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ANALYTICAL REPORT

PREPARED FOR

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City & County of Honolulu
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Honolulu, Hawaii 96843

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JOB DESCRIPTION

RED-HILL
Weekly PFAS
RUSH Weekly Red Hill

JOB NUMBER

380-132770-1

Eurofins Eaton Analytical Pomona

Job Notes

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

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

Compliance Statement

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

Authorization



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Authorized for release by
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Definitions/Glossary

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

Job ID: 380-132770-1
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: 380-132770-1

Job ID: 380-132770-1

Eurofins Eaton Analytical Pomona

Job Narrative 380-132770-1

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 1/29/2025 10:20 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.6°C and 3.6°C.

PFAS

Methods EPA 537.1 and EPA 533 are two distinct methods for the analysis of PFAS in drinking water. The analyses are conducted on differing instrumentation, with calibrations, extraction solvents and sample preservatives being dissimilar among the two methods. Therefore it is probable and not unexpected to see the methods having slight variations in analytical results. KA'AMILO WELLS (380-132770-5)

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: 380-132770-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-132770-1

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)	2.0		2.0	ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.1		2.0	ng/L	1		533	Total/NA
Perfluoropentanoic acid (PFPeA)	2.4		2.0	ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.3		2.0	ng/L	1		537.1	Total/NA
Perfluorohexanoic acid (PFHxA)	2.2		2.0	ng/L	1		537.1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.5		2.0	ng/L	1		537.1	Total/NA

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

Lab Sample ID: 380-132770-2

No Detections.

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

Lab Sample ID: 380-132770-3

No Detections.

Client Sample ID: AIEA WELLS PUMPS 1&2 (260) P2
(331-203-TP400)
PWSID Number: HI0000331

Lab Sample ID: 380-132770-4

No Detections.

Client Sample ID: KA'AMILO WELLS

Lab Sample ID: 380-132770-5

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)	2.7		2.0	ng/L	1		537.1	Total/NA
Perfluorohexanoic acid (PFHxA)	2.0		2.0	ng/L	1		537.1	Total/NA
Perfluorooctanoic acid (PFOA)	2.0		2.0	ng/L	1		537.1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.6		2.0	ng/L	1		537.1	Total/NA

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

Lab Sample ID: 380-132770-6

No Detections.

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

Lab Sample ID: 380-132770-7

No Detections.

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

Lab Sample ID: 380-132770-8

No Detections.

This Detection Summary does not include radiochemical test results.

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Detection Summary

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

Job ID: 380-132770-1
SDG: Weekly PFAS

**Client Sample ID: FB: AIEA WELLS PUMPS 1&2 (260)
(331-203-TP400)**

Lab Sample ID: 380-132770-9

No Detections.

Client Sample ID: FB: KA'AMILO WELLS

Lab Sample ID: 380-132770-10

No Detections.

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This Detection Summary does not include radiochemical test results.

Client Sample Results

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

Job ID: 380-132770-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-132770-1

Date Collected: 01/27/25 10:26

Matrix: Drinking Water

Date Received: 01/29/25 10:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafuoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 20:56	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 20:56	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 20:56	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 20:56	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 20:56	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 20:56	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 20:56	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 20:56	1
Perfluorohexanesulfonic acid (PFHxS)	2.5		2.0	ng/L		01/30/25 07:24	01/30/25 20:56	1
Perfluorohexanoic acid (PFHxA)	2.0		2.0	ng/L		01/30/25 07:24	01/30/25 20:56	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 20:56	1
Perfluorooctanesulfonic acid (PFOS)	2.1		2.0	ng/L		01/30/25 07:24	01/30/25 20:56	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 20:56	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 20:56	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 20:56	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 20:56	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 20:56	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 20:56	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 20:56	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 20:56	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 20:56	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 20:56	1
Perfluoropentanoic acid (PFPeA)	2.4		2.0	ng/L		01/30/25 07:24	01/30/25 20:56	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 20:56	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 20:56	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	80		50 - 200			01/30/25 07:24	01/30/25 20:56	1
13C6 PFDA	86		50 - 200			01/30/25 07:24	01/30/25 20:56	1
13C5 PFHxA	89		50 - 200			01/30/25 07:24	01/30/25 20:56	1
13C4 PFHpA	91		50 - 200			01/30/25 07:24	01/30/25 20:56	1
13C8 PFOA	85		50 - 200			01/30/25 07:24	01/30/25 20:56	1
13C9 PFNA	88		50 - 200			01/30/25 07:24	01/30/25 20:56	1
13C7 PFUnA	93		50 - 200			01/30/25 07:24	01/30/25 20:56	1
13C2 PFDoA	92		50 - 200			01/30/25 07:24	01/30/25 20:56	1
13C4 PFBA	96		50 - 200			01/30/25 07:24	01/30/25 20:56	1
13C5 PFPeA	105		50 - 200			01/30/25 07:24	01/30/25 20:56	1
13C3 PFBS	103		50 - 200			01/30/25 07:24	01/30/25 20:56	1

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Client Sample Results

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

Job ID: 380-132770-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-132770-1

Date Collected: 01/27/25 10:26

Matrix: Drinking Water

Date Received: 01/29/25 10:20

PWSID Number: HI0000331

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFHxS	101		50 - 200	01/30/25 07:24	01/30/25 20:56	1
13C8 PFOS	108		50 - 200	01/30/25 07:24	01/30/25 20:56	1
13C2-4:2-FTS	139		50 - 200	01/30/25 07:24	01/30/25 20:56	1
13C2-6:2-FTS	140		50 - 200	01/30/25 07:24	01/30/25 20:56	1
13C2-8:2-FTS	102		50 - 200	01/30/25 07:24	01/30/25 20:56	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		01/30/25 07:10	01/30/25 21:23	1
Perfluorooctanesulfonic acid (PFOS)	2.3		2.0	ng/L		01/30/25 07:10	01/30/25 21:23	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 21:23	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 21:23	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 21:23	1
Perfluorohexanoic acid (PFHxA)	2.2		2.0	ng/L		01/30/25 07:10	01/30/25 21:23	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 21:23	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 21:23	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 21:23	1
Perfluorohexanesulfonic acid (PFHxS)	2.5		2.0	ng/L		01/30/25 07:10	01/30/25 21:23	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 21:23	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 21:23	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 21:23	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 21:23	1
Perfluorotridecanoic acid (PFTTrDA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 21:23	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 21:23	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 21:23	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 21:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	104		70 - 130	01/30/25 07:10	01/30/25 21:23	1
13C2 PFHxA	106		70 - 130	01/30/25 07:10	01/30/25 21:23	1
13C2 PFDA	102		70 - 130	01/30/25 07:10	01/30/25 21:23	1
13C3-GenX	102		70 - 130	01/30/25 07:10	01/30/25 21:23	1

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

Lab Sample ID: 380-132770-2

Date Collected: 01/27/25 11:12

Matrix: Drinking Water

Date Received: 01/29/25 10:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:05	1

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Client Sample Results

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

Job ID: 380-132770-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-132770-2

Date Collected: 01/27/25 11:12

Matrix: Drinking Water

Date Received: 01/29/25 10:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:05	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:05	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:05	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:05	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:05	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:05	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:05	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:05	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:05	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:05	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:05	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:05	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:05	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:05	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:05	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:05	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6 2 FTS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:05	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:05	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:05	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:05	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:05	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:05	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:05	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:05	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	98		50 - 200	01/30/25 07:24	01/30/25 21:05	1
13C6 PFDA	101		50 - 200	01/30/25 07:24	01/30/25 21:05	1
13C5 PFHxA	100		50 - 200	01/30/25 07:24	01/30/25 21:05	1
13C4 PFHpA	106		50 - 200	01/30/25 07:24	01/30/25 21:05	1
13C8 PFOA	105		50 - 200	01/30/25 07:24	01/30/25 21:05	1
13C9 PFNA	109		50 - 200	01/30/25 07:24	01/30/25 21:05	1
13C7 PFUnA	101		50 - 200	01/30/25 07:24	01/30/25 21:05	1
13C2 PFDoA	100		50 - 200	01/30/25 07:24	01/30/25 21:05	1
13C4 PFBA	104		50 - 200	01/30/25 07:24	01/30/25 21:05	1
13C5 PFPeA	110		50 - 200	01/30/25 07:24	01/30/25 21:05	1
13C3 PFBS	103		50 - 200	01/30/25 07:24	01/30/25 21:05	1
13C3 PFHxS	105		50 - 200	01/30/25 07:24	01/30/25 21:05	1
13C8 PFOS	108		50 - 200	01/30/25 07:24	01/30/25 21:05	1
13C2-4:2-FTS	125		50 - 200	01/30/25 07:24	01/30/25 21:05	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-132770-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-132770-2

Date Collected: 01/27/25 11:12
Date Received: 01/29/25 10:20

Matrix: Drinking Water
PWSID Number: HI0000331

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2-6:2-FTS	129		50 - 200	01/30/25 07:24	01/30/25 21:05	1
13C2-8:2-FTS	101		50 - 200	01/30/25 07:24	01/30/25 21:05	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		01/30/25 07:10	01/30/25 23:11	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:11	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:11	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:11	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:11	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:11	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:11	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:11	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:11	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:11	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:11	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:11	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:11	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:11	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:11	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:11	1
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:11	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	113		70 - 130	01/30/25 07:10	01/30/25 23:11	1
13C2 PFHxA	116		70 - 130	01/30/25 07:10	01/30/25 23:11	1
13C2 PFDA	116		70 - 130	01/30/25 07:10	01/30/25 23:11	1
13C3-GenX	119		70 - 130	01/30/25 07:10	01/30/25 23:11	1

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

Lab Sample ID: 380-132770-3

Date Collected: 01/27/25 10:55
Date Received: 01/29/25 10:20

Matrix: Drinking Water
PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:15	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:15	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:15	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:15	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-132770-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-132770-3

Date Collected: 01/27/25 10:55

Matrix: Drinking Water

Date Received: 01/29/25 10:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:15	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:15	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:15	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:15	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:15	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:15	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:15	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:15	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:15	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:15	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:15	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:15	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:15	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:15	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:15	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:15	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:15	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:15	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:15	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:15	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:15	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	96		50 - 200	01/30/25 07:24	01/30/25 21:15	1
13C6 PFDA	100		50 - 200	01/30/25 07:24	01/30/25 21:15	1
13C5 PFHxA	104		50 - 200	01/30/25 07:24	01/30/25 21:15	1
13C4 PFHpA	107		50 - 200	01/30/25 07:24	01/30/25 21:15	1
13C8 PFOA	109		50 - 200	01/30/25 07:24	01/30/25 21:15	1
13C9 PFNA	108		50 - 200	01/30/25 07:24	01/30/25 21:15	1
13C7 PFUnA	102		50 - 200	01/30/25 07:24	01/30/25 21:15	1
13C2 PFDoA	99		50 - 200	01/30/25 07:24	01/30/25 21:15	1
13C4 PFBA	106		50 - 200	01/30/25 07:24	01/30/25 21:15	1
13C5 PFPeA	109		50 - 200	01/30/25 07:24	01/30/25 21:15	1
13C3 PFBS	104		50 - 200	01/30/25 07:24	01/30/25 21:15	1
13C3 PFHxS	107		50 - 200	01/30/25 07:24	01/30/25 21:15	1
13C8 PFOS	110		50 - 200	01/30/25 07:24	01/30/25 21:15	1
13C2-4:2-FTS	129		50 - 200	01/30/25 07:24	01/30/25 21:15	1
13C2-6:2-FTS	129		50 - 200	01/30/25 07:24	01/30/25 21:15	1
13C2-8:2-FTS	104		50 - 200	01/30/25 07:24	01/30/25 21:15	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-132770-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-132770-3

Date Collected: 01/27/25 10:55

Matrix: Drinking Water

Date Received: 01/29/25 10:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:22	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:22	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:22	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:22	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:22	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:22	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:22	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:22	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:22	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:22	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:22	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:22	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:22	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:22	1
Perfluorotridecanoic acid (PFTTrDA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:22	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:22	1
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:22	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	110		70 - 130			01/30/25 07:10	01/30/25 23:22	1
13C2 PFHxA	105		70 - 130			01/30/25 07:10	01/30/25 23:22	1
13C2 PFDA	108		70 - 130			01/30/25 07:10	01/30/25 23:22	1
13C3-GenX	110		70 - 130			01/30/25 07:10	01/30/25 23:22	1

**Client Sample ID: AIEA WELLS PUMPS 1&2 (260) P2
(331-203-TP400)**

Lab Sample ID: 380-132770-4

Date Collected: 01/27/25 11:33

Matrix: Drinking Water

Date Received: 01/29/25 10:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:25	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:25	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:25	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:25	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:25	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:25	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:25	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:25	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:25	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-132770-1
SDG: Weekly PFAS

**Client Sample ID: AIEA WELLS PUMPS 1&2 (260) P2
(331-203-TP400)**

Lab Sample ID: 380-132770-4

Date Collected: 01/27/25 11:33

Matrix: Drinking Water

Date Received: 01/29/25 10:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:25	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:25	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:25	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:25	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:25	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:25	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:25	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:25	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:25	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:25	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:25	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:25	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:25	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:25	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:25	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:25	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	101		50 - 200			01/30/25 07:24	01/30/25 21:25	1
13C6 PFDA	99		50 - 200			01/30/25 07:24	01/30/25 21:25	1
13C5 PFHxA	104		50 - 200			01/30/25 07:24	01/30/25 21:25	1
13C4 PFHpA	106		50 - 200			01/30/25 07:24	01/30/25 21:25	1
13C8 PFOA	103		50 - 200			01/30/25 07:24	01/30/25 21:25	1
13C9 PFNA	103		50 - 200			01/30/25 07:24	01/30/25 21:25	1
13C7 PFUnA	101		50 - 200			01/30/25 07:24	01/30/25 21:25	1
13C2 PFDoA	98		50 - 200			01/30/25 07:24	01/30/25 21:25	1
13C4 PFBA	101		50 - 200			01/30/25 07:24	01/30/25 21:25	1
13C5 PFPeA	109		50 - 200			01/30/25 07:24	01/30/25 21:25	1
13C3 PFBS	100		50 - 200			01/30/25 07:24	01/30/25 21:25	1
13C3 PFHxS	103		50 - 200			01/30/25 07:24	01/30/25 21:25	1
13C8 PFOS	107		50 - 200			01/30/25 07:24	01/30/25 21:25	1
13C2-4:2-FTS	126		50 - 200			01/30/25 07:24	01/30/25 21:25	1
13C2-6:2-FTS	128		50 - 200			01/30/25 07:24	01/30/25 21:25	1
13C2-8:2-FTS	98		50 - 200			01/30/25 07:24	01/30/25 21:25	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		01/30/25 07:10	01/30/25 23:44	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:44	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:44	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:44	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-132770-1
SDG: Weekly PFAS

**Client Sample ID: AIEA WELLS PUMPS 1&2 (260) P2
(331-203-TP400)**

Lab Sample ID: 380-132770-4

Date Collected: 01/27/25 11:33

Matrix: Drinking Water

Date Received: 01/29/25 10:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:44	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:44	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:44	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:44	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:44	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:44	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:44	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:44	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:44	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:44	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:44	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:44	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:44	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	120		70 - 130			01/30/25 07:10	01/30/25 23:44	1
13C2 PFHxA	114		70 - 130			01/30/25 07:10	01/30/25 23:44	1
13C2 PFDA	111		70 - 130			01/30/25 07:10	01/30/25 23:44	1
13C3-GenX	113		70 - 130			01/30/25 07:10	01/30/25 23:44	1

Client Sample ID: KA'AMILO WELLS

Lab Sample ID: 380-132770-5

Date Collected: 01/27/25 11:57

Matrix: Water

Date Received: 01/29/25 10:20

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		01/30/25 07:24	01/30/25 21:34	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:34	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:34	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:34	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:34	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:34	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:34	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:34	1
Perfluorohexanesulfonic acid (PFHxS)	2.3		2.0	ng/L		01/30/25 07:24	01/30/25 21:34	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:34	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:34	1
Perfluorooctanesulfonic acid (PFOS)	2.5		2.0	ng/L		01/30/25 07:24	01/30/25 21:34	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:34	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:34	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-132770-1
SDG: Weekly PFAS

Client Sample ID: KA'AMILO WELLS

Lab Sample ID: 380-132770-5

Date Collected: 01/27/25 11:57

Matrix: Water

Date Received: 01/29/25 10:20

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:34	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:34	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:34	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:34	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:34	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:34	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:34	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:34	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:34	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:34	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:34	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	106		50 - 200	01/30/25 07:24	01/30/25 21:34	1
13C6 PFDA	101		50 - 200	01/30/25 07:24	01/30/25 21:34	1
13C5 PFHxA	105		50 - 200	01/30/25 07:24	01/30/25 21:34	1
13C4 PFHpA	109		50 - 200	01/30/25 07:24	01/30/25 21:34	1
13C8 PFOA	106		50 - 200	01/30/25 07:24	01/30/25 21:34	1
13C9 PFNA	106		50 - 200	01/30/25 07:24	01/30/25 21:34	1
13C7 PFUnA	104		50 - 200	01/30/25 07:24	01/30/25 21:34	1
13C2 PFDoA	101		50 - 200	01/30/25 07:24	01/30/25 21:34	1
13C4 PFBA	104		50 - 200	01/30/25 07:24	01/30/25 21:34	1
13C5 PFPeA	114		50 - 200	01/30/25 07:24	01/30/25 21:34	1
13C3 PFBS	100		50 - 200	01/30/25 07:24	01/30/25 21:34	1
13C3 PFHxS	107		50 - 200	01/30/25 07:24	01/30/25 21:34	1
13C8 PFOS	104		50 - 200	01/30/25 07:24	01/30/25 21:34	1
13C2-4:2-FTS	134		50 - 200	01/30/25 07:24	01/30/25 21:34	1
13C2-6:2-FTS	123		50 - 200	01/30/25 07:24	01/30/25 21:34	1
13C2-8:2-FTS	103		50 - 200	01/30/25 07:24	01/30/25 21:34	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		01/30/25 07:10	01/30/25 23:54	1
Perfluorooctanesulfonic acid (PFOS)	2.7		2.0	ng/L		01/30/25 07:10	01/30/25 23:54	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:54	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:54	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:54	1
Perfluorohexanoic acid (PFHxA)	2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:54	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:54	1
Perfluorooctanoic acid (PFOA)	2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:54	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:54	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-132770-1
SDG: Weekly PFAS

Client Sample ID: KA'AMILO WELLS

Lab Sample ID: 380-132770-5

Date Collected: 01/27/25 11:57

Matrix: Water

Date Received: 01/29/25 10:20

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanesulfonic acid (PFHxS)	2.6		2.0	ng/L		01/30/25 07:10	01/30/25 23:54	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:54	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:54	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:54	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:54	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:54	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:54	1
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:54	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/30/25 07:10	01/30/25 23:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	116		70 - 130			01/30/25 07:10	01/30/25 23:54	1
13C2 PFHxA	111		70 - 130			01/30/25 07:10	01/30/25 23:54	1
13C2 PFDA	113		70 - 130			01/30/25 07:10	01/30/25 23:54	1
13C3-GenX	114		70 - 130			01/30/25 07:10	01/30/25 23:54	1

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

Lab Sample ID: 380-132770-6

Date Collected: 01/27/25 10:26

Matrix: Water

Date Received: 01/29/25 10:20

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		01/30/25 07:24	01/30/25 21:53	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:53	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:53	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:53	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:53	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:53	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:53	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:53	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:53	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:53	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:53	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:53	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:53	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:53	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:53	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:53	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:53	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:53	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-132770-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-132770-6

Date Collected: 01/27/25 10:26

Matrix: Water

Date Received: 01/29/25 10:20

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		01/30/25 07:24	01/30/25 21:53	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:53	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:53	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:53	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:53	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:53	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 21:53	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	98		50 - 200			01/30/25 07:24	01/30/25 21:53	1
13C6 PFDA	104		50 - 200			01/30/25 07:24	01/30/25 21:53	1
13C5 PFHxA	108		50 - 200			01/30/25 07:24	01/30/25 21:53	1
13C4 PFHpA	115		50 - 200			01/30/25 07:24	01/30/25 21:53	1
13C8 PFOA	110		50 - 200			01/30/25 07:24	01/30/25 21:53	1
13C9 PFNA	110		50 - 200			01/30/25 07:24	01/30/25 21:53	1
13C7 PFUnA	106		50 - 200			01/30/25 07:24	01/30/25 21:53	1
13C2 PFDoA	101		50 - 200			01/30/25 07:24	01/30/25 21:53	1
13C4 PFBA	109		50 - 200			01/30/25 07:24	01/30/25 21:53	1
13C5 PFPeA	118		50 - 200			01/30/25 07:24	01/30/25 21:53	1
13C3 PFBS	103		50 - 200			01/30/25 07:24	01/30/25 21:53	1
13C3 PFHxS	106		50 - 200			01/30/25 07:24	01/30/25 21:53	1
13C8 PFOS	115		50 - 200			01/30/25 07:24	01/30/25 21:53	1
13C2-4:2-FTS	133		50 - 200			01/30/25 07:24	01/30/25 21:53	1
13C2-6:2-FTS	134		50 - 200			01/30/25 07:24	01/30/25 21:53	1
13C2-8:2-FTS	108		50 - 200			01/30/25 07:24	01/30/25 21:53	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		01/30/25 07:10	01/31/25 00:05	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:05	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:05	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:05	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:05	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:05	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:05	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:05	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:05	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:05	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:05	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:05	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:05	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:05	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-132770-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-132770-6

Date Collected: 01/27/25 10:26

Matrix: Water

Date Received: 01/29/25 10:20

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorotridecanoic acid (PFTTrDA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:05	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:05	1
11-Chloroeicosafuoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:05	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	115		70 - 130			01/30/25 07:10	01/31/25 00:05	1
13C2 PFHxA	107		70 - 130			01/30/25 07:10	01/31/25 00:05	1
13C2 PFDA	112		70 - 130			01/30/25 07:10	01/31/25 00:05	1
13C3-GenX	103		70 - 130			01/30/25 07:10	01/31/25 00:05	1

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

Lab Sample ID: 380-132770-7

Date Collected: 01/27/25 11:12

Matrix: Water

Date Received: 01/29/25 10:20

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		01/30/25 07:24	01/30/25 22:03	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:03	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:03	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:03	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:03	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:03	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:03	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:03	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:03	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:03	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:03	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:03	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:03	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:03	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:03	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:03	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:03	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:03	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:03	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:03	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:03	1

Eurolins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-132770-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-132770-7

Date Collected: 01/27/25 11:12

Matrix: Water

Date Received: 01/29/25 10:20

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:03	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:03	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:03	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:03	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	96		50 - 200			01/30/25 07:24	01/30/25 22:03	1
13C6 PFDA	100		50 - 200			01/30/25 07:24	01/30/25 22:03	1
13C5 PFHxA	103		50 - 200			01/30/25 07:24	01/30/25 22:03	1
13C4 PFHpA	107		50 - 200			01/30/25 07:24	01/30/25 22:03	1
13C8 PFOA	105		50 - 200			01/30/25 07:24	01/30/25 22:03	1
13C9 PFNA	108		50 - 200			01/30/25 07:24	01/30/25 22:03	1
13C7 PFUnA	101		50 - 200			01/30/25 07:24	01/30/25 22:03	1
13C2 PFDoA	98		50 - 200			01/30/25 07:24	01/30/25 22:03	1
13C4 PFBA	106		50 - 200			01/30/25 07:24	01/30/25 22:03	1
13C5 PFPeA	108		50 - 200			01/30/25 07:24	01/30/25 22:03	1
13C3 PFBS	103		50 - 200			01/30/25 07:24	01/30/25 22:03	1
13C3 PFHxS	104		50 - 200			01/30/25 07:24	01/30/25 22:03	1
13C8 PFOS	108		50 - 200			01/30/25 07:24	01/30/25 22:03	1
13C2-4:2-FTS	125		50 - 200			01/30/25 07:24	01/30/25 22:03	1
13C2-6:2-FTS	132		50 - 200			01/30/25 07:24	01/30/25 22:03	1
13C2-8:2-FTS	103		50 - 200			01/30/25 07:24	01/30/25 22:03	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		01/30/25 07:10	01/31/25 00:16	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:16	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:16	1
N-methylperfluorooctanesulfonamideacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:16	1
N-ethylperfluorooctanesulfonamideacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:16	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:16	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:16	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:16	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:16	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:16	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:16	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:16	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:16	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:16	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:16	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:16	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:16	1

Client Sample Results

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

Job ID: 380-132770-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-132770-7

Date Collected: 01/27/25 11:12

Matrix: Water

Date Received: 01/29/25 10:20

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		01/30/25 07:10	01/31/25 00:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	113		70 - 130			01/30/25 07:10	01/31/25 00:16	1
13C2 PFHxA	111		70 - 130			01/30/25 07:10	01/31/25 00:16	1
13C2 PFDA	106		70 - 130			01/30/25 07:10	01/31/25 00:16	1
13C3-GenX	110		70 - 130			01/30/25 07:10	01/31/25 00:16	1

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

Lab Sample ID: 380-132770-8

Date Collected: 01/27/25 10:55

Matrix: Water

Date Received: 01/29/25 10:20

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		01/30/25 07:24	01/30/25 22:12	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:12	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:12	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:12	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:12	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:12	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:12	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:12	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:12	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:12	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:12	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:12	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:12	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:12	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:12	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:12	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:12	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:12	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:12	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:12	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:12	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:12	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:12	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:12	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-132770-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-132770-8

Date Collected: 01/27/25 10:55

Matrix: Water

Date Received: 01/29/25 10:20

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:12	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	97		50 - 200			01/30/25 07:24	01/30/25 22:12	1
13C6 PFDA	102		50 - 200			01/30/25 07:24	01/30/25 22:12	1
13C5 PFHxA	106		50 - 200			01/30/25 07:24	01/30/25 22:12	1
13C4 PFHpA	110		50 - 200			01/30/25 07:24	01/30/25 22:12	1
13C8 PFOA	108		50 - 200			01/30/25 07:24	01/30/25 22:12	1
13C9 PFNA	109		50 - 200			01/30/25 07:24	01/30/25 22:12	1
13C7 PFUnA	91		50 - 200			01/30/25 07:24	01/30/25 22:12	1
13C2 PFDoA	85		50 - 200			01/30/25 07:24	01/30/25 22:12	1
13C4 PFBA	108		50 - 200			01/30/25 07:24	01/30/25 22:12	1
13C5 PFPeA	110		50 - 200			01/30/25 07:24	01/30/25 22:12	1
13C3 PFBS	105		50 - 200			01/30/25 07:24	01/30/25 22:12	1
13C3 PFHxS	105		50 - 200			01/30/25 07:24	01/30/25 22:12	1
13C8 PFOS	110		50 - 200			01/30/25 07:24	01/30/25 22:12	1
13C2-4:2-FTS	133		50 - 200			01/30/25 07:24	01/30/25 22:12	1
13C2-6:2-FTS	131		50 - 200			01/30/25 07:24	01/30/25 22:12	1
13C2-8:2-FTS	105		50 - 200			01/30/25 07:24	01/30/25 22:12	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		01/30/25 07:10	01/31/25 00:27	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:27	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:27	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:27	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:27	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:27	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:27	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:27	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:27	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:27	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:27	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:27	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:27	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:27	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:27	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:27	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:27	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	116		70 - 130			01/30/25 07:10	01/31/25 00:27	1
13C2 PFHxA	110		70 - 130			01/30/25 07:10	01/31/25 00:27	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-132770-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-132770-8

Date Collected: 01/27/25 10:55

Matrix: Water

Date Received: 01/29/25 10:20

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFDA	112		70 - 130	01/30/25 07:10	01/31/25 00:27	1
13C3-GenX	108		70 - 130	01/30/25 07:10	01/31/25 00:27	1

**Client Sample ID: FB: AIEA WELLS PUMPS 1&2 (260)
(331-203-TP400)**

Lab Sample ID: 380-132770-9

Date Collected: 01/27/25 11:33

Matrix: Water

Date Received: 01/29/25 10:20

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		01/30/25 07:24	01/30/25 22:22	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:22	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:22	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:22	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:22	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:22	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:22	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:22	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:22	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:22	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:22	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:22	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:22	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:22	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:22	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:22	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:22	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:22	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:22	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:22	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:22	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:22	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:22	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:22	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:22	1
Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
13C3 HFPO-DA	99		50 - 200	01/30/25 07:24	01/30/25 22:22	1		
13C6 PFDA	104		50 - 200	01/30/25 07:24	01/30/25 22:22	1		

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-132770-1
SDG: Weekly PFAS

**Client Sample ID: FB: AIEA WELLS PUMPS 1&2 (260)
(331-203-TP400)**

Lab Sample ID: 380-132770-9

Date Collected: 01/27/25 11:33

Matrix: Water

Date Received: 01/29/25 10:20

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C5 PFHxA	104		50 - 200	01/30/25 07:24	01/30/25 22:22	1
13C4 PFHpA	108		50 - 200	01/30/25 07:24	01/30/25 22:22	1
13C8 PFOA	107		50 - 200	01/30/25 07:24	01/30/25 22:22	1
13C9 PFNA	109		50 - 200	01/30/25 07:24	01/30/25 22:22	1
13C7 PFUnA	100		50 - 200	01/30/25 07:24	01/30/25 22:22	1
13C2 PFDoA	99		50 - 200	01/30/25 07:24	01/30/25 22:22	1
13C4 PFBA	106		50 - 200	01/30/25 07:24	01/30/25 22:22	1
13C5 PFPeA	109		50 - 200	01/30/25 07:24	01/30/25 22:22	1
13C3 PFBS	106		50 - 200	01/30/25 07:24	01/30/25 22:22	1
13C3 PFHxS	107		50 - 200	01/30/25 07:24	01/30/25 22:22	1
13C8 PFOS	110		50 - 200	01/30/25 07:24	01/30/25 22:22	1
13C2-4:2-FTS	130		50 - 200	01/30/25 07:24	01/30/25 22:22	1
13C2-6:2-FTS	130		50 - 200	01/30/25 07:24	01/30/25 22:22	1
13C2-8:2-FTS	107		50 - 200	01/30/25 07:24	01/30/25 22:22	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		01/30/25 07:10	01/31/25 00:38	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:38	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:38	1
N-methylperfluorooctanesulfonamideacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:38	1
N-ethylperfluorooctanesulfonamideacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:38	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:38	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:38	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:38	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:38	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:38	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:38	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:38	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:38	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:38	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:38	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:38	1
11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:38	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	120		70 - 130	01/30/25 07:10	01/31/25 00:38	1
13C2 PFHxA	114		70 - 130	01/30/25 07:10	01/31/25 00:38	1
13C2 PFDA	117		70 - 130	01/30/25 07:10	01/31/25 00:38	1
13C3-GenX	112		70 - 130	01/30/25 07:10	01/31/25 00:38	1

Client Sample Results

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

Job ID: 380-132770-1
SDG: Weekly PFAS

Client Sample ID: FB: KA'AMILO WELLS

Lab Sample ID: 380-132770-10

Date Collected: 01/27/25 11:57

Matrix: Water

Date Received: 01/29/25 10:20

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		01/30/25 07:24	01/30/25 22:31	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:31	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:31	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:31	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:31	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:31	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:31	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:31	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:31	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:31	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:31	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:31	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:31	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:31	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:31	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:31	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:31	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:31	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:31	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:31	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:31	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:31	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:31	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:31	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		01/30/25 07:24	01/30/25 22:31	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	97		50 - 200	01/30/25 07:24	01/30/25 22:31	1
13C6 PFDA	107		50 - 200	01/30/25 07:24	01/30/25 22:31	1
13C5 PFHxA	108		50 - 200	01/30/25 07:24	01/30/25 22:31	1
13C4 PFHpA	110		50 - 200	01/30/25 07:24	01/30/25 22:31	1
13C8 PFOA	113		50 - 200	01/30/25 07:24	01/30/25 22:31	1
13C9 PFNA	111		50 - 200	01/30/25 07:24	01/30/25 22:31	1
13C7 PFUnA	105		50 - 200	01/30/25 07:24	01/30/25 22:31	1
13C2 PFDoA	103		50 - 200	01/30/25 07:24	01/30/25 22:31	1
13C4 PFBA	110		50 - 200	01/30/25 07:24	01/30/25 22:31	1
13C5 PFPeA	116		50 - 200	01/30/25 07:24	01/30/25 22:31	1
13C3 PFBS	105		50 - 200	01/30/25 07:24	01/30/25 22:31	1
13C3 PFHxS	109		50 - 200	01/30/25 07:24	01/30/25 22:31	1
13C8 PFOS	112		50 - 200	01/30/25 07:24	01/30/25 22:31	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-132770-1
SDG: Weekly PFAS

Client Sample ID: FB: KA'AMILO WELLS

Lab Sample ID: 380-132770-10

Date Collected: 01/27/25 11:57

Matrix: Water

Date Received: 01/29/25 10:20

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	131		50 - 200	01/30/25 07:24	01/30/25 22:31	1
13C2-6:2-FTS	134		50 - 200	01/30/25 07:24	01/30/25 22:31	1
13C2-8:2-FTS	108		50 - 200	01/30/25 07:24	01/30/25 22:31	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		01/30/25 07:10	01/31/25 00:49	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:49	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:49	1
N-methylperfluorooctanesulfonamideacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:49	1
N-ethylperfluorooctanesulfonamideacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:49	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:49	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:49	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:49	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:49	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:49	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:49	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:49	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:49	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:49	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:49	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:49	1
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:49	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/30/25 07:10	01/31/25 00:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	120		70 - 130	01/30/25 07:10	01/31/25 00:49	1
13C2 PFHxA	109		70 - 130	01/30/25 07:10	01/31/25 00:49	1
13C2 PFDA	108		70 - 130	01/30/25 07:10	01/31/25 00:49	1
13C3-GenX	105		70 - 130	01/30/25 07:10	01/31/25 00:49	1

Action Limit Summary

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

Job ID: 380-132770-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-132770-1

Compliance Check

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

Analyte	Result	Qualifier	Unit	EPAMCL Limit	RL	Method	Prep Type
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.5		ng/L	10	2.0	533	Total/NA
Perfluorononanoic acid (PFNA)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.1		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)	2.5		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
(331-201-TP071)
PWSID Number: HI0000331

Lab Sample ID: 380-132770-2

Compliance Check

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

Analyte	Result	Qualifier	Unit	EPAMCL Limit	RL	Method	Prep Type
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorononanoic acid (PFNA)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	<2.0		ng/L	4	2.0	533	Total/NA
Perfluorooctanoic acid (PFOA)	<2.0		ng/L	4	2.0	533	Total/NA
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		ng/L	10	2.0	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
(331-202-TP072)
PWSID Number: HI0000331

Lab Sample ID: 380-132770-3

Compliance Check

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

Analyte	Result	Qualifier	Unit	EPAMCL Limit	RL	Method	Prep Type
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		ng/L	10	2.0	533	Total/NA

Eurofins Eaton Analytical Pomona

Action Limit Summary

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

Job ID: 380-132770-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-132770-3

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			
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 WELLS PUMPS 1&2 (260) P2
(331-203-TP400)
PWSID Number: HI0000331

Lab Sample ID: 380-132770-4

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: 380-132770-5

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

Eurofins Eaton Analytical Pomona

Action Limit Summary

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

Job ID: 380-132770-1
SDG: Weekly PFAS

Client Sample ID: KA'AMILO WELLS (Continued)

Lab Sample ID: 380-132770-5

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	537.1	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.7		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)	2.6		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: HALAWA WELLS UNITS 1 & 2 (331-206-TP065)

Lab Sample ID: 380-132770-6

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 (331-201-TP071)

Lab Sample ID: 380-132770-7

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

Eurofins Eaton Analytical Pomona

Action Limit Summary

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

Job ID: 380-132770-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-132770-8

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
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)
(331-203-TP400)**

Lab Sample ID: 380-132770-9

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: 380-132770-10

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

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Action Limit Summary

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

Job ID: 380-132770-1
 SDG: Weekly PFAS

Client Sample ID: FB: KA'AMILO WELLS (Continued)

Lab Sample ID: 380-132770-10

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

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

Surrogate Summary

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

Job ID: 380-132770-1
SDG: Weekly PFAS

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

Matrix: Drinking Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		d5NEFOS (70-130)	PFHxA (70-130)	PFDA (70-130)	GenX (70-130)
380-132770-1	HALAWA WELLS UNITS 1 & 2 F	104	106	102	102
380-132770-1 MS	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	101	108	105	108
380-132770-1 MSD	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	98	105	105	105
380-132770-2	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	113	116	116	119
380-132770-3	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	110	105	108	110
380-132770-4	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP400)	120	114	111	113

Surrogate Legend

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

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		d5NEFOS (70-130)	PFHxA (70-130)	PFDA (70-130)	GenX (70-130)
380-132770-5	KA'AMILO WELLS	116	111	113	114
380-132770-6	FB: HALAWA WELLS UNITS 1 & 2 (331-206-TP065)	115	107	112	103
380-132770-7	FB: AIEA GULCH WELLS PUMF 1 (331-201-TP071)	113	111	106	110
380-132770-8	FB: AIEA GULCH WELLS PUMF 2 (331-202-TP072)	116	110	112	108
380-132770-9	FB: AIEA WELLS PUMPS 1&2 (260) (331-203-TP400)	120	114	117	112
380-132770-10	FB: KA'AMILO WELLS	120	109	108	105
LCS 380-131518/24-A	Lab Control Sample	104	106	107	103
MBL 380-131518/22-A	Method Blank	110	108	107	106
MRL 380-131518/23-A	Lab Control Sample	109	108	111	104

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: 380-132770-1
SDG: Weekly PFAS

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

Matrix: Drinking Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Isotope Dilution Recovery (Acceptance Limits)							
		HFPODA (50-200)	C6PFDA (50-200)	13C5PHA (50-200)	C4PFHA (50-200)	C8PFOA (50-200)	C9PFNA (50-200)	13C7PUA (50-200)	PFDaA (50-200)
380-132770-1	HALAWA WELLS UNITS 1 & 2 F	80	86	89	91	85	88	93	92
380-132770-2	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	98	101	100	106	105	109	101	100
380-132770-3	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	96	100	104	107	109	108	102	99
380-132770-4	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP400)	101	99	104	106	103	103	101	98

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)
380-132770-1	HALAWA WELLS UNITS 1 & 2 F	96	105	103	101	108	139	140	102
380-132770-2	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	104	110	103	105	108	125	129	101
380-132770-3	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	106	109	104	107	110	129	129	104
380-132770-4	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP400)	101	109	100	103	107	126	128	98

Surrogate Legend

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

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Isotope Dilution Recovery (Acceptance Limits)							
		HFPODA (50-200)	C6PFDA (50-200)	13C5PHA (50-200)	C4PFHA (50-200)	C8PFOA (50-200)	C9PFNA (50-200)	13C7PUA (50-200)	PFDaA (50-200)
380-132770-5	KA'AMILO WELLS	106	101	105	109	106	106	104	101
380-132770-6	FB: HALAWA WELLS UNITS 1 & 2 (331-206-TP065)	98	104	108	115	110	110	106	101
380-132770-7	FB: AIEA GULCH WELLS PUMF 1 (331-201-TP071)	96	100	103	107	105	108	101	98
380-132770-8	FB: AIEA GULCH WELLS PUMF 2 (331-202-TP072)	97	102	106	110	108	109	91	85
380-132770-9	FB: AIEA WELLS PUMPS 1&2 (260) (331-203-TP400)	99	104	104	108	107	109	100	99
380-132770-10	FB: KA'AMILO WELLS	97	107	108	110	113	111	105	103
380-132777-E-1-A MS	Matrix Spike	114	107	111	114	114	114	108	108

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Isotope Dilution Summary

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

Job ID: 380-132770-1
 SDG: Weekly PFAS

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

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	HFPODA (50-200)	C6PFDA (50-200)	13C5PHA (50-200)	C4PFHA (50-200)	C8PFOA (50-200)	C9PFNA (50-200)	13C7PUA (50-200)	PFDaA (50-200)
380-132777-F-1-A MSD	Matrix Spike Duplicate	113	111	109	115	116	116	110	108
LCS 380-131526/21-A	Lab Control Sample	101	105	109	111	108	112	107	105
MBL 380-131526/19-A	Method Blank	97	101	104	107	105	105	99	98
MRL 380-131526/20-A	Lab Control Sample	93	102	108	111	109	108	106	100

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFBA (50-200)	PFPeA (50-200)	C3PFBS (50-200)	C3PFHS (50-200)	C8PFOS (50-200)	42FTS (50-200)	62FTS (50-200)	82FTS (50-200)
380-132770-5	KA'AMILO WELLS	104	114	100	107	104	134	123	103
380-132770-6	FB: HALAWA WELLS UNITS 1 & 2 (331-206-TP065)	109	118	103	106	115	133	134	108
380-132770-7	FB: AIEA GULCH WELLS PUMF 1 (331-201-TP071)	106	108	103	104	108	125	132	103
380-132770-8	FB: AIEA GULCH WELLS PUMF 2 (331-202-TP072)	108	110	105	105	110	133	131	105
380-132770-9	FB: AIEA WELLS PUMPS 1&2 (260) (331-203-TP400)	106	109	106	107	110	130	130	107
380-132770-10	FB: KA'AMILO WELLS	110	116	105	109	112	131	134	108
380-132777-E-1-A MS	Matrix Spike	114	122	110	109	114	139	145	112
380-132777-F-1-A MSD	Matrix Spike Duplicate	114	117	109	107	109	123	128	106
LCS 380-131526/21-A	Lab Control Sample	110	116	104	108	109	121	131	107
MBL 380-131526/19-A	Method Blank	101	108	100	105	107	126	130	103
MRL 380-131526/20-A	Lab Control Sample	109	110	99	105	110	129	129	105

Surrogate Legend

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

QC Sample Results

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

Job ID: 380-132770-1
SDG: Weekly PFAS

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

Lab Sample ID: MBL 380-131526/19-A
Matrix: Water
Analysis Batch: 131627

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 131526

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		01/30/25 07:24	01/30/25 19:11	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<0.30		2.0	ng/L		01/30/25 07:24	01/30/25 19:11	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0	ng/L		01/30/25 07:24	01/30/25 19:11	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<1.0		2.0	ng/L		01/30/25 07:24	01/30/25 19:11	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0	ng/L		01/30/25 07:24	01/30/25 19:11	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	ng/L		01/30/25 07:24	01/30/25 19:11	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	ng/L		01/30/25 07:24	01/30/25 19:11	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0	ng/L		01/30/25 07:24	01/30/25 19:11	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0	ng/L		01/30/25 07:24	01/30/25 19:11	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0	ng/L		01/30/25 07:24	01/30/25 19:11	1
Perfluorononanoic acid (PFNA)	<0.40		2.0	ng/L		01/30/25 07:24	01/30/25 19:11	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0	ng/L		01/30/25 07:24	01/30/25 19:11	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0	ng/L		01/30/25 07:24	01/30/25 19:11	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0	ng/L		01/30/25 07:24	01/30/25 19:11	1
Perfluorobutanoic acid (PFBA)	<0.69		2.0	ng/L		01/30/25 07:24	01/30/25 19:11	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.38		2.0	ng/L		01/30/25 07:24	01/30/25 19:11	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.37		2.0	ng/L		01/30/25 07:24	01/30/25 19:11	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<0.48		2.0	ng/L		01/30/25 07:24	01/30/25 19:11	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<0.47		2.0	ng/L		01/30/25 07:24	01/30/25 19:11	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<0.25		2.0	ng/L		01/30/25 07:24	01/30/25 19:11	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.46		2.0	ng/L		01/30/25 07:24	01/30/25 19:11	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.15		2.0	ng/L		01/30/25 07:24	01/30/25 19:11	1
Perfluoropentanoic acid (PFPeA)	<0.38		2.0	ng/L		01/30/25 07:24	01/30/25 19:11	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.36		2.0	ng/L		01/30/25 07:24	01/30/25 19:11	1
Perfluoropentanesulfonic acid (PFPeS)	<0.39		2.0	ng/L		01/30/25 07:24	01/30/25 19:11	1

Isotope Dilution	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	97		50 - 200	01/30/25 07:24	01/30/25 19:11	1
13C6 PFDA	101		50 - 200	01/30/25 07:24	01/30/25 19:11	1
13C5 PFHxA	104		50 - 200	01/30/25 07:24	01/30/25 19:11	1
13C4 PFHpA	107		50 - 200	01/30/25 07:24	01/30/25 19:11	1
13C8 PFOA	105		50 - 200	01/30/25 07:24	01/30/25 19:11	1
13C9 PFNA	105		50 - 200	01/30/25 07:24	01/30/25 19:11	1
13C7 PFUnA	99		50 - 200	01/30/25 07:24	01/30/25 19:11	1
13C2 PFDoA	98		50 - 200	01/30/25 07:24	01/30/25 19:11	1
13C4 PFBA	101		50 - 200	01/30/25 07:24	01/30/25 19:11	1
13C5 PFPeA	108		50 - 200	01/30/25 07:24	01/30/25 19:11	1
13C3 PFBS	100		50 - 200	01/30/25 07:24	01/30/25 19:11	1
13C3 PFHxS	105		50 - 200	01/30/25 07:24	01/30/25 19:11	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-132770-1
SDG: Weekly PFAS

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

Lab Sample ID: MBL 380-131526/19-A
Matrix: Water
Analysis Batch: 131627

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 131526

<i>Isotope Dilution</i>	<i>MBL %Recovery</i>	<i>MBL Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C8 PFOS	107		50 - 200	01/30/25 07:24	01/30/25 19:11	1
13C2-4:2-FTS	126		50 - 200	01/30/25 07:24	01/30/25 19:11	1
13C2-6:2-FTS	130		50 - 200	01/30/25 07:24	01/30/25 19:11	1
13C2-8:2-FTS	103		50 - 200	01/30/25 07:24	01/30/25 19:11	1

Lab Sample ID: LCS 380-131526/21-A
Matrix: Water
Analysis Batch: 131627

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 131526

<i>Analyte</i>	<i>Spike Added</i>	<i>LCS Result</i>	<i>LCS Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec Limits</i>
11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	120	99.1		ng/L		82	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	120	102		ng/L		85	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	120	106		ng/L		88	70 - 130
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	120	121		ng/L		101	70 - 130
Perfluorobutanesulfonic acid (PFBS)	120	120		ng/L		100	70 - 130
Perfluorodecanoic acid (PFDA)	120	113		ng/L		94	70 - 130
Perfluorododecanoic acid (PFDoA)	120	115		ng/L		95	70 - 130
Perfluoroheptanoic acid (PFHpA)	120	110		ng/L		91	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	120	112		ng/L		93	70 - 130
Perfluorohexanoic acid (PFHxA)	120	111		ng/L		93	70 - 130
Perfluorononanoic acid (PFNA)	120	107		ng/L		89	70 - 130
Perfluorooctanesulfonic acid (PFOS)	120	109		ng/L		91	70 - 130
Perfluorooctanoic acid (PFOA)	120	117		ng/L		98	70 - 130
Perfluoroundecanoic acid (PFUnA)	120	117		ng/L		97	70 - 130
Perfluorobutanoic acid (PFBA)	120	116		ng/L		97	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	120	111		ng/L		92	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	120	115		ng/L		95	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	120	113		ng/L		94	70 - 130
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	120	116		ng/L		97	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	120	109		ng/L		91	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	120	117		ng/L		97	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	120	112		ng/L		93	70 - 130
Perfluoropentanoic acid (PFPeA)	120	111		ng/L		93	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	120	111		ng/L		92	70 - 130

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QC Sample Results

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

Job ID: 380-132770-1
SDG: Weekly PFAS

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

Lab Sample ID: LCS 380-131526/21-A
Matrix: Water
Analysis Batch: 131627

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 131526

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoropentanesulfonic acid (PFPeS)	120	115		ng/L		95	70 - 130
LCS LCS							
Isotope Dilution	%Recovery	Qualifier	Limits				
13C3 HFPO-DA	101		50 - 200				
13C6 PFDA	105		50 - 200				
13C5 PFHxA	109		50 - 200				
13C4 PFHpA	111		50 - 200				
13C8 PFOA	108		50 - 200				
13C9 PFNA	112		50 - 200				
13C7 PFUnA	107		50 - 200				
13C2 PFDoA	105		50 - 200				
13C4 PFBA	110		50 - 200				
13C5 PFPeA	116		50 - 200				
13C3 PFBS	104		50 - 200				
13C3 PFHxS	108		50 - 200				
13C8 PFOS	109		50 - 200				
13C2-4:2-FTS	121		50 - 200				
13C2-6:2-FTS	131		50 - 200				
13C2-8:2-FTS	107		50 - 200				

Lab Sample ID: MRL 380-131526/20-A
Matrix: Water
Analysis Batch: 131627

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 131526

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.01	1.64	J	ng/L		82	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	2.01	1.62	J	ng/L		81	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.01	1.86	J	ng/L		93	50 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.01	2.05	J	ng/L		102	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.01	2.08	J	ng/L		104	50 - 150
Perfluorodecanoic acid (PFDA)	2.01	2.07	J	ng/L		103	50 - 150
Perfluorododecanoic acid (PFDoA)	2.01	2.01	J	ng/L		100	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.01	1.87	J	ng/L		93	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.01	1.88	J	ng/L		94	50 - 150
Perfluorohexanoic acid (PFHxA)	2.01	1.89	J	ng/L		94	50 - 150
Perfluorononanoic acid (PFNA)	2.01	1.82	J	ng/L		91	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.01	1.85	J	ng/L		92	50 - 150
Perfluorooctanoic acid (PFOA)	2.01	1.74	J	ng/L		87	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.01	1.87	J	ng/L		93	50 - 150
Perfluorobutanoic acid (PFBA)	2.01	1.92	J	ng/L		96	50 - 150

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-132770-1
SDG: Weekly PFAS

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

Lab Sample ID: MRL 380-131526/20-A
Matrix: Water
Analysis Batch: 131627

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 131526

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	2.01	2.07	J	ng/L		103	50 - 150
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	2.01	2.16	J	ng/L		107	50 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	2.01	2.07	J	ng/L		103	50 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2.01	1.91	J	ng/L		95	50 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	2.01	1.83	J	ng/L		91	50 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.01	1.99	J	ng/L		99	50 - 150
Perfluoro-4-methoxybutanoic acid (PFMBA)	2.01	1.94	J	ng/L		97	50 - 150
Perfluoropentanoic acid (PFPeA)	2.01	1.94	J	ng/L		96	50 - 150
Perfluoroheptanesulfonic acid (PFHpS)	2.01	1.86	J	ng/L		93	50 - 150
Perfluoropentanesulfonic acid (PFPeS)	2.01	1.96	J	ng/L		97	50 - 150

Isotope Dilution	MRL %Recovery	MRL Qualifier	MRL Limits
13C3 HFPO-DA	93		50 - 200
13C6 PFDA	102		50 - 200
13C5 PFHxA	108		50 - 200
13C4 PFHpA	111		50 - 200
13C8 PFOA	109		50 - 200
13C9 PFNA	108		50 - 200
13C7 PFUnA	106		50 - 200
13C2 PFDoA	100		50 - 200
13C4 PFBA	109		50 - 200
13C5 PFPeA	110		50 - 200
13C3 PFBS	99		50 - 200
13C3 PFHxS	105		50 - 200
13C8 PFOS	110		50 - 200
13C2-4:2-FTS	129		50 - 200
13C2-6:2-FTS	129		50 - 200
13C2-8:2-FTS	105		50 - 200

Lab Sample ID: 380-132777-E-1-A MS
Matrix: Water
Analysis Batch: 131627

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 131526

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		120	102		ng/L		84	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		120	101		ng/L		83	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		120	108		ng/L		89	70 - 130

QC Sample Results

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

Job ID: 380-132770-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-132777-E-1-A MS
Matrix: Water
Analysis Batch: 131627

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 131526

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide	<2.0		120	113		ng/L		94	70 - 130
Dimer Acid (HFPO-DA/GenX)									
Perfluorobutanesulfonic acid (PFBS)	<2.0		120	118		ng/L		97	70 - 130
Perfluorodecanoic acid (PFDA)	<2.0		120	117		ng/L		97	70 - 130
Perfluorododecanoic acid (PFDoA)	<2.0		120	116		ng/L		96	70 - 130
Perfluoroheptanoic acid (PFHpA)	<2.0		120	114		ng/L		93	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	<2.0		120	118		ng/L		96	70 - 130
Perfluorohexanoic acid (PFHxA)	2.0		120	117		ng/L		96	70 - 130
Perfluorononanoic acid (PFNA)	<2.0		120	108		ng/L		90	70 - 130
Perfluorooctanesulfonic acid (PFOS)	<2.0		120	111		ng/L		91	70 - 130
Perfluorooctanoic acid (PFOA)	<2.0		120	116		ng/L		95	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		120	120		ng/L		99	70 - 130
Perfluorobutanoic acid (PFBA)	<2.0		120	115		ng/L		94	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		120	121		ng/L		100	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		120	116		ng/L		96	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		120	113		ng/L		94	70 - 130
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		120	135		ng/L		112	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		120	107		ng/L		89	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		120	115		ng/L		96	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		120	115		ng/L		95	70 - 130
Perfluoropentanoic acid (PFPeA)	2.4		120	112		ng/L		91	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		120	113		ng/L		94	70 - 130
Perfluoropentanesulfonic acid (PFPeS)	<2.0		120	120		ng/L		99	70 - 130

Isotope Dilution	MS MS		Limits
	%Recovery	Qualifier	
13C3 HFPO-DA	114		50 - 200
13C6 PFDA	107		50 - 200
13C5 PFHxA	111		50 - 200
13C4 PFHpA	114		50 - 200
13C8 PFOA	114		50 - 200
13C9 PFNA	114		50 - 200
13C7 PFUnA	108		50 - 200
13C2 PFDoA	108		50 - 200
13C4 PFBA	114		50 - 200
13C5 PFPeA	122		50 - 200
13C3 PFBS	110		50 - 200
13C3 PFHxS	109		50 - 200
13C8 PFOS	114		50 - 200

QC Sample Results

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

Job ID: 380-132770-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-132777-E-1-A MS
Matrix: Water
Analysis Batch: 131627

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 131526

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>MS MS Qualifier</i>	<i>Limits</i>
13C2-4:2-FTS	139		50 - 200
13C2-6:2-FTS	145		50 - 200
13C2-8:2-FTS	112		50 - 200

Lab Sample ID: 380-132777-F-1-A MSD
Matrix: Water
Analysis Batch: 131627

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 131526

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		120	102		ng/L		85	70 - 130	1	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		120	103		ng/L		85	70 - 130	2	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		120	111		ng/L		92	70 - 130	3	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		120	114		ng/L		95	70 - 130	1	30
Perfluorobutanesulfonic acid (PFBS)	<2.0		120	111		ng/L		91	70 - 130	6	30
Perfluorodecanoic acid (PFDA)	<2.0		120	115		ng/L		95	70 - 130	2	30
Perfluorododecanoic acid (PFDoA)	<2.0		120	116		ng/L		96	70 - 130	0	30
Perfluoroheptanoic acid (PFHpA)	<2.0		120	113		ng/L		93	70 - 130	0	30
Perfluorohexanesulfonic acid (PFHxS)	<2.0		120	115		ng/L		94	70 - 130	2	30
Perfluorohexanoic acid (PFHxA)	2.0		120	118		ng/L		97	70 - 130	1	30
Perfluorononanoic acid (PFNA)	<2.0		120	108		ng/L		90	70 - 130	0	30
Perfluorooctanesulfonic acid (PFOS)	<2.0		120	114		ng/L		93	70 - 130	3	30
Perfluorooctanoic acid (PFOA)	<2.0		120	114		ng/L		94	70 - 130	1	30
Perfluoroundecanoic acid (PFUnA)	<2.0		120	119		ng/L		99	70 - 130	0	30
Perfluorobutanoic acid (PFBA)	<2.0		120	114		ng/L		94	70 - 130	0	30
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		120	112		ng/L		93	70 - 130	8	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		120	117		ng/L		97	70 - 130	1	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		120	113		ng/L		94	70 - 130	1	30
Nonfluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		120	126		ng/L		105	70 - 130	7	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		120	104		ng/L		86	70 - 130	3	30
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		120	119		ng/L		98	70 - 130	3	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		120	121		ng/L		101	70 - 130	5	30
Perfluoropentanoic acid (PFPeA)	2.4		120	115		ng/L		93	70 - 130	2	30
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		120	112		ng/L		93	70 - 130	1	30
Perfluoropentanesulfonic acid (PFPeS)	<2.0		120	117		ng/L		97	70 - 130	3	30

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-132770-1
SDG: Weekly PFAS

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

Isotope Dilution	MSD MSD		Limits
	%Recovery	Qualifier	
13C3 HFPO-DA	113		50 - 200
13C6 PFDA	111		50 - 200
13C5 PFHxA	109		50 - 200
13C4 PFHpA	115		50 - 200
13C8 PFOA	116		50 - 200
13C9 PFNA	116		50 - 200
13C7 PFUnA	110		50 - 200
13C2 PFDoA	108		50 - 200
13C4 PFBA	114		50 - 200
13C5 PFPeA	117		50 - 200
13C3 PFBS	109		50 - 200
13C3 PFHxS	107		50 - 200
13C8 PFOS	109		50 - 200
13C2-4:2-FTS	123		50 - 200
13C2-6:2-FTS	128		50 - 200
13C2-8:2-FTS	106		50 - 200

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

Lab Sample ID: MBL 380-131518/22-A
Matrix: Water
Analysis Batch: 131651

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 131518

Analyte	MBL MBL		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<1.0		2.0	ng/L		01/30/25 07:10	01/30/25 20:50	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0	ng/L		01/30/25 07:10	01/30/25 20:50	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0	ng/L		01/30/25 07:10	01/30/25 20:50	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<0.58		2.0	ng/L		01/30/25 07:10	01/30/25 20:50	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<0.42		2.0	ng/L		01/30/25 07:10	01/30/25 20:50	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0	ng/L		01/30/25 07:10	01/30/25 20:50	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	ng/L		01/30/25 07:10	01/30/25 20:50	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0	ng/L		01/30/25 07:10	01/30/25 20:50	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	ng/L		01/30/25 07:10	01/30/25 20:50	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0	ng/L		01/30/25 07:10	01/30/25 20:50	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0	ng/L		01/30/25 07:10	01/30/25 20:50	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0	ng/L		01/30/25 07:10	01/30/25 20:50	1
Perfluorononanoic acid (PFNA)	<0.40		2.0	ng/L		01/30/25 07:10	01/30/25 20:50	1
Perfluorotetradecanoic acid (PFTA)	<0.54		2.0	ng/L		01/30/25 07:10	01/30/25 20:50	1
Perfluorotridecanoic acid (PFTrDA)	<0.36		2.0	ng/L		01/30/25 07:10	01/30/25 20:50	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<0.30		2.0	ng/L		01/30/25 07:10	01/30/25 20:50	1
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.30		2.0	ng/L		01/30/25 07:10	01/30/25 20:50	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0	ng/L		01/30/25 07:10	01/30/25 20:50	1
Surrogate	MBL MBL		Limits			Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier						
d5-NEtFOSAA	110		70 - 130			01/30/25 07:10	01/30/25 20:50	1
13C2 PFHxA	108		70 - 130			01/30/25 07:10	01/30/25 20:50	1
13C2 PFDA	107		70 - 130			01/30/25 07:10	01/30/25 20:50	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-132770-1
SDG: Weekly PFAS

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

Lab Sample ID: MBL 380-131518/22-A
Matrix: Water
Analysis Batch: 131651

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 131518

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C3-GenX	106		70 - 130	01/30/25 07:10	01/30/25 20:50	1

Lab Sample ID: LCS 380-131518/24-A
Matrix: Water
Analysis Batch: 131651

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 131518

<i>Analyte</i>	<i>Spike Added</i>	<i>LCS Result</i>	<i>LCS Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>Limits</i>
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	50.3	47.0		ng/L		93	70 - 130
Perfluorooctanesulfonic acid (PFOS)	50.3	51.3		ng/L		102	70 - 130
Perfluoroundecanoic acid (PFUnA)	50.3	52.0		ng/L		103	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	50.3	53.4		ng/L		106	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	50.3	49.7		ng/L		99	70 - 130
Perfluorohexanoic acid (PFHxA)	50.3	51.4		ng/L		102	70 - 130
Perfluorododecanoic acid (PFDoA)	50.3	51.0		ng/L		101	70 - 130
Perfluorooctanoic acid (PFOA)	50.3	49.4		ng/L		98	70 - 130
Perfluorodecanoic acid (PFDA)	50.3	52.9		ng/L		105	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	50.3	51.3		ng/L		102	70 - 130
Perfluorobutanesulfonic acid (PFBS)	50.3	49.0		ng/L		97	70 - 130
Perfluoroheptanoic acid (PFHpA)	50.3	52.2		ng/L		104	70 - 130
Perfluorononanoic acid (PFNA)	50.3	49.4		ng/L		98	70 - 130
Perfluorotetradecanoic acid (PFTA)	50.3	52.8		ng/L		105	70 - 130
Perfluorotridecanoic acid (PFTrDA)	50.3	48.3		ng/L		96	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	50.3	50.2		ng/L		100	70 - 130
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	50.3	46.9		ng/L		93	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	50.3	52.2		ng/L		104	70 - 130

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
d5-NEtFOSAA	104		70 - 130
13C2 PFHxA	106		70 - 130
13C2 PFDA	107		70 - 130
13C3-GenX	103		70 - 130

QC Sample Results

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

Job ID: 380-132770-1
SDG: Weekly PFAS

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

Lab Sample ID: MRL 380-131518/23-A
Matrix: Water
Analysis Batch: 131651

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 131518

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.01	2.12	J	ng/L		105	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.01	2.14	J	ng/L		106	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.01	2.10	J	ng/L		104	50 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2.01	2.19	J	ng/L		109	50 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2.01	2.25	J	ng/L		112	50 - 150
Perfluorohexanoic acid (PFHxA)	2.01	2.02	J	ng/L		100	50 - 150
Perfluorododecanoic acid (PFDoA)	2.01	2.02	J	ng/L		101	50 - 150
Perfluorooctanoic acid (PFOA)	2.01	2.23	J	ng/L		111	50 - 150
Perfluorodecanoic acid (PFDA)	2.01	2.26	J	ng/L		112	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.01	2.03	J	ng/L		101	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.01	1.93	J	ng/L		96	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.01	2.31	J	ng/L		115	50 - 150
Perfluorononanoic acid (PFNA)	2.01	2.19	J	ng/L		109	50 - 150
Perfluorotetradecanoic acid (PFTA)	2.01	2.34	J	ng/L		116	50 - 150
Perfluorotridecanoic acid (PFTrDA)	2.01	2.13	J	ng/L		106	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	2.01	1.96	J	ng/L		98	50 - 150
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.01	1.88	J	ng/L		94	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.01	2.18	J	ng/L		109	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
d5-NEtFOSAA	109		70 - 130
13C2 PFHxA	108		70 - 130
13C2 PFDA	111		70 - 130
13C3-GenX	104		70 - 130

Lab Sample ID: 380-132770-1 MS
Matrix: Drinking Water
Analysis Batch: 131651

Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)
Prep Type: Total/NA
Prep Batch: 131518

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		50.3	50.1		ng/L		100	70 - 130
Perfluorooctanesulfonic acid (PFOS)	2.3		50.3	52.1		ng/L		99	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		50.3	53.2		ng/L		106	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		50.3	52.5		ng/L		104	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-132770-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-132770-1 MS

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

Matrix: Drinking Water

Prep Type: Total/NA

Analysis Batch: 131651

Prep Batch: 131518

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		50.3	51.0		ng/L		101	70 - 130
Perfluorohexanoic acid (PFHxA)	2.2		50.3	51.7		ng/L		98	70 - 130
Perfluorododecanoic acid (PFDoA)	<2.0		50.3	52.1		ng/L		104	70 - 130
Perfluorooctanoic acid (PFOA)	<2.0		50.3	52.6		ng/L		101	70 - 130
Perfluorodecanoic acid (PFDA)	<2.0		50.3	51.6		ng/L		103	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	2.5		50.3	53.1		ng/L		101	70 - 130
Perfluorobutanesulfonic acid (PFBS)	<2.0		50.3	54.3		ng/L		106	70 - 130
Perfluoroheptanoic acid (PFHpA)	<2.0		50.3	55.5		ng/L		108	70 - 130
Perfluorononanoic acid (PFNA)	<2.0		50.3	50.4		ng/L		100	70 - 130
Perfluorotetradecanoic acid (PFTA)	<2.0		50.3	56.6		ng/L		113	70 - 130
Perfluorotridecanoic acid (PFTrDA)	<2.0		50.3	52.8		ng/L		105	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		50.3	49.7		ng/L		99	70 - 130
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid(11Cl-PF3OUdS)	<2.0		50.3	49.0		ng/L		97	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		50.3	51.6		ng/L		103	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
d5-NEtFOSAA	101		70 - 130
13C2 PFHxA	108		70 - 130
13C2 PFDA	105		70 - 130
13C3-GenX	108		70 - 130

Lab Sample ID: 380-132770-1 MSD

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

Matrix: Drinking Water

Prep Type: Total/NA

Analysis Batch: 131651

Prep Batch: 131518

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		50.3	47.1		ng/L		94	70 - 130	6	30
Perfluorooctanesulfonic acid (PFOS)	2.3		50.3	52.8		ng/L		100	70 - 130	1	30
Perfluoroundecanoic acid (PFUnA)	<2.0		50.3	49.4		ng/L		98	70 - 130	7	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		50.3	47.8		ng/L		95	70 - 130	9	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		50.3	45.3		ng/L		90	70 - 130	12	30
Perfluorohexanoic acid (PFHxA)	2.2		50.3	50.2		ng/L		96	70 - 130	3	30
Perfluorododecanoic acid (PFDoA)	<2.0		50.3	47.4		ng/L		94	70 - 130	9	30
Perfluorooctanoic acid (PFOA)	<2.0		50.3	52.3		ng/L		100	70 - 130	1	30
Perfluorodecanoic acid (PFDA)	<2.0		50.3	49.9		ng/L		99	70 - 130	3	30

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-132770-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-132770-1 MSD

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

Matrix: Drinking Water

Prep Type: Total/NA

Analysis Batch: 131651

Prep Batch: 131518

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorohexanesulfonic acid (PFHxS)	2.5		50.3	51.1		ng/L		96	70 - 130	4	30
Perfluorobutanesulfonic acid (PFBS)	<2.0		50.3	52.1		ng/L		101	70 - 130	4	30
Perfluoroheptanoic acid (PFHpA)	<2.0		50.3	53.2		ng/L		104	70 - 130	4	30
Perfluorononanoic acid (PFNA)	<2.0		50.3	50.0		ng/L		99	70 - 130	1	30
Perfluorotetradecanoic acid (PFTA)	<2.0		50.3	53.4		ng/L		106	70 - 130	6	30
Perfluorotridecanoic acid (PFTTrDA)	<2.0		50.3	49.0		ng/L		97	70 - 130	7	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		50.3	49.2		ng/L		98	70 - 130	1	30
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		50.3	45.7		ng/L		91	70 - 130	7	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		50.3	51.5		ng/L		102	70 - 130	0	30

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

QC Association Summary

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

Job ID: 380-132770-1
SDG: Weekly PFAS

LCMS

Prep Batch: 131518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-132770-1	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	537.1 DW	
380-132770-2	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	Total/NA	Drinking Water	537.1 DW	
380-132770-3	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Total/NA	Drinking Water	537.1 DW	
380-132770-4	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP073)	Total/NA	Drinking Water	537.1 DW	
380-132770-5	KA'AMILO WELLS	Total/NA	Water	537.1 DW	
380-132770-6	FB: HALAWA WELLS UNITS 1 & 2 (331-206-TPC01)	Total/NA	Water	537.1 DW	
380-132770-7	FB: AIEA GULCH WELLS PUMP 1 (331-201-TPC01)	Total/NA	Water	537.1 DW	
380-132770-8	FB: AIEA GULCH WELLS PUMP 2 (331-202-TPC01)	Total/NA	Water	537.1 DW	
380-132770-9	FB: AIEA WELLS PUMPS 1&2 (260) (331-203-TF01)	Total/NA	Water	537.1 DW	
380-132770-10	FB: KA'AMILO WELLS	Total/NA	Water	537.1 DW	
MBL 380-131518/22-A	Method Blank	Total/NA	Water	537.1 DW	
LCS 380-131518/24-A	Lab Control Sample	Total/NA	Water	537.1 DW	
MRL 380-131518/23-A	Lab Control Sample	Total/NA	Water	537.1 DW	
380-132770-1 MS	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	537.1 DW	
380-132770-1 MSD	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	537.1 DW	

Prep Batch: 131526

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-132770-1	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	533	
380-132770-2	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	Total/NA	Drinking Water	533	
380-132770-3	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Total/NA	Drinking Water	533	
380-132770-4	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP073)	Total/NA	Drinking Water	533	
380-132770-5	KA'AMILO WELLS	Total/NA	Water	533	
380-132770-6	FB: HALAWA WELLS UNITS 1 & 2 (331-206-TPC01)	Total/NA	Water	533	
380-132770-7	FB: AIEA GULCH WELLS PUMP 1 (331-201-TPC01)	Total/NA	Water	533	
380-132770-8	FB: AIEA GULCH WELLS PUMP 2 (331-202-TPC01)	Total/NA	Water	533	
380-132770-9	FB: AIEA WELLS PUMPS 1&2 (260) (331-203-TF01)	Total/NA	Water	533	
380-132770-10	FB: KA'AMILO WELLS	Total/NA	Water	533	
MBL 380-131526/19-A	Method Blank	Total/NA	Water	533	
LCS 380-131526/21-A	Lab Control Sample	Total/NA	Water	533	
MRL 380-131526/20-A	Lab Control Sample	Total/NA	Water	533	
380-132777-E-1-A MS	Matrix Spike	Total/NA	Water	533	
380-132777-F-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	533	

Analysis Batch: 131627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-132770-1	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	533	131526
380-132770-2	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	Total/NA	Drinking Water	533	131526
380-132770-3	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Total/NA	Drinking Water	533	131526
380-132770-4	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP073)	Total/NA	Drinking Water	533	131526
380-132770-5	KA'AMILO WELLS	Total/NA	Water	533	131526
380-132770-6	FB: HALAWA WELLS UNITS 1 & 2 (331-206-TPC01)	Total/NA	Water	533	131526
380-132770-7	FB: AIEA GULCH WELLS PUMP 1 (331-201-TPC01)	Total/NA	Water	533	131526
380-132770-8	FB: AIEA GULCH WELLS PUMP 2 (331-202-TPC01)	Total/NA	Water	533	131526
380-132770-9	FB: AIEA WELLS PUMPS 1&2 (260) (331-203-TF01)	Total/NA	Water	533	131526
380-132770-10	FB: KA'AMILO WELLS	Total/NA	Water	533	131526
MBL 380-131526/19-A	Method Blank	Total/NA	Water	533	131526
LCS 380-131526/21-A	Lab Control Sample	Total/NA	Water	533	131526
MRL 380-131526/20-A	Lab Control Sample	Total/NA	Water	533	131526
380-132777-E-1-A MS	Matrix Spike	Total/NA	Water	533	131526
380-132777-F-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	533	131526

QC Association Summary

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

Job ID: 380-132770-1
 SDG: Weekly PFAS

LCMS

Analysis Batch: 131651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-132770-1	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	537.1	131518
380-132770-2	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	Total/NA	Drinking Water	537.1	131518
380-132770-3	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Total/NA	Drinking Water	537.1	131518
380-132770-4	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP073)	Total/NA	Drinking Water	537.1	131518
380-132770-5	KA'AMILO WELLS	Total/NA	Water	537.1	131518
380-132770-6	FB: HALAWA WELLS UNITS 1 & 2 (331-206-TPC01)	Total/NA	Water	537.1	131518
380-132770-7	FB: AIEA GULCH WELLS PUMP 1 (331-201-TPC01)	Total/NA	Water	537.1	131518
380-132770-8	FB: AIEA GULCH WELLS PUMP 2 (331-202-TPC01)	Total/NA	Water	537.1	131518
380-132770-9	FB: AIEA WELLS PUMPS 1&2 (260) (331-203-TF01)	Total/NA	Water	537.1	131518
380-132770-10	FB: KA'AMILO WELLS	Total/NA	Water	537.1	131518
MBL 380-131518/22-A	Method Blank	Total/NA	Water	537.1	131518
LCS 380-131518/24-A	Lab Control Sample	Total/NA	Water	537.1	131518
MRL 380-131518/23-A	Lab Control Sample	Total/NA	Water	537.1	131518
380-132770-1 MS	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	537.1	131518
380-132770-1 MSD	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	537.1	131518



Lab Chronicle

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

Job ID: 380-132770-1
 SDG: Weekly PFAS

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

Lab Sample ID: 380-132770-1

Date Collected: 01/27/25 10:26

Matrix: Drinking Water

Date Received: 01/29/25 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			131526	XTD8	EA POM	01/30/25 07:24
Total/NA	Analysis	533		1	131627	SZ9R	EA POM	01/30/25 20:56
Total/NA	Prep	537.1 DW			131518	G9MN	EA POM	01/30/25 07:10
Total/NA	Analysis	537.1		1	131651	Y5FM	EA POM	01/30/25 21:23

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

Lab Sample ID: 380-132770-2

Date Collected: 01/27/25 11:12

Matrix: Drinking Water

Date Received: 01/29/25 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			131526	XTD8	EA POM	01/30/25 07:24
Total/NA	Analysis	533		1	131627	SZ9R	EA POM	01/30/25 21:05
Total/NA	Prep	537.1 DW			131518	G9MN	EA POM	01/30/25 07:10
Total/NA	Analysis	537.1		1	131651	Y5FM	EA POM	01/30/25 23:11

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

Lab Sample ID: 380-132770-3

Date Collected: 01/27/25 10:55

Matrix: Drinking Water

Date Received: 01/29/25 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			131526	XTD8	EA POM	01/30/25 07:24
Total/NA	Analysis	533		1	131627	SZ9R	EA POM	01/30/25 21:15
Total/NA	Prep	537.1 DW			131518	G9MN	EA POM	01/30/25 07:10
Total/NA	Analysis	537.1		1	131651	Y5FM	EA POM	01/30/25 23:22

**Client Sample ID: AIEA WELLS PUMPS 1&2 (260) P2
 (331-203-TP400)**

Lab Sample ID: 380-132770-4

Date Collected: 01/27/25 11:33

Matrix: Drinking Water

Date Received: 01/29/25 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			131526	XTD8	EA POM	01/30/25 07:24
Total/NA	Analysis	533		1	131627	SZ9R	EA POM	01/30/25 21:25
Total/NA	Prep	537.1 DW			131518	G9MN	EA POM	01/30/25 07:10
Total/NA	Analysis	537.1		1	131651	Y5FM	EA POM	01/30/25 23:44

Lab Chronicle

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

Job ID: 380-132770-1
SDG: Weekly PFAS

Client Sample ID: KA'AMILO WELLS

Lab Sample ID: 380-132770-5

Date Collected: 01/27/25 11:57

Matrix: Water

Date Received: 01/29/25 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			131526	XTD8	EA POM	01/30/25 07:24
Total/NA	Analysis	533		1	131627	SZ9R	EA POM	01/30/25 21:34
Total/NA	Prep	537.1 DW			131518	G9MN	EA POM	01/30/25 07:10
Total/NA	Analysis	537.1		1	131651	Y5FM	EA POM	01/30/25 23:54

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

Lab Sample ID: 380-132770-6

Date Collected: 01/27/25 10:26

Matrix: Water

Date Received: 01/29/25 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			131526	XTD8	EA POM	01/30/25 07:24
Total/NA	Analysis	533		1	131627	SZ9R	EA POM	01/30/25 21:53
Total/NA	Prep	537.1 DW			131518	G9MN	EA POM	01/30/25 07:10
Total/NA	Analysis	537.1		1	131651	Y5FM	EA POM	01/31/25 00:05

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

Lab Sample ID: 380-132770-7

Date Collected: 01/27/25 11:12

Matrix: Water

Date Received: 01/29/25 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			131526	XTD8	EA POM	01/30/25 07:24
Total/NA	Analysis	533		1	131627	SZ9R	EA POM	01/30/25 22:03
Total/NA	Prep	537.1 DW			131518	G9MN	EA POM	01/30/25 07:10
Total/NA	Analysis	537.1		1	131651	Y5FM	EA POM	01/31/25 00:16

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

Lab Sample ID: 380-132770-8

Date Collected: 01/27/25 10:55

Matrix: Water

Date Received: 01/29/25 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			131526	XTD8	EA POM	01/30/25 07:24
Total/NA	Analysis	533		1	131627	SZ9R	EA POM	01/30/25 22:12
Total/NA	Prep	537.1 DW			131518	G9MN	EA POM	01/30/25 07:10
Total/NA	Analysis	537.1		1	131651	Y5FM	EA POM	01/31/25 00:27

Lab Chronicle

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

Job ID: 380-132770-1
 SDG: Weekly PFAS

**Client Sample ID: FB: AIEA WELLS PUMPS 1&2 (260)
 (331-203-TP400)**

Lab Sample ID: 380-132770-9

Date Collected: 01/27/25 11:33

Matrix: Water

Date Received: 01/29/25 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			131526	XTD8	EA POM	01/30/25 07:24
Total/NA	Analysis	533		1	131627	SZ9R	EA POM	01/30/25 22:22
Total/NA	Prep	537.1 DW			131518	G9MN	EA POM	01/30/25 07:10
Total/NA	Analysis	537.1		1	131651	Y5FM	EA POM	01/31/25 00:38

Client Sample ID: FB: KA'AMILO WELLS

Lab Sample ID: 380-132770-10

Date Collected: 01/27/25 11:57

Matrix: Water

Date Received: 01/29/25 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			131526	XTD8	EA POM	01/30/25 07:24
Total/NA	Analysis	533		1	131627	SZ9R	EA POM	01/30/25 22:31
Total/NA	Prep	537.1 DW			131518	G9MN	EA POM	01/30/25 07:10
Total/NA	Analysis	537.1		1	131651	Y5FM	EA POM	01/31/25 00:49

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 380-132770-1
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: 380-132770-1
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: 380-132770-1
 SDG: Weekly PFAS

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	PWSID Number
380-132770-1	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	Drinking Water	01/27/25 10:26	01/29/25 10:20	HI0000331
380-132770-2	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	Drinking Water	01/27/25 11:12	01/29/25 10:20	HI0000331
380-132770-3	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Drinking Water	01/27/25 10:55	01/29/25 10:20	HI0000331
380-132770-4	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP400)	Drinking Water	01/27/25 11:33	01/29/25 10:20	HI0000331
380-132770-5	KA'AMILO WELLS	Water	01/27/25 11:57	01/29/25 10:20	
380-132770-6	FB: HALAWA WELLS UNITS 1 & 2 (331-206-TP065)	Water	01/27/25 10:26	01/29/25 10:20	
380-132770-7	FB: AIEA GULCH WELLS PUMP 1 (331-201-TP071)	Water	01/27/25 11:12	01/29/25 10:20	
380-132770-8	FB: AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Water	01/27/25 10:55	01/29/25 10:20	
380-132770-9	FB: AIEA WELLS PUMPS 1&2 (260) (331-203-TP400)	Water	01/27/25 11:33	01/29/25 10:20	
380-132770-10	FB: KA'AMILO WELLS	Water	01/27/25 11:57	01/29/25 10:20	

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



Environment Testing
 America

Chain of Custody Record

Client Information		Lab PM Arada Rachelle	Carrier Tracking No(s)	COC No: 380-279411-2757 2										
Client Contact: Dr Ron Fenstermacher		E-Mail: Rachelle.Arada@et.euronisus.com	State of Origin	Page: Page 2 of 2										
Company: City & County of Honolulu		PWSID	Job #:											
Address: 630 South Beretania Street, Chemistry Lab Honolulu		Due Date Requested.												
State, Zip: HI 96843		TAT Requested (days)												
Phone: 808-748-5091 (tel)		Compliance Project: <input type="checkbox"/> No <input type="checkbox"/> Yes												
Email: rfenstermacher@hbws.org		PO #: C20525101 exp 05312023												
Project Name: RED-HILL/HBWS sites Event Desc: RUSH Weekly Red Hill		WO #:												
Site:		Project #: 38001111												
		SSOW#:												
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Soil, On-water, Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUBCONTRACT - 625 PAH Phys LL (EAL) + TICs	8015B_GRO_LL - (MOD) GRO	8015B_DRO_LL_CS HNL Ranges C10-C24/C24-C30/C6-C18	525 2_PREC (MOD) 525plus PLUS TICs	537 1_DW_PREC - 537 1 Full List	533 All Analytes	Total Number of Containers	Special Instructions/Note
HALAWA WELLS UNITS 1&2 P1	27-Jan-2025	1026	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								
AIEA GULCH WELLS PUMP 1	27-Jan-2025	1112	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								chlorinated
AIEA GULCH WELLS PUMP 2	27-Jan-2025	1055	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								chlorinated
AIEA WELLS PUMPS 1&2 (260) PZ	27-Jan-2025	1133	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								chlorinated
KA'AMILO WELLS	27-Jan-2025	1157	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								chlorinated
FB HALAWA WELLS UNITS 1&2	27-Jan-2025	1026												(631A) 3 + 0.3 - 3.6
FB AIEA GULCH WELLS PUMP 1	27-Jan-2025	1112												Fed K-77732416923
FB AIEA GULCH WELLS PUMP 2	27-Jan-2025	1055												
FB AIEA WELLS PUMPS 1&2 (260)	27-Jan-2025	1133												
FB KA'AMILO WELLS	27-Jan-2025	1157												
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					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									
Deliverable Requested I II III IV Other (specify)					Special Instructions/QC Requirements									
Empty Kit Relinquished by					Method of Shipment: Fed X-7717 3241 6956									
Relinquished by					Date/Time: 1/29/25 10:20									
Relinquished by					Date/Time:									
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No					Cooler Temperature(s) °C and Other Remarks: (631A) 1.3103 1.6 gcl-f0856A									

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Ver 01/16/2019

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-132770-1

SDG Number: Weekly PFAS

Login Number: 132770

List Number: 1

Creator: Segura, Ryan

List Source: Eurofins Eaton Analytical Pomona

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