

ANALYTICAL REPORT

PREPARED FOR

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JOB DESCRIPTION

RED-HILL
Weekly PFAS
RUSH Weekly Red Hill

JOB NUMBER

380-135345-1

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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Definitions/Glossary

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

Job ID: 380-135345-1
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: 380-135345-1

Job ID: 380-135345-1

Eurofins Eaton Analytical Pomona

Job Narrative 380-135345-1

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 2/12/2025 9:44 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.8°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 (380-135345-5)

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: 380-135345-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-135345-1

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)	2.2		2.0	ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.3		2.0	ng/L	1		533	Total/NA
Perfluoropentanoic acid (PFPeA)	2.4		2.0	ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.4		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)	2.7		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: 380-135345-2

No Detections.

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

Lab Sample ID: 380-135345-3

No Detections.

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

Lab Sample ID: 380-135345-4

No Detections.

Client Sample ID: KA'AMILO WELLS
PWSID Number: HI0000331

Lab Sample ID: 380-135345-5

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanesulfonic acid (PFHxS)	2.4		2.0	ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.6		2.0	ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	3.1		2.0	ng/L	1		537.1	Total/NA
Perfluorohexanoic acid (PFHxA)	2.2		2.0	ng/L	1		537.1	Total/NA
Perfluorooctanoic acid (PFOA)	2.2		2.0	ng/L	1		537.1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.8		2.0	ng/L	1		537.1	Total/NA

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

Lab Sample ID: 380-135345-6

No Detections.

Client Sample ID: FB:AIEA GULCH WELLS P1 (331-201-TP071)
PWSID Number: HI0000331

Lab Sample ID: 380-135345-7

No Detections.

Client Sample ID: FB:AIEA GULCH WELLS P2 (331-202-TP072)
PWSID Number: HI0000331

Lab Sample ID: 380-135345-8

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: 380-135345-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-135345-9

No Detections.

Client Sample ID: FB: KA'AMILO WELLS
PWSID Number: HI0000331

Lab Sample ID: 380-135345-10

No Detections.

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

This Detection Summary does not include radiochemical test results.

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-135345-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-135345-1

Date Collected: 02/10/25 10:17

Matrix: Drinking Water

Date Received: 02/12/25 09:44

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-Chloroeicosfluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 19:58	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 19:58	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 19:58	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 19:58	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 19:58	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 19:58	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 19:58	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 19:58	1
Perfluorohexanesulfonic acid (PFHxS)	2.5		2.0	ng/L		02/14/25 17:39	02/16/25 19:58	1
Perfluorohexanoic acid (PFHxA)	2.2		2.0	ng/L		02/14/25 17:39	02/16/25 19:58	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 19:58	1
Perfluorooctanesulfonic acid (PFOS)	2.3		2.0	ng/L		02/14/25 17:39	02/16/25 19:58	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 19:58	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 19:58	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 19:58	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 19:58	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 19:58	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 19:58	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 19:58	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 19:58	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 19:58	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 19:58	1
Perfluoropentanoic acid (PFPeA)	2.4		2.0	ng/L		02/14/25 17:39	02/16/25 19:58	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 19:58	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 19:58	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	95		50 - 200			02/14/25 17:39	02/16/25 19:58	1
13C6 PFDA	97		50 - 200			02/14/25 17:39	02/16/25 19:58	1
13C5 PFHxA	98		50 - 200			02/14/25 17:39	02/16/25 19:58	1
13C4 PFHpA	103		50 - 200			02/14/25 17:39	02/16/25 19:58	1
13C8 PFOA	103		50 - 200			02/14/25 17:39	02/16/25 19:58	1
13C9 PFNA	100		50 - 200			02/14/25 17:39	02/16/25 19:58	1
13C7 PFUnA	94		50 - 200			02/14/25 17:39	02/16/25 19:58	1
13C2 PFDoA	94		50 - 200			02/14/25 17:39	02/16/25 19:58	1
13C4 PFBA	108		50 - 200			02/14/25 17:39	02/16/25 19:58	1
13C5 PFPeA	116		50 - 200			02/14/25 17:39	02/16/25 19:58	1
13C3 PFBS	103		50 - 200			02/14/25 17:39	02/16/25 19:58	1

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Client Sample Results

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

Job ID: 380-135345-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-135345-1

Date Collected: 02/10/25 10:17
Date Received: 02/12/25 09:44

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
13C3 PFHxS	106		50 - 200	02/14/25 17:39	02/16/25 19:58	1
13C8 PFOS	106		50 - 200	02/14/25 17:39	02/16/25 19:58	1
13C2-4:2-FTS	153		50 - 200	02/14/25 17:39	02/16/25 19:58	1
13C2-6:2-FTS	135		50 - 200	02/14/25 17:39	02/16/25 19:58	1
13C2-8:2-FTS	102		50 - 200	02/14/25 17:39	02/16/25 19:58	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		02/14/25 17:00	02/15/25 23:33	1
Perfluorooctanesulfonic acid (PFOS)	2.4		2.0	ng/L		02/14/25 17:00	02/15/25 23:33	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:33	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:33	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:33	1
Perfluorohexanoic acid (PFHxA)	2.2		2.0	ng/L		02/14/25 17:00	02/15/25 23:33	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:33	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:33	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:33	1
Perfluorohexanesulfonic acid (PFHxS)	2.7		2.0	ng/L		02/14/25 17:00	02/15/25 23:33	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:33	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:33	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:33	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:33	1
Perfluorotridecanoic acid (PFTTrDA)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:33	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:33	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:33	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	107		70 - 130	02/14/25 17:00	02/15/25 23:33	1
13C2 PFHxA	113		70 - 130	02/14/25 17:00	02/15/25 23:33	1
13C2 PFDA	103		70 - 130	02/14/25 17:00	02/15/25 23:33	1
13C3-GenX	106		70 - 130	02/14/25 17:00	02/15/25 23:33	1

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

Lab Sample ID: 380-135345-2

Date Collected: 02/10/25 10:44
Date Received: 02/12/25 09:44

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-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:07	1

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Client Sample Results

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

Job ID: 380-135345-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-135345-2

Date Collected: 02/10/25 10:44

Matrix: Drinking Water

Date Received: 02/12/25 09:44

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		02/14/25 17:39	02/16/25 20:07	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:07	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:07	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:07	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:07	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:07	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:07	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:07	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:07	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:07	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:07	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:07	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:07	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:07	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:07	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:07	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6 2 FTS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:07	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:07	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:07	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:07	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:07	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:07	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:07	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:07	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	104		50 - 200	02/14/25 17:39	02/16/25 20:07	1
13C6 PFDA	102		50 - 200	02/14/25 17:39	02/16/25 20:07	1
13C5 PFHxA	105		50 - 200	02/14/25 17:39	02/16/25 20:07	1
13C4 PFHpA	107		50 - 200	02/14/25 17:39	02/16/25 20:07	1
13C8 PFOA	105		50 - 200	02/14/25 17:39	02/16/25 20:07	1
13C9 PFNA	104		50 - 200	02/14/25 17:39	02/16/25 20:07	1
13C7 PFUnA	100		50 - 200	02/14/25 17:39	02/16/25 20:07	1
13C2 PFDoA	101		50 - 200	02/14/25 17:39	02/16/25 20:07	1
13C4 PFBA	108		50 - 200	02/14/25 17:39	02/16/25 20:07	1
13C5 PFPeA	113		50 - 200	02/14/25 17:39	02/16/25 20:07	1
13C3 PFBS	99		50 - 200	02/14/25 17:39	02/16/25 20:07	1
13C3 PFHxS	104		50 - 200	02/14/25 17:39	02/16/25 20:07	1
13C8 PFOS	104		50 - 200	02/14/25 17:39	02/16/25 20:07	1
13C2-4:2-FTS	129		50 - 200	02/14/25 17:39	02/16/25 20:07	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-135345-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-135345-2

Date Collected: 02/10/25 10:44

Matrix: Drinking Water

Date Received: 02/12/25 09:44

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	123		50 - 200	02/14/25 17:39	02/16/25 20:07	1
13C2-8:2-FTS	102		50 - 200	02/14/25 17:39	02/16/25 20:07	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:43	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:43	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:43	1
N-methylperfluorooctanesulfonamideacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:43	1
N-ethylperfluorooctanesulfonamideacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:43	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:43	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:43	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:43	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:43	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:43	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:43	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:43	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:43	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:43	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:43	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:43	1
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:43	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	105		70 - 130	02/14/25 17:00	02/15/25 23:43	1
13C2 PFHxA	107		70 - 130	02/14/25 17:00	02/15/25 23:43	1
13C2 PFDA	97		70 - 130	02/14/25 17:00	02/15/25 23:43	1
13C3-GenX	101		70 - 130	02/14/25 17:00	02/15/25 23:43	1

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

Lab Sample ID: 380-135345-3

Date Collected: 02/10/25 11:00

Matrix: Drinking Water

Date Received: 02/12/25 09:44

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		02/14/25 17:39	02/16/25 20:17	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:17	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:17	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:17	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-135345-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-135345-3

Date Collected: 02/10/25 11:00

Matrix: Drinking Water

Date Received: 02/12/25 09:44

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		02/14/25 17:39	02/16/25 20:17	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:17	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:17	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:17	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:17	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:17	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:17	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:17	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:17	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:17	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:17	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:17	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:17	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:17	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:17	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:17	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:17	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:17	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:17	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:17	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:17	1
<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>			<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C3 HFPO-DA	97		50 - 200			02/14/25 17:39	02/16/25 20:17	1
13C6 PFDA	103		50 - 200			02/14/25 17:39	02/16/25 20:17	1
13C5 PFHxA	107		50 - 200			02/14/25 17:39	02/16/25 20:17	1
13C4 PFHpA	109		50 - 200			02/14/25 17:39	02/16/25 20:17	1
13C8 PFOA	108		50 - 200			02/14/25 17:39	02/16/25 20:17	1
13C9 PFNA	105		50 - 200			02/14/25 17:39	02/16/25 20:17	1
13C7 PFUnA	98		50 - 200			02/14/25 17:39	02/16/25 20:17	1
13C2 PFDoA	98		50 - 200			02/14/25 17:39	02/16/25 20:17	1
13C4 PFBA	109		50 - 200			02/14/25 17:39	02/16/25 20:17	1
13C5 PFPeA	112		50 - 200			02/14/25 17:39	02/16/25 20:17	1
13C3 PFBS	107		50 - 200			02/14/25 17:39	02/16/25 20:17	1
13C3 PFHxS	114		50 - 200			02/14/25 17:39	02/16/25 20:17	1
13C8 PFOS	108		50 - 200			02/14/25 17:39	02/16/25 20:17	1
13C2-4:2-FTS	141		50 - 200			02/14/25 17:39	02/16/25 20:17	1
13C2-6:2-FTS	135		50 - 200			02/14/25 17:39	02/16/25 20:17	1
13C2-8:2-FTS	110		50 - 200			02/14/25 17:39	02/16/25 20:17	1

Client Sample Results

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

Job ID: 380-135345-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-135345-3

Date Collected: 02/10/25 11:00

Matrix: Drinking Water

Date Received: 02/12/25 09:44

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		02/14/25 17:00	02/15/25 23:54	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:54	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:54	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:54	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:54	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:54	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:54	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:54	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:54	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:54	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:54	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:54	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:54	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:54	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:54	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:54	1
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:54	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		02/14/25 17:00	02/15/25 23:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	105		70 - 130	02/14/25 17:00	02/15/25 23:54	1
13C2 PFHxA	108		70 - 130	02/14/25 17:00	02/15/25 23:54	1
13C2 PFDA	102		70 - 130	02/14/25 17:00	02/15/25 23:54	1
13C3-GenX	107		70 - 130	02/14/25 17:00	02/15/25 23:54	1

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

Lab Sample ID: 380-135345-4

Date Collected: 02/10/25 11:22

Matrix: Drinking Water

Date Received: 02/12/25 09:44

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		02/14/25 17:39	02/16/25 20:36	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:36	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:36	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:36	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:36	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:36	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:36	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:36	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:36	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-135345-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-135345-4

Date Collected: 02/10/25 11:22

Matrix: Drinking Water

Date Received: 02/12/25 09:44

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		02/14/25 17:39	02/16/25 20:36	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:36	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:36	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:36	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:36	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:36	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:36	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:36	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:36	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:36	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:36	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:36	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:36	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:36	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:36	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:36	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	102		50 - 200	02/14/25 17:39	02/16/25 20:36	1
13C6 PFDA	102		50 - 200	02/14/25 17:39	02/16/25 20:36	1
13C5 PFHxA	106		50 - 200	02/14/25 17:39	02/16/25 20:36	1
13C4 PFHpA	108		50 - 200	02/14/25 17:39	02/16/25 20:36	1
13C8 PFOA	109		50 - 200	02/14/25 17:39	02/16/25 20:36	1
13C9 PFNA	107		50 - 200	02/14/25 17:39	02/16/25 20:36	1
13C7 PFUnA	97		50 - 200	02/14/25 17:39	02/16/25 20:36	1
13C2 PFDoA	100		50 - 200	02/14/25 17:39	02/16/25 20:36	1
13C4 PFBA	108		50 - 200	02/14/25 17:39	02/16/25 20:36	1
13C5 PFPeA	113		50 - 200	02/14/25 17:39	02/16/25 20:36	1
13C3 PFBS	106		50 - 200	02/14/25 17:39	02/16/25 20:36	1
13C3 PFHxS	110		50 - 200	02/14/25 17:39	02/16/25 20:36	1
13C8 PFOS	110		50 - 200	02/14/25 17:39	02/16/25 20:36	1
13C2-4:2-FTS	145		50 - 200	02/14/25 17:39	02/16/25 20:36	1
13C2-6:2-FTS	131		50 - 200	02/14/25 17:39	02/16/25 20:36	1
13C2-8:2-FTS	107		50 - 200	02/14/25 17:39	02/16/25 20:36	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		02/14/25 17:00	02/16/25 00:05	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:05	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:05	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:05	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-135345-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-135345-4

Date Collected: 02/10/25 11:22

Matrix: Drinking Water

Date Received: 02/12/25 09:44

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		02/14/25 17:00	02/16/25 00:05	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:05	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:05	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:05	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:05	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:05	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:05	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:05	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:05	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:05	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:05	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:05	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:05	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	108		70 - 130			02/14/25 17:00	02/16/25 00:05	1
13C2 PFHxA	107		70 - 130			02/14/25 17:00	02/16/25 00:05	1
13C2 PFDA	100		70 - 130			02/14/25 17:00	02/16/25 00:05	1
13C3-GenX	103		70 - 130			02/14/25 17:00	02/16/25 00:05	1

Client Sample ID: KA'AMILO WELLS

Lab Sample ID: 380-135345-5

Date Collected: 02/10/25 11:47

Matrix: Water

Date Received: 02/12/25 09:44

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		02/14/25 17:39	02/16/25 20:46	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:46	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:46	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:46	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:46	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:46	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:46	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:46	1
Perfluorohexanesulfonic acid (PFHxS)	2.4		2.0	ng/L		02/14/25 17:39	02/16/25 20:46	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:46	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:46	1
Perfluorooctanesulfonic acid (PFOS)	2.6		2.0	ng/L		02/14/25 17:39	02/16/25 20:46	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:46	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:46	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-135345-1
SDG: Weekly PFAS

Client Sample ID: KA'AMILO WELLS

Lab Sample ID: 380-135345-5

Date Collected: 02/10/25 11:47

Matrix: Water

Date Received: 02/12/25 09:44

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
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:46	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:46	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:46	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:46	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:46	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:46	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:46	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:46	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:46	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:46	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:46	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	108		50 - 200	02/14/25 17:39	02/16/25 20:46	1
13C6 PFDA	105		50 - 200	02/14/25 17:39	02/16/25 20:46	1
13C5 PFHxA	107		50 - 200	02/14/25 17:39	02/16/25 20:46	1
13C4 PFHpA	111		50 - 200	02/14/25 17:39	02/16/25 20:46	1
13C8 PFOA	109		50 - 200	02/14/25 17:39	02/16/25 20:46	1
13C9 PFNA	108		50 - 200	02/14/25 17:39	02/16/25 20:46	1
13C7 PFUnA	101		50 - 200	02/14/25 17:39	02/16/25 20:46	1
13C2 PFDoA	103		50 - 200	02/14/25 17:39	02/16/25 20:46	1
13C4 PFBA	113		50 - 200	02/14/25 17:39	02/16/25 20:46	1
13C5 PFPeA	122		50 - 200	02/14/25 17:39	02/16/25 20:46	1
13C3 PFBS	101		50 - 200	02/14/25 17:39	02/16/25 20:46	1
13C3 PFHxS	112		50 - 200	02/14/25 17:39	02/16/25 20:46	1
13C8 PFOS	112		50 - 200	02/14/25 17:39	02/16/25 20:46	1
13C2-4:2-FTS	142		50 - 200	02/14/25 17:39	02/16/25 20:46	1
13C2-6:2-FTS	124		50 - 200	02/14/25 17:39	02/16/25 20:46	1
13C2-8:2-FTS	105		50 - 200	02/14/25 17:39	02/16/25 20:46	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		02/14/25 17:00	02/16/25 00:16	1
Perfluorooctanesulfonic acid (PFOS)	3.1		2.0	ng/L		02/14/25 17:00	02/16/25 00:16	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:16	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:16	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:16	1
Perfluorohexanoic acid (PFHxA)	2.2		2.0	ng/L		02/14/25 17:00	02/16/25 00:16	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:16	1
Perfluorooctanoic acid (PFOA)	2.2		2.0	ng/L		02/14/25 17:00	02/16/25 00:16	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:16	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-135345-1
SDG: Weekly PFAS

Client Sample ID: KA'AMILO WELLS

Lab Sample ID: 380-135345-5

Date Collected: 02/10/25 11:47

Matrix: Water

Date Received: 02/12/25 09:44

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanesulfonic acid (PFHxS)	2.8		2.0	ng/L		02/14/25 17:00	02/16/25 00:16	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:16	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:16	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:16	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:16	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:16	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:16	1
11-Chloroeicosafuoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:16	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	108		70 - 130			02/14/25 17:00	02/16/25 00:16	1
13C2 PFHxA	112		70 - 130			02/14/25 17:00	02/16/25 00:16	1
13C2 PFDA	104		70 - 130			02/14/25 17:00	02/16/25 00:16	1
13C3-GenX	106		70 - 130			02/14/25 17:00	02/16/25 00:16	1

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

Lab Sample ID: 380-135345-6

Date Collected: 02/10/25 10:17

Matrix: Water

Date Received: 02/12/25 09:44

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		02/14/25 17:39	02/16/25 20:55	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:55	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:55	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:55	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:55	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:55	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:55	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:55	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:55	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:55	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:55	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:55	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:55	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:55	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:55	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:55	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:55	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:55	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-135345-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-135345-6

Date Collected: 02/10/25 10:17

Matrix: Water

Date Received: 02/12/25 09:44

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
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:55	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:55	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:55	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:55	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:55	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:55	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 20:55	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	106		50 - 200			02/14/25 17:39	02/16/25 20:55	1
13C6 PFDA	105		50 - 200			02/14/25 17:39	02/16/25 20:55	1
13C5 PFHxA	110		50 - 200			02/14/25 17:39	02/16/25 20:55	1
13C4 PFHpA	117		50 - 200			02/14/25 17:39	02/16/25 20:55	1
13C8 PFOA	111		50 - 200			02/14/25 17:39	02/16/25 20:55	1
13C9 PFNA	108		50 - 200			02/14/25 17:39	02/16/25 20:55	1
13C7 PFUnA	102		50 - 200			02/14/25 17:39	02/16/25 20:55	1
13C2 PFDoA	106		50 - 200			02/14/25 17:39	02/16/25 20:55	1
13C4 PFBA	112		50 - 200			02/14/25 17:39	02/16/25 20:55	1
13C5 PFPeA	111		50 - 200			02/14/25 17:39	02/16/25 20:55	1
13C3 PFBS	103		50 - 200			02/14/25 17:39	02/16/25 20:55	1
13C3 PFHxS	113		50 - 200			02/14/25 17:39	02/16/25 20:55	1
13C8 PFOS	110		50 - 200			02/14/25 17:39	02/16/25 20:55	1
13C2-4:2-FTS	138		50 - 200			02/14/25 17:39	02/16/25 20:55	1
13C2-6:2-FTS	126		50 - 200			02/14/25 17:39	02/16/25 20:55	1
13C2-8:2-FTS	106		50 - 200			02/14/25 17:39	02/16/25 20:55	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:27	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:27	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:27	1
N-methylperfluorooctanesulfonamideacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:27	1
N-ethylperfluorooctanesulfonamideacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:27	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:27	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:27	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:27	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:27	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:27	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:27	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:27	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:27	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:27	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-135345-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-135345-6

Date Collected: 02/10/25 10:17

Matrix: Water

Date Received: 02/12/25 09:44

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorotridecanoic acid (PFTTrDA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:27	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:27	1
11-Chloroeicosafuoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:27	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	106		70 - 130			02/14/25 17:00	02/16/25 00:27	1
13C2 PFHxA	108		70 - 130			02/14/25 17:00	02/16/25 00:27	1
13C2 PFDA	99		70 - 130			02/14/25 17:00	02/16/25 00:27	1
13C3-GenX	103		70 - 130			02/14/25 17:00	02/16/25 00:27	1

Client Sample ID: FB:AIEA GULCH WELLS P1 (331-201-TP071)

Lab Sample ID: 380-135345-7

Date Collected: 02/10/25 10:44

Matrix: Water

Date Received: 02/12/25 09:44

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		02/14/25 17:39	02/16/25 21:05	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:05	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:05	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:05	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:05	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:05	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:05	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:05	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:05	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:05	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:05	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:05	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:05	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:05	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:05	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:05	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:05	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:05	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:05	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:05	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:05	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-135345-1
SDG: Weekly PFAS

Client Sample ID: FB:AIEA GULCH WELLS P1 (331-201-TP071)

Lab Sample ID: 380-135345-7

Date Collected: 02/10/25 10:44

Matrix: Water

Date Received: 02/12/25 09:44

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
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:05	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:05	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:05	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:05	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	101		50 - 200			02/14/25 17:39	02/16/25 21:05	1
13C6 PFDA	102		50 - 200			02/14/25 17:39	02/16/25 21:05	1
13C5 PFHxA	103		50 - 200			02/14/25 17:39	02/16/25 21:05	1
13C4 PFHpA	108		50 - 200			02/14/25 17:39	02/16/25 21:05	1
13C8 PFOA	105		50 - 200			02/14/25 17:39	02/16/25 21:05	1
13C9 PFNA	106		50 - 200			02/14/25 17:39	02/16/25 21:05	1
13C7 PFUnA	99		50 - 200			02/14/25 17:39	02/16/25 21:05	1
13C2 PFDoA	99		50 - 200			02/14/25 17:39	02/16/25 21:05	1
13C4 PFBA	106		50 - 200			02/14/25 17:39	02/16/25 21:05	1
13C5 PFPeA	106		50 - 200			02/14/25 17:39	02/16/25 21:05	1
13C3 PFBS	104		50 - 200			02/14/25 17:39	02/16/25 21:05	1
13C3 PFHxS	108		50 - 200			02/14/25 17:39	02/16/25 21:05	1
13C8 PFOS	108		50 - 200			02/14/25 17:39	02/16/25 21:05	1
13C2-4:2-FTS	132		50 - 200			02/14/25 17:39	02/16/25 21:05	1
13C2-6:2-FTS	117		50 - 200			02/14/25 17:39	02/16/25 21:05	1
13C2-8:2-FTS	105		50 - 200			02/14/25 17:39	02/16/25 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		02/14/25 17:00	02/16/25 00:48	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:48	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:48	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:48	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:48	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:48	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:48	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:48	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:48	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:48	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:48	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:48	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:48	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:48	1
Perfluorotridecanoic acid (PFTTrDA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:48	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:48	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:48	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:48	1

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Client Sample Results

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

Job ID: 380-135345-1
SDG: Weekly PFAS

Client Sample ID: FB:AIEA GULCH WELLS P1 (331-201-TP071)

Lab Sample ID: 380-135345-7

Date Collected: 02/10/25 10:44

Matrix: Water

Date Received: 02/12/25 09:44

PWSID Number: HI0000331

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	107		70 - 130	02/14/25 17:00	02/16/25 00:48	1
13C2 PFHxA	107		70 - 130	02/14/25 17:00	02/16/25 00:48	1
13C2 PFDA	101		70 - 130	02/14/25 17:00	02/16/25 00:48	1
13C3-GenX	106		70 - 130	02/14/25 17:00	02/16/25 00:48	1

Client Sample ID: FB:AIEA GULCH WELLS P2 (331-202-TP072)

Lab Sample ID: 380-135345-8

Date Collected: 02/10/25 11:00

Matrix: Water

Date Received: 02/12/25 09:44

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		02/14/25 17:39	02/16/25 21:14	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:14	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:14	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:14	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:14	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:14	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:14	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:14	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:14	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:14	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:14	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:14	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:14	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:14	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:14	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:14	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:14	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:14	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:14	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:14	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:14	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:14	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:14	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:14	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:14	1
Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
13C3 HFPO-DA	107		50 - 200	02/14/25 17:39	02/16/25 21:14	1		
13C6 PFDA	105		50 - 200	02/14/25 17:39	02/16/25 21:14	1		
13C5 PFHxA	106		50 - 200	02/14/25 17:39	02/16/25 21:14	1		

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-135345-1
SDG: Weekly PFAS

Client Sample ID: FB:AIEA GULCH WELLS P2 (331-202-TP072)

Lab Sample ID: 380-135345-8

Date Collected: 02/10/25 11:00

Matrix: Water

Date Received: 02/12/25 09:44

PWSID Number: HI0000331

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFHpA	111		50 - 200	02/14/25 17:39	02/16/25 21:14	1
13C8 PFOA	107		50 - 200	02/14/25 17:39	02/16/25 21:14	1
13C9 PFNA	110		50 - 200	02/14/25 17:39	02/16/25 21:14	1
13C7 PFUnA	101		50 - 200	02/14/25 17:39	02/16/25 21:14	1
13C2 PFDoA	102		50 - 200	02/14/25 17:39	02/16/25 21:14	1
13C4 PFBA	106		50 - 200	02/14/25 17:39	02/16/25 21:14	1
13C5 PFPeA	107		50 - 200	02/14/25 17:39	02/16/25 21:14	1
13C3 PFBS	103		50 - 200	02/14/25 17:39	02/16/25 21:14	1
13C3 PFHxS	109		50 - 200	02/14/25 17:39	02/16/25 21:14	1
13C8 PFOS	109		50 - 200	02/14/25 17:39	02/16/25 21:14	1
13C2-4:2-FTS	138		50 - 200	02/14/25 17:39	02/16/25 21:14	1
13C2-6:2-FTS	127		50 - 200	02/14/25 17:39	02/16/25 21:14	1
13C2-8:2-FTS	107		50 - 200	02/14/25 17:39	02/16/25 21:14	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:59	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:59	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:59	1
N-methylperfluorooctanesulfonamide acetic acid (NMeFOSAA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:59	1
N-ethylperfluorooctanesulfonamide acetic acid (NEtFOSAA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:59	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:59	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:59	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:59	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:59	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:59	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:59	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:59	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:59	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:59	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:59	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:59	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:59	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 00:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	106		70 - 130	02/14/25 17:00	02/16/25 00:59	1
13C2 PFHxA	109		70 - 130	02/14/25 17:00	02/16/25 00:59	1
13C2 PFDA	101		70 - 130	02/14/25 17:00	02/16/25 00:59	1
13C3-GenX	104		70 - 130	02/14/25 17:00	02/16/25 00:59	1

Client Sample Results

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

Job ID: 380-135345-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-135345-9

Date Collected: 02/10/25 11:22

Matrix: Water

Date Received: 02/12/25 09:44

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		02/14/25 17:39	02/16/25 21:24	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:24	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:24	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:24	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:24	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:24	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:24	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:24	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:24	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:24	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:24	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:24	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:24	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:24	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:24	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:24	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:24	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:24	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:24	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:24	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:24	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:24	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:24	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:24	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:24	1
<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>			<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C3 HFPO-DA	99		50 - 200			02/14/25 17:39	02/16/25 21:24	1
13C6 PFDA	102		50 - 200			02/14/25 17:39	02/16/25 21:24	1
13C5 PFHxA	102		50 - 200			02/14/25 17:39	02/16/25 21:24	1
13C4 PFHpA	107		50 - 200			02/14/25 17:39	02/16/25 21:24	1
13C8 PFOA	107		50 - 200			02/14/25 17:39	02/16/25 21:24	1
13C9 PFNA	104		50 - 200			02/14/25 17:39	02/16/25 21:24	1
13C7 PFUnA	101		50 - 200			02/14/25 17:39	02/16/25 21:24	1
13C2 PFDoA	103		50 - 200			02/14/25 17:39	02/16/25 21:24	1
13C4 PFBA	110		50 - 200			02/14/25 17:39	02/16/25 21:24	1
13C5 PFPeA	108		50 - 200			02/14/25 17:39	02/16/25 21:24	1
13C3 PFBS	106		50 - 200			02/14/25 17:39	02/16/25 21:24	1
13C3 PFHxS	114		50 - 200			02/14/25 17:39	02/16/25 21:24	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-135345-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-135345-9

Date Collected: 02/10/25 11:22

Matrix: Water

Date Received: 02/12/25 09:44

PWSID Number: HI0000331

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 PFOS	112		50 - 200	02/14/25 17:39	02/16/25 21:24	1
13C2-4:2-FTS	131		50 - 200	02/14/25 17:39	02/16/25 21:24	1
13C2-6:2-FTS	132		50 - 200	02/14/25 17:39	02/16/25 21:24	1
13C2-8:2-FTS	107		50 - 200	02/14/25 17:39	02/16/25 21:24	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		02/15/25 17:02	02/16/25 23:03	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		02/15/25 17:02	02/16/25 23:03	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		02/15/25 17:02	02/16/25 23:03	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		02/15/25 17:02	02/16/25 23:03	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		02/15/25 17:02	02/16/25 23:03	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		02/15/25 17:02	02/16/25 23:03	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		02/15/25 17:02	02/16/25 23:03	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		02/15/25 17:02	02/16/25 23:03	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		02/15/25 17:02	02/16/25 23:03	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		02/15/25 17:02	02/16/25 23:03	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		02/15/25 17:02	02/16/25 23:03	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		02/15/25 17:02	02/16/25 23:03	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		02/15/25 17:02	02/16/25 23:03	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		02/15/25 17:02	02/16/25 23:03	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		02/15/25 17:02	02/16/25 23:03	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		02/15/25 17:02	02/16/25 23:03	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		02/15/25 17:02	02/16/25 23:03	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		02/15/25 17:02	02/16/25 23:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	114		70 - 130	02/15/25 17:02	02/16/25 23:03	1
13C2 PFHxA	113		70 - 130	02/15/25 17:02	02/16/25 23:03	1
13C2 PFDA	109		70 - 130	02/15/25 17:02	02/16/25 23:03	1
13C3-GenX	111		70 - 130	02/15/25 17:02	02/16/25 23:03	1

Client Sample ID: FB: KA'AMILO WELLS

Lab Sample ID: 380-135345-10

Date Collected: 02/10/25 11:47

Matrix: Water

Date Received: 02/12/25 09:44

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		02/14/25 17:39	02/16/25 21:33	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:33	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:33	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:33	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-135345-1
SDG: Weekly PFAS

Client Sample ID: FB: KA'AMILO WELLS

Lab Sample ID: 380-135345-10

Date Collected: 02/10/25 11:47

Matrix: Water

Date Received: 02/12/25 09:44

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		02/14/25 17:39	02/16/25 21:33	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:33	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:33	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:33	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:33	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:33	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:33	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:33	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:33	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:33	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:33	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:33	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:33	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:33	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:33	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:33	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:33	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:33	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:33	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:33	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		02/14/25 17:39	02/16/25 21:33	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	102		50 - 200	02/14/25 17:39	02/16/25 21:33	1
13C6 PFDA	102		50 - 200	02/14/25 17:39	02/16/25 21:33	1
13C5 PFHxA	107		50 - 200	02/14/25 17:39	02/16/25 21:33	1
13C4 PFHpA	107		50 - 200	02/14/25 17:39	02/16/25 21:33	1
13C8 PFOA	107		50 - 200	02/14/25 17:39	02/16/25 21:33	1
13C9 PFNA	107		50 - 200	02/14/25 17:39	02/16/25 21:33	1
13C7 PFUnA	100		50 - 200	02/14/25 17:39	02/16/25 21:33	1
13C2 PFDoA	100		50 - 200	02/14/25 17:39	02/16/25 21:33	1
13C4 PFBA	108		50 - 200	02/14/25 17:39	02/16/25 21:33	1
13C5 PFPeA	107		50 - 200	02/14/25 17:39	02/16/25 21:33	1
13C3 PFBS	108		50 - 200	02/14/25 17:39	02/16/25 21:33	1
13C3 PFHxS	114		50 - 200	02/14/25 17:39	02/16/25 21:33	1
13C8 PFOS	113		50 - 200	02/14/25 17:39	02/16/25 21:33	1
13C2-4:2-FTS	139		50 - 200	02/14/25 17:39	02/16/25 21:33	1
13C2-6:2-FTS	128		50 - 200	02/14/25 17:39	02/16/25 21:33	1
13C2-8:2-FTS	111		50 - 200	02/14/25 17:39	02/16/25 21:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 01:10	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-135345-1
SDG: Weekly PFAS

Client Sample ID: FB: KA'AMILO WELLS

Lab Sample ID: 380-135345-10

Date Collected: 02/10/25 11:47

Matrix: Water

Date Received: 02/12/25 09:44

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 01:10	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 01:10	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 01:10	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 01:10	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 01:10	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 01:10	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 01:10	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 01:10	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 01:10	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 01:10	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 01:10	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 01:10	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 01:10	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 01:10	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 01:10	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 01:10	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		02/14/25 17:00	02/16/25 01:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	111		70 - 130			02/14/25 17:00	02/16/25 01:10	1
13C2 PFHxA	110		70 - 130			02/14/25 17:00	02/16/25 01:10	1
13C2 PFDA	104		70 - 130			02/14/25 17:00	02/16/25 01:10	1
13C3-GenX	105		70 - 130			02/14/25 17:00	02/16/25 01:10	1

Surrogate Summary

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

Job ID: 380-135345-1
 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)
380-135345-1	HALAWA WELLS UNITS 1 & 2 F	107	113	103	106
380-135345-2	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	105	107	97	101
380-135345-3	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	105	108	102	107
380-135345-4	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP400)	108	107	100	103

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)
380-135345-5	KA'AMILO WELLS	108	112	104	106
380-135345-6	FB: HALAWA WELLS UNITS 1&2 (331-206-TP065)	106	108	99	103
380-135345-7	FB:AIEA GULCH WELLS P1 (331-201-TP071)	107	107	101	106
380-135345-8	FB:AIEA GULCH WELLS P2 (331-202-TP072)	106	109	101	104
380-135345-9	FB: AIEA WELLS PUMPS 1&2 (260) (331-203-TP400)	114	113	109	111
380-135345-10	FB: KA'AMILO WELLS	111	110	104	105
380-135363-AF-1-A MS	Matrix Spike	105	111	100	106
380-135363-AG-1-A MSD	Matrix Spike Duplicate	102	112	101	108
380-135782-B-1-A MS	Matrix Spike	106	115	110	112
380-135782-C-1-A MSD	Matrix Spike Duplicate	106	110	109	107
LCS 380-135396/24-A	Lab Control Sample	103	111	106	107
LCS 380-135573/22-A	Lab Control Sample	115	114	108	112
MBL 380-135396/22-A	Method Blank	101	113	103	108
MBL 380-135573/20-A	Method Blank	104	108	108	104
MRL 380-135396/23-A	Lab Control Sample	98	106	102	103
MRL 380-135573/21-A	Lab Control Sample	111	115	109	111

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: 380-135345-1
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)
380-135345-1	HALAWA WELLS UNITS 1 & 2 F	95	97	98	103	103	100	94	94
380-135345-2	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	104	102	105	107	105	104	100	101
380-135345-3	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	97	103	107	109	108	105	98	98
380-135345-4	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP400)	102	102	106	108	109	107	97	100

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)
380-135345-1	HALAWA WELLS UNITS 1 & 2 F	108	116	103	106	106	153	135	102
380-135345-2	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	108	113	99	104	104	129	123	102
380-135345-3	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	109	112	107	114	108	141	135	110
380-135345-4	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP400)	108	113	106	110	110	145	131	107

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)
380-135343-E-1-A MS	Matrix Spike	105	100	106	107	106	105	100	103
380-135343-F-1-A MSD	Matrix Spike Duplicate	110	104	106	113	108	107	103	106
380-135345-5	KA'AMILO WELLS	108	105	107	111	109	108	101	103
380-135345-6	FB: HALAWA WELLS UNITS 1&2 (331-206-TP065)	106	105	110	117	111	108	102	106
380-135345-7	FB:AIEA GULCH WELLS P1 (331-201-TP071)	101	102	103	108	105	106	99	99
380-135345-8	FB:AIEA GULCH WELLS P2 (331-202-TP072)	107	105	106	111	107	110	101	102
380-135345-9	FB: AIEA WELLS PUMPS 1&2 (260) (331-203-TP400)	99	102	102	107	107	104	101	103

Eurofins Eaton Analytical Pomona

Isotope Dilution Summary

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

Job ID: 380-135345-1
 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)
380-135345-10	FB: KA'AMILO WELLS	102	102	107	107	107	107	100	100
LCS 380-135405/22-A	Lab Control Sample	98	104	105	106	108	106	102	108
MBL 380-135405/20-A	Method Blank	91	99	101	105	106	105	101	100
MRL 380-135405/21-A	Lab Control Sample	98	98	107	107	108	103	98	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)
380-135343-E-1-A MS	Matrix Spike	108	112	107	113	108	134	131	105
380-135343-F-1-A MSD	Matrix Spike Duplicate	109	113	105	112	108	130	122	103
380-135345-5	KA'AMILO WELLS	113	122	101	112	112	142	124	105
380-135345-6	FB: HALAWA WELLS UNITS 1&2 (331-206-TP065)	112	111	103	113	110	138	126	106
380 135345 7	FB:AIEA GULCH WELLS P1 (331-201-TP071)	106	106	104	108	108	132	117	105
380-135345-8	FB:AIEA GULCH WELLS P2 (331-202-TP072)	106	107	103	109	109	138	127	107
380-135345-9	FB: AIEA WELLS PUMPS 1&2 (260) (331-203-TP400)	110	108	106	114	112	131	132	107
380-135345-10	FB: KA'AMILO WELLS	108	107	108	114	113	139	128	111
LCS 380-135405/22-A	Lab Control Sample	103	107	108	113	108	129	120	108
MBL 380-135405/20-A	Method Blank	101	102	106	113	113	128	119	103
MRL 380-135405/21-A	Lab Control Sample	107	107	105	110	107	136	122	103

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: 380-135345-1
SDG: Weekly PFAS

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

Lab Sample ID: MBL 380-135405/20-A
Matrix: Water
Analysis Batch: 135583

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 135405

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		02/14/25 17:39	02/16/25 18:03	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<0.30		2.0	ng/L		02/14/25 17:39	02/16/25 18:03	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0	ng/L		02/14/25 17:39	02/16/25 18:03	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<1.0		2.0	ng/L		02/14/25 17:39	02/16/25 18:03	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0	ng/L		02/14/25 17:39	02/16/25 18:03	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	ng/L		02/14/25 17:39	02/16/25 18:03	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	ng/L		02/14/25 17:39	02/16/25 18:03	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0	ng/L		02/14/25 17:39	02/16/25 18:03	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0	ng/L		02/14/25 17:39	02/16/25 18:03	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0	ng/L		02/14/25 17:39	02/16/25 18:03	1
Perfluorononanoic acid (PFNA)	<0.40		2.0	ng/L		02/14/25 17:39	02/16/25 18:03	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0	ng/L		02/14/25 17:39	02/16/25 18:03	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0	ng/L		02/14/25 17:39	02/16/25 18:03	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0	ng/L		02/14/25 17:39	02/16/25 18:03	1
Perfluorobutanoic acid (PFBA)	<0.69		2.0	ng/L		02/14/25 17:39	02/16/25 18:03	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.38		2.0	ng/L		02/14/25 17:39	02/16/25 18:03	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.37		2.0	ng/L		02/14/25 17:39	02/16/25 18:03	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<0.48		2.0	ng/L		02/14/25 17:39	02/16/25 18:03	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<0.47		2.0	ng/L		02/14/25 17:39	02/16/25 18:03	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<0.25		2.0	ng/L		02/14/25 17:39	02/16/25 18:03	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.46		2.0	ng/L		02/14/25 17:39	02/16/25 18:03	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.15		2.0	ng/L		02/14/25 17:39	02/16/25 18:03	1
Perfluoropentanoic acid (PFPeA)	<0.38		2.0	ng/L		02/14/25 17:39	02/16/25 18:03	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.36		2.0	ng/L		02/14/25 17:39	02/16/25 18:03	1
Perfluoropentanesulfonic acid (PFPeS)	<0.39		2.0	ng/L		02/14/25 17:39	02/16/25 18:03	1

Isotope Dilution	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	91		50 - 200	02/14/25 17:39	02/16/25 18:03	1
13C6 PFDA	99		50 - 200	02/14/25 17:39	02/16/25 18:03	1
13C5 PFHxA	101		50 - 200	02/14/25 17:39	02/16/25 18:03	1
13C4 PFHpA	105		50 - 200	02/14/25 17:39	02/16/25 18:03	1
13C8 PFOA	106		50 - 200	02/14/25 17:39	02/16/25 18:03	1
13C9 PFNA	105		50 - 200	02/14/25 17:39	02/16/25 18:03	1
13C7 PFUnA	101		50 - 200	02/14/25 17:39	02/16/25 18:03	1
13C2 PFDoA	100		50 - 200	02/14/25 17:39	02/16/25 18:03	1
13C4 PFBA	101		50 - 200	02/14/25 17:39	02/16/25 18:03	1
13C5 PFPeA	102		50 - 200	02/14/25 17:39	02/16/25 18:03	1
13C3 PFBS	106		50 - 200	02/14/25 17:39	02/16/25 18:03	1
13C3 PFHxS	113		50 - 200	02/14/25 17:39	02/16/25 18:03	1

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QC Sample Results

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

Job ID: 380-135345-1
SDG: Weekly PFAS

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

Lab Sample ID: MBL 380-135405/20-A
Matrix: Water
Analysis Batch: 135583

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 135405

Isotope Dilution	MBL MBL		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C8 PFOS	113		50 - 200	02/14/25 17:39	02/16/25 18:03	1
13C2-4:2-FTS	128		50 - 200	02/14/25 17:39	02/16/25 18:03	1
13C2-6:2-FTS	119		50 - 200	02/14/25 17:39	02/16/25 18:03	1
13C2-8:2-FTS	103		50 - 200	02/14/25 17:39	02/16/25 18:03	1

Lab Sample ID: LCS 380-135405/22-A
Matrix: Water
Analysis Batch: 135583

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 135405

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec
							Limits
11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	120	110		ng/L		92	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	120	108		ng/L		90	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	120	112		ng/L		93	70 - 130
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	120	124		ng/L		103	70 - 130
Perfluorobutanesulfonic acid (PFBS)	120	110		ng/L		91	70 - 130
Perfluorodecanoic acid (PFDA)	120	117		ng/L		97	70 - 130
Perfluorododecanoic acid (PFDoA)	120	113		ng/L		94	70 - 130
Perfluoroheptanoic acid (PFHpA)	120	112		ng/L		94	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	120	113		ng/L		95	70 - 130
Perfluorohexanoic acid (PFHxA)	120	115		ng/L		96	70 - 130
Perfluorononanoic acid (PFNA)	120	112		ng/L		94	70 - 130
Perfluorooctanesulfonic acid (PFOS)	120	113		ng/L		94	70 - 130
Perfluorooctanoic acid (PFOA)	120	115		ng/L		96	70 - 130
Perfluoroundecanoic acid (PFUnA)	120	113		ng/L		94	70 - 130
Perfluorobutanoic acid (PFBA)	120	116		ng/L		96	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	120	114		ng/L		95	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	120	107		ng/L		89	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	120	115		ng/L		96	70 - 130
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	120	109		ng/L		91	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	120	107		ng/L		89	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	120	116		ng/L		97	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	120	111		ng/L		93	70 - 130
Perfluoropentanoic acid (PFPeA)	120	112		ng/L		93	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	120	116		ng/L		97	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-135345-1
SDG: Weekly PFAS

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

Lab Sample ID: LCS 380-135405/22-A
Matrix: Water
Analysis Batch: 135583

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 135405

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoropentanesulfonic acid (PFPeS)	120	110		ng/L		92	70 - 130
LCS LCS							
Isotope Dilution	%Recovery	Qualifier	Limits				
13C3 HFPO-DA	98		50 - 200				
13C6 PFDA	104		50 - 200				
13C5 PFHxA	105		50 - 200				
13C4 PFHpA	106		50 - 200				
13C8 PFOA	108		50 - 200				
13C9 PFNA	106		50 - 200				
13C7 PFUnA	102		50 - 200				
13C2 PFDoA	108		50 - 200				
13C4 PFBA	103		50 - 200				
13C5 PFPeA	107		50 - 200				
13C3 PFBS	108		50 - 200				
13C3 PFHxS	113		50 - 200				
13C8 PFOS	108		50 - 200				
13C2-4:2-FTS	129		50 - 200				
13C2-6:2-FTS	120		50 - 200				
13C2-8:2-FTS	108		50 - 200				

Lab Sample ID: MRL 380-135405/21-A
Matrix: Water
Analysis Batch: 135583

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 135405

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.00	1.99	J	ng/L		99	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	2.00	1.81	J	ng/L		90	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.00	2.07	J	ng/L		103	50 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.00	2.02	J	ng/L		101	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.00	2.13	J	ng/L		106	50 - 150
Perfluorodecanoic acid (PFDA)	2.00	2.17	J	ng/L		108	50 - 150
Perfluorododecanoic acid (PFDoA)	2.00	2.19	J	ng/L		109	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.00	2.23	J	ng/L		111	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.00	2.08	J	ng/L		104	50 - 150
Perfluorohexanoic acid (PFHxA)	2.00	2.08	J	ng/L		104	50 - 150
Perfluorononanoic acid (PFNA)	2.00	2.18	J	ng/L		109	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.00	2.19	J	ng/L		109	50 - 150
Perfluorooctanoic acid (PFOA)	2.00	2.04	J	ng/L		102	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.00	2.14	J	ng/L		107	50 - 150
Perfluorobutanoic acid (PFBA)	2.00	2.10	J	ng/L		105	50 - 150

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-135345-1
SDG: Weekly PFAS

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

Lab Sample ID: MRL 380-135405/21-A
Matrix: Water
Analysis Batch: 135583

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 135405

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	2.00	2.20	J	ng/L		110	50 - 150
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	2.00	2.24	J	ng/L		112	50 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	2.00	2.29	J	ng/L		114	50 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2.00	2.02	J	ng/L		101	50 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	2.00	1.95	J	ng/L		97	50 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.00	1.99	J	ng/L		99	50 - 150
Perfluoro-4-methoxybutanoic acid (PFMBA)	2.00	1.97	J	ng/L		99	50 - 150
Perfluoropentanoic acid (PFPeA)	2.00	2.17	J	ng/L		108	50 - 150
Perfluoroheptanesulfonic acid (PFHpS)	2.00	2.12	J	ng/L		106	50 - 150
Perfluoropentanesulfonic acid (PFPeS)	2.00	2.07	J	ng/L		103	50 - 150

Isotope Dilution	MRL %Recovery	MRL Qualifier	MRL Limits
13C3 HFPO-DA	98		50 - 200
13C6 PFDA	98		50 - 200
13C5 PFHxA	107		50 - 200
13C4 PFHpA	107		50 - 200
13C8 PFOA	108		50 - 200
13C9 PFNA	103		50 - 200
13C7 PFUnA	98		50 - 200
13C2 PFDoA	100		50 - 200
13C4 PFBA	107		50 - 200
13C5 PFPeA	107		50 - 200
13C3 PFBS	105		50 - 200
13C3 PFHxS	110		50 - 200
13C8 PFOS	107		50 - 200
13C2-4:2-FTS	136		50 - 200
13C2-6:2-FTS	122		50 - 200
13C2-8:2-FTS	103		50 - 200

Lab Sample ID: 380-135343-E-1-A MS
Matrix: Water
Analysis Batch: 135583

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 135405

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		60.4	56.9		ng/L		94	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		60.4	54.8		ng/L		91	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		60.4	59.5		ng/L		99	70 - 130

QC Sample Results

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

Job ID: 380-135345-1
 SDG: Weekly PFAS

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

Lab Sample ID: 380-135343-E-1-A MS
Matrix: Water
Analysis Batch: 135583

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 135405

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide	<2.0		60.4	61.8		ng/L		102	70 - 130
Dimer Acid (HFPO-DA/GenX)									
Perfluorobutanesulfonic acid (PFBS)	<2.0		60.4	63.0		ng/L		104	70 - 130
Perfluorodecanoic acid (PFDA)	<2.0		60.4	61.2		ng/L		101	70 - 130
Perfluorododecanoic acid (PFDoA)	<2.0		60.4	60.1		ng/L		100	70 - 130
Perfluoroheptanoic acid (PFHpA)	<2.0		60.4	59.2		ng/L		98	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	<2.0		60.4	59.4		ng/L		98	70 - 130
Perfluorohexanoic acid (PFHxA)	<2.0		60.4	61.6		ng/L		100	70 - 130
Perfluorononanoic acid (PFNA)	<2.0		60.4	60.9		ng/L		101	70 - 130
Perfluorooctanesulfonic acid (PFOS)	<2.0		60.4	60.4		ng/L		99	70 - 130
Perfluorooctanoic acid (PFOA)	<2.0		60.4	62.0		ng/L		102	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		60.4	61.8		ng/L		102	70 - 130
Perfluorobutanoic acid (PFBA)	<2.0		60.4	62.0		ng/L		103	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		60.4	62.9		ng/L		104	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		60.4	63.5		ng/L		105	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		60.4	58.6		ng/L		97	70 - 130
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		60.4	62.1		ng/L		103	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		60.4	58.1		ng/L		96	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		60.4	62.0		ng/L		103	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		60.4	60.2		ng/L		100	70 - 130
Perfluoropentanoic acid (PFPeA)	<2.0		60.4	61.8		ng/L		100	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		60.4	61.4		ng/L		102	70 - 130
Perfluoropentanesulfonic acid (PFPeS)	<2.0		60.4	58.6		ng/L		97	70 - 130

Isotope Dilution	MS MS		Limits
	%Recovery	Qualifier	
13C3 HFPO-DA	105		50 - 200
13C6 PFDA	100		50 - 200
13C5 PFHxA	106		50 - 200
13C4 PFHpA	107		50 - 200
13C8 PFOA	106		50 - 200
13C9 PFNA	105		50 - 200
13C7 PFUnA	100		50 - 200
13C2 PFDoA	103		50 - 200
13C4 PFBA	108		50 - 200
13C5 PFPeA	112		50 - 200
13C3 PFBS	107		50 - 200
13C3 PFHxS	113		50 - 200
13C8 PFOS	108		50 - 200

QC Sample Results

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

Job ID: 380-135345-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-135343-E-1-A MS
Matrix: Water
Analysis Batch: 135583

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 135405

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>MS MS Qualifier</i>	<i>Limits</i>
13C2-4:2-FTS	134		50 - 200
13C2-6:2-FTS	131		50 - 200
13C2-8:2-FTS	105		50 - 200

Lab Sample ID: 380-135343-F-1-A MSD
Matrix: Water
Analysis Batch: 135583

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 135405

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		60.4	56.1		ng/L		93	70 - 130	1	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		60.4	52.1		ng/L		86	70 - 130	5	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		60.4	56.7		ng/L		94	70 - 130	5	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		60.4	54.8		ng/L		91	70 - 130	12	30
Perfluorobutanesulfonic acid (PFBS)	<2.0		60.4	60.8		ng/L		100	70 - 130	4	30
Perfluorodecanoic acid (PFDA)	<2.0		60.4	61.4		ng/L		102	70 - 130	0	30
Perfluorododecanoic acid (PFDoA)	<2.0		60.4	58.5		ng/L		97	70 - 130	3	30
Perfluoroheptanoic acid (PFHpA)	<2.0		60.4	56.4		ng/L		93	70 - 130	5	30
Perfluorohexanesulfonic acid (PFHxS)	<2.0		60.4	58.1		ng/L		96	70 - 130	2	30
Perfluorohexanoic acid (PFHxA)	<2.0		60.4	59.8		ng/L		97	70 - 130	3	30
Perfluorononanoic acid (PFNA)	<2.0		60.4	58.6		ng/L		97	70 - 130	4	30
Perfluorooctanesulfonic acid (PFOS)	<2.0		60.4	58.4		ng/L		96	70 - 130	3	30
Perfluorooctanoic acid (PFOA)	<2.0		60.4	59.1		ng/L		97	70 - 130	5	30
Perfluoroundecanoic acid (PFUnA)	<2.0		60.4	60.7		ng/L		101	70 - 130	2	30
Perfluorobutanoic acid (PFBA)	<2.0		60.4	60.2		ng/L		100	70 - 130	3	30
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		60.4	58.1		ng/L		96	70 - 130	8	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		60.4	61.0		ng/L		101	70 - 130	4	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		60.4	61.2		ng/L		101	70 - 130	4	30
Nonfluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		60.4	52.6		ng/L		87	70 - 130	17	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		60.4	55.2		ng/L		92	70 - 130	5	30
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		60.4	60.7		ng/L		101	70 - 130	2	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		60.4	58.7		ng/L		97	70 - 130	3	30
Perfluoropentanoic acid (PFPeA)	<2.0		60.4	61.2		ng/L		99	70 - 130	1	30
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		60.4	58.6		ng/L		97	70 - 130	5	30
Perfluoropentanesulfonic acid (PFPeS)	<2.0		60.4	58.3		ng/L		97	70 - 130	0	30

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-135345-1
SDG: Weekly PFAS

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

Isotope Dilution	MSD MSD		Limits
	%Recovery	Qualifier	
13C3 HFPO-DA	110		50 - 200
13C6 PFDA	104		50 - 200
13C5 PFHxA	106		50 - 200
13C4 PFHpA	113		50 - 200
13C8 PFOA	108		50 - 200
13C9 PFNA	107		50 - 200
13C7 PFUnA	103		50 - 200
13C2 PFDoA	106		50 - 200
13C4 PFBA	109		50 - 200
13C5 PFPeA	113		50 - 200
13C3 PFBS	105		50 - 200
13C3 PFHxS	112		50 - 200
13C8 PFOS	108		50 - 200
13C2-4:2-FTS	130		50 - 200
13C2-6:2-FTS	122		50 - 200
13C2-8:2-FTS	103		50 - 200

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

Lab Sample ID: MBL 380-135396/22-A
Matrix: Water
Analysis Batch: 135554

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 135396

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		02/14/25 17:00	02/15/25 21:55	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0	ng/L		02/14/25 17:00	02/15/25 21:55	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0	ng/L		02/14/25 17:00	02/15/25 21:55	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<0.58		2.0	ng/L		02/14/25 17:00	02/15/25 21:55	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<0.42		2.0	ng/L		02/14/25 17:00	02/15/25 21:55	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0	ng/L		02/14/25 17:00	02/15/25 21:55	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	ng/L		02/14/25 17:00	02/15/25 21:55	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0	ng/L		02/14/25 17:00	02/15/25 21:55	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	ng/L		02/14/25 17:00	02/15/25 21:55	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0	ng/L		02/14/25 17:00	02/15/25 21:55	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0	ng/L		02/14/25 17:00	02/15/25 21:55	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0	ng/L		02/14/25 17:00	02/15/25 21:55	1
Perfluorononanoic acid (PFNA)	<0.40		2.0	ng/L		02/14/25 17:00	02/15/25 21:55	1
Perfluorotetradecanoic acid (PFTA)	<0.54		2.0	ng/L		02/14/25 17:00	02/15/25 21:55	1
Perfluorotridecanoic acid (PFTrDA)	<0.36		2.0	ng/L		02/14/25 17:00	02/15/25 21:55	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<0.30		2.0	ng/L		02/14/25 17:00	02/15/25 21:55	1
11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.30		2.0	ng/L		02/14/25 17:00	02/15/25 21:55	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0	ng/L		02/14/25 17:00	02/15/25 21:55	1
Surrogate	MBL MBL		Limits			Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier						
d5-NEtFOSAA	101		70 - 130			02/14/25 17:00	02/15/25 21:55	1
13C2 PFHxA	113		70 - 130			02/14/25 17:00	02/15/25 21:55	1
13C2 PFDA	103		70 - 130			02/14/25 17:00	02/15/25 21:55	1

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QC Sample Results

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

Job ID: 380-135345-1
SDG: Weekly PFAS

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

Lab Sample ID: MBL 380-135396/22-A
Matrix: Water
Analysis Batch: 135554

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 135396

<i>Surrogate</i>	<i>MBL</i>	<i>MBL</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C3-GenX	108	Qualifier	70 - 130	02/14/25 17:00	02/15/25 21:55	1

Lab Sample ID: LCS 380-135396/24-A
Matrix: Water
Analysis Batch: 135554

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 135396

<i>Analyte</i>	<i>Spike</i>	<i>LCS</i>	<i>LCS</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec</i>	<i>Limits</i>
	<i>Added</i>	<i>Result</i>	<i>Qualifier</i>					
Hexafluoropropylene Oxide	50.0	53.0		ng/L		106		70 - 130
Dimer Acid (HFPO-DA/GenX)								
Perfluorooctanesulfonic acid (PFOS)	50.0	54.2		ng/L		108		70 - 130
Perfluoroundecanoic acid (PFUnA)	50.0	50.6		ng/L		101		70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	50.0	55.8		ng/L		112		70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	50.0	51.5		ng/L		103		70 - 130
Perfluorohexanoic acid (PFHxA)	50.0	55.2		ng/L		110		70 - 130
Perfluorododecanoic acid (PFDoA)	50.0	52.2		ng/L		104		70 - 130
Perfluorooctanoic acid (PFOA)	50.0	53.8		ng/L		108		70 - 130
Perfluorodecanoic acid (PFDA)	50.0	51.8		ng/L		104		70 - 130
Perfluorohexanesulfonic acid (PFHxS)	50.0	56.2		ng/L		112		70 - 130
Perfluorobutanesulfonic acid (PFBS)	50.0	53.7		ng/L		107		70 - 130
Perfluoroheptanoic acid (PFHpA)	50.0	55.9		ng/L		112		70 - 130
Perfluorononanoic acid (PFNA)	50.0	53.7		ng/L		107		70 - 130
Perfluorotetradecanoic acid (PFTA)	50.0	54.6		ng/L		109		70 - 130
Perfluorotridecanoic acid (PFTrDA)	50.0	52.9		ng/L		106		70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	50.0	53.8		ng/L		108		70 - 130
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	50.0	51.2		ng/L		102		70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	50.0	53.9		ng/L		108		70 - 130

<i>Surrogate</i>	<i>LCS</i>	<i>LCS</i>	<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
d5-NEtFOSAA	103		70 - 130
13C2 PFHxA	111		70 - 130
13C2 PFDA	106		70 - 130
13C3-GenX	107		70 - 130

QC Sample Results

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

Job ID: 380-135345-1
SDG: Weekly PFAS

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

Lab Sample ID: MRL 380-135396/23-A
Matrix: Water
Analysis Batch: 135554

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 135396

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.01	2.07	J	ng/L		103	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.01	2.09	J	ng/L		104	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.01	2.07	J	ng/L		103	50 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2.01	2.12	J	ng/L		105	50 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2.01	2.03	J	ng/L		101	50 - 150
Perfluorohexanoic acid (PFHxA)	2.01	2.23	J	ng/L		111	50 - 150
Perfluorododecanoic acid (PFDoA)	2.01	2.08	J	ng/L		103	50 - 150
Perfluorooctanoic acid (PFOA)	2.01	2.17	J	ng/L		108	50 - 150
Perfluorodecanoic acid (PFDA)	2.01	2.11	J	ng/L		105	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.01	2.17	J	ng/L		108	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.01	1.97	J	ng/L		98	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.01	2.30	J	ng/L		115	50 - 150
Perfluorononanoic acid (PFNA)	2.01	2.13	J	ng/L		106	50 - 150
Perfluorotetradecanoic acid (PFTA)	2.01	2.34	J	ng/L		116	50 - 150
Perfluorotridecanoic acid (PFTrDA)	2.01	2.10	J	ng/L		104	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	2.01	2.06	J	ng/L		103	50 - 150
11-Chloroeicosafafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.01	2.02	J	ng/L		101	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.01	2.16	J	ng/L		108	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	MRL Limits
d5-NEtFOSAA	98		70 - 130
13C2 PFHxA	106		70 - 130
13C2 PFDA	102		70 - 130
13C3-GenX	103		70 - 130

Lab Sample ID: 380-135363-AF-1-A MS
Matrix: Water
Analysis Batch: 135554

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 135396

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		50.3	53.3		ng/L		106	70 - 130
Perfluorooctanesulfonic acid (PFOS)	3.3		50.3	58.5		ng/L		110	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		50.3	50.8		ng/L		101	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		50.3	53.8		ng/L		107	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-135345-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-135363-AF-1-A MS
Matrix: Water
Analysis Batch: 135554

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 135396

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		50.3	51.8		ng/L		103	70 - 130
Perfluorohexanoic acid (PFHxA)	<2.0		50.3	57.7		ng/L		111	70 - 130
Perfluorododecanoic acid (PFDoA)	<2.0		50.3	50.8		ng/L		101	70 - 130
Perfluorooctanoic acid (PFOA)	3.2		50.3	57.0		ng/L		107	70 - 130
Perfluorodecanoic acid (PFDA)	<2.0		50.3	51.6		ng/L		103	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	4.2		50.3	60.8		ng/L		113	70 - 130
Perfluorobutanesulfonic acid (PFBS)	4.5		50.3	59.9		ng/L		110	70 - 130
Perfluoroheptanoic acid (PFHpA)	<2.0		50.3	55.5		ng/L		108	70 - 130
Perfluorononanoic acid (PFNA)	<2.0		50.3	51.4		ng/L		102	70 - 130
Perfluorotetradecanoic acid (PFTA)	<2.0		50.3	54.2		ng/L		108	70 - 130
Perfluorotridecanoic acid (PFTTrDA)	<2.0		50.3	51.3		ng/L		102	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		50.3	53.8		ng/L		107	70 - 130
11-Chloroeicosasfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		50.3	51.4		ng/L		102	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		50.3	53.5		ng/L		106	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
d5-NEtFOSAA	105		70 - 130
13C2 PFHxA	111		70 - 130
13C2 PFDA	100		70 - 130
13C3-GenX	106		70 - 130

Lab Sample ID: 380-135363-AG-1-A MSD
Matrix: Water
Analysis Batch: 135554

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 135396

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	54.0		ng/L		107	70 - 130	1	30
Perfluorooctanesulfonic acid (PFOS)	3.3		50.3	57.0		ng/L		107	70 - 130	3	30
Perfluoroundecanoic acid (PFUnA)	<2.0		50.3	51.6		ng/L		103	70 - 130	2	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		50.3	54.2		ng/L		108	70 - 130	1	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		50.3	50.7		ng/L		101	70 - 130	2	30
Perfluorohexanoic acid (PFHxA)	<2.0		50.3	59.1		ng/L		114	70 - 130	2	30
Perfluorododecanoic acid (PFDoA)	<2.0		50.3	52.7		ng/L		105	70 - 130	4	30
Perfluorooctanoic acid (PFOA)	3.2		50.3	58.1		ng/L		109	70 - 130	2	30
Perfluorodecanoic acid (PFDA)	<2.0		50.3	50.5		ng/L		100	70 - 130	2	30

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-135345-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-135363-AG-1-A MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 135554

Prep Batch: 135396

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorohexanesulfonic acid (PFHxS)	4.2		50.3	59.9		ng/L		111	70 - 130	1	30
Perfluorobutanesulfonic acid (PFBS)	4.5		50.3	59.4		ng/L		109	70 - 130	1	30
Perfluoroheptanoic acid (PFHpA)	<2.0		50.3	56.8		ng/L		110	70 - 130	2	30
Perfluorononanoic acid (PFNA)	<2.0		50.3	54.8		ng/L		109	70 - 130	6	30
Perfluorotetradecanoic acid (PFTA)	<2.0		50.3	54.4		ng/L		108	70 - 130	0	30
Perfluorotridecanoic acid (PFTTrDA)	<2.0		50.3	51.5		ng/L		102	70 - 130	0	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		50.3	52.1		ng/L		104	70 - 130	3	30
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		50.3	50.2		ng/L		100	70 - 130	2	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		50.3	54.3		ng/L		108	70 - 130	1	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
d5-NEtFOSAA	102		70 - 130
13C2 PFHxA	112		70 - 130
13C2 PFDA	101		70 - 130
13C3-GenX	108		70 - 130

Lab Sample ID: MBL 380-135573/20-A

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 135595

Prep Batch: 135573

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<1.0		2.0	ng/L		02/15/25 17:02	02/16/25 22:05	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0	ng/L		02/15/25 17:02	02/16/25 22:05	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0	ng/L		02/15/25 17:02	02/16/25 22:05	1
N-methylperfluorooctanesulfonamide acetic acid (NMeFOSAA)	<0.58		2.0	ng/L		02/15/25 17:02	02/16/25 22:05	1
N-ethylperfluorooctanesulfonamide acetic acid (NEtFOSAA)	<0.42		2.0	ng/L		02/15/25 17:02	02/16/25 22:05	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0	ng/L		02/15/25 17:02	02/16/25 22:05	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	ng/L		02/15/25 17:02	02/16/25 22:05	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0	ng/L		02/15/25 17:02	02/16/25 22:05	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	ng/L		02/15/25 17:02	02/16/25 22:05	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0	ng/L		02/15/25 17:02	02/16/25 22:05	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0	ng/L		02/15/25 17:02	02/16/25 22:05	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0	ng/L		02/15/25 17:02	02/16/25 22:05	1
Perfluorononanoic acid (PFNA)	<0.40		2.0	ng/L		02/15/25 17:02	02/16/25 22:05	1
Perfluorotetradecanoic acid (PFTA)	<0.54		2.0	ng/L		02/15/25 17:02	02/16/25 22:05	1
Perfluorotridecanoic acid (PFTTrDA)	<0.36		2.0	ng/L		02/15/25 17:02	02/16/25 22:05	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<0.30		2.0	ng/L		02/15/25 17:02	02/16/25 22:05	1
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.30		2.0	ng/L		02/15/25 17:02	02/16/25 22:05	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-135345-1
SDG: Weekly PFAS

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

Lab Sample ID: MBL 380-135573/20-A
Matrix: Water
Analysis Batch: 135595

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 135573

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0	ng/L		02/15/25 17:02	02/16/25 22:05	1

Surrogate	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	104		70 - 130	02/15/25 17:02	02/16/25 22:05	1
13C2 PFHxA	108		70 - 130	02/15/25 17:02	02/16/25 22:05	1
13C2 PFDA	108		70 - 130	02/15/25 17:02	02/16/25 22:05	1
13C3-GenX	104		70 - 130	02/15/25 17:02	02/16/25 22:05	1

Lab Sample ID: LCS 380-135573/22-A
Matrix: Water
Analysis Batch: 135595

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 135573

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	25.1	27.0		ng/L		108	70 - 130
Perfluorooctanesulfonic acid (PFOS)	25.1	27.4		ng/L		109	70 - 130
Perfluoroundecanoic acid (PFUnA)	25.1	26.2		ng/L		105	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	25.1	27.6		ng/L		110	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	25.1	28.3		ng/L		113	70 - 130
Perfluorohexanoic acid (PFHxA)	25.1	27.9		ng/L		111	70 - 130
Perfluorododecanoic acid (PFDoA)	25.1	25.9		ng/L		103	70 - 130
Perfluorooctanoic acid (PFOA)	25.1	26.8		ng/L		107	70 - 130
Perfluorodecanoic acid (PFDA)	25.1	26.6		ng/L		106	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	25.1	28.2		ng/L		113	70 - 130
Perfluorobutanesulfonic acid (PFBS)	25.1	27.0		ng/L		108	70 - 130
Perfluoroheptanoic acid (PFHpA)	25.1	28.0		ng/L		112	70 - 130
Perfluorononanoic acid (PFNA)	25.1	26.1		ng/L		104	70 - 130
Perfluorotetradecanoic acid (PFTA)	25.1	27.4		ng/L		109	70 - 130
Perfluorotridecanoic acid (PFTTrDA)	25.1	25.6		ng/L		102	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	25.1	27.3		ng/L		109	70 - 130
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	25.1	26.7		ng/L		106	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	25.1	27.0		ng/L		108	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
d5-NEtFOSAA	115		70 - 130
13C2 PFHxA	114		70 - 130
13C2 PFDA	108		70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-135345-1
SDG: Weekly PFAS

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

Lab Sample ID: LCS 380-135573/22-A
Matrix: Water
Analysis Batch: 135595

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 135573

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
13C3-GenX	112		70 - 130

Lab Sample ID: MRL 380-135573/21-A
Matrix: Water
Analysis Batch: 135595

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 135573

Analyte	Spike Added	MRL MRL		Unit	D	%Rec	Limits
		Result	Qualifier				
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.00	1.97	J	ng/L		98	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.00	2.15	J	ng/L		107	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.00	2.07	J	ng/L		103	50 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2.00	2.21	J	ng/L		110	50 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2.00	2.33	J	ng/L		116	50 - 150
Perfluorohexanoic acid (PFHxA)	2.00	2.07	J	ng/L		103	50 - 150
Perfluorododecanoic acid (PFDoA)	2.00	2.09	J	ng/L		104	50 - 150
Perfluorooctanoic acid (PFOA)	2.00	2.00	J	ng/L		100	50 - 150
Perfluorodecanoic acid (PFDA)	2.00	2.15	J	ng/L		108	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.00	2.18	J	ng/L		109	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.00	2.07	J	ng/L		103	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.00	2.18	J	ng/L		109	50 - 150
Perfluorononanoic acid (PFNA)	2.00	2.12	J	ng/L		106	50 - 150
Perfluorotetradecanoic acid (PFTA)	2.00	2.41	J	ng/L		121	50 - 150
Perfluorotridecanoic acid (PFTrDA)	2.00	2.12	J	ng/L		106	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.00	2.14	J	ng/L		107	50 - 150
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.00	1.99	J	ng/L		99	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.00	2.12	J	ng/L		106	50 - 150

Surrogate	MRL MRL		Limits
	%Recovery	Qualifier	
d5-NEtFOSAA	111		70 - 130
13C2 PFHxA	115		70 - 130
13C2 PFDA	109		70 - 130
13C3-GenX	111		70 - 130

QC Sample Results

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

Job ID: 380-135345-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-135782-B-1-A MS
Matrix: Water
Analysis Batch: 135595

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 135573

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier					
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		50.3	55.8		ng/L		111		70 - 130
Perfluorooctanesulfonic acid (PFOS)	<2.0		50.3	56.7		ng/L		113		70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		50.3	53.6		ng/L		106		70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		50.3	54.5		ng/L		108		70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		50.3	55.0		ng/L		109		70 - 130
Perfluorohexanoic acid (PFHxA)	<2.0		50.3	55.7		ng/L		111		70 - 130
Perfluorododecanoic acid (PFDoA)	<2.0		50.3	52.0		ng/L		103		70 - 130
Perfluorooctanoic acid (PFOA)	<2.0		50.3	54.2		ng/L		108		70 - 130
Perfluorodecanoic acid (PFDA)	<2.0		50.3	54.1		ng/L		108		70 - 130
Perfluorohexanesulfonic acid (PFHxS)	<2.0		50.3	58.0		ng/L		114		70 - 130
Perfluorobutanesulfonic acid (PFBS)	<2.0		50.3	55.6		ng/L		111		70 - 130
Perfluoroheptanoic acid (PFHpA)	<2.0		50.3	55.6		ng/L		111		70 - 130
Perfluorononanoic acid (PFNA)	<2.0		50.3	53.5		ng/L		106		70 - 130
Perfluorotetradecanoic acid (PFTA)	<2.0		50.3	55.4		ng/L		110		70 - 130
Perfluorotridecanoic acid (PFTrDA)	<2.0		50.3	52.0		ng/L		103		70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		50.3	57.0		ng/L		113		70 - 130
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		50.3	54.2		ng/L		108		70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		50.3	55.7		ng/L		111		70 - 130

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
d5-NEtFOSAA	106		70 - 130
13C2 PFHxA	115		70 - 130
13C2 PFDA	110		70 - 130
13C3-GenX	112		70 - 130

Lab Sample ID: 380-135782-C-1-A MSD
Matrix: Water
Analysis Batch: 135595

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 135573

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	Limits	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier							
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		50.3	51.3		ng/L		102		70 - 130	8	30
Perfluorooctanesulfonic acid (PFOS)	<2.0		50.3	54.0		ng/L		107		70 - 130	5	30
Perfluoroundecanoic acid (PFUnA)	<2.0		50.3	53.3		ng/L		106		70 - 130	0	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		50.3	54.0		ng/L		107		70 - 130	1	30

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-135345-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-135782-C-1-A MSD

Matrix: Water

Analysis Batch: 135595

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 135573

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		
N-ethylperfluorooctanesulfonamide acetic acid (NEtFOSAA)	<2.0		50.3	53.9		ng/L		107	70 - 130	2	30
Perfluorohexanoic acid (PFHxA)	<2.0		50.3	53.5		ng/L		106	70 - 130	4	30
Perfluorododecanoic acid (PFDoA)	<2.0		50.3	53.2		ng/L		106	70 - 130	2	30
Perfluorooctanoic acid (PFOA)	<2.0		50.3	55.4		ng/L		110	70 - 130	2	30
Perfluorodecanoic acid (PFDA)	<2.0		50.3	54.2		ng/L		108	70 - 130	0	30
Perfluorohexanesulfonic acid (PFHxS)	<2.0		50.3	56.5		ng/L		111	70 - 130	3	30
Perfluorobutanesulfonic acid (PFBS)	<2.0		50.3	53.2		ng/L		106	70 - 130	5	30
Perfluoroheptanoic acid (PFHpA)	<2.0		50.3	57.9		ng/L		115	70 - 130	4	30
Perfluorononanoic acid (PFNA)	<2.0		50.3	54.3		ng/L		108	70 - 130	1	30
Perfluorotetradecanoic acid (PFTA)	<2.0		50.3	54.7		ng/L		109	70 - 130	1	30
Perfluorotridecanoic acid (PFTrDA)	<2.0		50.3	51.7		ng/L		103	70 - 130	1	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<2.0		50.3	55.3		ng/L		110	70 - 130	3	30
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		50.3	52.9		ng/L		105	70 - 130	2	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		50.3	55.8		ng/L		111	70 - 130	0	30
Surrogate		MSD	MSD								
		%Recovery	Qualifier	Limits							
d5-NEtFOSAA		106		70 - 130							
13C2 PFHxA		110		70 - 130							
13C2 PFDA		109		70 - 130							
13C3-GenX		107		70 - 130							

QC Association Summary

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

Job ID: 380-135345-1
SDG: Weekly PFAS

LCMS

Prep Batch: 135396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-135345-1	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	537.1 DW	
380-135345-2	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	Total/NA	Drinking Water	537.1 DW	
380-135345-3	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Total/NA	Drinking Water	537.1 DW	
380-135345-4	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP072)	Total/NA	Drinking Water	537.1 DW	
380-135345-5	KA'AMILO WELLS	Total/NA	Water	537.1 DW	
380-135345-6	FB: HALAWA WELLS UNITS 1&2 (331-206-TP06)	Total/NA	Water	537.1 DW	
380-135345-7	FB:AIEA GULCH WELLS P1 (331-201-TP071)	Total/NA	Water	537.1 DW	
380-135345-8	FB:AIEA GULCH WELLS P2 (331-202-TP072)	Total/NA	Water	537.1 DW	
380-135345-10	FB: KA'AMILO WELLS	Total/NA	Water	537.1 DW	
MBL 380-135396/22-A	Method Blank	Total/NA	Water	537.1 DW	
LCS 380-135396/24-A	Lab Control Sample	Total/NA	Water	537.1 DW	
MRL 380-135396/23-A	Lab Control Sample	Total/NA	Water	537.1 DW	
380-135363-AF-1-A MS	Matrix Spike	Total/NA	Water	537.1 DW	
380-135363-AG-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	537.1 DW	

Prep Batch: 135405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-135345-1	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	533	
380-135345-2	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	Total/NA	Drinking Water	533	
380-135345-3	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Total/NA	Drinking Water	533	
380-135345-4	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP072)	Total/NA	Drinking Water	533	
380-135345-5	KA'AMILO WELLS	Total/NA	Water	533	
380-135345-6	FB: HALAWA WELLS UNITS 1&2 (331-206-TP06)	Total/NA	Water	533	
380-135345-7	FB:AIEA GULCH WELLS P1 (331-201-TP071)	Total/NA	Water	533	
380-135345-8	FB:AIEA GULCH WELLS P2 (331-202-TP072)	Total/NA	Water	533	
380-135345-9	FB: AIEA WELLS PUMPS 1&2 (260) (331-203-TF072)	Total/NA	Water	533	
380-135345-10	FB: KA'AMILO WELLS	Total/NA	Water	533	
MBL 380-135405/20-A	Method Blank	Total/NA	Water	533	
LCS 380-135405/22-A	Lab Control Sample	Total/NA	Water	533	
MRL 380-135405/21-A	Lab Control Sample	Total/NA	Water	533	
380-135343-E-1-A MS	Matrix Spike	Total/NA	Water	533	
380-135343-F-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	533	

Analysis Batch: 135554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-135345-1	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	537.1	135396
380-135345-2	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	Total/NA	Drinking Water	537.1	135396
380-135345-3	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Total/NA	Drinking Water	537.1	135396
380-135345-4	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP072)	Total/NA	Drinking Water	537.1	135396
380-135345-5	KA'AMILO WELLS	Total/NA	Water	537.1	135396
380-135345-6	FB: HALAWA WELLS UNITS 1&2 (331-206-TP06)	Total/NA	Water	537.1	135396
380-135345-7	FB:AIEA GULCH WELLS P1 (331-201-TP071)	Total/NA	Water	537.1	135396
380-135345-8	FB:AIEA GULCH WELLS P2 (331-202-TP072)	Total/NA	Water	537.1	135396
380-135345-10	FB: KA'AMILO WELLS	Total/NA	Water	537.1	135396
MBL 380-135396/22-A	Method Blank	Total/NA	Water	537.1	135396
LCS 380-135396/24-A	Lab Control Sample	Total/NA	Water	537.1	135396
MRL 380-135396/23-A	Lab Control Sample	Total/NA	Water	537.1	135396
380-135363-AF-1-A MS	Matrix Spike	Total/NA	Water	537.1	135396
380-135363-AG-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	537.1	135396

QC Association Summary

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

Job ID: 380-135345-1
SDG: Weekly PFAS

LCMS

Prep Batch: 135573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-135345-9	FB: AIEA WELLS PUMPS 1&2 (260) (331-203-TF	Total/NA	Water	537.1 DW	
MBL 380-135573/20-A	Method Blank	Total/NA	Water	537.1 DW	
LCS 380-135573/22-A	Lab Control Sample	Total/NA	Water	537.1 DW	
MRL 380-135573/21-A	Lab Control Sample	Total/NA	Water	537.1 DW	
380-135782-B-1-A MS	Matrix Spike	Total/NA	Water	537.1 DW	
380-135782-C-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	537.1 DW	

Analysis Batch: 135583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-135345-1	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP06	Total/NA	Drinking Water	533	135405
380-135345-2	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	Total/NA	Drinking Water	533	135405
380-135345-3	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Total/NA	Drinking Water	533	135405
380-135345-4	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP	Total/NA	Drinking Water	533	135405
380-135345-5	KA'AMILO WELLS	Total/NA	Water	533	135405
380-135345-6	FB: HALAWA WELLS UNITS 1&2 (331-206-TP06	Total/NA	Water	533	135405
380-135345-7	FB:AIEA GULCH WELLS P1 (331-201-TP071)	Total/NA	Water	533	135405
380-135345-8	FB:AIEA GULCH WELLS P2 (331-202-TP072)	Total/NA	Water	533	135405
380-135345-9	FB: AIEA WELLS PUMPS 1&2 (260) (331-203-TF	Total/NA	Water	533	135405
380-135345-10	FB: KA'AMILO WELLS	Total/NA	Water	533	135405
MBL 380-135405/20-A	Method Blank	Total/NA	Water	533	135405
LCS 380-135405/22-A	Lab Control Sample	Total/NA	Water	533	135405
MRL 380-135405/21-A	Lab Control Sample	Total/NA	Water	533	135405
380-135343-E-1-A MS	Matrix Spike	Total/NA	Water	533	135405
380-135343-F-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	533	135405

Analysis Batch: 135595

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-135345-9	FB: AIEA WELLS PUMPS 1&2 (260) (331-203-TF	Total/NA	Water	537.1	135573
MBL 380-135573/20-A	Method Blank	Total/NA	Water	537.1	135573
LCS 380-135573/22-A	Lab Control Sample	Total/NA	Water	537.1	135573
MRL 380-135573/21-A	Lab Control Sample	Total/NA	Water	537.1	135573
380-135782-B-1-A MS	Matrix Spike	Total/NA	Water	537.1	135573
380-135782-C-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	537.1	135573

Lab Chronicle

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

Job ID: 380-135345-1
 SDG: Weekly PFAS

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

Lab Sample ID: 380-135345-1

Date Collected: 02/10/25 10:17

Matrix: Drinking Water

Date Received: 02/12/25 09:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			135405	N8NE	EA POM	02/14/25 17:39
Total/NA	Analysis	533		1	135583	M7ML	EA POM	02/16/25 19:58
Total/NA	Prep	537.1 DW			135396	E9PK	EA POM	02/14/25 17:00
Total/NA	Analysis	537.1		1	135554	M7ML	EA POM	02/15/25 23:33

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

Lab Sample ID: 380-135345-2

Date Collected: 02/10/25 10:44

Matrix: Drinking Water

Date Received: 02/12/25 09:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			135405	N8NE	EA POM	02/14/25 17:39
Total/NA	Analysis	533		1	135583	M7ML	EA POM	02/16/25 20:07
Total/NA	Prep	537.1 DW			135396	E9PK	EA POM	02/14/25 17:00
Total/NA	Analysis	537.1		1	135554	M7ML	EA POM	02/15/25 23:43

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

Lab Sample ID: 380-135345-3

Date Collected: 02/10/25 11:00

Matrix: Drinking Water

Date Received: 02/12/25 09:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			135405	N8NE	EA POM	02/14/25 17:39
Total/NA	Analysis	533		1	135583	M7ML	EA POM	02/16/25 20:17
Total/NA	Prep	537.1 DW			135396	E9PK	EA POM	02/14/25 17:00
Total/NA	Analysis	537.1		1	135554	M7ML	EA POM	02/15/25 23:54

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

Lab Sample ID: 380-135345-4

Date Collected: 02/10/25 11:22

Matrix: Drinking Water

Date Received: 02/12/25 09:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			135405	N8NE	EA POM	02/14/25 17:39
Total/NA	Analysis	533		1	135583	M7ML	EA POM	02/16/25 20:36
Total/NA	Prep	537.1 DW			135396	E9PK	EA POM	02/14/25 17:00
Total/NA	Analysis	537.1		1	135554	M7ML	EA POM	02/16/25 00:05

Lab Chronicle

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

Job ID: 380-135345-1
SDG: Weekly PFAS

Client Sample ID: KA'AMILO WELLS

Lab Sample ID: 380-135345-5

Date Collected: 02/10/25 11:47

Matrix: Water

Date Received: 02/12/25 09:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			135405	N8NE	EA POM	02/14/25 17:39
Total/NA	Analysis	533		1	135583	M7ML	EA POM	02/16/25 20:46
Total/NA	Prep	537.1 DW			135396	E9PK	EA POM	02/14/25 17:00
Total/NA	Analysis	537.1		1	135554	M7ML	EA POM	02/16/25 00:16

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

Lab Sample ID: 380-135345-6

Date Collected: 02/10/25 10:17

Matrix: Water

Date Received: 02/12/25 09:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			135405	N8NE	EA POM	02/14/25 17:39
Total/NA	Analysis	533		1	135583	M7ML	EA POM	02/16/25 20:55
Total/NA	Prep	537.1 DW			135396	E9PK	EA POM	02/14/25 17:00
Total/NA	Analysis	537.1		1	135554	M7ML	EA POM	02/16/25 00:27

Client Sample ID: FB:AIEA GULCH WELLS P1 (331-201-TP071)

Lab Sample ID: 380-135345-7

Date Collected: 02/10/25 10:44

Matrix: Water

Date Received: 02/12/25 09:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			135405	N8NE	EA POM	02/14/25 17:39
Total/NA	Analysis	533		1	135583	M7ML	EA POM	02/16/25 21:05
Total/NA	Prep	537.1 DW			135396	E9PK	EA POM	02/14/25 17:00
Total/NA	Analysis	537.1		1	135554	M7ML	EA POM	02/16/25 00:48

Client Sample ID: FB:AIEA GULCH WELLS P2 (331-202-TP072)

Lab Sample ID: 380-135345-8

Date Collected: 02/10/25 11:00

Matrix: Water

Date Received: 02/12/25 09:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			135405	N8NE	EA POM	02/14/25 17:39
Total/NA	Analysis	533		1	135583	M7ML	EA POM	02/16/25 21:14
Total/NA	Prep	537.1 DW			135396	E9PK	EA POM	02/14/25 17:00
Total/NA	Analysis	537.1		1	135554	M7ML	EA POM	02/16/25 00:59

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

Lab Sample ID: 380-135345-9

Date Collected: 02/10/25 11:22

Matrix: Water

Date Received: 02/12/25 09:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			135405	N8NE	EA POM	02/14/25 17:39
Total/NA	Analysis	533		1	135583	M7ML	EA POM	02/16/25 21:24
Total/NA	Prep	537.1 DW			135573	E9PK	EA POM	02/15/25 17:02
Total/NA	Analysis	537.1		1	135595	SZ9R	EA POM	02/16/25 23:03

Eurofins Eaton Analytical Pomona

Lab Chronicle

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

Job ID: 380-135345-1
SDG: Weekly PFAS

Client Sample ID: FB: KA'AMILO WELLS

Lab Sample ID: 380-135345-10

Date Collected: 02/10/25 11:47

Matrix: Water

Date Received: 02/12/25 09:44

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			135405	N8NE	EA POM	02/14/25 17:39
Total/NA	Analysis	533		1	135583	M7ML	EA POM	02/16/25 21:33
Total/NA	Prep	537.1 DW			135396	E9PK	EA POM	02/14/25 17:00
Total/NA	Analysis	537.1		1	135554	M7ML	EA POM	02/16/25 01:10

Laboratory References:

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

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Accreditation/Certification Summary

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

Job ID: 380-135345-1
 SDG: Weekly PFAS

Laboratory: Eurofins Eaton Analytical Pomona

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	ISO/IEC 17025	5890.01 & 5890.02	06-30-25
Alabama	State	41060	06-18-25
Arizona	State	AZ0833	02-26-25
Arkansas (DW)	State	CA00006	01-31-25 *
California	State	2813	06-18-25
Colorado	State	CA00006	01-31-26
Connecticut	State	PH-0107	03-31-26
Delaware (DW)	State	CA00006	01-31-26
Florida	NELAP	E871024	06-30-25
Georgia (DW)	State	947	01-31-25 *
Guam	State	24-03R	03-31-25
Hawaii	State	CA00006	01-31-25 *
Hawaii (Micro)	State	CA00006	01-31-25 *
Idaho (DW)	State	CA00006	01-31-26
Idaho (Micro)	State	CA00006	03-31-25
Illinois	NELAP	200033	03-31-25
Indiana	State	C-CA-01	06-18-25
Kansas	NELAP	E-10268	04-30-25
Kentucky (DW)	State	KY90107	12-31-25
Louisiana (DW)	State	LA008	12-31-25
Maine	State	CA00006A	03-08-26
Maryland	State	224	03-31-25
Massachusetts	State	M-CA006	06-30-25
MI - RadChem Recognition	State	9906	06-18-25
Michigan	State	9906	06-18-25
Mississippi	State	CA2813	06-18-25
Montana (DW)	State	CERT0035	01-01-26
Nebraska	State	NE-OS-21-13	01-31-25 *
Nevada	State	CA00006	07-31-25
New Hampshire	NELAP	2959	03-29-25
New Jersey	NELAP	CA008	06-30-25
New Mexico	State	CA00006	01-31-26
New York	NELAP	11320	04-01-25
North Carolina (DW)	State	06701	07-31-25
North Dakota	State	R-009	01-31-24 *
Northern Mariana Islands (DW)	State	CA00006	01-31-25 *
Ohio	State	87786	01-31-25 *
Oregon	NELAP	4034	01-29-26
Pennsylvania	NELAP	68-00565	10-31-25
Puerto Rico	State	CA00006	03-31-25
Rhode Island	State	LAO00381	12-30-25
South Dakota (DW)	State	CA11320	06-18-25
Tennessee	State	TN02839	01-31-25 *
Texas	NELAP	T104704230	09-30-25
USEPA UCMR 5	US Federal Programs	CA00006	12-31-25
Utah	NELAP	CA00006	01-31-26
Vermont	State	VT-0114	12-28-25
Virginia	NELAP	460260	06-14-25
Washington	State	C838	03-13-25
Wyoming	State	8-TMS-L	06-18-25

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

Eurofins Eaton Analytical Pomona

Method Summary

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

Job ID: 380-135345-1
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

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Sample Summary

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

Job ID: 380-135345-1
 SDG: Weekly PFAS

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	PWSID Number
380-135345-1	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	Drinking Water	02/10/25 10:17	02/12/25 09:44	HI0000331
380-135345-2	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	Drinking Water	02/10/25 10:44	02/12/25 09:44	HI0000331
380-135345-3	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Drinking Water	02/10/25 11:00	02/12/25 09:44	HI0000331
380-135345-4	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP400)	Drinking Water	02/10/25 11:22	02/12/25 09:44	HI0000331
380-135345-5	KA'AMILO WELLS	Water	02/10/25 11:47	02/12/25 09:44	HI0000331
380-135345-6	FB: HALAWA WELLS UNITS 1&2 (331-206-TP065)	Water	02/10/25 10:17	02/12/25 09:44	HI0000331
380-135345-7	FB:AIEA GULCH WELLS P1 (331-201-TP071)	Water	02/10/25 10:44	02/12/25 09:44	HI0000331
380-135345-8	FB:AIEA GULCH WELLS P2 (331-202-TP072)	Water	02/10/25 11:00	02/12/25 09:44	HI0000331
380-135345-9	FB: AIEA WELLS PUMPS 1&2 (260) (331-203-TP400)	Water	02/10/25 11:22	02/12/25 09:44	HI0000331
380-135345-10	FB: KA'AMILO WELLS	Water	02/10/25 11:47	02/12/25 09:44	HI0000331

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

Chain of Custody Record



Client Information		Lab PM: Arada, Rachelle	Carrier Tracking No(s): 380-27941-2757 2																						
Client Contact: kirk Iwamoto		E-Mail: Rachelle.Arada@eurofins.com	Page: Page 2 of 2																						
City & County of Honolulu		PWSID:	Job #:																						
Address: 630 South Beretania Street, Chemistry Lab		Analysis Requested																							
City: Honolulu		Preservation Codes: M Hexane N None O AsNaO2 P Na2CO3 Q Na2SO3 R Na2SO4 S H2SO4 T - TSP Dodecahydrate U Acetone V - MCAA W pH 4-5 Y Trizma Z - other (specify) Other:																							
State, Zip: HI 96843		Total Number of Containers: <input checked="" type="checkbox"/>																							
Phone: 808-748-5840 (tel)		Special Instructions/Note:																							
Email: kiwamoto@hbws.org		chlorinated																							
Project Name: RED-HILL/HBWS sites Event Desc: RUSH Weekly Red Hill		chlorinated																							
Site:		chlorinated																							
Due Date Requested:		380-135345 COC																							
TAT Requested (days):		<table border="1"> <thead> <tr> <th>Field Filtered Sample (Yes or No)</th> <th>Form MS/MSD (Yes or No)</th> <th>Subcontract 625 PAH Physis LL (EAL) + TICs</th> <th>80158_GRO_LL (MOD) GRO</th> <th>80158_GRO_LL_CS HNL Ranges C10-C24/C24-C36/C8</th> <th>525.2.PREC (MOD) 625plus PLUS TICs</th> <th>537.1.DW.PREC 637.1 Full List</th> <th>533 All Analytes</th> </tr> <tr> <th>R</th> <th>A</th> <th>Q</th> <th>OA</th> <th>Y</th> <th>I</th> </tr> </thead> <tbody> <tr> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> </tbody> </table>		Field Filtered Sample (Yes or No)	Form MS/MSD (Yes or No)	Subcontract 625 PAH Physis LL (EAL) + TICs	80158_GRO_LL (MOD) GRO	80158_GRO_LL_CS HNL Ranges C10-C24/C24-C36/C8	525.2.PREC (MOD) 625plus PLUS TICs	537.1.DW.PREC 637.1 Full List	533 All Analytes	R	A	Q	OA	Y	I	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Field Filtered Sample (Yes or No)	Form MS/MSD (Yes or No)	Subcontract 625 PAH Physis LL (EAL) + TICs	80158_GRO_LL (MOD) GRO	80158_GRO_LL_CS HNL Ranges C10-C24/C24-C36/C8	525.2.PREC (MOD) 625plus PLUS TICs	537.1.DW.PREC 637.1 Full List	533 All Analytes																		
R	A	Q	OA	Y	I																				
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Compliance Project: Δ No		Matrix (Water, Soil, Sediment, Other)																							
PO #: C20525101 exp 05312023		Sample Type (C=Comp, G=grab)																							
WO #: 38001111		Sample Time																							
Project #: 38001111		Sample Date																							
SSOW#:		Preservation Code:																							
Sample Identification		Sample Date																							
HALAWA WELLS UNITS 1&2		10-Feb-2025																							
AIEA GULCH WELLS PUMP 1		10-Feb-2025																							
AIEA GULCH WELLS PUMP 2		10-Feb-2025																							
AIEA WELLS PUMPS 1&2 (260) P2		10-Feb-2025																							
KA'AMILO WELLS		10-Feb-2025																							
FB HALAWA WELLS UNITS 1&2		10-Feb-2025																							
FB AIEA GULCH WELLS PUMP 1		10-Feb-2025																							
FB AIEA GULCH WELLS PUMP 2		10-Feb-2025																							
FB AIEA WELLS PUMPS 1&2 (260)		10-Feb-2025																							
FB KA'AMILO WELLS		10-Feb-2025																							
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological																									
Deliverable Requested I II III IV Other (specify)																									
Empty Kit Relinquished by																									
Date: 11 FEBRUARY 2025 1400																									
Company: HBWS																									
Date/Time: 2/12/25 9:44																									
Company: KEAP																									
Date/Time:																									
Company:																									
Date/Time:																									
Cooler Temperature (°C and Other Remarks): (B31A) 3.5+0.3 3 B gel-frozen																									



Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-135345-1

SDG Number: Weekly PFAS

Login Number: 135345

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	

