533	Total/NA
Perfluorononanoic acid (PFNA)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.3		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)	2.2		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)	2.3		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: 380-131761-2

Compliance Check

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

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

Client Sample ID: AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-131761-3

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

Action Limit Summary

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

Job ID: 380-131761-1
SDG: Weekly PFAS

Client Sample ID: AIEA GULCH WELLS PUMP 2 (Continued)

Lab Sample ID: 380-131761-3

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	RL	Method	Prep Type
				Limit			
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 WELLS PUMPS 1&2 (260) P2

Lab Sample ID: 380-131761-4

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

Client Sample ID: KA'AMILO WELLS

Lab Sample ID: 380-131761-5

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	RL	Method	Prep Type
				Limit			
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.3		ng/L	10	2.0	533	Total/NA
Perfluorononanoic acid (PFNA)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.5		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)	2.3		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)	2.2		ng/L	10	2.0	537.1	Total/NA
Perfluorononanoic acid (PFNA)	<2.0		ng/L	10	2.0	537.1	Total/NA

Action Limit Summary

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

Job ID: 380-131761-1
SDG: Weekly PFAS

Client Sample ID: FB: HALAWA WELLS UNITS 1&2 P1

Lab Sample ID: 380-131761-6

Compliance Check

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

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

Client Sample ID: FB: AIEA GULCH WELLS PUMP 1

Lab Sample ID: 380-131761-7

Compliance Check

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

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

Client Sample ID: FB: AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-131761-8

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			
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

Eurofins Eaton Analytical Pomona

Action Limit Summary

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

Job ID: 380-131761-1
SDG: Weekly PFAS

Client Sample ID: FB: AIEA GULCH WELLS PUMP 2 (Continued)

Lab Sample ID: 380-131761-8

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			
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 WELLS PUMPS 1&2 (260) P2

Lab Sample ID: 380-131761-9

Compliance Check

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

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

Client Sample ID: FB: KA'AMILO WELLS

Lab Sample ID: 380-131761-10

Compliance Check

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

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

Surrogate Summary

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

Job ID: 380-131761-1
 SDG: Weekly PFAS

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)
380-131733-E-1-A MS	Matrix Spike	97	97	102	91
380-131733-F-1-A MSD	Matrix Spike Duplicate	97	91	97	89
380-131761-1	HALAWA WELLS UNITS 1&2 P1	94	100	103	99
380-131761-2	AIEA GULCH WELLS PUMP 1	89	96	97	92
380-131761-3	AIEA GULCH WELLS PUMP 2	91	91	90	87
380-131761-4	AIEA WELLS PUMPS 1&2 (260) P2	93	94	100	91
380-131761-5	KA'AMILO WELLS	90	98	96	93
380-131761-6	FB: HALAWA WELLS UNITS 1&2 P1	95	98	99	93
380-131761-7	FB: AIEA GULCH WELLS PUMF 1	89	92	91	89
380-131761-8	FB: AIEA GULCH WELLS PUMF 2	105	98	101	93
380-131761-9	FB: AIEA WELLS PUMPS 1&2 (260) P2	97	92	96	87
380-131761-10	FB: KA'AMILO WELLS	90	98	104	91
LCS 380-130172/22-A	Lab Control Sample	95	96	95	97
MBL 380-130172/20-A	Method Blank	100	97	102	91
MRL 380-130172/21-A	Lab Control Sample	103	100	100	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: 380-131761-1
SDG: Weekly PFAS

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

Matrix: Water

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	HFPODA (50-200)	C6PFDA (50-200)	13C5PHA (50-200)	C4PFHA (50-200)	C8PFOA (50-200)	C9PFNA (50-200)	13C7PUA (50-200)	PFDoA (50-200)
380-131697-B-1-A MS	Matrix Spike	124	97	100	99	101	100	99	104
380-131697-C-1-A MSD	Matrix Spike Duplicate	122	111	102	104	109	109	103	109
380-131761-1	HALAWA WELLS UNITS 1&2 P1	120	110	105	109	110	112	106	109
380-131761-2	AIEA GULCH WELLS PUMP 1	123	112	107	111	116	112	109	111
380-131761-3	AIEA GULCH WELLS PUMP 2	114	106	105	110	110	110	106	107
380-131761-4	AIEA WELLS PUMPS 1&2 (260) P2	104	92	91	92	97	95	68	54
380-131761-5	KA'AMILO WELLS	119	108	103	109	111	110	105	109
380-131761-6	FB: HALAWA WELLS UNITS 1&2 P1	111	92	101	106	107	101	76	70
380-131761-7	FB: AIEA GULCH WELLS PUMF 1	106	108	103	109	113	107	108	106
380-131761-8	FB: AIEA GULCH WELLS PUMF 2	110	110	106	113	116	112	109	111
380-131761-9	FB: AIEA WELLS PUMPS 1&2 (260) P2	104	107	105	108	110	108	104	106
380-131761-10	FB: KA'AMILO WELLS	117	112	111	112	117	112	107	107
380-131809-B-1-A MS	Matrix Spike	122	111	104	106	110	111	106	106
380-131809-C-1-A MSD	Matrix Spike Duplicate	110	107	99	104	107	110	104	103
LCS 380-130176/22-A	Lab Control Sample	117	114	112	113	114	113	112	111
LCS 380-130177/22-A	Lab Control Sample	129	107	111	112	116	111	108	112
MBL 380-130176/20-A	Method Blank	108	103	105	107	109	105	102	105
MBL 380-130177/20-A	Method Blank	107	101	102	105	105	103	95	99
MRL 380-130176/21-A	Lab Control Sample	111	110	109	112	111	112	109	109
MRL 380-130177/21-A	Lab Control Sample	118	108	110	116	115	113	109	109

		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)
380-131697-B-1-A MS	Matrix Spike	109	128	114	118	111	143	130	109
380-131697-C-1-A MSD	Matrix Spike Duplicate	107	127	111	117	113	145	126	108
380-131761-1	HALAWA WELLS UNITS 1&2 P1	109	113	109	121	116	126	111	102
380-131761-2	AIEA GULCH WELLS PUMP 1	111	112	105	118	116	114	102	98
380-131761-3	AIEA GULCH WELLS PUMP 2	110	111	111	118	112	112	107	105
380-131761-4	AIEA WELLS PUMPS 1&2 (260) P2	103	99	107	115	107	113	106	92
380-131761-5	KA'AMILO WELLS	112	118	111	119	114	114	115	100
380-131761-6	FB: HALAWA WELLS UNITS 1&2 P1	106	107	107	120	114	116	111	97
380-131761-7	FB: AIEA GULCH WELLS PUMF 1	105	107	111	120	113	115	114	102
380-131761-8	FB: AIEA GULCH WELLS PUMF 2	111	117	109	115	113	108	106	97
380-131761-9	FB: AIEA WELLS PUMPS 1&2 (260) P2	113	113	112	116	112	114	114	99
380-131761-10	FB: KA'AMILO WELLS	111	117	116	123	113	115	111	100
380-131809-B-1-A MS	Matrix Spike	107	111	109	116	111	108	102	94
380-131809-C-1-A MSD	Matrix Spike Duplicate	107	113	111	120	115	111	107	100
LCS 380-130176/22-A	Lab Control Sample	115	118	113	119	117	114	110	102
LCS 380-130177/22-A	Lab Control Sample	112	119	111	122	112	109	104	95
MBL 380-130176/20-A	Method Blank	107	106	112	116	109	108	107	98

Isotope Dilution Summary

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

Job ID: 380-131761-1
 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	Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFBA (50-200)	PFPeA (50-200)	C3PFBS (50-200)	C3PFHS (50-200)	C8PFOS (50-200)	42FTS (50-200)	62FTS (50-200)	82FTS (50-200)
MBL 380-130177/20-A	Method Blank	104	103	103	117	109	104	102	94
MRL 380-130176/21-A	Lab Control Sample	106	112	110	114	109	114	107	100
MRL 380-130177/21-A	Lab Control Sample	112	116	110	118	112	109	104	96

Surrogate Legend

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



QC Sample Results

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

Job ID: 380-131761-1
SDG: Weekly PFAS

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

Lab Sample ID: MBL 380-130176/20-A
Matrix: Water
Analysis Batch: 130345

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 130176

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosfluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<0.30		2.0	ng/L		01/24/25 07:21	01/25/25 04:22	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<0.30		2.0	ng/L		01/24/25 07:21	01/25/25 04:22	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0	ng/L		01/24/25 07:21	01/25/25 04:22	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<1.0		2.0	ng/L		01/24/25 07:21	01/25/25 04:22	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0	ng/L		01/24/25 07:21	01/25/25 04:22	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	ng/L		01/24/25 07:21	01/25/25 04:22	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	ng/L		01/24/25 07:21	01/25/25 04:22	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0	ng/L		01/24/25 07:21	01/25/25 04:22	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0	ng/L		01/24/25 07:21	01/25/25 04:22	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0	ng/L		01/24/25 07:21	01/25/25 04:22	1
Perfluorononanoic acid (PFNA)	<0.40		2.0	ng/L		01/24/25 07:21	01/25/25 04:22	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0	ng/L		01/24/25 07:21	01/25/25 04:22	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0	ng/L		01/24/25 07:21	01/25/25 04:22	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0	ng/L		01/24/25 07:21	01/25/25 04:22	1
Perfluorobutanoic acid (PFBA)	<0.69		2.0	ng/L		01/24/25 07:21	01/25/25 04:22	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.38		2.0	ng/L		01/24/25 07:21	01/25/25 04:22	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.37		2.0	ng/L		01/24/25 07:21	01/25/25 04:22	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<0.48		2.0	ng/L		01/24/25 07:21	01/25/25 04:22	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<0.47		2.0	ng/L		01/24/25 07:21	01/25/25 04:22	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<0.25		2.0	ng/L		01/24/25 07:21	01/25/25 04:22	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.46		2.0	ng/L		01/24/25 07:21	01/25/25 04:22	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.15		2.0	ng/L		01/24/25 07:21	01/25/25 04:22	1
Perfluoropentanoic acid (PFPeA)	<0.38		2.0	ng/L		01/24/25 07:21	01/25/25 04:22	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.36		2.0	ng/L		01/24/25 07:21	01/25/25 04:22	1
Perfluoropentanesulfonic acid (PFPeS)	<0.39		2.0	ng/L		01/24/25 07:21	01/25/25 04:22	1

Isotope Dilution	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	108		50 - 200	01/24/25 07:21	01/25/25 04:22	1
13C6 PFDA	103		50 - 200	01/24/25 07:21	01/25/25 04:22	1
13C5 PFHxA	105		50 - 200	01/24/25 07:21	01/25/25 04:22	1
13C4 PFHpA	107		50 - 200	01/24/25 07:21	01/25/25 04:22	1
13C8 PFOA	109		50 - 200	01/24/25 07:21	01/25/25 04:22	1
13C9 PFNA	105		50 - 200	01/24/25 07:21	01/25/25 04:22	1
13C7 PFUnA	102		50 - 200	01/24/25 07:21	01/25/25 04:22	1
13C2 PFDoA	105		50 - 200	01/24/25 07:21	01/25/25 04:22	1
13C4 PFBA	107		50 - 200	01/24/25 07:21	01/25/25 04:22	1
13C5 PFPeA	106		50 - 200	01/24/25 07:21	01/25/25 04:22	1
13C3 PFBS	112		50 - 200	01/24/25 07:21	01/25/25 04:22	1
13C3 PFHxS	116		50 - 200	01/24/25 07:21	01/25/25 04:22	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-131761-1
SDG: Weekly PFAS

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

Lab Sample ID: MBL 380-130176/20-A
Matrix: Water
Analysis Batch: 130345

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 130176

Isotope Dilution	MBL MBL		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C8 PFOS	109		50 - 200	01/24/25 07:21	01/25/25 04:22	1
13C2-4:2-FTS	108		50 - 200	01/24/25 07:21	01/25/25 04:22	1
13C2-6:2-FTS	107		50 - 200	01/24/25 07:21	01/25/25 04:22	1
13C2-8:2-FTS	98		50 - 200	01/24/25 07:21	01/25/25 04:22	1

Lab Sample ID: LCS 380-130176/22-A
Matrix: Water
Analysis Batch: 130345

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 130176

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	60.1	52.5		ng/L		87	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	60.1	63.5		ng/L		106	70 - 130
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	60.1	60.0		ng/L		100	70 - 130
Perfluorobutanesulfonic acid (PFBS)	60.1	60.9		ng/L		101	70 - 130
Perfluorodecanoic acid (PFDA)	60.1	60.5		ng/L		101	70 - 130
Perfluorododecanoic acid (PFDoA)	60.1	60.9		ng/L		101	70 - 130
Perfluoroheptanoic acid (PFHpA)	60.1	57.9		ng/L		96	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	60.1	60.8		ng/L		101	70 - 130
Perfluorohexanoic acid (PFHxA)	60.1	59.9		ng/L		100	70 - 130
Perfluorononanoic acid (PFNA)	60.1	60.9		ng/L		101	70 - 130
Perfluorooctanesulfonic acid (PFOS)	60.1	58.9		ng/L		98	70 - 130
Perfluorooctanoic acid (PFOA)	60.1	59.8		ng/L		99	70 - 130
Perfluoroundecanoic acid (PFUnA)	60.1	62.7		ng/L		104	70 - 130
Perfluorobutanoic acid (PFBA)	60.1	60.3		ng/L		100	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	60.1	61.6		ng/L		103	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	60.1	62.0		ng/L		103	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	60.1	63.6		ng/L		106	70 - 130
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	60.1	68.3		ng/L		114	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	60.1	58.3		ng/L		97	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	60.1	60.8		ng/L		101	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	60.1	59.9		ng/L		100	70 - 130
Perfluoropentanoic acid (PFPeA)	60.1	56.9		ng/L		95	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	60.1	59.1		ng/L		98	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-131761-1
SDG: Weekly PFAS

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

Lab Sample ID: LCS 380-130176/22-A
Matrix: Water
Analysis Batch: 130345

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 130176

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoropentanesulfonic acid (PFPeS)	60.1	61.6		ng/L		102	70 - 130
LCS LCS							
Isotope Dilution	%Recovery	Qualifier	Limits				
13C3 HFPO-DA	117		50 - 200				
13C6 PFDA	114		50 - 200				
13C5 PFHxA	112		50 - 200				
13C4 PFHpA	113		50 - 200				
13C8 PFOA	114		50 - 200				
13C9 PFNA	113		50 - 200				
13C7 PFUnA	112		50 - 200				
13C2 PFDoA	111		50 - 200				
13C4 PFBA	115		50 - 200				
13C5 PFPeA	118		50 - 200				
13C3 PFBS	113		50 - 200				
13C3 PFHxS	119		50 - 200				
13C8 PFOS	117		50 - 200				
13C2-4:2-FTS	114		50 - 200				
13C2-6:2-FTS	110		50 - 200				
13C2-8:2-FTS	102		50 - 200				

Lab Sample ID: MRL 380-130176/21-A
Matrix: Water
Analysis Batch: 130345

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 130176

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.01	1.79	J	ng/L		89	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	2.01	1.70	J	ng/L		84	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.01	2.09	J	ng/L		104	50 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.01	1.95	J	ng/L		97	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.01	1.97	J	ng/L		98	50 - 150
Perfluorodecanoic acid (PFDA)	2.01	2.10	J	ng/L		105	50 - 150
Perfluorododecanoic acid (PFDoA)	2.01	2.06	J	ng/L		103	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.01	2.02	J	ng/L		101	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.01	2.00	J	ng/L		99	50 - 150
Perfluorohexanoic acid (PFHxA)	2.01	2.11	J	ng/L		105	50 - 150
Perfluorononanoic acid (PFNA)	2.01	1.99	J	ng/L		99	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.01	2.12	J	ng/L		106	50 - 150
Perfluorooctanoic acid (PFOA)	2.01	2.11	J	ng/L		105	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.01	1.99	J	ng/L		99	50 - 150
Perfluorobutanoic acid (PFBA)	2.01	2.19	J	ng/L		109	50 - 150

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-131761-1
SDG: Weekly PFAS

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

Lab Sample ID: MRL 380-130176/21-A
Matrix: Water
Analysis Batch: 130345

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 130176

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	2.01	2.08	J	ng/L		104	50 - 150
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	2.01	2.26	J	ng/L		112	50 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	2.01	2.18	J	ng/L		108	50 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2.01	2.54	J	ng/L		126	50 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	2.01	1.79	J	ng/L		89	50 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.01	2.10	J	ng/L		105	50 - 150
Perfluoro-4-methoxybutanoic acid (PFMBA)	2.01	1.94	J	ng/L		97	50 - 150
Perfluoropentanoic acid (PFPeA)	2.01	2.04	J	ng/L		102	50 - 150
Perfluoroheptanesulfonic acid (PFHpS)	2.01	2.00	J	ng/L		99	50 - 150
Perfluoropentanesulfonic acid (PFPeS)	2.01	1.97	J	ng/L		98	50 - 150

Isotope Dilution	MRL %Recovery	MRL Qualifier	MRL Limits
13C3 HFPO-DA	111		50 - 200
13C6 PFDA	110		50 - 200
13C5 PFHxA	109		50 - 200
13C4 PFHpA	112		50 - 200
13C8 PFOA	111		50 - 200
13C9 PFNA	112		50 - 200
13C7 PFUnA	109		50 - 200
13C2 PFDoA	109		50 - 200
13C4 PFBA	106		50 - 200
13C5 PFPeA	112		50 - 200
13C3 PFBS	110		50 - 200
13C3 PFHxS	114		50 - 200
13C8 PFOS	109		50 - 200
13C2-4:2-FTS	114		50 - 200
13C2-6:2-FTS	107		50 - 200
13C2-8:2-FTS	100		50 - 200

Lab Sample ID: 380-131697-B-1-A MS
Matrix: Water
Analysis Batch: 130345

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 130176

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		60.4	54.0		ng/L		89	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		60.4	53.5		ng/L		89	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		60.4	62.3		ng/L		103	70 - 130

QC Sample Results

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

Job ID: 380-131761-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-131697-B-1-A MS
Matrix: Water
Analysis Batch: 130345

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 130176

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide	<2.0		60.4	52.4		ng/L		87	70 - 130
Dimer Acid (HFPO-DA/GenX)									
Perfluorobutanesulfonic acid (PFBS)	2.2		60.4	60.1		ng/L		96	70 - 130
Perfluorodecanoic acid (PFDA)	<2.0		60.4	61.8		ng/L		102	70 - 130
Perfluorododecanoic acid (PFDoA)	<2.0		60.4	60.3		ng/L		100	70 - 130
Perfluoroheptanoic acid (PFHpA)	<2.0		60.4	58.7		ng/L		96	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	4.3		60.4	61.7		ng/L		95	70 - 130
Perfluorohexanoic acid (PFHxA)	<2.0		60.4	64.7		ng/L		104	70 - 130
Perfluorononanoic acid (PFNA)	<2.0		60.4	58.9		ng/L		97	70 - 130
Perfluorooctanesulfonic acid (PFOS)	8.0		60.4	68.9		ng/L		101	70 - 130
Perfluorooctanoic acid (PFOA)	3.6		60.4	62.4		ng/L		97	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		60.4	63.7		ng/L		106	70 - 130
Perfluorobutanoic acid (PFBA)	3.1		60.4	63.9		ng/L		101	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		60.4	59.5		ng/L		99	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		60.4	62.0		ng/L		103	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		60.4	61.2		ng/L		101	70 - 130
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		60.4	59.2		ng/L		98	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		60.4	54.0		ng/L		89	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		60.4	63.1		ng/L		105	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		60.4	58.9		ng/L		98	70 - 130
Perfluoropentanoic acid (PFPeA)	<2.0		60.4	53.1		ng/L		85	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		60.4	60.4		ng/L		100	70 - 130
Perfluoropentanesulfonic acid (PFPeS)	<2.0		60.4	59.7		ng/L		98	70 - 130

Isotope Dilution	MS MS		Limits
	%Recovery	Qualifier	
13C3 HFPO-DA	124		50 - 200
13C6 PFDA	97		50 - 200
13C5 PFHxA	100		50 - 200
13C4 PFHpA	99		50 - 200
13C8 PFOA	101		50 - 200
13C9 PFNA	100		50 - 200
13C7 PFUnA	99		50 - 200
13C2 PFDoA	104		50 - 200
13C4 PFBA	109		50 - 200
13C5 PFPeA	128		50 - 200
13C3 PFBS	114		50 - 200
13C3 PFHxS	118		50 - 200
13C8 PFOS	111		50 - 200

QC Sample Results

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

Job ID: 380-131761-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-131697-B-1-A MS
Matrix: Water
Analysis Batch: 130345

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 130176

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>MS MS Qualifier</i>	<i>Limits</i>
13C2-4:2-FTS	143		50 - 200
13C2-6:2-FTS	130		50 - 200
13C2-8:2-FTS	109		50 - 200

Lab Sample ID: 380-131697-C-1-A MSD
Matrix: Water
Analysis Batch: 130345

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 130176

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		60.4	52.9		ng/L		88	70 - 130	2	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		60.4	52.4		ng/L		87	70 - 130	2	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		60.4	64.4		ng/L		107	70 - 130	3	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		60.4	55.3		ng/L		92	70 - 130	5	30
Perfluorobutanesulfonic acid (PFBS)	2.2		60.4	62.0		ng/L		99	70 - 130	3	30
Perfluorodecanoic acid (PFDA)	<2.0		60.4	60.3		ng/L		100	70 - 130	2	30
Perfluorododecanoic acid (PFDoA)	<2.0		60.4	60.6		ng/L		100	70 - 130	0	30
Perfluoroheptanoic acid (PFHpA)	<2.0		60.4	59.3		ng/L		97	70 - 130	1	30
Perfluorohexanesulfonic acid (PFHxS)	4.3		60.4	63.7		ng/L		98	70 - 130	3	30
Perfluorohexanoic acid (PFHxA)	<2.0		60.4	64.5		ng/L		104	70 - 130	0	30
Perfluorononanoic acid (PFNA)	<2.0		60.4	61.8		ng/L		102	70 - 130	5	30
Perfluorooctanesulfonic acid (PFOS)	8.0		60.4	68.1		ng/L		100	70 - 130	1	30
Perfluorooctanoic acid (PFOA)	3.6		60.4	63.7		ng/L		100	70 - 130	2	30
Perfluoroundecanoic acid (PFUnA)	<2.0		60.4	64.3		ng/L		107	70 - 130	1	30
Perfluorobutanoic acid (PFBA)	3.1		60.4	65.2		ng/L		103	70 - 130	2	30
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		60.4	61.5		ng/L		102	70 - 130	3	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		60.4	62.5		ng/L		104	70 - 130	1	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		60.4	63.4		ng/L		105	70 - 130	4	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		60.4	67.1		ng/L		111	70 - 130	12	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		60.4	56.5		ng/L		94	70 - 130	5	30
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		60.4	65.5		ng/L		109	70 - 130	4	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		60.4	61.8		ng/L		102	70 - 130	5	30
Perfluoropentanoic acid (PFPeA)	<2.0		60.4	52.9		ng/L		85	70 - 130	0	30
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		60.4	60.4		ng/L		100	70 - 130	0	30
Perfluoropentanesulfonic acid (PFPeS)	<2.0		60.4	60.7		ng/L		99	70 - 130	2	30

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QC Sample Results

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

Job ID: 380-131761-1
SDG: Weekly PFAS

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

Isotope Dilution	MSD MSD		Limits
	%Recovery	Qualifier	
13C3 HFPO-DA	122		50 - 200
13C6 PFDA	111		50 - 200
13C5 PFHxA	102		50 - 200
13C4 PFHpA	104		50 - 200
13C8 PFOA	109		50 - 200
13C9 PFNA	109		50 - 200
13C7 PFUnA	103		50 - 200
13C2 PFDoA	109		50 - 200
13C4 PFBA	107		50 - 200
13C5 PFPeA	127		50 - 200
13C3 PFBS	111		50 - 200
13C3 PFHxS	117		50 - 200
13C8 PFOS	113		50 - 200
13C2-4:2-FTS	145		50 - 200
13C2-6:2-FTS	126		50 - 200
13C2-8:2-FTS	108		50 - 200

Lab Sample ID: MBL 380-130177/20-A
Matrix: Water
Analysis Batch: 130380

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 130177

Analyte	MBL MBL		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
11-Chloroeicosfluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<0.30		2.0	ng/L		01/24/25 07:27	01/25/25 09:55	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<0.30		2.0	ng/L		01/24/25 07:27	01/25/25 09:55	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0	ng/L		01/24/25 07:27	01/25/25 09:55	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<1.0		2.0	ng/L		01/24/25 07:27	01/25/25 09:55	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0	ng/L		01/24/25 07:27	01/25/25 09:55	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	ng/L		01/24/25 07:27	01/25/25 09:55	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	ng/L		01/24/25 07:27	01/25/25 09:55	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0	ng/L		01/24/25 07:27	01/25/25 09:55	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0	ng/L		01/24/25 07:27	01/25/25 09:55	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0	ng/L		01/24/25 07:27	01/25/25 09:55	1
Perfluorononanoic acid (PFNA)	<0.40		2.0	ng/L		01/24/25 07:27	01/25/25 09:55	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0	ng/L		01/24/25 07:27	01/25/25 09:55	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0	ng/L		01/24/25 07:27	01/25/25 09:55	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0	ng/L		01/24/25 07:27	01/25/25 09:55	1
Perfluorobutanoic acid (PFBA)	<0.69		2.0	ng/L		01/24/25 07:27	01/25/25 09:55	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.38		2.0	ng/L		01/24/25 07:27	01/25/25 09:55	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.37		2.0	ng/L		01/24/25 07:27	01/25/25 09:55	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<0.48		2.0	ng/L		01/24/25 07:27	01/25/25 09:55	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<0.47		2.0	ng/L		01/24/25 07:27	01/25/25 09:55	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<0.25		2.0	ng/L		01/24/25 07:27	01/25/25 09:55	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.46		2.0	ng/L		01/24/25 07:27	01/25/25 09:55	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.15		2.0	ng/L		01/24/25 07:27	01/25/25 09:55	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-131761-1
SDG: Weekly PFAS

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

Lab Sample ID: MBL 380-130177/20-A
Matrix: Water
Analysis Batch: 130380

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 130177

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoropentanoic acid (PFPeA)	<0.38		2.0	ng/L		01/24/25 07:27	01/25/25 09:55	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.36		2.0	ng/L		01/24/25 07:27	01/25/25 09:55	1
Perfluoropentanesulfonic acid (PFPeS)	<0.39		2.0	ng/L		01/24/25 07:27	01/25/25 09:55	1

Isotope Dilution	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	107		50 - 200	01/24/25 07:27	01/25/25 09:55	1
13C6 PFDA	101		50 - 200	01/24/25 07:27	01/25/25 09:55	1
13C5 PFHxA	102		50 - 200	01/24/25 07:27	01/25/25 09:55	1
13C4 PFHpA	105		50 - 200	01/24/25 07:27	01/25/25 09:55	1
13C8 PFOA	105		50 - 200	01/24/25 07:27	01/25/25 09:55	1
13C9 PFNA	103		50 - 200	01/24/25 07:27	01/25/25 09:55	1
13C7 PFUnA	95		50 - 200	01/24/25 07:27	01/25/25 09:55	1
13C2 PFDoA	99		50 - 200	01/24/25 07:27	01/25/25 09:55	1
13C4 PFBA	104		50 - 200	01/24/25 07:27	01/25/25 09:55	1
13C5 PFPeA	103		50 - 200	01/24/25 07:27	01/25/25 09:55	1
13C3 PFBS	103		50 - 200	01/24/25 07:27	01/25/25 09:55	1
13C3 PFHxS	117		50 - 200	01/24/25 07:27	01/25/25 09:55	1
13C8 PFOS	109		50 - 200	01/24/25 07:27	01/25/25 09:55	1
13C2-4:2-FTS	104		50 - 200	01/24/25 07:27	01/25/25 09:55	1
13C2-6:2-FTS	102		50 - 200	01/24/25 07:27	01/25/25 09:55	1
13C2-8:2-FTS	94		50 - 200	01/24/25 07:27	01/25/25 09:55	1

Lab Sample ID: LCS 380-130177/22-A
Matrix: Water
Analysis Batch: 130380

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 130177

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	120	102		ng/L		85	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	120	103		ng/L		86	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	120	118		ng/L		98	70 - 130
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	120	99.6		ng/L		83	70 - 130
Perfluorobutanesulfonic acid (PFBS)	120	114		ng/L		95	70 - 130
Perfluorodecanoic acid (PFDA)	120	120		ng/L		100	70 - 130
Perfluorododecanoic acid (PFDoA)	120	112		ng/L		93	70 - 130
Perfluoroheptanoic acid (PFHpA)	120	110		ng/L		92	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	120	109		ng/L		91	70 - 130
Perfluorohexanoic acid (PFHxA)	120	116		ng/L		96	70 - 130
Perfluorononanoic acid (PFNA)	120	109		ng/L		90	70 - 130
Perfluorooctanesulfonic acid (PFOS)	120	117		ng/L		97	70 - 130
Perfluorooctanoic acid (PFOA)	120	112		ng/L		93	70 - 130

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QC Sample Results

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

Job ID: 380-131761-1
SDG: Weekly PFAS

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

Lab Sample ID: LCS 380-130177/22-A
Matrix: Water
Analysis Batch: 130380

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 130177

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoroundecanoic acid (PFUnA)	120	118		ng/L		98	70 - 130
Perfluorobutanoic acid (PFBA)	120	116		ng/L		97	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	120	110		ng/L		91	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	120	116		ng/L		96	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	120	115		ng/L		96	70 - 130
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	120	135		ng/L		112	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	120	113		ng/L		94	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	120	113		ng/L		94	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	120	113		ng/L		94	70 - 130
Perfluoropentanoic acid (PFPeA)	120	106		ng/L		88	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	120	115		ng/L		96	70 - 130
Perfluoropentanesulfonic acid (PFPeS)	120	109		ng/L		91	70 - 130

Isotope Dilution	LCS LCS		Limits
	%Recovery	Qualifier	
13C3 HFPO-DA	129		50 - 200
13C6 PFDA	107		50 - 200
13C5 PFHxA	111		50 - 200
13C4 PFHpA	112		50 - 200
13C8 PFOA	116		50 - 200
13C9 PFNA	111		50 - 200
13C7 PFUnA	108		50 - 200
13C2 PFDoA	112		50 - 200
13C4 PFBA	112		50 - 200
13C5 PFPeA	119		50 - 200
13C3 PFBS	111		50 - 200
13C3 PFHxS	122		50 - 200
13C8 PFOS	112		50 - 200
13C2-4:2-FTS	109		50 - 200
13C2-6:2-FTS	104		50 - 200
13C2-8:2-FTS	95		50 - 200

Lab Sample ID: MRL 380-130177/21-A
Matrix: Water
Analysis Batch: 130380

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 130177

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.00	1.77	J	ng/L		89	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	2.00	1.64	J	ng/L		82	50 - 150

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QC Sample Results

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

Job ID: 380-131761-1
 SDG: Weekly PFAS

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

Lab Sample ID: MRL 380-130177/21-A
Matrix: Water
Analysis Batch: 130380

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 130177

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.00	2.06	J	ng/L		103	50 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.00	1.90	J	ng/L		95	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.00	2.10	J	ng/L		105	50 - 150
Perfluorodecanoic acid (PFDA)	2.00	2.11	J	ng/L		105	50 - 150
Perfluorododecanoic acid (PFDoA)	2.00	2.12	J	ng/L		106	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.00	1.99	J	ng/L		99	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.00	1.98	J	ng/L		99	50 - 150
Perfluorohexanoic acid (PFHxA)	2.00	2.12	J	ng/L		106	50 - 150
Perfluorononanoic acid (PFNA)	2.00	2.04	J	ng/L		102	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.00	2.04	J	ng/L		102	50 - 150
Perfluorooctanoic acid (PFOA)	2.00	2.07	J	ng/L		103	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.00	2.04	J	ng/L		102	50 - 150
Perfluorobutanoic acid (PFBA)	2.00	1.90	J	ng/L		95	50 - 150
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	2.00	2.07	J	ng/L		103	50 - 150
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	2.00	2.17	J	ng/L		108	50 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	2.00	2.11	J	ng/L		105	50 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2.00	2.54	J	ng/L		127	50 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	2.00	1.79	J	ng/L		89	50 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.00	2.08	J	ng/L		104	50 - 150
Perfluoro-4-methoxybutanoic acid (PFMBA)	2.00	1.95	J	ng/L		97	50 - 150
Perfluoropentanoic acid (PFPeA)	2.00	1.86	J	ng/L		93	50 - 150
Perfluoroheptanesulfonic acid (PFHpS)	2.00	2.00	J	ng/L		100	50 - 150
Perfluoropentanesulfonic acid (PFPeS)	2.00	1.96	J	ng/L		98	50 - 150

Isotope Dilution	MRL %Recovery	MRL Qualifier	MRL Limits
13C3 HFPO-DA	118		50 - 200
13C6 PFDA	108		50 - 200
13C5 PFHxA	110		50 - 200
13C4 PFHpA	116		50 - 200
13C8 PFOA	115		50 - 200
13C9 PFNA	113		50 - 200
13C7 PFUnA	109		50 - 200
13C2 PFDoA	109		50 - 200
13C4 PFBA	112		50 - 200
13C5 PFPeA	116		50 - 200
13C3 PFBS	110		50 - 200
13C3 PFHxS	118		50 - 200

QC Sample Results

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

Job ID: 380-131761-1
SDG: Weekly PFAS

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

Lab Sample ID: MRL 380-130177/21-A
Matrix: Water
Analysis Batch: 130380

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 130177

<i>Isotope Dilution</i>	<i>MRL %Recovery</i>	<i>MRL Qualifier</i>	<i>Limits</i>
13C8 PFOS	112		50 - 200
13C2-4:2-FTS	109		50 - 200
13C2-6:2-FTS	104		50 - 200
13C2-8:2-FTS	96		50 - 200

Lab Sample ID: 380-131809-B-1-A MS
Matrix: Water
Analysis Batch: 130380

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 130177

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		121	103		ng/L		85	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		121	109		ng/L		90	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		121	120		ng/L		100	70 - 130
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		121	110		ng/L		91	70 - 130
Perfluorobutanesulfonic acid (PFBS)	<2.0		121	120		ng/L		99	70 - 130
Perfluorodecanoic acid (PFDA)	<2.0		121	116		ng/L		96	70 - 130
Perfluorododecanoic acid (PFDoA)	<2.0		121	118		ng/L		98	70 - 130
Perfluoroheptanoic acid (PFHpA)	<2.0		121	112		ng/L		93	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	<2.0		121	115		ng/L		95	70 - 130
Perfluorohexanoic acid (PFHxA)	<2.0		121	124		ng/L		103	70 - 130
Perfluorononanoic acid (PFNA)	<2.0		121	118		ng/L		97	70 - 130
Perfluorooctanesulfonic acid (PFOS)	<2.0		121	118		ng/L		98	70 - 130
Perfluorooctanoic acid (PFOA)	<2.0		121	117		ng/L		97	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		121	125		ng/L		104	70 - 130
Perfluorobutanoic acid (PFBA)	<2.0		121	119		ng/L		99	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		121	119		ng/L		99	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		121	119		ng/L		99	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		121	118		ng/L		98	70 - 130
Nonfluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		121	134		ng/L		111	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		121	117		ng/L		97	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		121	117		ng/L		97	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		121	117		ng/L		97	70 - 130
Perfluoropentanoic acid (PFPeA)	<2.0		121	112		ng/L		93	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		121	120		ng/L		99	70 - 130

QC Sample Results

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

Job ID: 380-131761-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-131809-B-1-A MS
Matrix: Water
Analysis Batch: 130380

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 130177

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoropentanesulfonic acid (PFPeS)	<2.0		121	117		ng/L		97	70 - 130
MS MS									
Isotope Dilution	%Recovery	Qualifier	Limits						
13C3 HFPO-DA	122		50 - 200						
13C6 PFDA	111		50 - 200						
13C5 PFHxA	104		50 - 200						
13C4 PFHpA	106		50 - 200						
13C8 PFOA	110		50 - 200						
13C9 PFNA	111		50 - 200						
13C7 PFUnA	106		50 - 200						
13C2 PFDoA	106		50 - 200						
13C4 PFBA	107		50 - 200						
13C5 PFPeA	111		50 - 200						
13C3 PFBS	109		50 - 200						
13C3 PFHxS	116		50 - 200						
13C8 PFOS	111		50 - 200						
13C2-4:2-FTS	108		50 - 200						
13C2-6:2-FTS	102		50 - 200						
13C2-8:2-FTS	94		50 - 200						

Lab Sample ID: 380-131809-C-1-A MSD
Matrix: Water
Analysis Batch: 130380

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 130177

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		121	98.3		ng/L		81	70 - 130	4	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		121	103		ng/L		85	70 - 130	6	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		121	118		ng/L		98	70 - 130	2	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		121	109		ng/L		90	70 - 130	1	30
Perfluorobutanesulfonic acid (PFBS)	<2.0		121	115		ng/L		95	70 - 130	4	30
Perfluorodecanoic acid (PFDA)	<2.0		121	114		ng/L		94	70 - 130	2	30
Perfluorododecanoic acid (PFDoA)	<2.0		121	121		ng/L		100	70 - 130	2	30
Perfluoroheptanoic acid (PFHpA)	<2.0		121	111		ng/L		92	70 - 130	1	30
Perfluorohexanesulfonic acid (PFHxS)	<2.0		121	113		ng/L		93	70 - 130	2	30
Perfluorohexanoic acid (PFHxA)	<2.0		121	122		ng/L		101	70 - 130	1	30
Perfluorononanoic acid (PFNA)	<2.0		121	113		ng/L		94	70 - 130	4	30
Perfluorooctanesulfonic acid (PFOS)	<2.0		121	114		ng/L		94	70 - 130	3	30
Perfluorooctanoic acid (PFOA)	<2.0		121	118		ng/L		97	70 - 130	1	30
Perfluoroundecanoic acid (PFUnA)	<2.0		121	121		ng/L		100	70 - 130	4	30
Perfluorobutanoic acid (PFBA)	<2.0		121	114		ng/L		95	70 - 130	4	30

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QC Sample Results

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

Job ID: 380-131761-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-131809-C-1-A MSD
Matrix: Water
Analysis Batch: 130380

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 130177

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)	<2.0		121	111		ng/L		92	70 - 130	8	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		121	115		ng/L		95	70 - 130	4	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		121	115		ng/L		95	70 - 130	3	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		121	119		ng/L		98	70 - 130	12	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		121	113		ng/L		93	70 - 130	4	30
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		121	113		ng/L		93	70 - 130	4	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		121	111		ng/L		92	70 - 130	6	30
Perfluoropentanoic acid (PFPeA)	<2.0		121	108		ng/L		89	70 - 130	4	30
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		121	111		ng/L		92	70 - 130	8	30
Perfluoropentanesulfonic acid (PFPeS)	<2.0		121	110		ng/L		91	70 - 130	7	30

Isotope Dilution	MSD %Recovery	MSD Qualifier	MSD Limits
13C3 HFPO-DA	110		50 - 200
13C6 PFDA	107		50 - 200
13C5 PFHxA	99		50 - 200
13C4 PFHpA	104		50 - 200
13C8 PFOA	107		50 - 200
13C9 PFNA	110		50 - 200
13C7 PFUnA	104		50 - 200
13C2 PFDoA	103		50 - 200
13C4 PFBA	107		50 - 200
13C5 PFPeA	113		50 - 200
13C3 PFBS	111		50 - 200
13C3 PFHxS	120		50 - 200
13C8 PFOS	115		50 - 200
13C2-4:2-FTS	111		50 - 200
13C2-6:2-FTS	107		50 - 200
13C2-8:2-FTS	100		50 - 200

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

Lab Sample ID: MBL 380-130172/20-A
Matrix: Water
Analysis Batch: 130290

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 130172

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		01/24/25 02:15	01/24/25 14:33	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0	ng/L		01/24/25 02:15	01/24/25 14:33	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0	ng/L		01/24/25 02:15	01/24/25 14:33	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<0.58		2.0	ng/L		01/24/25 02:15	01/24/25 14:33	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-131761-1
SDG: Weekly PFAS

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

Lab Sample ID: MBL 380-130172/20-A
Matrix: Water
Analysis Batch: 130290

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 130172

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<0.42		2.0	ng/L		01/24/25 02:15	01/24/25 14:33	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0	ng/L		01/24/25 02:15	01/24/25 14:33	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	ng/L		01/24/25 02:15	01/24/25 14:33	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0	ng/L		01/24/25 02:15	01/24/25 14:33	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	ng/L		01/24/25 02:15	01/24/25 14:33	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0	ng/L		01/24/25 02:15	01/24/25 14:33	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0	ng/L		01/24/25 02:15	01/24/25 14:33	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0	ng/L		01/24/25 02:15	01/24/25 14:33	1
Perfluorononanoic acid (PFNA)	<0.40		2.0	ng/L		01/24/25 02:15	01/24/25 14:33	1
Perfluorotetradecanoic acid (PFTA)	<0.54		2.0	ng/L		01/24/25 02:15	01/24/25 14:33	1
Perfluorotridecanoic acid (PFTrDA)	<0.36		2.0	ng/L		01/24/25 02:15	01/24/25 14:33	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<0.30		2.0	ng/L		01/24/25 02:15	01/24/25 14:33	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.30		2.0	ng/L		01/24/25 02:15	01/24/25 14:33	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0	ng/L		01/24/25 02:15	01/24/25 14:33	1
Surrogate	MBL %Recovery	MBL Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	100		70 - 130			01/24/25 02:15	01/24/25 14:33	1
13C2 PFHxA	97		70 - 130			01/24/25 02:15	01/24/25 14:33	1
13C2 PFDA	102		70 - 130			01/24/25 02:15	01/24/25 14:33	1
13C3-GenX	91		70 - 130			01/24/25 02:15	01/24/25 14:33	1

Lab Sample ID: LCS 380-130172/22-A
Matrix: Water
Analysis Batch: 130290

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 130172

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	25.1	21.6		ng/L		86	70 - 130
Perfluorooctanesulfonic acid (PFOS)	25.1	23.1		ng/L		92	70 - 130
Perfluoroundecanoic acid (PFUnA)	25.1	25.1		ng/L		100	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	25.1	23.1		ng/L		92	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	25.1	23.2		ng/L		93	70 - 130
Perfluorohexanoic acid (PFHxA)	25.1	22.8		ng/L		91	70 - 130
Perfluorododecanoic acid (PFDoA)	25.1	26.2		ng/L		105	70 - 130
Perfluorooctanoic acid (PFOA)	25.1	22.8		ng/L		91	70 - 130
Perfluorodecanoic acid (PFDA)	25.1	23.1		ng/L		92	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	25.1	23.5		ng/L		94	70 - 130
Perfluorobutanesulfonic acid (PFBS)	25.1	22.5		ng/L		90	70 - 130
Perfluoroheptanoic acid (PFHpA)	25.1	24.8		ng/L		99	70 - 130
Perfluorononanoic acid (PFNA)	25.1	22.3		ng/L		89	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-131761-1
SDG: Weekly PFAS

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

Lab Sample ID: LCS 380-130172/22-A
Matrix: Water
Analysis Batch: 130290

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 130172

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorotetradecanoic acid (PFTA)	25.1	22.4		ng/L		89	70 - 130
Perfluorotridecanoic acid (PFTrDA)	25.1	22.8		ng/L		91	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	25.1	23.6		ng/L		94	70 - 130
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	25.1	22.4		ng/L		89	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	25.1	22.3		ng/L		89	70 - 130
LCS LCS							
Surrogate	%Recovery	Qualifier	Limits				
d5-NEtFOSAA	95		70 - 130				
13C2 PFHxA	96		70 - 130				
13C2 PFDA	95		70 - 130				
13C3-GenX	97		70 - 130				

Lab Sample ID: MRL 380-130172/21-A
Matrix: Water
Analysis Batch: 130290

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 130172

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.01	1.85	J	ng/L		92	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.01	1.87	J	ng/L		93	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.01	2.01	J	ng/L		100	50 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2.01	1.99	J	ng/L		99	50 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2.01	1.97	J	ng/L		98	50 - 150
Perfluorohexanoic acid (PFHxA)	2.01	2.01	J	ng/L		100	50 - 150
Perfluorododecanoic acid (PFDoA)	2.01	2.13	J	ng/L		106	50 - 150
Perfluorooctanoic acid (PFOA)	2.01	1.83	J	ng/L		91	50 - 150
Perfluorodecanoic acid (PFDA)	2.01	1.87	J	ng/L		93	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.01	1.93	J	ng/L		96	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.01	1.74	J	ng/L		87	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.01	2.04	J	ng/L		102	50 - 150
Perfluorononanoic acid (PFNA)	2.01	1.89	J	ng/L		94	50 - 150
Perfluorotetradecanoic acid (PFTA)	2.01	1.99	J	ng/L		99	50 - 150
Perfluorotridecanoic acid (PFTrDA)	2.01	1.89	J	ng/L		94	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	2.01	1.90	J	ng/L		95	50 - 150

QC Sample Results

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

Job ID: 380-131761-1
SDG: Weekly PFAS

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

Lab Sample ID: MRL 380-130172/21-A
Matrix: Water
Analysis Batch: 130290

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 130172

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.01	1.72	J	ng/L		86	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.01	1.80	J	ng/L		90	50 - 150
Surrogate	MRL %Recovery	MRL Qualifier	Limits				
d5-NEtFOSAA	103		70 - 130				
13C2 PFHxA	100		70 - 130				
13C2 PFDA	100		70 - 130				
13C3-GenX	93		70 - 130				

Lab Sample ID: 380-131733-E-1-A MS
Matrix: Water
Analysis Batch: 130290

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 130172

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		25.1	21.5		ng/L		86	70 - 130
Perfluorooctanesulfonic acid (PFOS)	3.2		25.1	26.3		ng/L		92	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		25.1	24.6		ng/L		98	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		25.1	22.4		ng/L		89	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		25.1	22.2		ng/L		88	70 - 130
Perfluorohexanoic acid (PFHxA)	<2.0		25.1	23.8		ng/L		89	70 - 130
Perfluorododecanoic acid (PFDoA)	<2.0		25.1	25.5		ng/L		102	70 - 130
Perfluorooctanoic acid (PFOA)	<2.0		25.1	23.4		ng/L		89	70 - 130
Perfluorodecanoic acid (PFDA)	<2.0		25.1	23.6		ng/L		94	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	3.3		25.1	24.6		ng/L		85	70 - 130
Perfluorobutanesulfonic acid (PFBS)	<2.0		25.1	22.4		ng/L		89	70 - 130
Perfluoroheptanoic acid (PFHpA)	2.0		25.1	23.4		ng/L		91	70 - 130
Perfluorononanoic acid (PFNA)	<2.0		25.1	23.3		ng/L		93	70 - 130
Perfluorotetradecanoic acid (PFTA)	<2.0		25.1	23.3		ng/L		93	70 - 130
Perfluorotridecanoic acid (PFTrDA)	<2.0		25.1	23.0		ng/L		91	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		25.1	23.2		ng/L		93	70 - 130
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		25.1	21.7		ng/L		87	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		25.1	21.4		ng/L		85	70 - 130

QC Sample Results

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

Job ID: 380-131761-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-131733-E-1-A MS
Matrix: Water
Analysis Batch: 130290

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 130172

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
d5-NEtFOSAA	97		70 - 130
13C2 PFHxA	97		70 - 130
13C2 PFDA	102		70 - 130
13C3-GenX	91		70 - 130

Lab Sample ID: 380-131733-F-1-A MSD
Matrix: Water
Analysis Batch: 130290

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 130172

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD MSD		Unit	D	%Rec	%Rec		RPD	RPD Limit
				Result	Qualifier				Limits	RPD		
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		25.2	19.9		ng/L		79	70 - 130	8	30	
Perfluorooctanesulfonic acid (PFOS)	3.2		25.2	25.3		ng/L		88	70 - 130	4	30	
Perfluoroundecanoic acid (PFUnA)	<2.0		25.2	24.6		ng/L		98	70 - 130	0	30	
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		25.2	21.6		ng/L		86	70 - 130	4	30	
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		25.2	22.6		ng/L		90	70 - 130	2	30	
Perfluorohexanoic acid (PFHxA)	<2.0		25.2	23.7		ng/L		88	70 - 130	0	30	
Perfluorododecanoic acid (PFDoA)	<2.0		25.2	26.9		ng/L		107	70 - 130	5	30	
Perfluorooctanoic acid (PFOA)	<2.0		25.2	23.1		ng/L		88	70 - 130	1	30	
Perfluorodecanoic acid (PFDA)	<2.0		25.2	22.6		ng/L		90	70 - 130	4	30	
Perfluorohexanesulfonic acid (PFHxS)	3.3		25.2	25.1		ng/L		87	70 - 130	2	30	
Perfluorobutanesulfonic acid (PFBS)	<2.0		25.2	22.5		ng/L		89	70 - 130	0	30	
Perfluoroheptanoic acid (PFHpA)	<2.0		25.2	23.3		ng/L		90	70 - 130	1	30	
Perfluorononanoic acid (PFNA)	<2.0		25.2	22.8		ng/L		91	70 - 130	2	30	
Perfluorotetradecanoic acid (PFTA)	<2.0		25.2	22.2		ng/L		88	70 - 130	5	30	
Perfluorotridecanoic acid (PFTrDA)	<2.0		25.2	22.6		ng/L		90	70 - 130	1	30	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		25.2	22.9		ng/L		91	70 - 130	1	30	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		25.2	21.6		ng/L		86	70 - 130	1	30	
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		25.2	20.8		ng/L		83	70 - 130	3	30	

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
d5-NEtFOSAA	97		70 - 130
13C2 PFHxA	91		70 - 130
13C2 PFDA	97		70 - 130
13C3-GenX	89		70 - 130

QC Association Summary

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

Job ID: 380-131761-1
SDG: Weekly PFAS

LCMS

Prep Batch: 130172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131761-1	HALAWA WELLS UNITS 1&2 P1	Total/NA	Water	537.1 DW	
380-131761-2	AIEA GULCH WELLS PUMP 1	Total/NA	Water	537.1 DW	
380-131761-3	AIEA GULCH WELLS PUMP 2	Total/NA	Water	537.1 DW	
380-131761-4	AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Water	537.1 DW	
380-131761-5	KA'AMILO WELLS	Total/NA	Water	537.1 DW	
380-131761-6	FB: HALAWA WELLS UNITS 1&2 P1	Total/NA	Water	537.1 DW	
380-131761-7	FB: AIEA GULCH WELLS PUMP 1	Total/NA	Water	537.1 DW	
380-131761-8	FB: AIEA GULCH WELLS PUMP 2	Total/NA	Water	537.1 DW	
380-131761-9	FB: AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Water	537.1 DW	
380-131761-10	FB: KA'AMILO WELLS	Total/NA	Water	537.1 DW	
MBL 380-130172/20-A	Method Blank	Total/NA	Water	537.1 DW	
LCS 380-130172/22-A	Lab Control Sample	Total/NA	Water	537.1 DW	
MRL 380-130172/21-A	Lab Control Sample	Total/NA	Water	537.1 DW	
380-131733-E-1-A MS	Matrix Spike	Total/NA	Water	537.1 DW	
380-131733-F-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	537.1 DW	

Prep Batch: 130176

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131761-1	HALAWA WELLS UNITS 1&2 P1	Total/NA	Water	533	
380-131761-2	AIEA GULCH WELLS PUMP 1	Total/NA	Water	533	
380-131761-3	AIEA GULCH WELLS PUMP 2	Total/NA	Water	533	
380-131761-4	AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Water	533	
380-131761-5	KA'AMILO WELLS	Total/NA	Water	533	
380-131761-6	FB: HALAWA WELLS UNITS 1&2 P1	Total/NA	Water	533	
380-131761-7	FB: AIEA GULCH WELLS PUMP 1	Total/NA	Water	533	
MBL 380-130176/20-A	Method Blank	Total/NA	Water	533	
LCS 380-130176/22-A	Lab Control Sample	Total/NA	Water	533	
MRL 380-130176/21-A	Lab Control Sample	Total/NA	Water	533	
380-131697-B-1-A MS	Matrix Spike	Total/NA	Water	533	
380-131697-C-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	533	

Prep Batch: 130177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131761-8	FB: AIEA GULCH WELLS PUMP 2	Total/NA	Water	533	
380-131761-9	FB: AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Water	533	
380-131761-10	FB: KA'AMILO WELLS	Total/NA	Water	533	
MBL 380-130177/20-A	Method Blank	Total/NA	Water	533	
LCS 380-130177/22-A	Lab Control Sample	Total/NA	Water	533	
MRL 380-130177/21-A	Lab Control Sample	Total/NA	Water	533	
380-131809-B-1-A MS	Matrix Spike	Total/NA	Water	533	
380-131809-C-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	533	

Analysis Batch: 130290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131761-1	HALAWA WELLS UNITS 1&2 P1	Total/NA	Water	537.1	130172
380-131761-2	AIEA GULCH WELLS PUMP 1	Total/NA	Water	537.1	130172
380-131761-3	AIEA GULCH WELLS PUMP 2	Total/NA	Water	537.1	130172
380-131761-4	AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Water	537.1	130172
380-131761-5	KA'AMILO WELLS	Total/NA	Water	537.1	130172
380-131761-6	FB: HALAWA WELLS UNITS 1&2 P1	Total/NA	Water	537.1	130172
380-131761-7	FB: AIEA GULCH WELLS PUMP 1	Total/NA	Water	537.1	130172

QC Association Summary

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

Job ID: 380-131761-1
SDG: Weekly PFAS

LCMS (Continued)

Analysis Batch: 130290 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131761-8	FB: AIEA GULCH WELLS PUMP 2	Total/NA	Water	537.1	130172
380-131761-9	FB: AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Water	537.1	130172
380-131761-10	FB: KA'AMILO WELLS	Total/NA	Water	537.1	130172
MBL 380-130172/20-A	Method Blank	Total/NA	Water	537.1	130172
LCS 380-130172/22-A	Lab Control Sample	Total/NA	Water	537.1	130172
MRL 380-130172/21-A	Lab Control Sample	Total/NA	Water	537.1	130172
380-131733-E-1-A MS	Matrix Spike	Total/NA	Water	537.1	130172
380-131733-F-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	537.1	130172

Analysis Batch: 130345

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131761-1	HALAWA WELLS UNITS 1&2 P1	Total/NA	Water	533	130176
380-131761-2	AIEA GULCH WELLS PUMP 1	Total/NA	Water	533	130176
380-131761-3	AIEA GULCH WELLS PUMP 2	Total/NA	Water	533	130176
380-131761-4	AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Water	533	130176
380-131761-5	KA'AMILO WELLS	Total/NA	Water	533	130176
380-131761-6	FB: HALAWA WELLS UNITS 1&2 P1	Total/NA	Water	533	130176
380-131761-7	FB: AIEA GULCH WELLS PUMP 1	Total/NA	Water	533	130176
MBL 380-130176/20-A	Method Blank	Total/NA	Water	533	130176
LCS 380-130176/22-A	Lab Control Sample	Total/NA	Water	533	130176
MRL 380-130176/21-A	Lab Control Sample	Total/NA	Water	533	130176
380-131697-B-1-A MS	Matrix Spike	Total/NA	Water	533	130176
380-131697-C-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	533	130176

Analysis Batch: 130380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131761-8	FB: AIEA GULCH WELLS PUMP 2	Total/NA	Water	533	130177
380-131761-9	FB: AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Water	533	130177
380-131761-10	FB: KA'AMILO WELLS	Total/NA	Water	533	130177
MBL 380-130177/20-A	Method Blank	Total/NA	Water	533	130177
LCS 380-130177/22-A	Lab Control Sample	Total/NA	Water	533	130177
MRL 380-130177/21-A	Lab Control Sample	Total/NA	Water	533	130177
380-131809-B-1-A MS	Matrix Spike	Total/NA	Water	533	130177
380-131809-C-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	533	130177

Lab Chronicle

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

Job ID: 380-131761-1
SDG: Weekly PFAS

Client Sample ID: HALAWA WELLS UNITS 1&2 P1
Date Collected: 01/21/25 09:50
Date Received: 01/23/25 09:37

Lab Sample ID: 380-131761-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			130176	XTD8	EA POM	01/24/25 07:21
Total/NA	Analysis	533		1	130345	Y5FM	EA POM	01/25/25 06:26
Total/NA	Prep	537.1 DW			130172	G9MN	EA POM	01/24/25 02:15
Total/NA	Analysis	537.1		1	130290	Y5FM	EA POM	01/24/25 15:52

Client Sample ID: AIEA GULCH WELLS PUMP 1
Date Collected: 01/21/25 10:19
Date Received: 01/23/25 09:37

Lab Sample ID: 380-131761-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			130176	XTD8	EA POM	01/24/25 07:21
Total/NA	Analysis	533		1	130345	Y5FM	EA POM	01/25/25 06:35
Total/NA	Prep	537.1 DW			130172	G9MN	EA POM	01/24/25 02:15
Total/NA	Analysis	537.1		1	130290	Y5FM	EA POM	01/24/25 16:02

Client Sample ID: AIEA GULCH WELLS PUMP 2
Date Collected: 01/21/25 10:34
Date Received: 01/23/25 09:37

Lab Sample ID: 380-131761-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			130176	XTD8	EA POM	01/24/25 07:21
Total/NA	Analysis	533		1	130345	Y5FM	EA POM	01/25/25 06:55
Total/NA	Prep	537.1 DW			130172	G9MN	EA POM	01/24/25 02:15
Total/NA	Analysis	537.1		1	130290	Y5FM	EA POM	01/24/25 16:12

Client Sample ID: AIEA WELLS PUMPS 1&2 (260) P2
Date Collected: 01/21/25 10:55
Date Received: 01/23/25 09:37

Lab Sample ID: 380-131761-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			130176	XTD8	EA POM	01/24/25 07:21
Total/NA	Analysis	533		1	130345	Y5FM	EA POM	01/25/25 07:04
Total/NA	Prep	537.1 DW			130172	G9MN	EA POM	01/24/25 02:15
Total/NA	Analysis	537.1		1	130290	Y5FM	EA POM	01/24/25 16:21

Client Sample ID: KA'AMILO WELLS
Date Collected: 01/21/25 11:22
Date Received: 01/23/25 09:37

Lab Sample ID: 380-131761-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			130176	XTD8	EA POM	01/24/25 07:21
Total/NA	Analysis	533		1	130345	Y5FM	EA POM	01/25/25 07:14
Total/NA	Prep	537.1 DW			130172	G9MN	EA POM	01/24/25 02:15
Total/NA	Analysis	537.1		1	130290	Y5FM	EA POM	01/24/25 16:31

Lab Chronicle

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

Job ID: 380-131761-1
SDG: Weekly PFAS

Client Sample ID: FB: HALAWA WELLS UNITS 1&2 P1

Lab Sample ID: 380-131761-6

Date Collected: 01/21/25 09:50

Matrix: Water

Date Received: 01/23/25 09:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			130176	XTD8	EA POM	01/24/25 07:21
Total/NA	Analysis	533		1	130345	Y5FM	EA POM	01/25/25 07:23
Total/NA	Prep	537.1 DW			130172	G9MN	EA POM	01/24/25 02:15
Total/NA	Analysis	537.1		1	130290	Y5FM	EA POM	01/24/25 16:41

Client Sample ID: FB: AIEA GULCH WELLS PUMP 1

Lab Sample ID: 380-131761-7

Date Collected: 01/21/25 10:19

Matrix: Water

Date Received: 01/23/25 09:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			130176	XTD8	EA POM	01/24/25 07:21
Total/NA	Analysis	533		1	130345	Y5FM	EA POM	01/25/25 07:33
Total/NA	Prep	537.1 DW			130172	G9MN	EA POM	01/24/25 02:15
Total/NA	Analysis	537.1		1	130290	Y5FM	EA POM	01/24/25 16:50

Client Sample ID: FB: AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-131761-8

Date Collected: 01/21/25 10:34

Matrix: Water

Date Received: 01/23/25 09:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			130177	XTD8	EA POM	01/24/25 07:27
Total/NA	Analysis	533		1	130380	Y7BM	EA POM	01/25/25 13:07
Total/NA	Prep	537.1 DW			130172	G9MN	EA POM	01/24/25 02:15
Total/NA	Analysis	537.1		1	130290	Y5FM	EA POM	01/24/25 17:11

Client Sample ID: FB: AIEA WELLS PUMPS 1&2 (260) P2

Lab Sample ID: 380-131761-9

Date Collected: 01/21/25 10:55

Matrix: Water

Date Received: 01/23/25 09:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			130177	XTD8	EA POM	01/24/25 07:27
Total/NA	Analysis	533		1	130380	Y7BM	EA POM	01/25/25 13:16
Total/NA	Prep	537.1 DW			130172	G9MN	EA POM	01/24/25 02:15
Total/NA	Analysis	537.1		1	130290	Y5FM	EA POM	01/24/25 17:22

Client Sample ID: FB: KA'AMILO WELLS

Lab Sample ID: 380-131761-10

Date Collected: 01/21/25 11:22

Matrix: Water

Date Received: 01/23/25 09:37

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			130177	XTD8	EA POM	01/24/25 07:27
Total/NA	Analysis	533		1	130380	Y7BM	EA POM	01/25/25 13:26
Total/NA	Prep	537.1 DW			130172	G9MN	EA POM	01/24/25 02:15
Total/NA	Analysis	537.1		1	130290	Y5FM	EA POM	01/24/25 17:32

Lab Chronicle

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

Job ID: 380-131761-1
SDG: Weekly PFAS

Laboratory References:

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

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Accreditation/Certification Summary

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

Job ID: 380-131761-1
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	01-31-25

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Method Summary

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

Job ID: 380-131761-1
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: 380-131761-1
SDG: Weekly PFAS

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
380-131761-1	HALAWA WELLS UNITS 1&2 P1	Water	01/21/25 09:50	01/23/25 09:37
380-131761-2	AIEA GULCH WELLS PUMP 1	Water	01/21/25 10:19	01/23/25 09:37
380-131761-3	AIEA GULCH WELLS PUMP 2	Water	01/21/25 10:34	01/23/25 09:37
380-131761-4	AIEA WELLS PUMPS 1&2 (260) P2	Water	01/21/25 10:55	01/23/25 09:37
380-131761-5	KA'AMILO WELLS	Water	01/21/25 11:22	01/23/25 09:37
380-131761-6	FB: HALAWA WELLS UNITS 1&2 P1	Water	01/21/25 09:50	01/23/25 09:37
380-131761-7	FB: AIEA GULCH WELLS PUMP 1	Water	01/21/25 10:19	01/23/25 09:37
380-131761-8	FB: AIEA GULCH WELLS PUMP 2	Water	01/21/25 10:34	01/23/25 09:37
380-131761-9	FB: AIEA WELLS PUMPS 1&2 (260) P2	Water	01/21/25 10:55	01/23/25 09:37
380-131761-10	FB: KA'AMILO WELLS	Water	01/21/25 11:22	01/23/25 09:37

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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 PM	Carrier Tracking No(s)	COC No:	
Client Contact: Dr. Ron Fenstermacher Phone: +1 808 748 5840 Email: Rachelle.Arada@et.euronorus.com			Arada Rachelle		380-27941-2757.2	
Company: City & County of Honolulu Address: 630 South Beretania Street, Chemistry Lab City: Honolulu State Zip: HI 96843 Phone: 808-748-5091 (tel) Email: rfenstermacher@hbws.org			E-Mail: Rachelle.Arada@et.euronorus.com	State of Origin:	Page: Page 2 of 2	
Project Name: RED-HILL/HBWS sites Event Desc: RUSH Weekly Red Hill Site:			Job #: Analysis Requested Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> SUBCONTRACT 625 PAH Physis LL (EAL) + TICs 6015B_GRO_LL (MOD) GRO 6015B_DRO_LL_CS HNL Ranges C10-C24/C24-C38/C8- C18 525 2_PREC (MOD) 525plus PLUS TICs 537 1_DW_PREC 537 1 Full List 533 All Analytes			
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=on-site, BT=Tissue, AA=)	Preservation Code:	Special Instructions/Note.
HALAWA WELLS UNITS 1&2 P1	21-Jan-2025	0950	G	Water		
AIEA GULCH WELLS PUMP 1	21-Jan-2025	1019	G	Water		chlorinated
AIEA GULCH WELLS PUMP 2	21-Jan-2025	1034	G	Water		chlorinated
AIEA WELLS PUMPS 1&2 (260) P2	21-Jan-2025	1055	G	Water		chlorinated
KA'AMILO WELLS	21-Jan-2025	1122	G	Water		chlorinated
FB HALAWA WELLS UNITS 1&2	21-Jan-2025	0950				
FB AIEA GULCH WELLS PUMP 1	21-Jan-2025	1019				
FB AIEA GULCH WELLS PUMP 2	21-Jan-2025	1034				
FB AIEA WELLS PUMPS 1&2 (260)	21-Jan-2025	1055				
FB KA'AMILO WELLS	21-Jan-2025	1122				380-131761 COC

Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological	
Deliverable Requested I II III IV Other (specify)	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months
Empty Kit Relinquished by:	Special Instructions/QC Requirements: 07716 0684 8117 07116 0684 8128
Date/Time: 22 Jan 2025 1400	Date/Time: 012325 09:37
Company: HBWS	Company: EEAR
Date/Time:	Date/Time:
Relinquished by:	Relinquished by:
Custody Seal No.	Cooler Temperature(s) °C and Other Remarks: (751N) 1.6°-0.0°=1.6° (2.5°-0.0°=2.5°) 3.4°-0.0°=3.4° F (2.5°-0.0°=2.5°)

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-131761-1

SDG Number: Weekly PFAS

Login Number: 131761

List Number: 1

Creator: Do, Michelle

List Source: Eurofins Eaton Analytical Pomona

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

