

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Erwin Kawata
City & County of Honolulu
630 South Beretania Street
Public Service Bldg. Room 310
Honolulu, Hawaii 96843

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JOB DESCRIPTION

RED-HILL
Weekly PFAS
RUSH Weekly Red Hill

JOB NUMBER

380-139197-1

Eurofins Eaton Analytical Pomona

Job Notes

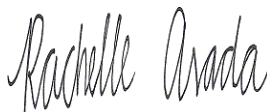
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The test results in this report relate only to the samples as received by the laboratory and meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval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

Compliance Statement

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

Authorization



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Authorized for release by
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Table of Contents

Cover Page 1

Table of Contents 3

Definitions/Glossary 4

Case Narrative 5

Detection Summary 6

Client Sample Results 7

Action Limit Summary 22

Surrogate Summary 26

Isotope Dilution Summary 27

QC Sample Results 29

QC Association Summary 40

Lab Chronicle 42

Certification Summary 44

Method Summary 45

Sample Summary 46

Chain of Custody 47

Receipt Checklists 48



Definitions/Glossary

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

Job ID: 380-139197-1
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: 380-139197-1

Job ID: 380-139197-1

Eurofins Eaton Analytical Pomona

Job Narrative 380-139197-1

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 3/5/2025 9:20 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.0°C.

PFAS

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

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Detection Summary

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

Job ID: 380-139197-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-139197-1

No Detections.

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

Lab Sample ID: 380-139197-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanesulfonic acid (PFHxS)	2.5		2.0	ng/L	1		533	Total/NA
Perfluorohexanoic acid (PFHxA)	2.1		2.0	ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.1		2.0	ng/L	1		533	Total/NA
Perfluoropentanoic acid (PFPeA)	2.4		2.0	ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.4		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)	2.6		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: 380-139197-3

No Detections.

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

Lab Sample ID: 380-139197-4

No Detections.

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

Lab Sample ID: 380-139197-5

No Detections.

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

Lab Sample ID: 380-139197-6

No Detections.

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

Lab Sample ID: 380-139197-7

No Detections.

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

Lab Sample ID: 380-139197-8

No Detections.

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: 380-139197-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-139197-1

Date Collected: 03/03/25 09:38

Matrix: Drinking Water

Date Received: 03/05/25 09:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid (11CI-PF3OUdS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:31	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9CI-PF3ONS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:31	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:31	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:31	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:31	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:31	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:31	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:31	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:31	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:31	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:31	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:31	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:31	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:31	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:31	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:31	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:31	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:31	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:31	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:31	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:31	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:31	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:31	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:31	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:31	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	106		50 - 200	03/10/25 06:55	03/10/25 22:31	1
13C6 PFDA	108		50 - 200	03/10/25 06:55	03/10/25 22:31	1
13C5 PFHxA	111		50 - 200	03/10/25 06:55	03/10/25 22:31	1
13C4 PFHpA	115		50 - 200	03/10/25 06:55	03/10/25 22:31	1
13C8 PFOA	114		50 - 200	03/10/25 06:55	03/10/25 22:31	1
13C9 PFNA	112		50 - 200	03/10/25 06:55	03/10/25 22:31	1
13C7 PFUnA	108		50 - 200	03/10/25 06:55	03/10/25 22:31	1
13C2 PFDoA	106		50 - 200	03/10/25 06:55	03/10/25 22:31	1
13C4 PFBA	114		50 - 200	03/10/25 06:55	03/10/25 22:31	1
13C5 PFPeA	114		50 - 200	03/10/25 06:55	03/10/25 22:31	1
13C3 PFBS	112		50 - 200	03/10/25 06:55	03/10/25 22:31	1
13C3 PFHxS	110		50 - 200	03/10/25 06:55	03/10/25 22:31	1
13C8 PFOS	116		50 - 200	03/10/25 06:55	03/10/25 22:31	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-139197-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-139197-1

Date Collected: 03/03/25 09:38

Matrix: Drinking Water

Date Received: 03/05/25 09:20

PWSID Number: HI0000331

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2-4:2-FTS	132		50 - 200	03/10/25 06:55	03/10/25 22:31	1
13C2-6:2-FTS	120		50 - 200	03/10/25 06:55	03/10/25 22:31	1
13C2-8:2-FTS	111		50 - 200	03/10/25 06:55	03/10/25 22:31	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 16:41	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 16:41	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 16:41	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 16:41	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 16:41	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 16:41	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 16:41	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 16:41	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 16:41	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 16:41	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 16:41	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 16:41	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 16:41	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 16:41	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 16:41	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 16:41	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 16:41	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 16:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	111		70 - 130			03/07/25 13:49	03/08/25 16:41	1
13C2 PFHxA	111		70 - 130			03/07/25 13:49	03/08/25 16:41	1
13C2 PFDA	111		70 - 130			03/07/25 13:49	03/08/25 16:41	1
13C3-GenX	101		70 - 130			03/07/25 13:49	03/08/25 16:41	1

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

Lab Sample ID: 380-139197-2

Date Collected: 03/03/25 10:00

Matrix: Drinking Water

Date Received: 03/05/25 09:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:51	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:51	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:51	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:51	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:51	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-139197-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-139197-2

Date Collected: 03/03/25 10:00

Matrix: Drinking Water

Date Received: 03/05/25 09:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:51	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:51	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:51	1
Perfluorohexanesulfonic acid (PFHxS)	2.5		2.0	ng/L		03/10/25 06:55	03/10/25 22:51	1
Perfluorohexanoic acid (PFHxA)	2.1		2.0	ng/L		03/10/25 06:55	03/10/25 22:51	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:51	1
Perfluorooctanesulfonic acid (PFOS)	2.1		2.0	ng/L		03/10/25 06:55	03/10/25 22:51	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:51	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:51	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:51	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:51	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:51	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:51	1
Nonfluoro-3,6-dioxahexanoic acid (NFDHA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:51	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:51	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:51	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:51	1
Perfluoropentanoic acid (PFPeA)	2.4		2.0	ng/L		03/10/25 06:55	03/10/25 22:51	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:51	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 22:51	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	102		50 - 200	03/10/25 06:55	03/10/25 22:51	1
13C6 PFDA	109		50 - 200	03/10/25 06:55	03/10/25 22:51	1
13C5 PFHxA	108		50 - 200	03/10/25 06:55	03/10/25 22:51	1
13C4 PFHpA	110		50 - 200	03/10/25 06:55	03/10/25 22:51	1
13C8 PFOA	113		50 - 200	03/10/25 06:55	03/10/25 22:51	1
13C9 PFNA	111		50 - 200	03/10/25 06:55	03/10/25 22:51	1
13C7 PFUnA	109		50 - 200	03/10/25 06:55	03/10/25 22:51	1
13C2 PFDoA	109		50 - 200	03/10/25 06:55	03/10/25 22:51	1
13C4 PFBA	112		50 - 200	03/10/25 06:55	03/10/25 22:51	1
13C5 PFPeA	117		50 - 200	03/10/25 06:55	03/10/25 22:51	1
13C3 PFBS	115		50 - 200	03/10/25 06:55	03/10/25 22:51	1
13C3 PFHxS	112		50 - 200	03/10/25 06:55	03/10/25 22:51	1
13C8 PFOS	119		50 - 200	03/10/25 06:55	03/10/25 22:51	1
13C2-4:2-FTS	141		50 - 200	03/10/25 06:55	03/10/25 22:51	1
13C2-6:2-FTS	126		50 - 200	03/10/25 06:55	03/10/25 22:51	1
13C2-8:2-FTS	117		50 - 200	03/10/25 06:55	03/10/25 22:51	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-139197-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-139197-2

Date Collected: 03/03/25 10:00

Matrix: Drinking Water

Date Received: 03/05/25 09:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:02	1
Perfluorooctanesulfonic acid (PFOS)	2.4		2.0	ng/L		03/07/25 13:49	03/08/25 17:02	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:02	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:02	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:02	1
Perfluorohexanoic acid (PFHxA)	2.2		2.0	ng/L		03/07/25 13:49	03/08/25 17:02	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:02	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:02	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:02	1
Perfluorohexanesulfonic acid (PFHxS)	2.6		2.0	ng/L		03/07/25 13:49	03/08/25 17:02	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:02	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:02	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:02	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:02	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:02	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:02	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:02	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	114		70 - 130			03/07/25 13:49	03/08/25 17:02	1
13C2 PFHxA	109		70 - 130			03/07/25 13:49	03/08/25 17:02	1
13C2 PFDA	115		70 - 130			03/07/25 13:49	03/08/25 17:02	1
13C3-GenX	102		70 - 130			03/07/25 13:49	03/08/25 17:02	1

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

Lab Sample ID: 380-139197-3

Date Collected: 03/03/25 10:28

Matrix: Drinking Water

Date Received: 03/05/25 09:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:02	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:02	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:02	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:02	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:02	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:02	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:02	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:02	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-139197-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-139197-3

Date Collected: 03/03/25 10:28

Matrix: Drinking Water

Date Received: 03/05/25 09:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:02	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:02	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:02	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:02	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:02	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:02	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:02	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:02	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:02	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:02	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:02	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:02	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:02	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:02	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:02	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:02	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:02	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	102		50 - 200	03/10/25 06:55	03/10/25 23:02	1
13C6 PFDA	105		50 - 200	03/10/25 06:55	03/10/25 23:02	1
13C5 PFHxA	108		50 - 200	03/10/25 06:55	03/10/25 23:02	1
13C4 PFHpA	110		50 - 200	03/10/25 06:55	03/10/25 23:02	1
13C8 PFOA	112		50 - 200	03/10/25 06:55	03/10/25 23:02	1
13C9 PFNA	110		50 - 200	03/10/25 06:55	03/10/25 23:02	1
13C7 PFUnA	105		50 - 200	03/10/25 06:55	03/10/25 23:02	1
13C2 PFDoA	104		50 - 200	03/10/25 06:55	03/10/25 23:02	1
13C4 PFBA	112		50 - 200	03/10/25 06:55	03/10/25 23:02	1
13C5 PFPeA	113		50 - 200	03/10/25 06:55	03/10/25 23:02	1
13C3 PFBS	114		50 - 200	03/10/25 06:55	03/10/25 23:02	1
13C3 PFHxS	112		50 - 200	03/10/25 06:55	03/10/25 23:02	1
13C8 PFOS	116		50 - 200	03/10/25 06:55	03/10/25 23:02	1
13C2-4:2-FTS	137		50 - 200	03/10/25 06:55	03/10/25 23:02	1
13C2-6:2-FTS	125		50 - 200	03/10/25 06:55	03/10/25 23:02	1
13C2-8:2-FTS	111		50 - 200	03/10/25 06:55	03/10/25 23:02	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		03/07/25 13:49	03/08/25 17:13	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:13	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:13	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-139197-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-139197-3

Date Collected: 03/03/25 10:28

Matrix: Drinking Water

Date Received: 03/05/25 09:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:13	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:13	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:13	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:13	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:13	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:13	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:13	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:13	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:13	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:13	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:13	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:13	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:13	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:13	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	110		70 - 130	03/07/25 13:49	03/08/25 17:13	1
13C2 PFHxA	111		70 - 130	03/07/25 13:49	03/08/25 17:13	1
13C2 PFDA	113		70 - 130	03/07/25 13:49	03/08/25 17:13	1
13C3-GenX	104		70 - 130	03/07/25 13:49	03/08/25 17:13	1

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

Lab Sample ID: 380-139197-4

Date Collected: 03/03/25 10:46

Matrix: Drinking Water

Date Received: 03/05/25 09:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:12	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:12	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:12	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:12	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:12	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:12	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:12	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:12	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:12	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:12	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:12	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:12	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:12	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-139197-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-139197-4

Date Collected: 03/03/25 10:46

Matrix: Drinking Water

Date Received: 03/05/25 09:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:12	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:12	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:12	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:12	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:12	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:12	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:12	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:12	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:12	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:12	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:12	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:12	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	105		50 - 200	03/10/25 06:55	03/10/25 23:12	1
13C6 PFDA	108		50 - 200	03/10/25 06:55	03/10/25 23:12	1
13C5 PFHxA	108		50 - 200	03/10/25 06:55	03/10/25 23:12	1
13C4 PFHpA	113		50 - 200	03/10/25 06:55	03/10/25 23:12	1
13C8 PFOA	113		50 - 200	03/10/25 06:55	03/10/25 23:12	1
13C9 PFNA	111		50 - 200	03/10/25 06:55	03/10/25 23:12	1
13C7 PFUnA	107		50 - 200	03/10/25 06:55	03/10/25 23:12	1
13C2 PFDoA	106		50 - 200	03/10/25 06:55	03/10/25 23:12	1
13C4 PFBA	113		50 - 200	03/10/25 06:55	03/10/25 23:12	1
13C5 PFPeA	116		50 - 200	03/10/25 06:55	03/10/25 23:12	1
13C3 PFBS	116		50 - 200	03/10/25 06:55	03/10/25 23:12	1
13C3 PFHxS	112		50 - 200	03/10/25 06:55	03/10/25 23:12	1
13C8 PFOS	117		50 - 200	03/10/25 06:55	03/10/25 23:12	1
13C2-4:2-FTS	131		50 - 200	03/10/25 06:55	03/10/25 23:12	1
13C2-6:2-FTS	123		50 - 200	03/10/25 06:55	03/10/25 23:12	1
13C2-8:2-FTS	108		50 - 200	03/10/25 06:55	03/10/25 23:12	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:22	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:22	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:22	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:22	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:22	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:22	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:22	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-139197-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-139197-4

Date Collected: 03/03/25 10:46

Matrix: Drinking Water

Date Received: 03/05/25 09:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:22	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:22	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:22	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:22	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:22	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:22	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:22	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:22	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:22	1
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:22	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	114		70 - 130			03/07/25 13:49	03/08/25 17:22	1
13C2 PFHxA	109		70 - 130			03/07/25 13:49	03/08/25 17:22	1
13C2 PFDA	110		70 - 130			03/07/25 13:49	03/08/25 17:22	1
13C3-GenX	102		70 - 130			03/07/25 13:49	03/08/25 17:22	1

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

Lab Sample ID: 380-139197-5

Date Collected: 03/03/25 09:38

Matrix: Water

Date Received: 03/05/25 09:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:22	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:22	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:22	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:22	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:22	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:22	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:22	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:22	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:22	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:22	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:22	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:22	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:22	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:22	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:22	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:22	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:22	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-139197-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-139197-5

Date Collected: 03/03/25 09:38

Matrix: Water

Date Received: 03/05/25 09:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:22	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:22	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:22	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:22	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:22	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:22	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:22	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:22	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	108		50 - 200			03/10/25 06:55	03/10/25 23:22	1
13C6 PFDA	109		50 - 200			03/10/25 06:55	03/10/25 23:22	1
13C5 PFHxA	114		50 - 200			03/10/25 06:55	03/10/25 23:22	1
13C4 PFHpA	115		50 - 200			03/10/25 06:55	03/10/25 23:22	1
13C8 PFOA	114		50 - 200			03/10/25 06:55	03/10/25 23:22	1
13C9 PFNA	111		50 - 200			03/10/25 06:55	03/10/25 23:22	1
13C7 PFUnA	108		50 - 200			03/10/25 06:55	03/10/25 23:22	1
13C2 PFDoA	107		50 - 200			03/10/25 06:55	03/10/25 23:22	1
13C4 PFBA	116		50 - 200			03/10/25 06:55	03/10/25 23:22	1
13C5 PFPeA	117		50 - 200			03/10/25 06:55	03/10/25 23:22	1
13C3 PFBS	116		50 - 200			03/10/25 06:55	03/10/25 23:22	1
13C3 PFHxS	113		50 - 200			03/10/25 06:55	03/10/25 23:22	1
13C8 PFOS	115		50 - 200			03/10/25 06:55	03/10/25 23:22	1
13C2-4:2-FTS	133		50 - 200			03/10/25 06:55	03/10/25 23:22	1
13C2-6:2-FTS	123		50 - 200			03/10/25 06:55	03/10/25 23:22	1
13C2-8:2-FTS	112		50 - 200			03/10/25 06:55	03/10/25 23:22	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:32	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:32	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:32	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:32	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:32	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:32	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:32	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:32	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:32	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:32	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:32	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:32	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:32	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:32	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-139197-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-139197-5

Date Collected: 03/03/25 09:38

Matrix: Water

Date Received: 03/05/25 09:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:32	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:32	1
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:32	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	109		70 - 130			03/07/25 13:49	03/08/25 17:32	1
13C2 PFHxA	108		70 - 130			03/07/25 13:49	03/08/25 17:32	1
13C2 PFDA	109		70 - 130			03/07/25 13:49	03/08/25 17:32	1
13C3-GenX	100		70 - 130			03/07/25 13:49	03/08/25 17:32	1

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

Lab Sample ID: 380-139197-6

Date Collected: 03/03/25 10:00

Matrix: Water

Date Received: 03/05/25 09:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:31	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:31	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:31	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:31	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:31	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:31	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:31	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:31	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:31	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:31	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:31	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:31	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:31	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:31	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:31	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:31	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:31	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:31	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:31	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:31	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:31	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-139197-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-139197-6

Date Collected: 03/03/25 10:00

Matrix: Water

Date Received: 03/05/25 09:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:31	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:31	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:31	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:31	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	107		50 - 200			03/10/25 06:55	03/10/25 23:31	1
13C6 PFDA	112		50 - 200			03/10/25 06:55	03/10/25 23:31	1
13C5 PFHxA	114		50 - 200			03/10/25 06:55	03/10/25 23:31	1
13C4 PFHpA	115		50 - 200			03/10/25 06:55	03/10/25 23:31	1
13C8 PFOA	116		50 - 200			03/10/25 06:55	03/10/25 23:31	1
13C9 PFNA	114		50 - 200			03/10/25 06:55	03/10/25 23:31	1
13C7 PFUnA	110		50 - 200			03/10/25 06:55	03/10/25 23:31	1
13C2 PFDoA	107		50 - 200			03/10/25 06:55	03/10/25 23:31	1
13C4 PFBA	112		50 - 200			03/10/25 06:55	03/10/25 23:31	1
13C5 PFPeA	114		50 - 200			03/10/25 06:55	03/10/25 23:31	1
13C3 PFBS	116		50 - 200			03/10/25 06:55	03/10/25 23:31	1
13C3 PFHxS	113		50 - 200			03/10/25 06:55	03/10/25 23:31	1
13C8 PFOS	117		50 - 200			03/10/25 06:55	03/10/25 23:31	1
13C2-4:2-FTS	133		50 - 200			03/10/25 06:55	03/10/25 23:31	1
13C2-6:2-FTS	130		50 - 200			03/10/25 06:55	03/10/25 23:31	1
13C2-8:2-FTS	110		50 - 200			03/10/25 06:55	03/10/25 23:31	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:42	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:42	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:42	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:42	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:42	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:42	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:42	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:42	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:42	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:42	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:42	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:42	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:42	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:42	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:42	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:42	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUDS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:42	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-139197-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-139197-6

Date Collected: 03/03/25 10:00

Matrix: Water

Date Received: 03/05/25 09:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	112		70 - 130			03/07/25 13:49	03/08/25 17:42	1
13C2 PFHxA	113		70 - 130			03/07/25 13:49	03/08/25 17:42	1
13C2 PFDA	113		70 - 130			03/07/25 13:49	03/08/25 17:42	1
13C3-GenX	104		70 - 130			03/07/25 13:49	03/08/25 17:42	1

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

Lab Sample ID: 380-139197-7

Date Collected: 03/03/25 10:28

Matrix: Water

Date Received: 03/05/25 09:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:41	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:41	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:41	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:41	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:41	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:41	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:41	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:41	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:41	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:41	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:41	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:41	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:41	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:41	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:41	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:41	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:41	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:41	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:41	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:41	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:41	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:41	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:41	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:41	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-139197-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-139197-7

Date Collected: 03/03/25 10:28

Matrix: Water

Date Received: 03/05/25 09:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:41	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	107		50 - 200			03/10/25 06:55	03/10/25 23:41	1
13C6 PFDA	112		50 - 200			03/10/25 06:55	03/10/25 23:41	1
13C5 PFHxA	113		50 - 200			03/10/25 06:55	03/10/25 23:41	1
13C4 PFHpA	116		50 - 200			03/10/25 06:55	03/10/25 23:41	1
13C8 PFOA	116		50 - 200			03/10/25 06:55	03/10/25 23:41	1
13C9 PFNA	114		50 - 200			03/10/25 06:55	03/10/25 23:41	1
13C7 PFUnA	110		50 - 200			03/10/25 06:55	03/10/25 23:41	1
13C2 PFDoA	107		50 - 200			03/10/25 06:55	03/10/25 23:41	1
13C4 PFBA	117		50 - 200			03/10/25 06:55	03/10/25 23:41	1
13C5 PFPeA	122		50 - 200			03/10/25 06:55	03/10/25 23:41	1
13C3 PFBS	115		50 - 200			03/10/25 06:55	03/10/25 23:41	1
13C3 PFHxS	112		50 - 200			03/10/25 06:55	03/10/25 23:41	1
13C8 PFOS	117		50 - 200			03/10/25 06:55	03/10/25 23:41	1
13C2-4:2-FTS	139		50 - 200			03/10/25 06:55	03/10/25 23:41	1
13C2-6:2-FTS	121		50 - 200			03/10/25 06:55	03/10/25 23:41	1
13C2-8:2-FTS	111		50 - 200			03/10/25 06:55	03/10/25 23:41	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:51	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:51	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:51	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:51	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:51	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:51	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:51	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:51	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:51	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:51	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:51	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:51	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:51	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:51	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:51	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:51	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:51	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 17:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	113		70 - 130			03/07/25 13:49	03/08/25 17:51	1
13C2 PFHxA	112		70 - 130			03/07/25 13:49	03/08/25 17:51	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-139197-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-139197-7

Date Collected: 03/03/25 10:28

Matrix: Water

Date Received: 03/05/25 09:20

PWSID Number: HI0000331

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFDA	110		70 - 130	03/07/25 13:49	03/08/25 17:51	1
13C3-GenX	102		70 - 130	03/07/25 13:49	03/08/25 17:51	1

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

Lab Sample ID: 380-139197-8

Date Collected: 03/03/25 10:46

Matrix: Water

Date Received: 03/05/25 09:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:51	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:51	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:51	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:51	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:51	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:51	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:51	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:51	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:51	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:51	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:51	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:51	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:51	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:51	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:51	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:51	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:51	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:51	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:51	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:51	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:51	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:51	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:51	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:51	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		03/10/25 06:55	03/10/25 23:51	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	107		50 - 200			03/10/25 06:55	03/10/25 23:51	1
13C6 PFDA	109		50 - 200			03/10/25 06:55	03/10/25 23:51	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-139197-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-139197-8

Date Collected: 03/03/25 10:46

Matrix: Water

Date Received: 03/05/25 09:20

PWSID Number: HI0000331

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C5 PFHxA	112		50 - 200	03/10/25 06:55	03/10/25 23:51	1
13C4 PFHpA	113		50 - 200	03/10/25 06:55	03/10/25 23:51	1
13C8 PFOA	112		50 - 200	03/10/25 06:55	03/10/25 23:51	1
13C9 PFNA	114		50 - 200	03/10/25 06:55	03/10/25 23:51	1
13C7 PFUnA	109		50 - 200	03/10/25 06:55	03/10/25 23:51	1
13C2 PFDoA	105		50 - 200	03/10/25 06:55	03/10/25 23:51	1
13C4 PFBA	114		50 - 200	03/10/25 06:55	03/10/25 23:51	1
13C5 PFPeA	114		50 - 200	03/10/25 06:55	03/10/25 23:51	1
13C3 PFBS	114		50 - 200	03/10/25 06:55	03/10/25 23:51	1
13C3 PFHxS	115		50 - 200	03/10/25 06:55	03/10/25 23:51	1
13C8 PFOS	120		50 - 200	03/10/25 06:55	03/10/25 23:51	1
13C2-4:2-FTS	133		50 - 200	03/10/25 06:55	03/10/25 23:51	1
13C2-6:2-FTS	126		50 - 200	03/10/25 06:55	03/10/25 23:51	1
13C2-8:2-FTS	111		50 - 200	03/10/25 06:55	03/10/25 23:51	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 18:01	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 18:01	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 18:01	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 18:01	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 18:01	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 18:01	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 18:01	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 18:01	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 18:01	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 18:01	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 18:01	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 18:01	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 18:01	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 18:01	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 18:01	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 18:01	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 18:01	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		03/07/25 13:49	03/08/25 18:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	114		70 - 130	03/07/25 13:49	03/08/25 18:01	1
13C2 PFHxA	109		70 - 130	03/07/25 13:49	03/08/25 18:01	1
13C2 PFDA	112		70 - 130	03/07/25 13:49	03/08/25 18:01	1
13C3-GenX	104		70 - 130	03/07/25 13:49	03/08/25 18:01	1

Eurofins Eaton Analytical Pomona

Action Limit Summary

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

Job ID: 380-139197-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-139197-1

Compliance Check

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

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

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

PWSID Number: HI0000331

Lab Sample ID: 380-139197-2

Compliance Check

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

Analyte	Result	Qualifier	Unit	EPAMCL Limit	RL	Method	Prep Type
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.5		ng/L	10	2.0	533	Total/NA
Perfluorononanoic acid (PFNA)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.1		ng/L	4	2.0	533	Total/NA
Perfluorooctanoic acid (PFOA)	<2.0		ng/L	4	2.0	533	Total/NA
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		ng/L	10	2.0	537.1	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.4		ng/L	4	2.0	537.1	Total/NA
Perfluorooctanoic acid (PFOA)	<2.0		ng/L	4	2.0	537.1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.6		ng/L	10	2.0	537.1	Total/NA
Perfluorononanoic acid (PFNA)	<2.0		ng/L	10	2.0	537.1	Total/NA

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

PWSID Number: HI0000331

Lab Sample ID: 380-139197-3

Compliance Check

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

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

Eurofins Eaton Analytical Pomona

Action Limit Summary

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

Job ID: 380-139197-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-139197-3

Compliance Check

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

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

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

Lab Sample ID: 380-139197-4

Compliance Check

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

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

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

Lab Sample ID: 380-139197-5

Compliance Check

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

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

Eurofins Eaton Analytical Pomona

Action Limit Summary

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

Job ID: 380-139197-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-139197-5

(Continued)

PWSID Number: HI0000331

Compliance Check

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

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

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

Lab Sample ID: 380-139197-6

(331-206-TP065)

PWSID Number: HI0000331

Compliance Check

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

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

Client Sample ID: FB: AIEA GULCH WELLS PUMP 1

Lab Sample ID: 380-139197-7

(331-201-TP071)

PWSID Number: HI0000331

Compliance Check

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

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

Eurofins Eaton Analytical Pomona

Action Limit Summary

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

Job ID: 380-139197-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-139197-7

Compliance Check

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

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

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

Lab Sample ID: 380-139197-8

Compliance Check

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

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

Surrogate Summary

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

Job ID: 380-139197-1
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)
380-139197-1	MOANALUA WELLS (331-223-T	111	111	111	101
380-139197-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	114	109	115	102
380-139197-3	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	110	111	113	104
380-139197-4	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	114	109	110	102

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)
380-139180-B-1-A MS	Matrix Spike	111	109	111	103
380-139180-C-1-A MSD	Matrix Spike Duplicate	112	111	112	103
380-139197-5	FB: MOANALUA WELLS (331-223-TP202)	109	108	109	100
380-139197-6	FB: HALAWA WELLS UNITS 1 & 2 (331-206-TP065)	112	113	113	104
380-139197-7	FB: AIEA GULCH WELLS PUMF 1 (331-201-TP071)	113	112	110	102
380-139197-8	FB: AIEA GULCH WELLS PUMF 2 (331-202-TP072)	114	109	112	104
LCS 380-140601/22-A	Lab Control Sample	109	107	106	100
MBL 380-140601/20-A	Method Blank	115	105	112	98
MRL 380-140601/21-A	Lab Control Sample	105	108	111	98

Surrogate Legend

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

Isotope Dilution Summary

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

Job ID: 380-139197-1
SDG: Weekly PFAS

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

Matrix: Drinking Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	HFPODA (50-200)	C6PFDA (50-200)	13C5PHA (50-200)	C4PFHA (50-200)	C8PFOA (50-200)	C9PFNA (50-200)	13C7PUA (50-200)	PFDaA (50-200)
380-139197-1	MOANALUA WELLS (331-223-T	106	108	111	115	114	112	108	106
380-139197-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	102	109	108	110	113	111	109	109
380-139197-3	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	102	105	108	110	112	110	105	104
380-139197-4	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	105	108	108	113	113	111	107	106

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)
380-139197-1	MOANALUA WELLS (331-223-T	114	114	112	110	116	132	120	111
380-139197-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	112	117	115	112	119	141	126	117
380-139197-3	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	112	113	114	112	116	137	125	111
380-139197-4	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	113	116	116	112	117	131	123	108

Surrogate Legend

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

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

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	HFPODA (50-200)	C6PFDA (50-200)	13C5PHA (50-200)	C4PFHA (50-200)	C8PFOA (50-200)	C9PFNA (50-200)	13C7PUA (50-200)	PFDaA (50-200)
380-139166-B-1-A MS	Matrix Spike	107	112	110	115	112	114	111	109
380-139166-B-1-B MSD	Matrix Spike Duplicate	108	112	110	114	117	116	111	110
380-139197-5	FB: MOANALUA WELLS (331-223-TP202)	108	109	114	115	114	111	108	107
380-139197-6	FB: HALAWA WELLS UNITS 1 & 2 (331-206-TP065)	107	112	114	115	116	114	110	107
380-139197-7	FB: AIEA GULCH WELLS PUMF 1 (331-201-TP071)	107	112	113	116	116	114	110	107
380-139197-8	FB: AIEA GULCH WELLS PUMF 2 (331-202-TP072)	107	109	112	113	112	114	109	105
LCS 380-140828/22-A	Lab Control Sample	111	115	115	118	119	120	113	110

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Isotope Dilution Summary

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

Job ID: 380-139197-1
SDG: Weekly PFAS

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

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	HFPODA (50-200)	C6PFDA (50-200)	13C5PHA (50-200)	C4PFHA (50-200)	C8PFOA (50-200)	C9PFNA (50-200)	13C7PUA (50-200)	PFDaA (50-200)
MBL 380-140828/20-A	Method Blank	109	115	119	118	119	117	112	110
MRL 380-140828/21-A	Lab Control Sample	113	115	121	118	120	119	114	111

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)
380-139166-B-1-A MS	Matrix Spike	114	113	116	115	120	129	130	121
380-139166-B-1-B MSD	Matrix Spike Duplicate	115	116	114	112	119	128	122	114
380-139197-5	FB: MOANALUA WELLS (331-223-TP202)	116	117	116	113	115	133	123	112
380-139197-6	FB: HALAWA WELLS UNITS 1 & 2 (331-206-TP065)	112	114	116	113	117	133	130	110
380-139197-7	FB: AIEA GULCH WELLS PUMF 1 (331-201-TP071)	117	122	115	112	117	139	121	111
380-139197-8	FB: AIEA GULCH WELLS PUMF 2 (331-202-TP072)	114	114	114	115	120	133	126	111
LCS 380-140828/22-A	Lab Control Sample	117	119	122	120	127	132	133	125
MBL 380-140828/20-A	Method Blank	117	123	119	115	120	139	127	112
MRL 380-140828/21-A	Lab Control Sample	119	117	122	120	124	130	129	117

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: 380-139197-1
SDG: Weekly PFAS

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

Lab Sample ID: MBL 380-140828/20-A

Matrix: Water

Analysis Batch: 141017

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 140828

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<0.30		2.0	ng/L		03/10/25 06:55	03/10/25 20:14	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<0.30		2.0	ng/L		03/10/25 06:55	03/10/25 20:14	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0	ng/L		03/10/25 06:55	03/10/25 20:14	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<1.0		2.0	ng/L		03/10/25 06:55	03/10/25 20:14	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0	ng/L		03/10/25 06:55	03/10/25 20:14	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	ng/L		03/10/25 06:55	03/10/25 20:14	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	ng/L		03/10/25 06:55	03/10/25 20:14	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0	ng/L		03/10/25 06:55	03/10/25 20:14	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0	ng/L		03/10/25 06:55	03/10/25 20:14	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0	ng/L		03/10/25 06:55	03/10/25 20:14	1
Perfluorononanoic acid (PFNA)	<0.40		2.0	ng/L		03/10/25 06:55	03/10/25 20:14	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0	ng/L		03/10/25 06:55	03/10/25 20:14	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0	ng/L		03/10/25 06:55	03/10/25 20:14	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0	ng/L		03/10/25 06:55	03/10/25 20:14	1
Perfluorobutanoic acid (PFBA)	<0.69		2.0	ng/L		03/10/25 06:55	03/10/25 20:14	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.38		2.0	ng/L		03/10/25 06:55	03/10/25 20:14	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.37		2.0	ng/L		03/10/25 06:55	03/10/25 20:14	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<0.48		2.0	ng/L		03/10/25 06:55	03/10/25 20:14	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<0.47		2.0	ng/L		03/10/25 06:55	03/10/25 20:14	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<0.25		2.0	ng/L		03/10/25 06:55	03/10/25 20:14	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.46		2.0	ng/L		03/10/25 06:55	03/10/25 20:14	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.15		2.0	ng/L		03/10/25 06:55	03/10/25 20:14	1
Perfluoropentanoic acid (PFPeA)	<0.38		2.0	ng/L		03/10/25 06:55	03/10/25 20:14	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.36		2.0	ng/L		03/10/25 06:55	03/10/25 20:14	1
Perfluoropentanesulfonic acid (PFPeS)	<0.39		2.0	ng/L		03/10/25 06:55	03/10/25 20:14	1

Isotope Dilution	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	109		50 - 200	03/10/25 06:55	03/10/25 20:14	1
13C6 PFDA	115		50 - 200	03/10/25 06:55	03/10/25 20:14	1
13C5 PFHxA	119		50 - 200	03/10/25 06:55	03/10/25 20:14	1
13C4 PFHpA	118		50 - 200	03/10/25 06:55	03/10/25 20:14	1
13C8 PFOA	119		50 - 200	03/10/25 06:55	03/10/25 20:14	1
13C9 PFNA	117		50 - 200	03/10/25 06:55	03/10/25 20:14	1
13C7 PFUnA	112		50 - 200	03/10/25 06:55	03/10/25 20:14	1
13C2 PFDoA	110		50 - 200	03/10/25 06:55	03/10/25 20:14	1
13C4 PFBA	117		50 - 200	03/10/25 06:55	03/10/25 20:14	1
13C5 PFPeA	123		50 - 200	03/10/25 06:55	03/10/25 20:14	1
13C3 PFBS	119		50 - 200	03/10/25 06:55	03/10/25 20:14	1
13C3 PFHxS	115		50 - 200	03/10/25 06:55	03/10/25 20:14	1

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QC Sample Results

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

Job ID: 380-139197-1
SDG: Weekly PFAS

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

Lab Sample ID: MBL 380-140828/20-A

Matrix: Water

Analysis Batch: 141017

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 140828

Isotope Dilution	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 PFOS	120		50 - 200	03/10/25 06:55	03/10/25 20:14	1
13C2-4:2-FTS	139		50 - 200	03/10/25 06:55	03/10/25 20:14	1
13C2-6:2-FTS	127		50 - 200	03/10/25 06:55	03/10/25 20:14	1
13C2-8:2-FTS	112		50 - 200	03/10/25 06:55	03/10/25 20:14	1

Lab Sample ID: LCS 380-140828/22-A

Matrix: Water

Analysis Batch: 141017

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 140828

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	121	104		ng/L		86	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	121	103		ng/L		85	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	121	114		ng/L		94	70 - 130
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	121	117		ng/L		97	70 - 130
Perfluorobutanesulfonic acid (PFBS)	121	110		ng/L		91	70 - 130
Perfluorodecanoic acid (PFDA)	121	116		ng/L		96	70 - 130
Perfluorododecanoic acid (PFDoA)	121	118		ng/L		97	70 - 130
Perfluoroheptanoic acid (PFHpA)	121	117		ng/L		97	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	121	112		ng/L		93	70 - 130
Perfluorohexanoic acid (PFHxA)	121	114		ng/L		94	70 - 130
Perfluorononanoic acid (PFNA)	121	113		ng/L		94	70 - 130
Perfluorooctanesulfonic acid (PFOS)	121	109		ng/L		90	70 - 130
Perfluorooctanoic acid (PFOA)	121	114		ng/L		94	70 - 130
Perfluoroundecanoic acid (PFUnA)	121	119		ng/L		98	70 - 130
Perfluorobutanoic acid (PFBA)	121	115		ng/L		95	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	121	113		ng/L		94	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	121	111		ng/L		92	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	121	114		ng/L		94	70 - 130
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	121	130		ng/L		108	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	121	113		ng/L		94	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	121	117		ng/L		97	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	121	111		ng/L		92	70 - 130
Perfluoropentanoic acid (PFPeA)	121	116		ng/L		96	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	121	107		ng/L		89	70 - 130

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QC Sample Results

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

Job ID: 380-139197-1
SDG: Weekly PFAS

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

Lab Sample ID: LCS 380-140828/22-A

Matrix: Water

Analysis Batch: 141017

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 140828

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoropentanesulfonic acid (PFPeS)	121	110		ng/L		91	70 - 130
Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits				
13C3 HFPO-DA	111		50 - 200				
13C6 PFDA	115		50 - 200				
13C5 PFHxA	115		50 - 200				
13C4 PFHpA	118		50 - 200				
13C8 PFOA	119		50 - 200				
13C9 PFNA	120		50 - 200				
13C7 PFUnA	113		50 - 200				
13C2 PFDoA	110		50 - 200				
13C4 PFBA	117		50 - 200				
13C5 PFPeA	119		50 - 200				
13C3 PFBS	122		50 - 200				
13C3 PFHxS	120		50 - 200				
13C8 PFOS	127		50 - 200				
13C2-4:2-FTS	132		50 - 200				
13C2-6:2-FTS	133		50 - 200				
13C2-8:2-FTS	125		50 - 200				

Lab Sample ID: MRL 380-140828/21-A

Matrix: Water

Analysis Batch: 141017

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 140828

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.01	1.82	J	ng/L		91	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.01	1.83	J	ng/L		91	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.01	2.02	J	ng/L		101	50 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.01	2.00	J	ng/L		100	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.01	1.92	J	ng/L		95	50 - 150
Perfluorodecanoic acid (PFDA)	2.01	1.95	J	ng/L		97	50 - 150
Perfluorododecanoic acid (PFDoA)	2.01	2.02	J	ng/L		101	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.01	2.04	J	ng/L		102	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.01	1.93	J	ng/L		96	50 - 150
Perfluorohexanoic acid (PFHxA)	2.01	2.06	J	ng/L		103	50 - 150
Perfluorononanoic acid (PFNA)	2.01	1.87	J	ng/L		93	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.01	1.89	J	ng/L		94	50 - 150
Perfluorooctanoic acid (PFOA)	2.01	1.92	J	ng/L		95	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.01	2.05	J	ng/L		102	50 - 150
Perfluorobutanoic acid (PFBA)	2.01	2.11	J	ng/L		105	50 - 150

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QC Sample Results

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

Job ID: 380-139197-1
SDG: Weekly PFAS

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

Lab Sample ID: MRL 380-140828/21-A

Matrix: Water

Analysis Batch: 141017

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 140828

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	2.01	2.11	J	ng/L		105	50 - 150
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	2.01	2.02	J	ng/L		100	50 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	2.01	2.05	J	ng/L		102	50 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2.01	2.32	J	ng/L		116	50 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	2.01	1.93	J	ng/L		96	50 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.01	1.86	J	ng/L		93	50 - 150
Perfluoro-4-methoxybutanoic acid (PFMBA)	2.01	1.89	J	ng/L		94	50 - 150
Perfluoropentanoic acid (PFPeA)	2.01	2.01	J	ng/L		100	50 - 150
Perfluoroheptanesulfonic acid (PFHpS)	2.01	1.75	J	ng/L		87	50 - 150
Perfluoropentanesulfonic acid (PFPeS)	2.01	1.94	J	ng/L		96	50 - 150

Isotope Dilution	MRL %Recovery	MRL Qualifier	MRL Limits
13C3 HFPO-DA	113		50 - 200
13C6 PFDA	115		50 - 200
13C5 PFHxA	121		50 - 200
13C4 PFHpA	118		50 - 200
13C8 PFOA	120		50 - 200
13C9 PFNA	119		50 - 200
13C7 PFUnA	114		50 - 200
13C2 PFDoA	111		50 - 200
13C4 PFBA	119		50 - 200
13C5 PFPeA	117		50 - 200
13C3 PFBS	122		50 - 200
13C3 PFHxS	120		50 - 200
13C8 PFOS	124		50 - 200
13C2-4:2-FTS	130		50 - 200
13C2-6:2-FTS	129		50 - 200
13C2-8:2-FTS	117		50 - 200

Lab Sample ID: 380-139166-B-1-A MS

Matrix: Water

Analysis Batch: 141017

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 140828

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		121	108		ng/L		89	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		121	105		ng/L		86	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		121	109		ng/L		91	70 - 130

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QC Sample Results

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

Job ID: 380-139197-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-139166-B-1-A MS

Matrix: Water

Analysis Batch: 141017

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 140828

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide	<2.0		121	113		ng/L		94	70 - 130
Dimer Acid (HFPO-DA/GenX)									
Perfluorobutanesulfonic acid (PFBS)	<2.0		121	110		ng/L		91	70 - 130
Perfluorodecanoic acid (PFDA)	<2.0		121	113		ng/L		93	70 - 130
Perfluorododecanoic acid (PFDoA)	<2.0		121	115		ng/L		95	70 - 130
Perfluoroheptanoic acid (PFHpA)	<2.0		121	116		ng/L		96	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	<2.0		121	112		ng/L		92	70 - 130
Perfluorohexanoic acid (PFHxA)	<2.0		121	118		ng/L		97	70 - 130
Perfluorononanoic acid (PFNA)	<2.0		121	116		ng/L		96	70 - 130
Perfluorooctanesulfonic acid (PFOS)	<2.0		121	109		ng/L		90	70 - 130
Perfluorooctanoic acid (PFOA)	<2.0		121	115		ng/L		95	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		121	118		ng/L		97	70 - 130
Perfluorobutanoic acid (PFBA)	<2.0		121	114		ng/L		94	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		121	111		ng/L		92	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		121	112		ng/L		93	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		121	111		ng/L		92	70 - 130
Nonafluoro-3,6-dioxahexanoic acid (NFDHA)	<2.0		121	129		ng/L		107	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		121	115		ng/L		95	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		121	115		ng/L		95	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		121	111		ng/L		92	70 - 130
Perfluoropentanoic acid (PFPeA)	<2.0		121	115		ng/L		95	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		121	107		ng/L		88	70 - 130
Perfluoropentanesulfonic acid (PFPeS)	<2.0		121	109		ng/L		90	70 - 130

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
13C3 HFPO-DA	107		50 - 200
13C6 PFDA	112		50 - 200
13C5 PFHxA	110		50 - 200
13C4 PFHpA	115		50 - 200
13C8 PFOA	112		50 - 200
13C9 PFNA	114		50 - 200
13C7 PFUnA	111		50 - 200
13C2 PFDoA	109		50 - 200
13C4 PFBA	114		50 - 200
13C5 PFPeA	113		50 - 200
13C3 PFBS	116		50 - 200
13C3 PFHxS	115		50 - 200
13C8 PFOS	120		50 - 200

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QC Sample Results

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

Job ID: 380-139197-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-139166-B-1-A MS

Matrix: Water

Analysis Batch: 141017

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 140828

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
13C2-4:2-FTS	129		50 - 200
13C2-6:2-FTS	130		50 - 200
13C2-8:2-FTS	121		50 - 200

Lab Sample ID: 380-139166-B-1-B MSD

Matrix: Water

Analysis Batch: 141017

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 140828

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		121	105		ng/L		87	70 - 130	2	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<2.0		121	105		ng/L		87	70 - 130	0	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		121	114		ng/L		94	70 - 130	4	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		121	114		ng/L		94	70 - 130	1	30
Perfluorobutanesulfonic acid (PFBS)	<2.0		121	111		ng/L		92	70 - 130	1	30
Perfluorodecanoic acid (PFDA)	<2.0		121	116		ng/L		96	70 - 130	3	30
Perfluorododecanoic acid (PFDaA)	<2.0		121	116		ng/L		95	70 - 130	1	30
Perfluoroheptanoic acid (PFHpA)	<2.0		121	118		ng/L		97	70 - 130	2	30
Perfluorohexanesulfonic acid (PFHxS)	<2.0		121	113		ng/L		94	70 - 130	1	30
Perfluorohexanoic acid (PFHxA)	<2.0		121	117		ng/L		97	70 - 130	0	30
Perfluorononanoic acid (PFNA)	<2.0		121	114		ng/L		94	70 - 130	2	30
Perfluorooctanesulfonic acid (PFOS)	<2.0		121	111		ng/L		92	70 - 130	2	30
Perfluorooctanoic acid (PFOA)	<2.0		121	112		ng/L		93	70 - 130	3	30
Perfluoroundecanoic acid (PFUnA)	<2.0		121	120		ng/L		99	70 - 130	2	30
Perfluorobutanoic acid (PFBA)	<2.0		121	115		ng/L		95	70 - 130	1	30
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		121	116		ng/L		96	70 - 130	4	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		121	108		ng/L		89	70 - 130	4	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		121	116		ng/L		96	70 - 130	4	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		121	131		ng/L		108	70 - 130	1	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEA)	<2.0		121	114		ng/L		95	70 - 130	1	30
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		121	117		ng/L		97	70 - 130	1	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		121	112		ng/L		93	70 - 130	1	30
Perfluoropentanoic acid (PFPeA)	<2.0		121	115		ng/L		95	70 - 130	1	30
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		121	109		ng/L		90	70 - 130	2	30
Perfluoropentanesulfonic acid (PFPeS)	<2.0		121	112		ng/L		93	70 - 130	3	30

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QC Sample Results

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

Job ID: 380-139197-1
SDG: Weekly PFAS

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

Isotope Dilution	MSD %Recovery	MSD Qualifier	Limits
13C3 HFPO-DA	108		50 - 200
13C6 PFDA	112		50 - 200
13C5 PFHxA	110		50 - 200
13C4 PFHpA	114		50 - 200
13C8 PFOA	117		50 - 200
13C9 PFNA	116		50 - 200
13C7 PFUnA	111		50 - 200
13C2 PFDoA	110		50 - 200
13C4 PFBA	115		50 - 200
13C5 PFPeA	116		50 - 200
13C3 PFBS	114		50 - 200
13C3 PFHxS	112		50 - 200
13C8 PFOS	119		50 - 200
13C2-4:2-FTS	128		50 - 200
13C2-6:2-FTS	122		50 - 200
13C2-8:2-FTS	114		50 - 200

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

Lab Sample ID: MBL 380-140601/20-A
Matrix: Water
Analysis Batch: 140677

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 140601

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		03/07/25 13:49	03/08/25 14:24	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0	ng/L		03/07/25 13:49	03/08/25 14:24	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0	ng/L		03/07/25 13:49	03/08/25 14:24	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<0.58		2.0	ng/L		03/07/25 13:49	03/08/25 14:24	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<0.42		2.0	ng/L		03/07/25 13:49	03/08/25 14:24	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0	ng/L		03/07/25 13:49	03/08/25 14:24	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	ng/L		03/07/25 13:49	03/08/25 14:24	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0	ng/L		03/07/25 13:49	03/08/25 14:24	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	ng/L		03/07/25 13:49	03/08/25 14:24	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0	ng/L		03/07/25 13:49	03/08/25 14:24	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0	ng/L		03/07/25 13:49	03/08/25 14:24	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0	ng/L		03/07/25 13:49	03/08/25 14:24	1
Perfluorononanoic acid (PFNA)	<0.40		2.0	ng/L		03/07/25 13:49	03/08/25 14:24	1
Perfluorotetradecanoic acid (PFTA)	<0.54		2.0	ng/L		03/07/25 13:49	03/08/25 14:24	1
Perfluorotridecanoic acid (PFTrDA)	<0.36		2.0	ng/L		03/07/25 13:49	03/08/25 14:24	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<0.30		2.0	ng/L		03/07/25 13:49	03/08/25 14:24	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.30		2.0	ng/L		03/07/25 13:49	03/08/25 14:24	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0	ng/L		03/07/25 13:49	03/08/25 14:24	1
Surrogate	MBL %Recovery	MBL Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	115		70 - 130			03/07/25 13:49	03/08/25 14:24	1
13C2 PFHxA	105		70 - 130			03/07/25 13:49	03/08/25 14:24	1
13C2 PFDA	112		70 - 130			03/07/25 13:49	03/08/25 14:24	1

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QC Sample Results

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

Job ID: 380-139197-1
SDG: Weekly PFAS

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

Lab Sample ID: MBL 380-140601/20-A
Matrix: Water
Analysis Batch: 140677

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 140601

Surrogate	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-GenX	98		70 - 130	03/07/25 13:49	03/08/25 14:24	1

Lab Sample ID: LCS 380-140601/22-A
Matrix: Water
Analysis Batch: 140677

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 140601

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide	25.1	24.7		ng/L		98	70 - 130
Dimer Acid (HFPO-DA/GenX)							
Perfluorooctanesulfonic acid (PFOS)	25.1	27.8		ng/L		111	70 - 130
Perfluoroundecanoic acid (PFUnA)	25.1	27.9		ng/L		111	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	25.1	27.5		ng/L		109	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	25.1	27.9		ng/L		111	70 - 130
Perfluorohexanoic acid (PFHxA)	25.1	26.3		ng/L		105	70 - 130
Perfluorododecanoic acid (PFDoA)	25.1	26.9		ng/L		107	70 - 130
Perfluorooctanoic acid (PFOA)	25.1	27.2		ng/L		108	70 - 130
Perfluorodecanoic acid (PFDA)	25.1	27.9		ng/L		111	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	25.1	28.0		ng/L		112	70 - 130
Perfluorobutanesulfonic acid (PFBS)	25.1	26.7		ng/L		106	70 - 130
Perfluoroheptanoic acid (PFHpA)	25.1	27.5		ng/L		110	70 - 130
Perfluorononanoic acid (PFNA)	25.1	27.9		ng/L		111	70 - 130
Perfluorotetradecanoic acid (PFTA)	25.1	28.2		ng/L		112	70 - 130
Perfluorotridecanoic acid (PFTrDA)	25.1	27.6		ng/L		110	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	25.1	26.5		ng/L		105	70 - 130
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	25.1	27.6		ng/L		110	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	25.1	26.4		ng/L		105	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
d5-NEtFOSAA	109		70 - 130
13C2 PFHxA	107		70 - 130
13C2 PFDA	106		70 - 130
13C3-GenX	100		70 - 130

QC Sample Results

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

Job ID: 380-139197-1
SDG: Weekly PFAS

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

Lab Sample ID: MRL 380-140601/21-A

Matrix: Water

Analysis Batch: 140677

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 140601

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.01	1.93	J	ng/L		96	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.01	2.17	J	ng/L		108	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.01	2.17	J	ng/L		108	50 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2.01	2.17	J	ng/L		108	50 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2.01	2.11	J	ng/L		105	50 - 150
Perfluorohexanoic acid (PFHxA)	2.01	2.14	J	ng/L		107	50 - 150
Perfluorododecanoic acid (PFDoA)	2.01	2.16	J	ng/L		107	50 - 150
Perfluorooctanoic acid (PFOA)	2.01	2.19	J	ng/L		109	50 - 150
Perfluorodecanoic acid (PFDA)	2.01	2.23	J	ng/L		111	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.01	2.20	J	ng/L		110	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.01	2.03	J	ng/L		101	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.01	2.16	J	ng/L		107	50 - 150
Perfluorononanoic acid (PFNA)	2.01	2.19	J	ng/L		109	50 - 150
Perfluorotetradecanoic acid (PFTA)	2.01	2.29	J	ng/L		114	50 - 150
Perfluorotridecanoic acid (PFTrDA)	2.01	2.13	J	ng/L		106	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	2.01	2.11	J	ng/L		105	50 - 150
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.01	2.13	J	ng/L		106	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.01	2.11	J	ng/L		105	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
d5-NEtFOSAA	105		70 - 130
13C2 PFHxA	108		70 - 130
13C2 PFDA	111		70 - 130
13C3-GenX	98		70 - 130

Lab Sample ID: 380-139180-B-1-A MS

Matrix: Water

Analysis Batch: 140677

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 140601

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		25.2	26.0		ng/L		103	70 - 130
Perfluorooctanesulfonic acid (PFOS)	<2.0		25.2	27.7		ng/L		110	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		25.2	28.5		ng/L		113	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		25.2	28.1		ng/L		111	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-139197-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-139180-B-1-A MS

Matrix: Water

Analysis Batch: 140677

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 140601

Sample Data - 100%									
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		25.2	28.6		ng/L		113	70 - 130
Perfluorohexanoic acid (PFHxA)	<2.0		25.2	29.1		ng/L		112	70 - 130
Perfluorododecanoic acid (PFDoA)	<2.0		25.2	27.5		ng/L		109	70 - 130
Perfluorooctanoic acid (PFOA)	<2.0		25.2	28.3		ng/L		110	70 - 130
Perfluorodecanoic acid (PFDA)	<2.0		25.2	28.8		ng/L		114	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	<2.0		25.2	27.5		ng/L		106	70 - 130
Perfluorobutanesulfonic acid (PFBS)	<2.0		25.2	26.8		ng/L		105	70 - 130
Perfluoroheptanoic acid (PFHpA)	<2.0		25.2	28.2		ng/L		110	70 - 130
Perfluorononanoic acid (PFNA)	<2.0		25.2	28.7		ng/L		114	70 - 130
Perfluorotetradecanoic acid (PFTA)	<2.0		25.2	28.4		ng/L		113	70 - 130
Perfluorotridecanoic acid (PFTrDA)	<2.0		25.2	28.4		ng/L		113	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		25.2	26.8		ng/L		106	70 - 130
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		25.2	27.5		ng/L		109	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		25.2	26.8		ng/L		106	70 - 130

Lab Sample ID: 380-139180-C-1-A MSD

Matrix: Water

Analysis Batch: 140677

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 140601

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		25.3	26.6		ng/L		105	70 - 130	2	30
Perfluorooctanesulfonic acid (PFOS)	<2.0		25.3	28.6		ng/L		113	70 - 130	3	30
Perfluoroundecanoic acid (PFUnA)	<2.0		25.3	28.8		ng/L		114	70 - 130	1	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		25.3	28.4		ng/L		112	70 - 130	1	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		25.3	28.5		ng/L		113	70 - 130	0	30
Perfluorohexanoic acid (PFHxA)	<2.0		25.3	28.9		ng/L		111	70 - 130	1	30
Perfluorododecanoic acid (PFDoA)	<2.0		25.3	28.0		ng/L		111	70 - 130	2	30
Perfluorooctanoic acid (PFOA)	<2.0		25.3	28.9		ng/L		112	70 - 130	2	30
Perfluorodecanoic acid (PFDA)	<2.0		25.3	28.9		ng/L		115	70 - 130	1	30

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-139197-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-139180-C-1-A MSD

Matrix: Water

Analysis Batch: 140677

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 140601

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorohexanesulfonic acid (PFHxS)	<2.0		25.3	28.5		ng/L		110	70 - 130	4	30
Perfluorobutanesulfonic acid (PFBS)	<2.0		25.3	27.1		ng/L		106	70 - 130	1	30
Perfluoroheptanoic acid (PFHpA)	<2.0		25.3	29.6		ng/L		115	70 - 130	5	30
Perfluorononanoic acid (PFNA)	<2.0		25.3	29.0		ng/L		115	70 - 130	1	30
Perfluorotetradecanoic acid (PFTA)	<2.0		25.3	29.1		ng/L		115	70 - 130	3	30
Perfluorotridecanoic acid (PFTTrDA)	<2.0		25.3	28.1		ng/L		111	70 - 130	1	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		25.3	27.2		ng/L		108	70 - 130	1	30
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		25.3	28.4		ng/L		112	70 - 130	3	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		25.3	28.3		ng/L		112	70 - 130	6	30
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
d5-NEtFOSAA	112		70 - 130								
13C2 PFHxA	111		70 - 130								
13C2 PFDA	112		70 - 130								
13C3-GenX	103		70 - 130								

QC Association Summary

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

Job ID: 380-139197-1
SDG: Weekly PFAS

LCMS

Prep Batch: 140601

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-139197-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Drinking Water	537.1 DW	
380-139197-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	537.1 DW	
380-139197-3	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	Total/NA	Drinking Water	537.1 DW	
380-139197-4	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Total/NA	Drinking Water	537.1 DW	
380-139197-5	FB: MOANALUA WELLS (331-223-TP202)	Total/NA	Water	537.1 DW	
380-139197-6	FB: HALAWA WELLS UNITS 1 & 2 (331-206-TPC01)	Total/NA	Water	537.1 DW	
380-139197-7	FB: AIEA GULCH WELLS PUMP 1 (331-201-TPC01)	Total/NA	Water	537.1 DW	
380-139197-8	FB: AIEA GULCH WELLS PUMP 2 (331-202-TPC01)	Total/NA	Water	537.1 DW	
MBL 380-140601/20-A	Method Blank	Total/NA	Water	537.1 DW	
LCS 380-140601/22-A	Lab Control Sample	Total/NA	Water	537.1 DW	
MRL 380-140601/21-A	Lab Control Sample	Total/NA	Water	537.1 DW	
380-139180-B-1-A MS	Matrix Spike	Total/NA	Water	537.1 DW	
380-139180-C-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	537.1 DW	

Analysis Batch: 140677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-139197-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Drinking Water	537.1	140601
380-139197-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	537.1	140601
380-139197-3	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	Total/NA	Drinking Water	537.1	140601
380-139197-4	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Total/NA	Drinking Water	537.1	140601
380-139197-5	FB: MOANALUA WELLS (331-223-TP202)	Total/NA	Water	537.1	140601
380-139197-6	FB: HALAWA WELLS UNITS 1 & 2 (331-206-TPC01)	Total/NA	Water	537.1	140601
380-139197-7	FB: AIEA GULCH WELLS PUMP 1 (331-201-TPC01)	Total/NA	Water	537.1	140601
380-139197-8	FB: AIEA GULCH WELLS PUMP 2 (331-202-TPC01)	Total/NA	Water	537.1	140601
MBL 380-140601/20-A	Method Blank	Total/NA	Water	537.1	140601
LCS 380-140601/22-A	Lab Control Sample	Total/NA	Water	537.1	140601
MRL 380-140601/21-A	Lab Control Sample	Total/NA	Water	537.1	140601
380-139180-B-1-A MS	Matrix Spike	Total/NA	Water	537.1	140601
380-139180-C-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	537.1	140601

Prep Batch: 140828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-139197-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Drinking Water	533	
380-139197-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	533	
380-139197-3	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	Total/NA	Drinking Water	533	
380-139197-4	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Total/NA	Drinking Water	533	
380-139197-5	FB: MOANALUA WELLS (331-223-TP202)	Total/NA	Water	533	
380-139197-6	FB: HALAWA WELLS UNITS 1 & 2 (331-206-TPC01)	Total/NA	Water	533	
380-139197-7	FB: AIEA GULCH WELLS PUMP 1 (331-201-TPC01)	Total/NA	Water	533	
380-139197-8	FB: AIEA GULCH WELLS PUMP 2 (331-202-TPC01)	Total/NA	Water	533	
MBL 380-140828/20-A	Method Blank	Total/NA	Water	533	
LCS 380-140828/22-A	Lab Control Sample	Total/NA	Water	533	
MRL 380-140828/21-A	Lab Control Sample	Total/NA	Water	533	
380-139166-B-1-A MS	Matrix Spike	Total/NA	Water	533	
380-139166-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	533	

Analysis Batch: 141017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-139197-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Drinking Water	533	140828
380-139197-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	533	140828
380-139197-3	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	Total/NA	Drinking Water	533	140828

Eurofins Eaton Analytical Pomona

QC Association Summary

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

Job ID: 380-139197-1
SDG: Weekly PFAS

LCMS (Continued)

Analysis Batch: 141017 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-139197-4	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Total/NA	Drinking Water	533	140828
380-139197-5	FB: MOANALUA WELLS (331-223-TP202)	Total/NA	Water	533	140828
380-139197-6	FB: HALAWA WELLS UNITS 1 & 2 (331-206-TPC	Total/NA	Water	533	140828
380-139197-7	FB: AIEA GULCH WELLS PUMP 1 (331-201-TPC	Total/NA	Water	533	140828
380-139197-8	FB: AIEA GULCH WELLS PUMP 2 (331-202-TPC	Total/NA	Water	533	140828
MBL 380-140828/20-A	Method Blank	Total/NA	Water	533	140828
LCS 380-140828/22-A	Lab Control Sample	Total/NA	Water	533	140828
MRL 380-140828/21-A	Lab Control Sample	Total/NA	Water	533	140828
380-139166-B-1-A MS	Matrix Spike	Total/NA	Water	533	140828
380-139166-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	533	140828

Lab Chronicle

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

Job ID: 380-139197-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-139197-1

Date Collected: 03/03/25 09:38

Matrix: Drinking Water

Date Received: 03/05/25 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			140828	XTD8	EA POM	03/10/25 06:55
Total/NA	Analysis	533		1	141017	M7ML	EA POM	03/10/25 22:31
Total/NA	Prep	537.1 DW			140601	HM3M	EA POM	03/07/25 13:49
Total/NA	Analysis	537.1		1	140677	M7ML	EA POM	03/08/25 16:41

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

Lab Sample ID: 380-139197-2

Date Collected: 03/03/25 10:00

Matrix: Drinking Water

Date Received: 03/05/25 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			140828	XTD8	EA POM	03/10/25 06:55
Total/NA	Analysis	533		1	141017	M7ML	EA POM	03/10/25 22:51
Total/NA	Prep	537.1 DW			140601	HM3M	EA POM	03/07/25 13:49
Total/NA	Analysis	537.1		1	140677	M7ML	EA POM	03/08/25 17:02

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

Lab Sample ID: 380-139197-3

Date Collected: 03/03/25 10:28

Matrix: Drinking Water

Date Received: 03/05/25 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			140828	XTD8	EA POM	03/10/25 06:55
Total/NA	Analysis	533		1	141017	M7ML	EA POM	03/10/25 23:02
Total/NA	Prep	537.1 DW			140601	HM3M	EA POM	03/07/25 13:49
Total/NA	Analysis	537.1		1	140677	M7ML	EA POM	03/08/25 17:13

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

Lab Sample ID: 380-139197-4

Date Collected: 03/03/25 10:46

Matrix: Drinking Water

Date Received: 03/05/25 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			140828	XTD8	EA POM	03/10/25 06:55
Total/NA	Analysis	533		1	141017	M7ML	EA POM	03/10/25 23:12
Total/NA	Prep	537.1 DW			140601	HM3M	EA POM	03/07/25 13:49
Total/NA	Analysis	537.1		1	140677	M7ML	EA POM	03/08/25 17:22

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

Lab Sample ID: 380-139197-5

Date Collected: 03/03/25 09:38

Matrix: Water

Date Received: 03/05/25 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			140828	XTD8	EA POM	03/10/25 06:55
Total/NA	Analysis	533		1	141017	M7ML	EA POM	03/10/25 23:22

Eurofins Eaton Analytical Pomona

Lab Chronicle

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

Job ID: 380-139197-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-139197-5

Date Collected: 03/03/25 09:38

Matrix: Water

Date Received: 03/05/25 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	537.1 DW			140601	HM3M	EA POM	03/07/25 13:49
Total/NA	Analysis	537.1		1	140677	M7ML	EA POM	03/08/25 17:32

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

Lab Sample ID: 380-139197-6

Date Collected: 03/03/25 10:00

Matrix: Water

Date Received: 03/05/25 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			140828	XTD8	EA POM	03/10/25 06:55
Total/NA	Analysis	533		1	141017	M7ML	EA POM	03/10/25 23:31
Total/NA	Prep	537.1 DW			140601	HM3M	EA POM	03/07/25 13:49
Total/NA	Analysis	537.1		1	140677	M7ML	EA POM	03/08/25 17:42

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

Lab Sample ID: 380-139197-7

Date Collected: 03/03/25 10:28

Matrix: Water

Date Received: 03/05/25 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			140828	XTD8	EA POM	03/10/25 06:55
Total/NA	Analysis	533		1	141017	M7ML	EA POM	03/10/25 23:41
Total/NA	Prep	537.1 DW			140601	HM3M	EA POM	03/07/25 13:49
Total/NA	Analysis	537.1		1	140677	M7ML	EA POM	03/08/25 17:51

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

Lab Sample ID: 380-139197-8

Date Collected: 03/03/25 10:46

Matrix: Water

Date Received: 03/05/25 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			140828	XTD8	EA POM	03/10/25 06:55
Total/NA	Analysis	533		1	141017	M7ML	EA POM	03/10/25 23:51
Total/NA	Prep	537.1 DW			140601	HM3M	EA POM	03/07/25 13:49
Total/NA	Analysis	537.1		1	140677	M7ML	EA POM	03/08/25 18:01

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 380-139197-1
SDG: Weekly PFAS

Laboratory: Eurofins Eaton Analytical Pomona

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

Authority	Program	Identification Number	Expiration Date
Hawaii	State	CA00006	01-31-25 *

- 1
- 2
- 3
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* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

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

Job ID: 380-139197-1
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Method	Method Description	Protocol	Laboratory
533	Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water	EPA	EA POM
537.1	Perfluorinated Alkyl Acids (LC/MS)	EPA	EA POM
533	Extraction of Perfluorinated and Polyfluorinated Alkyl Acids	EPA	EA POM
537.1 DW	Extraction of Perfluorinated Alkyl Acids	EPA	EA POM

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

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

Sample Summary

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

Job ID: 380-139197-1
SDG: Weekly PFAS

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	PWSID Number
380-139197-1	MOANALUA WELLS (331-223-TP202)	Drinking Water	03/03/25 09:38	03/05/25 09:20	HI0000331
380-139197-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	Drinking Water	03/03/25 10:00	03/05/25 09:20	HI0000331
380-139197-3	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	Drinking Water	03/03/25 10:28	03/05/25 09:20	HI0000331
380-139197-4	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Drinking Water	03/03/25 10:46	03/05/25 09:20	HI0000331
380-139197-5	FB: MOANALUA WELLS (331-223-TP202)	Water	03/03/25 09:38	03/05/25 09:20	HI0000331
380-139197-6	FB: HALAWA WELLS UNITS 1 & 2 (331-206-TP065)	Water	03/03/25 10:00	03/05/25 09:20	HI0000331
380-139197-7	FB: AIEA GULCH WELLS PUMP 1 (331-201-TP071)	Water	03/03/25 10:28	03/05/25 09:20	HI0000331
380-139197-8	FB: AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Water	03/03/25 10:46	03/05/25 09:20	HI0000331

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	Carrier Tracking No(s)	COC No:
Client Contact: kirk iwamoto		Arada, Rachelle		380-27941-2757 2
Company: City & County of Honolulu		E-Mail: Rachelle.Arada@eurofins.com	State of Origin:	Page: Page 2 of 2
Address: 630 South Beretania Street, Chemistry Lab Honolulu State Zip: HI 96843		PWSID		Job #:
Phone: 808-748-5840 (tel)		Due Date Requested	Analysis Requested	
E-mail: kiwamoto@hbws.org		TAT Requested (days)	Preservation Codes	
Project Name: RED-HILL/HBWS sites Event Desc: RUSH Weekly Red Hill		Compliance Project: Δ No	A HCL B NaOH C Zn Acetate D Nitric Acid E - NaHSO4 F - MeOH G Amchlor H - Ascorbic Acid I - Ice J - DI Water K EDTA L EDA Other	
Site: 38001111		PO #: C20525101 exp 05312023	M Hexane N - None O - AsNaO2 P Na2O4S Q - Na2SO3 R Na2SO3 S H2SO4 T - TSP Dodecylhydrate U Acetone V - MCAA W pH 4-5 Y Trizma Z other (specify)	
SSOW#:		WO #:	Total Number of Containers	
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)
Moanalua Wells		3-Mar-2025	0938	G
Halawa Wells Units 1&2 P1		3-Mar-2025	1000	G
Aiea Gulch Wells Pump 1		3-Mar-2025	1028	G
Aiea Gulch Wells Pump 2		3-Mar-2025	1046	G
FB Moanalua Wells		3-Mar-2025	0938	
FB Halawa Wells Units 1&2		3-Mar-2025	1000	
FB Aiea Gulch Wells Pump 1		3-Mar-2025		
FB Aiea Gulch Wells Pump 2		3-Mar-2025	1046	
Possible Hazard Identification		Special Instructions/Note		
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological		chlorinated		
Deliverable Requested I II III IV Other (specify)		chlorinated		
Empty Kit Relinquished by:		chlorinated		
Date/Time:		Special Instructions/QC Requirements		
04 March 2025 1400		Return To Client ☐ Disposal By Lab ☐ Archive For ☐ Months		
Relinquished by:		Method of Shipment: FEDEX 7724 7986 1967		
Relinquished by:		Date/Time: 03/05/25 09:20		
Relinquished by:		Date/Time: 03/05/25 09:20		
Relinquished by:		Date/Time: 03/05/25 09:20		
Custody Seals Intact: Δ Yes Δ No		Cooler Temperature(s) °C and Other Remarks: 1.0°-0.0°:1.0°		

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-139197-1

SDG Number: Weekly PFAS

Login Number: 139197

List Source: Eurofins Eaton Analytical Pomona

List Number: 1

Creator: Gerfen, Chris

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