

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

ANALYTICAL REPORT

PREPARED FOR

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

Generated 8/27/2024 9:45:06 AM

JOB DESCRIPTION

RED-HILL
Weekly PFAS
RUSH Weekly Red Hill

JOB NUMBER

380-109653-1

Eurofins Eaton Analytical Pomona

Job Notes

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

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

Compliance Statement

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

Authorization



Generated
8/27/2024 9:45:06 AM

Authorized for release by
Rachelle Arada, Project Manager
Rachelle.Arada@et.eurofinsus.com
(626)386-1106



Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Detection Summary	6
Client Sample Results	8
Action Limit Summary	27
Surrogate Summary	32
Isotope Dilution Summary	33
QC Sample Results	35
QC Association Summary	46
Lab Chronicle	48
Certification Summary	51
Method Summary	52
Sample Summary	53
Chain of Custody	54
Receipt Checklists	55

Definitions/Glossary

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

Job ID: 380-109653-1
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.
α	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: 380-109653-1

Job ID: 380-109653-1

Eurofins Eaton Analytical Pomona

Job Narrative 380-109653-1

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 8/21/2024 9:51 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 1.5°C, 2.4°C and 2.6°C.

PFAS

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

Detection Summary

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

Job ID: 380-109653-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-109653-1

No Detections.

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

Lab Sample ID: 380-109653-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanesulfonic acid (PFHxS)	2.7		2.0	ng/L	1		533	Total/NA
Perfluorohexanoic acid (PFHxA)	2.2		2.0	ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.2		2.0	ng/L	1		533	Total/NA
Perfluoropentanoic acid (PFPeA)	2.6		2.0	ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.1		2.0	ng/L	1		537.1	Total/NA
Perfluorohexanoic acid (PFHxA)	2.4		2.0	ng/L	1		537.1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.4		2.0	ng/L	1		537.1	Total/NA

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

Lab Sample ID: 380-109653-3

No Detections.

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

Lab Sample ID: 380-109653-4

No Detections.

Client Sample ID: KA'AMILO WELLS

Lab Sample ID: 380-109653-5

No Detections.

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

Lab Sample ID: 380-109653-6

No Detections.

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

Lab Sample ID: 380-109653-7

No Detections.

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

Lab Sample ID: 380-109653-8

No Detections.

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

Lab Sample ID: 380-109653-9

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Eaton Analytical Pomona

Detection Summary

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

Job ID: 380-109653-1
SDG: Weekly PFAS

Client Sample ID: FB: KA'AMILO WELLS

Lab Sample ID: 380-109653-10

No Detections.

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

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: 380-109653-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-109653-1

Date Collected: 08/19/24 09:41

Matrix: Drinking Water

Date Received: 08/21/24 09:51

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		08/22/24 16:02	08/23/24 17:47	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 17:47	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 17:47	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 17:47	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 17:47	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 17:47	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 17:47	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 17:47	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 17:47	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 17:47	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 17:47	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 17:47	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 17:47	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 17:47	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 17:47	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 17:47	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 17:47	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 17:47	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 17:47	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 17:47	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 17:47	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 17:47	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 17:47	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 17:47	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 17:47	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	64		50 - 200	08/22/24 16:02	08/23/24 17:47	1
13C6 PFDA	56		50 - 200	08/22/24 16:02	08/23/24 17:47	1
13C5 PFHxA	79		50 - 200	08/22/24 16:02	08/23/24 17:47	1
13C4 PFHpA	80		50 - 200	08/22/24 16:02	08/23/24 17:47	1
13C8 PFOA	71		50 - 200	08/22/24 16:02	08/23/24 17:47	1
13C9 PFNA	61		50 - 200	08/22/24 16:02	08/23/24 17:47	1
13C7 PFUnA	62		50 - 200	08/22/24 16:02	08/23/24 17:47	1
13C2 PFDoA	68		50 - 200	08/22/24 16:02	08/23/24 17:47	1
13C4 PFBA	87		50 - 200	08/22/24 16:02	08/23/24 17:47	1
13C5 PFPeA	88		50 - 200	08/22/24 16:02	08/23/24 17:47	1
13C3 PFBS	112		50 - 200	08/22/24 16:02	08/23/24 17:47	1
13C3 PFHxS	113		50 - 200	08/22/24 16:02	08/23/24 17:47	1
13C8 PFOS	108		50 - 200	08/22/24 16:02	08/23/24 17:47	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-109653-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-109653-1

Date Collected: 08/19/24 09:41

Matrix: Drinking Water

Date Received: 08/21/24 09:51

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	158		50 - 200	08/22/24 16:02	08/23/24 17:47	1
13C2-6:2-FTS	156		50 - 200	08/22/24 16:02	08/23/24 17:47	1
13C2-8:2-FTS	135		50 - 200	08/22/24 16:02	08/23/24 17:47	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		08/22/24 08:59	08/22/24 19:37	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 19:37	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 19:37	1
N-methylperfluorooctanesulfonamideacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 19:37	1
N-ethylperfluorooctanesulfonamideacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 19:37	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 19:37	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 19:37	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 19:37	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 19:37	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 19:37	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 19:37	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 19:37	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 19:37	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 19:37	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 19:37	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 19:37	1
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 19:37	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 19:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	118		70 - 130	08/22/24 08:59	08/22/24 19:37	1
13C2 PFHxA	121		70 - 130	08/22/24 08:59	08/22/24 19:37	1
13C2 PFDA	121		70 - 130	08/22/24 08:59	08/22/24 19:37	1
13C3-GenX	118		70 - 130	08/22/24 08:59	08/22/24 19:37	1

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

Lab Sample ID: 380-109653-2

Date Collected: 08/19/24 10:07

Matrix: Drinking Water

Date Received: 08/21/24 09:51

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:06	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:06	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:06	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:06	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:06	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-109653-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-109653-2

Date Collected: 08/19/24 10:07

Matrix: Drinking Water

Date Received: 08/21/24 09:51

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		08/22/24 16:02	08/23/24 18:06	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:06	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:06	1
Perfluorohexanesulfonic acid (PFHxS)	2.7		2.0	ng/L		08/22/24 16:02	08/23/24 18:06	1
Perfluorohexanoic acid (PFHxA)	2.2		2.0	ng/L		08/22/24 16:02	08/23/24 18:06	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:06	1
Perfluorooctanesulfonic acid (PFOS)	2.2		2.0	ng/L		08/22/24 16:02	08/23/24 18:06	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:06	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:06	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:06	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:06	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:06	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:06	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:06	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:06	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:06	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:06	1
Perfluoropentanoic acid (PFPeA)	2.6		2.0	ng/L		08/22/24 16:02	08/23/24 18:06	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:06	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:06	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	77		50 - 200			08/22/24 16:02	08/23/24 18:06	1
13C6 PFDA	73		50 - 200			08/22/24 16:02	08/23/24 18:06	1
13C5 PFHxA	87		50 - 200			08/22/24 16:02	08/23/24 18:06	1
13C4 PFHpA	88		50 - 200			08/22/24 16:02	08/23/24 18:06	1
13C8 PFOA	80		50 - 200			08/22/24 16:02	08/23/24 18:06	1
13C9 PFNA	73		50 - 200			08/22/24 16:02	08/23/24 18:06	1
13C7 PFUnA	81		50 - 200			08/22/24 16:02	08/23/24 18:06	1
13C2 PFDoA	82		50 - 200			08/22/24 16:02	08/23/24 18:06	1
13C4 PFBA	94		50 - 200			08/22/24 16:02	08/23/24 18:06	1
13C5 PFPeA	104		50 - 200			08/22/24 16:02	08/23/24 18:06	1
13C3 PFBS	111		50 - 200			08/22/24 16:02	08/23/24 18:06	1
13C3 PFHxS	112		50 - 200			08/22/24 16:02	08/23/24 18:06	1
13C8 PFOS	108		50 - 200			08/22/24 16:02	08/23/24 18:06	1
13C2-4:2-FTS	156		50 - 200			08/22/24 16:02	08/23/24 18:06	1
13C2-6:2-FTS	147		50 - 200			08/22/24 16:02	08/23/24 18:06	1
13C2-8:2-FTS	127		50 - 200			08/22/24 16:02	08/23/24 18:06	1

Client Sample Results

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

Job ID: 380-109653-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-109653-2

Date Collected: 08/19/24 10:07

Matrix: Drinking Water

Date Received: 08/21/24 09:51

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		08/22/24 08:59	08/22/24 19:47	1
Perfluorooctanesulfonic acid (PFOS)	2.1		2.0	ng/L		08/22/24 08:59	08/22/24 19:47	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 19:47	1
N-methylperfluorooctanesulfonamideacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 19:47	1
N-ethylperfluorooctanesulfonamideacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 19:47	1
Perfluorohexanoic acid (PFHxA)	2.4		2.0	ng/L		08/22/24 08:59	08/22/24 19:47	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 19:47	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 19:47	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 19:47	1
Perfluorohexanesulfonic acid (PFHxS)	2.4		2.0	ng/L		08/22/24 08:59	08/22/24 19:47	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 19:47	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 19:47	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 19:47	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 19:47	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 19:47	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 19:47	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 19:47	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 19:47	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	112		70 - 130			08/22/24 08:59	08/22/24 19:47	1
13C2 PFHxA	117		70 - 130			08/22/24 08:59	08/22/24 19:47	1
13C2 PFDA	118		70 - 130			08/22/24 08:59	08/22/24 19:47	1
13C3-GenX	112		70 - 130			08/22/24 08:59	08/22/24 19:47	1

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

Lab Sample ID: 380-109653-3

Date Collected: 08/19/24 10:39

Matrix: Drinking Water

Date Received: 08/21/24 09:51

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		08/22/24 16:02	08/23/24 18:15	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:15	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:15	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:15	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:15	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:15	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:15	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:15	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-109653-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-109653-3

Date Collected: 08/19/24 10:39

Matrix: Drinking Water

Date Received: 08/21/24 09:51

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		08/22/24 16:02	08/23/24 18:15	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:15	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:15	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:15	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:15	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:15	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:15	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:15	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:15	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:15	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:15	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:15	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:15	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:15	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:15	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:15	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:15	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	79		50 - 200			08/22/24 16:02	08/23/24 18:15	1
13C6 PFDA	101		50 - 200			08/22/24 16:02	08/23/24 18:15	1
13C5 PFHxA	105		50 - 200			08/22/24 16:02	08/23/24 18:15	1
13C4 PFHpA	109		50 - 200			08/22/24 16:02	08/23/24 18:15	1
13C8 PFOA	109		50 - 200			08/22/24 16:02	08/23/24 18:15	1
13C9 PFNA	105		50 - 200			08/22/24 16:02	08/23/24 18:15	1
13C7 PFUnA	98		50 - 200			08/22/24 16:02	08/23/24 18:15	1
13C2 PFDoA	99		50 - 200			08/22/24 16:02	08/23/24 18:15	1
13C4 PFBA	109		50 - 200			08/22/24 16:02	08/23/24 18:15	1
13C5 PFPeA	113		50 - 200			08/22/24 16:02	08/23/24 18:15	1
13C3 PFBS	117		50 - 200			08/22/24 16:02	08/23/24 18:15	1
13C3 PFHxS	116		50 - 200			08/22/24 16:02	08/23/24 18:15	1
13C8 PFOS	107		50 - 200			08/22/24 16:02	08/23/24 18:15	1
13C2-4:2-FTS	173		50 - 200			08/22/24 16:02	08/23/24 18:15	1
13C2-6:2-FTS	149		50 - 200			08/22/24 16:02	08/23/24 18:15	1
13C2-8:2-FTS	122		50 - 200			08/22/24 16:02	08/23/24 18:15	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		08/22/24 08:59	08/22/24 20:07	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:07	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:07	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-109653-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-109653-3

Date Collected: 08/19/24 10:39

Matrix: Drinking Water

Date Received: 08/21/24 09:51

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		08/22/24 08:59	08/22/24 20:07	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:07	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:07	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:07	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:07	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:07	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:07	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:07	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:07	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:07	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:07	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:07	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:07	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:07	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	114		70 - 130			08/22/24 08:59	08/22/24 20:07	1
13C2 PFHxA	112		70 - 130			08/22/24 08:59	08/22/24 20:07	1
13C2 PFDA	121		70 - 130			08/22/24 08:59	08/22/24 20:07	1
13C3-GenX	110		70 - 130			08/22/24 08:59	08/22/24 20:07	1

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

Lab Sample ID: 380-109653-4

Date Collected: 08/19/24 11:08

Matrix: Drinking Water

Date Received: 08/21/24 09:51

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		08/22/24 16:02	08/23/24 18:25	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:25	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:25	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:25	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:25	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:25	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:25	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:25	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:25	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:25	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:25	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:25	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:25	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-109653-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-109653-4

Date Collected: 08/19/24 11:08

Matrix: Drinking Water

Date Received: 08/21/24 09:51

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		08/22/24 16:02	08/23/24 18:25	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:25	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:25	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:25	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:25	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:25	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:25	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:25	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:25	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:25	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:25	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:25	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	77		50 - 200	08/22/24 16:02	08/23/24 18:25	1
13C6 PFDA	85		50 - 200	08/22/24 16:02	08/23/24 18:25	1
13C5 PFHxA	93		50 - 200	08/22/24 16:02	08/23/24 18:25	1
13C4 PFHpA	97		50 - 200	08/22/24 16:02	08/23/24 18:25	1
13C8 PFOA	91		50 - 200	08/22/24 16:02	08/23/24 18:25	1
13C9 PFNA	86		50 - 200	08/22/24 16:02	08/23/24 18:25	1
13C7 PFUnA	86		50 - 200	08/22/24 16:02	08/23/24 18:25	1
13C2 PFDoA	82		50 - 200	08/22/24 16:02	08/23/24 18:25	1
13C4 PFBA	102		50 - 200	08/22/24 16:02	08/23/24 18:25	1
13C5 PFPeA	101		50 - 200	08/22/24 16:02	08/23/24 18:25	1
13C3 PFBS	115		50 - 200	08/22/24 16:02	08/23/24 18:25	1
13C3 PFHxS	116		50 - 200	08/22/24 16:02	08/23/24 18:25	1
13C8 PFOS	108		50 - 200	08/22/24 16:02	08/23/24 18:25	1
13C2-4:2-FTS	156		50 - 200	08/22/24 16:02	08/23/24 18:25	1
13C2-6:2-FTS	146		50 - 200	08/22/24 16:02	08/23/24 18:25	1
13C2-8:2-FTS	125		50 - 200	08/22/24 16:02	08/23/24 18:25	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:19	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:19	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:19	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:19	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:19	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:19	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:19	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-109653-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-109653-4

Date Collected: 08/19/24 11:08

Matrix: Drinking Water

Date Received: 08/21/24 09:51

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		08/22/24 08:59	08/22/24 20:19	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:19	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:19	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:19	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:19	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:19	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:19	1
Perfluorotridecanoic acid (PFTTrDA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:19	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:19	1
11-Chloroeicosafuoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:19	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	116		70 - 130			08/22/24 08:59	08/22/24 20:19	1
13C2 PFHxA	122		70 - 130			08/22/24 08:59	08/22/24 20:19	1
13C2 PFDA	124		70 - 130			08/22/24 08:59	08/22/24 20:19	1
13C3-GenX	118		70 - 130			08/22/24 08:59	08/22/24 20:19	1

Client Sample ID: KA'AMILO WELLS

Lab Sample ID: 380-109653-5

Date Collected: 08/19/24 11:34

Matrix: Water

Date Received: 08/21/24 09:51

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafuoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:35	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:35	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:35	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:35	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:35	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:35	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:35	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:35	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:35	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:35	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:35	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:35	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:35	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:35	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:35	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:35	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:35	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-109653-1
SDG: Weekly PFAS

Client Sample ID: KA'AMILO WELLS

Lab Sample ID: 380-109653-5

Date Collected: 08/19/24 11:34

Matrix: Water

Date Received: 08/21/24 09:51

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		08/22/24 16:02	08/23/24 18:35	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:35	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:35	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:35	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:35	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:35	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:35	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:35	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	76		50 - 200			08/22/24 16:02	08/23/24 18:35	1
13C6 PFDA	79		50 - 200			08/22/24 16:02	08/23/24 18:35	1
13C5 PFHxA	88		50 - 200			08/22/24 16:02	08/23/24 18:35	1
13C4 PFHpA	91		50 - 200			08/22/24 16:02	08/23/24 18:35	1
13C8 PFOA	83		50 - 200			08/22/24 16:02	08/23/24 18:35	1
13C9 PFNA	76		50 - 200			08/22/24 16:02	08/23/24 18:35	1
13C7 PFUnA	83		50 - 200			08/22/24 16:02	08/23/24 18:35	1
13C2 PFDoA	82		50 - 200			08/22/24 16:02	08/23/24 18:35	1
13C4 PFBA	99		50 - 200			08/22/24 16:02	08/23/24 18:35	1
13C5 PFPeA	101		50 - 200			08/22/24 16:02	08/23/24 18:35	1
13C3 PFBS	111		50 - 200			08/22/24 16:02	08/23/24 18:35	1
13C3 PFHxS	112		50 - 200			08/22/24 16:02	08/23/24 18:35	1
13C8 PFOS	108		50 - 200			08/22/24 16:02	08/23/24 18:35	1
13C2-4:2-FTS	159		50 - 200			08/22/24 16:02	08/23/24 18:35	1
13C2-6:2-FTS	165		50 - 200			08/22/24 16:02	08/23/24 18:35	1
13C2-8:2-FTS	130		50 - 200			08/22/24 16:02	08/23/24 18:35	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		08/22/24 08:59	08/22/24 20:28	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:28	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:28	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:28	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:28	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:28	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:28	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:28	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:28	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:28	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:28	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:28	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:28	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:28	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-109653-1
SDG: Weekly PFAS

Client Sample ID: KA'AMILO WELLS

Lab Sample ID: 380-109653-5

Date Collected: 08/19/24 11:34

Matrix: Water

Date Received: 08/21/24 09:51

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		08/22/24 08:59	08/22/24 20:28	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:28	1
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:28	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	117		70 - 130			08/22/24 08:59	08/22/24 20:28	1
13C2 PFHxA	113		70 - 130			08/22/24 08:59	08/22/24 20:28	1
13C2 PFDA	114		70 - 130			08/22/24 08:59	08/22/24 20:28	1
13C3-GenX	113		70 - 130			08/22/24 08:59	08/22/24 20:28	1

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

Lab Sample ID: 380-109653-6

Date Collected: 08/19/24 09:41

Matrix: Water

Date Received: 08/21/24 09:51

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		08/22/24 16:02	08/23/24 18:44	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:44	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:44	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:44	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:44	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:44	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:44	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:44	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:44	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:44	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:44	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:44	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:44	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:44	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:44	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:44	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:44	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:44	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:44	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:44	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:44	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:44	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:44	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-109653-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-109653-6

Date Collected: 08/19/24 09:41

Matrix: Water

Date Received: 08/21/24 09:51

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:44	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:44	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	69		50 - 200			08/22/24 16:02	08/23/24 18:44	1
13C6 PFDA	88		50 - 200			08/22/24 16:02	08/23/24 18:44	1
13C5 PFHxA	91		50 - 200			08/22/24 16:02	08/23/24 18:44	1
13C4 PFHpA	95		50 - 200			08/22/24 16:02	08/23/24 18:44	1
13C8 PFOA	93		50 - 200			08/22/24 16:02	08/23/24 18:44	1
13C9 PFNA	89		50 - 200			08/22/24 16:02	08/23/24 18:44	1
13C7 PFUnA	87		50 - 200			08/22/24 16:02	08/23/24 18:44	1
13C2 PFDoA	89		50 - 200			08/22/24 16:02	08/23/24 18:44	1
13C4 PFBA	94		50 - 200			08/22/24 16:02	08/23/24 18:44	1
13C5 PFPeA	92		50 - 200			08/22/24 16:02	08/23/24 18:44	1
13C3 PFBS	108		50 - 200			08/22/24 16:02	08/23/24 18:44	1
13C3 PFHxS	112		50 - 200			08/22/24 16:02	08/23/24 18:44	1
13C8 PFOS	104		50 - 200			08/22/24 16:02	08/23/24 18:44	1
13C2-4:2-FTS	144		50 - 200			08/22/24 16:02	08/23/24 18:44	1
13C2-6:2-FTS	138		50 - 200			08/22/24 16:02	08/23/24 18:44	1
13C2-8:2-FTS	113		50 - 200			08/22/24 16:02	08/23/24 18:44	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		08/22/24 08:59	08/22/24 20:38	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:38	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:38	1
N-methylperfluorooctanesulfonamide acetic acid (NMeFOSAA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:38	1
N-ethylperfluorooctanesulfonamide acetic acid (NEtFOSAA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:38	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:38	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:38	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:38	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:38	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:38	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:38	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:38	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:38	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:38	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:38	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:38	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:38	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	115		70 - 130			08/22/24 08:59	08/22/24 20:38	1
13C2 PFHxA	115		70 - 130			08/22/24 08:59	08/22/24 20:38	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-109653-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-109653-6

Date Collected: 08/19/24 09:41

Matrix: Water

Date Received: 08/21/24 09:51

PWSID Number: HI0000331

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFDA	119		70 - 130	08/22/24 08:59	08/22/24 20:38	1
13C3-GenX	114		70 - 130	08/22/24 08:59	08/22/24 20:38	1

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

Lab Sample ID: 380-109653-7

Date Collected: 08/19/24 10:07

Matrix: Water

Date Received: 08/21/24 09:51

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		08/22/24 16:02	08/23/24 18:54	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:54	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:54	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:54	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:54	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:54	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:54	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:54	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:54	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:54	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:54	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:54	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:54	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:54	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:54	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:54	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:54	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:54	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:54	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:54	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:54	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:54	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:54	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:54	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 18:54	1
Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
13C3 HFPO-DA	77		50 - 200	08/22/24 16:02	08/23/24 18:54	1		
13C6 PFDA	94		50 - 200	08/22/24 16:02	08/23/24 18:54	1		
13C5 PFHxA	96		50 - 200	08/22/24 16:02	08/23/24 18:54	1		

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-109653-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-109653-7

Date Collected: 08/19/24 10:07

Matrix: Water

Date Received: 08/21/24 09:51

PWSID Number: HI0000331

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFHpA	101		50 - 200	08/22/24 16:02	08/23/24 18:54	1
13C8 PFOA	101		50 - 200	08/22/24 16:02	08/23/24 18:54	1
13C9 PFNA	98		50 - 200	08/22/24 16:02	08/23/24 18:54	1
13C7 PFUnA	97		50 - 200	08/22/24 16:02	08/23/24 18:54	1
13C2 PFDoA	90		50 - 200	08/22/24 16:02	08/23/24 18:54	1
13C4 PFBA	97		50 - 200	08/22/24 16:02	08/23/24 18:54	1
13C5 PFPeA	95		50 - 200	08/22/24 16:02	08/23/24 18:54	1
13C3 PFBS	110		50 - 200	08/22/24 16:02	08/23/24 18:54	1
13C3 PFHxS	111		50 - 200	08/22/24 16:02	08/23/24 18:54	1
13C8 PFOS	105		50 - 200	08/22/24 16:02	08/23/24 18:54	1
13C2-4:2-FTS	147		50 - 200	08/22/24 16:02	08/23/24 18:54	1
13C2-6:2-FTS	142		50 - 200	08/22/24 16:02	08/23/24 18:54	1
13C2-8:2-FTS	119		50 - 200	08/22/24 16:02	08/23/24 18:54	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		08/22/24 08:59	08/22/24 20:48	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:48	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:48	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:48	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:48	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:48	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:48	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:48	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:48	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:48	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:48	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:48	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:48	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:48	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:48	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:48	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:48	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	115		70 - 130	08/22/24 08:59	08/22/24 20:48	1
13C2 PFHxA	113		70 - 130	08/22/24 08:59	08/22/24 20:48	1
13C2 PFDA	117		70 - 130	08/22/24 08:59	08/22/24 20:48	1
13C3-GenX	111		70 - 130	08/22/24 08:59	08/22/24 20:48	1

Client Sample Results

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

Job ID: 380-109653-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-109653-8

Date Collected: 08/19/24 10:39

Matrix: Water

Date Received: 08/21/24 09:51

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosfluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:03	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:03	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:03	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:03	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:03	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:03	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:03	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:03	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:03	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:03	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:03	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:03	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:03	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:03	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:03	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:03	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:03	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:03	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:03	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:03	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:03	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:03	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:03	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:03	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:03	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	76		50 - 200	08/22/24 16:02	08/23/24 19:03	1
13C6 PFDA	95		50 - 200	08/22/24 16:02	08/23/24 19:03	1
13C5 PFHxA	91		50 - 200	08/22/24 16:02	08/23/24 19:03	1
13C4 PFHpA	98		50 - 200	08/22/24 16:02	08/23/24 19:03	1
13C8 PFOA	94		50 - 200	08/22/24 16:02	08/23/24 19:03	1
13C9 PFNA	95		50 - 200	08/22/24 16:02	08/23/24 19:03	1
13C7 PFUnA	96		50 - 200	08/22/24 16:02	08/23/24 19:03	1
13C2 PFDoA	93		50 - 200	08/22/24 16:02	08/23/24 19:03	1
13C4 PFBA	98		50 - 200	08/22/24 16:02	08/23/24 19:03	1
13C5 PFPeA	99		50 - 200	08/22/24 16:02	08/23/24 19:03	1
13C3 PFBS	113		50 - 200	08/22/24 16:02	08/23/24 19:03	1
13C3 PFHxS	112		50 - 200	08/22/24 16:02	08/23/24 19:03	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-109653-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-109653-8

Date Collected: 08/19/24 10:39

Matrix: Water

Date Received: 08/21/24 09:51

PWSID Number: HI0000331

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 PFOS	105		50 - 200	08/22/24 16:02	08/23/24 19:03	1
13C2-4:2-FTS	151		50 - 200	08/22/24 16:02	08/23/24 19:03	1
13C2-6:2-FTS	148		50 - 200	08/22/24 16:02	08/23/24 19:03	1
13C2-8:2-FTS	128		50 - 200	08/22/24 16:02	08/23/24 19:03	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:57	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:57	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:57	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:57	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:57	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:57	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:57	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:57	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:57	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:57	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:57	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:57	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:57	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:57	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:57	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:57	1
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:57	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 20:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	117		70 - 130	08/22/24 08:59	08/22/24 20:57	1
13C2 PFHxA	114		70 - 130	08/22/24 08:59	08/22/24 20:57	1
13C2 PFDA	119		70 - 130	08/22/24 08:59	08/22/24 20:57	1
13C3-GenX	115		70 - 130	08/22/24 08:59	08/22/24 20:57	1

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

Lab Sample ID: 380-109653-9

Date Collected: 08/19/24 11:08

Matrix: Water

Date Received: 08/21/24 09:51

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:13	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:13	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:13	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-109653-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-109653-9

Date Collected: 08/19/24 11:08

Matrix: Water

Date Received: 08/21/24 09:51

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
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:13	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:13	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:13	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:13	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:13	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:13	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:13	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:13	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:13	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:13	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:13	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:13	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:13	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:13	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:13	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:13	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:13	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:13	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:13	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:13	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:13	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:13	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	88		50 - 200	08/22/24 16:02	08/23/24 19:13	1
13C6 PFDA	106		50 - 200	08/22/24 16:02	08/23/24 19:13	1
13C5 PFHxA	107		50 - 200	08/22/24 16:02	08/23/24 19:13	1
13C4 PFHpA	115		50 - 200	08/22/24 16:02	08/23/24 19:13	1
13C8 PFOA	111		50 - 200	08/22/24 16:02	08/23/24 19:13	1
13C9 PFNA	109		50 - 200	08/22/24 16:02	08/23/24 19:13	1
13C7 PFUnA	104		50 - 200	08/22/24 16:02	08/23/24 19:13	1
13C2 PFDoA	100		50 - 200	08/22/24 16:02	08/23/24 19:13	1
13C4 PFBA	110		50 - 200	08/22/24 16:02	08/23/24 19:13	1
13C5 PFPeA	111		50 - 200	08/22/24 16:02	08/23/24 19:13	1
13C3 PFBS	115		50 - 200	08/22/24 16:02	08/23/24 19:13	1
13C3 PFHxS	116		50 - 200	08/22/24 16:02	08/23/24 19:13	1
13C8 PFOS	110		50 - 200	08/22/24 16:02	08/23/24 19:13	1
13C2-4:2-FTS	153		50 - 200	08/22/24 16:02	08/23/24 19:13	1
13C2-6:2-FTS	142		50 - 200	08/22/24 16:02	08/23/24 19:13	1
13C2-8:2-FTS	126		50 - 200	08/22/24 16:02	08/23/24 19:13	1

Client Sample Results

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

Job ID: 380-109653-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-109653-9

Date Collected: 08/19/24 11:08

Matrix: Water

Date Received: 08/21/24 09:51

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		08/22/24 08:59	08/22/24 21:07	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 21:07	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 21:07	1
N-methylperfluorooctanesulfonamide acetic acid (NMeFOSAA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 21:07	1
N-ethylperfluorooctanesulfonamide acetic acid (NEtFOSAA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 21:07	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 21:07	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 21:07	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 21:07	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 21:07	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 21:07	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 21:07	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 21:07	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 21:07	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 21:07	1
Perfluorotridecanoic acid (PFTTrDA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 21:07	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 21:07	1
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 21:07	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 21:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	114		70 - 130			08/22/24 08:59	08/22/24 21:07	1
13C2 PFHxA	113		70 - 130			08/22/24 08:59	08/22/24 21:07	1
13C2 PFDA	118		70 - 130			08/22/24 08:59	08/22/24 21:07	1
13C3-GenX	111		70 - 130			08/22/24 08:59	08/22/24 21:07	1

Client Sample ID: FB: KA'AMILO WELLS

Lab Sample ID: 380-109653-10

Date Collected: 08/19/24 11:34

Matrix: Water

Date Received: 08/21/24 09:51

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:22	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:22	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:22	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:22	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:22	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:22	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:22	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:22	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:22	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:22	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-109653-1
SDG: Weekly PFAS

Client Sample ID: FB: KA'AMILO WELLS

Lab Sample ID: 380-109653-10

Date Collected: 08/19/24 11:34

Matrix: Water

Date Received: 08/21/24 09:51

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:22	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:22	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:22	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:22	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:22	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:22	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:22	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:22	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:22	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:22	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:22	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:22	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:22	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:22	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		08/22/24 16:02	08/23/24 19:22	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	85		50 - 200			08/22/24 16:02	08/23/24 19:22	1
13C6 PFDA	101		50 - 200			08/22/24 16:02	08/23/24 19:22	1
13C5 PFHxA	104		50 - 200			08/22/24 16:02	08/23/24 19:22	1
13C4 PFHpA	110		50 - 200			08/22/24 16:02	08/23/24 19:22	1
13C8 PFOA	104		50 - 200			08/22/24 16:02	08/23/24 19:22	1
13C9 PFNA	101		50 - 200			08/22/24 16:02	08/23/24 19:22	1
13C7 PFUnA	101		50 - 200			08/22/24 16:02	08/23/24 19:22	1
13C2 PFDoA	96		50 - 200			08/22/24 16:02	08/23/24 19:22	1
13C4 PFBA	104		50 - 200			08/22/24 16:02	08/23/24 19:22	1
13C5 PFPeA	108		50 - 200			08/22/24 16:02	08/23/24 19:22	1
13C3 PFBS	113		50 - 200			08/22/24 16:02	08/23/24 19:22	1
13C3 PFHxS	113		50 - 200			08/22/24 16:02	08/23/24 19:22	1
13C8 PFOS	107		50 - 200			08/22/24 16:02	08/23/24 19:22	1
13C2-4:2-FTS	157		50 - 200			08/22/24 16:02	08/23/24 19:22	1
13C2-6:2-FTS	148		50 - 200			08/22/24 16:02	08/23/24 19:22	1
13C2-8:2-FTS	127		50 - 200			08/22/24 16:02	08/23/24 19:22	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		08/22/24 08:59	08/22/24 21:17	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 21:17	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 21:17	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 21:17	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 21:17	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-109653-1
SDG: Weekly PFAS

Client Sample ID: FB: KA'AMILO WELLS

Lab Sample ID: 380-109653-10

Date Collected: 08/19/24 11:34

Matrix: Water

Date Received: 08/21/24 09:51

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 21:17	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 21:17	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 21:17	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 21:17	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 21:17	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 21:17	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 21:17	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 21:17	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 21:17	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 21:17	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 21:17	1
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 21:17	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		08/22/24 08:59	08/22/24 21:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	115		70 - 130	08/22/24 08:59	08/22/24 21:17	1
13C2 PFHxA	112		70 - 130	08/22/24 08:59	08/22/24 21:17	1
13C2 PFDA	116		70 - 130	08/22/24 08:59	08/22/24 21:17	1
13C3-GenX	111		70 - 130	08/22/24 08:59	08/22/24 21:17	1

Action Limit Summary

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

Job ID: 380-109653-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-109653-1

PWSID Number: HI0000331

Compliance Check

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

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

Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1

Lab Sample ID: 380-109653-2

(331-206-TP065)

PWSID Number: HI0000331

Compliance Check

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

Analyte	Result	Qualifier	Unit	EPAMCL	RL	Method	Prep Type
				Limit			
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.7		ng/L	10	2.0	533	Total/NA
Perfluorononanoic acid (PFNA)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.2		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)	2.1		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)	2.4		ng/L	10	2.0	537.1	Total/NA
Perfluorononanoic acid (PFNA)	<2.0		ng/L	10	2.0	537.1	Total/NA

Client Sample ID: AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-109653-3

(331-202-TP072)

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

Eurofins Eaton Analytical Pomona

Action Limit Summary

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

Job ID: 380-109653-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-109653-3

Compliance Check

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

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

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

Lab Sample ID: 380-109653-4

Compliance Check

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

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

Client Sample ID: KA'AMILO WELLS

Lab Sample ID: 380-109653-5

Compliance Check

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

Analyte	Result	Qualifier	Unit	EPAMCL	RL	Method	Prep Type
				Limit			
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	<2.0		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: 380-109653-1
SDG: Weekly PFAS

Client Sample ID: KA'AMILO WELLS (Continued)

Lab Sample ID: 380-109653-5

Compliance Check

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

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

Lab Sample ID: 380-109653-6

PWSID Number: HI0000331

Compliance Check

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

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

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

Lab Sample ID: 380-109653-7

PWSID Number: HI0000331

Compliance Check

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

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

Eurofins Eaton Analytical Pomona

Action Limit Summary

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

Job ID: 380-109653-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-109653-7

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
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: 380-109653-8

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

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

Lab Sample ID: 380-109653-9

Compliance Check

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

Analyte	Result	Qualifier	Unit	EPAMCL 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

Action Limit Summary

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

Job ID: 380-109653-1
 SDG: Weekly PFAS

Client Sample ID: FB: KA'AMILO WELLS

Lab Sample ID: 380-109653-10

Compliance Check

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

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

Surrogate Summary

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

Job ID: 380-109653-1
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)
380-109653-1	MOANALUA WELLS (331-223-T	118	121	121	118
380-109653-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	112	117	118	112
380-109653-3	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	114	112	121	110
380-109653-4	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP400)	116	122	124	118

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)
380-109397-E-1-A MS	Matrix Spike	115	108	112	108
380-109397-F-1-A MSD	Matrix Spike Duplicate	112	113	113	111
380-109653-5	KA'AMILO WELLS	117	113	114	113
380-109653-6	FB: MOANALUA WELLS (331-223-TP202)	115	115	119	114
380-109653-7	FB: HALAWA WELLS UNITS 1 & 2 (331-206-TP065)	115	113	117	111
380-109653-8	FB: AIEA GULCH WELLS PUMF 2 (331-202-TP072)	117	114	119	115
380-109653-9	FB: AIEA WELLS PUMPS 1&2 (260) (331-203-TP400)	114	113	118	111
380-109653-10	FB: KA'AMILO WELLS	115	112	116	111
LCS 380-104831/21-A	Lab Control Sample	117	117	122	115
MBL 380-104831/19-A	Method Blank	120	123	128	120
MRL 380-104831/20-A	Lab Control Sample	112	117	118	116

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: 380-109653-1
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)
380-109653-1	MOANALUA WELLS (331-223-T	64	56	79	80	71	61	62	68
380-109653-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	77	73	87	88	80	73	81	82
380-109653-3	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	79	101	105	109	109	105	98	99
380-109653-4	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP400)	77	85	93	97	91	86	86	82

		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)
380-109653-1	MOANALUA WELLS (331-223-T	87	88	112	113	108	158	156	135
380-109653-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	94	104	111	112	108	156	147	127
380-109653-3	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	109	113	117	116	107	173	149	122
380-109653-4	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP400)	102	101	115	116	108	156	146	125

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)
380-109424-B-1-A MS	Matrix Spike	92	99	94	96	99	105	101	95
380-109424-C-1-A MSD	Matrix Spike Duplicate	92	103	96	99	98	102	98	92
380-109653-5	KA'AMILO WELLS	76	79	88	91	83	76	83	82
380-109653-6	FB: MOANALUA WELLS (331-223-TP202)	69	88	91	95	93	89	87	89
380-109653-7	FB: HALAWA WELLS UNITS 1 & 2 (331-206-TP065)	77	94	96	101	101	98	97	90
380-109653-8	FB: AIEA GULCH WELLS PUMF 2 (331-202-TP072)	76	95	91	98	94	95	96	93
380-109653-9	FB: AIEA WELLS PUMPS 1&2 (260) (331-203-TP400)	88	106	107	115	111	109	104	100

Eurofins Eaton Analytical Pomona

Isotope Dilution Summary

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

Job ID: 380-109653-1
 SDG: Weekly PFAS

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

Matrix: Water

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	HFPODA (50-200)	C6PFDA (50-200)	13C5PHA (50-200)	C4PFHA (50-200)	C8PFOA (50-200)	C9PFNA (50-200)	13C7PUA (50-200)	PFDaA (50-200)
380-109653-10	FB: KA'AMILO WELLS	85	101	104	110	104	101	101	96
LCS 380-104942/22-A	Lab Control Sample	87	106	107	112	109	105	100	103
MBL 380-104942/20-A	Method Blank	82	103	100	108	104	100	98	91
MRL 380-104942/21-A	Lab Control Sample	77	102	105	108	109	106	103	98

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFBA (50-200)	PFPeA (50-200)	C3PFBS (50-200)	C3PFHS (50-200)	C8PFOS (50-200)	42FTS (50-200)	62FTS (50-200)	82FTS (50-200)
380-109424-B-1-A MS	Matrix Spike	98	117	114	112	108	162	147	131
380-109424-C-1-A MSD	Matrix Spike Duplicate	99	119	111	114	106	166	151	130
380-109653-5	KA'AMILO WELLS	99	101	111	112	108	159	165	130
380-109653-6	FB: MOANALUA WELLS (331-223-TP202)	94	92	108	112	104	144	138	113
380 109653 7	FB: HALAWA WELLS UNITS 1 & 2 (331-206-TP065)	97	95	110	111	105	147	142	119
380-109653-8	FB: AIEA GULCH WELLS PUMF 2 (331-202-TP072)	98	99	113	112	105	151	148	128
380-109653-9	FB: AIEA WELLS PUMPS 1&2 (260) (331-203-TP400)	110	111	115	116	110	153	142	126
380-109653-10	FB: KA'AMILO WELLS	104	108	113	113	107	157	148	127
LCS 380-104942/22-A	Lab Control Sample	106	107	114	113	102	137	134	120
MBL 380-104942/20-A	Method Blank	110	110	112	117	107	151	145	123
MRL 380-104942/21-A	Lab Control Sample	110	112	117	118	110	155	146	125

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: 380-109653-1
SDG: Weekly PFAS

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

Lab Sample ID: MBL 380-104942/20-A
Matrix: Water
Analysis Batch: 105073

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 104942

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosfluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<0.30		2.0	ng/L		08/22/24 16:02	08/23/24 15:33	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<0.30		2.0	ng/L		08/22/24 16:02	08/23/24 15:33	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0	ng/L		08/22/24 16:02	08/23/24 15:33	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<1.0		2.0	ng/L		08/22/24 16:02	08/23/24 15:33	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0	ng/L		08/22/24 16:02	08/23/24 15:33	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	ng/L		08/22/24 16:02	08/23/24 15:33	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	ng/L		08/22/24 16:02	08/23/24 15:33	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0	ng/L		08/22/24 16:02	08/23/24 15:33	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0	ng/L		08/22/24 16:02	08/23/24 15:33	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0	ng/L		08/22/24 16:02	08/23/24 15:33	1
Perfluorononanoic acid (PFNA)	<0.40		2.0	ng/L		08/22/24 16:02	08/23/24 15:33	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0	ng/L		08/22/24 16:02	08/23/24 15:33	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0	ng/L		08/22/24 16:02	08/23/24 15:33	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0	ng/L		08/22/24 16:02	08/23/24 15:33	1
Perfluorobutanoic acid (PFBA)	<0.69		2.0	ng/L		08/22/24 16:02	08/23/24 15:33	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.38		2.0	ng/L		08/22/24 16:02	08/23/24 15:33	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.37		2.0	ng/L		08/22/24 16:02	08/23/24 15:33	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<0.48		2.0	ng/L		08/22/24 16:02	08/23/24 15:33	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<0.47		2.0	ng/L		08/22/24 16:02	08/23/24 15:33	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<0.25		2.0	ng/L		08/22/24 16:02	08/23/24 15:33	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.46		2.0	ng/L		08/22/24 16:02	08/23/24 15:33	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.15		2.0	ng/L		08/22/24 16:02	08/23/24 15:33	1
Perfluoropentanoic acid (PFPeA)	<0.38		2.0	ng/L		08/22/24 16:02	08/23/24 15:33	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.36		2.0	ng/L		08/22/24 16:02	08/23/24 15:33	1
Perfluoropentanesulfonic acid (PFPeS)	<0.39		2.0	ng/L		08/22/24 16:02	08/23/24 15:33	1

Isotope Dilution	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	82		50 - 200	08/22/24 16:02	08/23/24 15:33	1
13C6 PFDA	103		50 - 200	08/22/24 16:02	08/23/24 15:33	1
13C5 PFHxA	100		50 - 200	08/22/24 16:02	08/23/24 15:33	1
13C4 PFHpA	108		50 - 200	08/22/24 16:02	08/23/24 15:33	1
13C8 PFOA	104		50 - 200	08/22/24 16:02	08/23/24 15:33	1
13C9 PFNA	100		50 - 200	08/22/24 16:02	08/23/24 15:33	1
13C7 PFUnA	98		50 - 200	08/22/24 16:02	08/23/24 15:33	1
13C2 PFDoA	91		50 - 200	08/22/24 16:02	08/23/24 15:33	1
13C4 PFBA	110		50 - 200	08/22/24 16:02	08/23/24 15:33	1
13C5 PFPeA	110		50 - 200	08/22/24 16:02	08/23/24 15:33	1
13C3 PFBS	112		50 - 200	08/22/24 16:02	08/23/24 15:33	1
13C3 PFHxS	117		50 - 200	08/22/24 16:02	08/23/24 15:33	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-109653-1
SDG: Weekly PFAS

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

Lab Sample ID: MBL 380-104942/20-A
Matrix: Water
Analysis Batch: 105073

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 104942

<i>Isotope Dilution</i>	<i>MBL %Recovery</i>	<i>MBL Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C8 PFOS	107		50 - 200	08/22/24 16:02	08/23/24 15:33	1
13C2-4:2-FTS	151		50 - 200	08/22/24 16:02	08/23/24 15:33	1
13C2-6:2-FTS	145		50 - 200	08/22/24 16:02	08/23/24 15:33	1
13C2-8:2-FTS	123		50 - 200	08/22/24 16:02	08/23/24 15:33	1

Lab Sample ID: LCS 380-104942/22-A
Matrix: Water
Analysis Batch: 105073

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 104942

<i>Analyte</i>	<i>Spike Added</i>	<i>LCS Result</i>	<i>LCS Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec Limits</i>
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	60.1	59.4		ng/L		99	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	60.1	59.7		ng/L		99	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	60.1	58.7		ng/L		98	70 - 130
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	60.1	59.7		ng/L		99	70 - 130
Perfluorobutanesulfonic acid (PFBS)	60.1	59.3		ng/L		99	70 - 130
Perfluorodecanoic acid (PFDA)	60.1	57.7		ng/L		96	70 - 130
Perfluorododecanoic acid (PFDoA)	60.1	63.4		ng/L		105	70 - 130
Perfluoroheptanoic acid (PFHpA)	60.1	59.3		ng/L		99	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	60.1	60.1		ng/L		100	70 - 130
Perfluorohexanoic acid (PFHxA)	60.1	61.7		ng/L		103	70 - 130
Perfluorononanoic acid (PFNA)	60.1	59.4		ng/L		99	70 - 130
Perfluorooctanesulfonic acid (PFOS)	60.1	62.3		ng/L		104	70 - 130
Perfluorooctanoic acid (PFOA)	60.1	58.0		ng/L		96	70 - 130
Perfluoroundecanoic acid (PFUnA)	60.1	67.6		ng/L		112	70 - 130
Perfluorobutanoic acid (PFBA)	60.1	62.6		ng/L		104	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	60.1	59.5		ng/L		99	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	60.1	66.1		ng/L		110	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	60.1	61.9		ng/L		103	70 - 130
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	60.1	50.5		ng/L		84	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	60.1	56.3		ng/L		94	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	60.1	63.4		ng/L		105	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	60.1	63.0		ng/L		105	70 - 130
Perfluoropentanoic acid (PFPeA)	60.1	62.2		ng/L		103	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	60.1	66.1		ng/L		110	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-109653-1
SDG: Weekly PFAS

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

Lab Sample ID: LCS 380-104942/22-A
Matrix: Water
Analysis Batch: 105073

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 104942

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoropentanesulfonic acid (PFPeS)	60.1	58.6		ng/L		97	70 - 130
LCS LCS							
Isotope Dilution	%Recovery	Qualifier	Limits				
13C3 HFPO-DA	87		50 - 200				
13C6 PFDA	106		50 - 200				
13C5 PFHxA	107		50 - 200				
13C4 PFHpA	112		50 - 200				
13C8 PFOA	109		50 - 200				
13C9 PFNA	105		50 - 200				
13C7 PFUnA	100		50 - 200				
13C2 PFDoA	103		50 - 200				
13C4 PFBA	106		50 - 200				
13C5 PFPeA	107		50 - 200				
13C3 PFBS	114		50 - 200				
13C3 PFHxS	113		50 - 200				
13C8 PFOS	102		50 - 200				
13C2-4:2-FTS	137		50 - 200				
13C2-6:2-FTS	134		50 - 200				
13C2-8:2-FTS	120		50 - 200				

Lab Sample ID: MRL 380-104942/21-A
Matrix: Water
Analysis Batch: 105073

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 104942

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafuoro-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	1.95	J	ng/L		97	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.01	2.10	J	ng/L		105	50 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.01	1.97	J	ng/L		98	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.01	1.94	J	ng/L		96	50 - 150
Perfluorodecanoic acid (PFDA)	2.01	2.18	J	ng/L		109	50 - 150
Perfluorododecanoic acid (PFDoA)	2.01	2.18	J	ng/L		109	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.01	2.18	J	ng/L		109	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.01	2.02	J	ng/L		101	50 - 150
Perfluorohexanoic acid (PFHxA)	2.01	2.16	J	ng/L		108	50 - 150
Perfluorononanoic acid (PFNA)	2.01	2.10	J	ng/L		105	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.01	2.08	J	ng/L		104	50 - 150
Perfluorooctanoic acid (PFOA)	2.01	2.12	J	ng/L		106	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.01	2.07	J	ng/L		103	50 - 150
Perfluorobutanoic acid (PFBA)	2.01	2.10	J	ng/L		105	50 - 150

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-109653-1
SDG: Weekly PFAS

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

Lab Sample ID: MRL 380-104942/21-A
Matrix: Water
Analysis Batch: 105073

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 104942

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	2.01	2.05	J	ng/L		102	50 - 150
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	2.01	2.36	J	ng/L		118	50 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	2.01	2.26	J	ng/L		112	50 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2.01	1.59	J	ng/L		79	50 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	2.01	1.84	J	ng/L		92	50 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.01	2.03	J	ng/L		101	50 - 150
Perfluoro-4-methoxybutanoic acid (PFMBA)	2.01	1.96	J	ng/L		97	50 - 150
Perfluoropentanoic acid (PFPeA)	2.01	2.15	J	ng/L		107	50 - 150
Perfluoroheptanesulfonic acid (PFHpS)	2.01	2.16	J	ng/L		108	50 - 150
Perfluoropentanesulfonic acid (PFPeS)	2.01	1.90	J	ng/L		95	50 - 150

Isotope Dilution	MRL %Recovery	MRL Qualifier	MRL Limits
13C3 HFPO-DA	77		50 - 200
13C6 PFDA	102		50 - 200
13C5 PFHxA	105		50 - 200
13C4 PFHpA	108		50 - 200
13C8 PFOA	109		50 - 200
13C9 PFNA	106		50 - 200
13C7 PFUnA	103		50 - 200
13C2 PFDoA	98		50 - 200
13C4 PFBA	110		50 - 200
13C5 PFPeA	112		50 - 200
13C3 PFBS	117		50 - 200
13C3 PFHxS	118		50 - 200
13C8 PFOS	110		50 - 200
13C2-4:2-FTS	155		50 - 200
13C2-6:2-FTS	146		50 - 200
13C2-8:2-FTS	125		50 - 200

Lab Sample ID: 380-109424-B-1-A MS
Matrix: Water
Analysis Batch: 105073

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 104942

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		120	107		ng/L		89	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		120	112		ng/L		93	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		120	112		ng/L		93	70 - 130

QC Sample Results

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

Job ID: 380-109653-1
 SDG: Weekly PFAS

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

Lab Sample ID: 380-109424-B-1-A MS
Matrix: Water
Analysis Batch: 105073

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 104942

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide	<2.0		120	108		ng/L		90	70 - 130
Dimer Acid (HFPO-DA/GenX)									
Perfluorobutanesulfonic acid (PFBS)	<2.0		120	115		ng/L		95	70 - 130
Perfluorodecanoic acid (PFDA)	<2.0		120	118		ng/L		98	70 - 130
Perfluorododecanoic acid (PFDoA)	<2.0		120	118		ng/L		98	70 - 130
Perfluoroheptanoic acid (PFHpA)	<2.0		120	119		ng/L		99	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	<2.0		120	114		ng/L		95	70 - 130
Perfluorohexanoic acid (PFHxA)	<2.0		120	127		ng/L		106	70 - 130
Perfluorononanoic acid (PFNA)	<2.0		120	109		ng/L		91	70 - 130
Perfluorooctanesulfonic acid (PFOS)	<2.0		120	116		ng/L		96	70 - 130
Perfluorooctanoic acid (PFOA)	<2.0		120	118		ng/L		98	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		120	120		ng/L		100	70 - 130
Perfluorobutanoic acid (PFBA)	<2.0		120	113		ng/L		94	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		120	116		ng/L		96	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		120	119		ng/L		99	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		120	120		ng/L		99	70 - 130
Nonafluoro-3,6-dioxahheptanoic acid (NFDHA)	<2.0		120	101		ng/L		84	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		120	104		ng/L		86	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		120	126		ng/L		105	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		120	122		ng/L		101	70 - 130
Perfluoropentanoic acid (PFPeA)	<2.0		120	117		ng/L		98	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		120	118		ng/L		98	70 - 130
Perfluoropentanesulfonic acid (PFPeS)	<2.0		120	114		ng/L		95	70 - 130

Isotope Dilution	MS MS		Limits
	%Recovery	Qualifier	
13C3 HFPO-DA	92		50 - 200
13C6 PFDA	99		50 - 200
13C5 PFHxA	94		50 - 200
13C4 PFHpA	96		50 - 200
13C8 PFOA	99		50 - 200
13C9 PFNA	105		50 - 200
13C7 PFUnA	101		50 - 200
13C2 PFDoA	95		50 - 200
13C4 PFBA	98		50 - 200
13C5 PFPeA	117		50 - 200
13C3 PFBS	114		50 - 200
13C3 PFHxS	112		50 - 200
13C8 PFOS	108		50 - 200

QC Sample Results

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

Job ID: 380-109653-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-109424-B-1-A MS
Matrix: Water
Analysis Batch: 105073

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 104942

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>MS MS Qualifier</i>	<i>Limits</i>
13C2-4:2-FTS	162		50 - 200
13C2-6:2-FTS	147		50 - 200
13C2-8:2-FTS	131		50 - 200

Lab Sample ID: 380-109424-C-1-A MSD
Matrix: Water
Analysis Batch: 105073

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 104942

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		120	110		ng/L		91	70 - 130	3	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		120	114		ng/L		95	70 - 130	2	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		120	110		ng/L		91	70 - 130	2	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		120	105		ng/L		88	70 - 130	2	30
Perfluorobutanesulfonic acid (PFBS)	<2.0		120	120		ng/L		99	70 - 130	4	30
Perfluorodecanoic acid (PFDA)	<2.0		120	114		ng/L		95	70 - 130	3	30
Perfluorododecanoic acid (PFDoA)	<2.0		120	119		ng/L		99	70 - 130	1	30
Perfluoroheptanoic acid (PFHpA)	<2.0		120	113		ng/L		94	70 - 130	6	30
Perfluorohexanesulfonic acid (PFHxS)	<2.0		120	113		ng/L		94	70 - 130	1	30
Perfluorohexanoic acid (PFHxA)	<2.0		120	128		ng/L		106	70 - 130	0	30
Perfluorononanoic acid (PFNA)	<2.0		120	116		ng/L		96	70 - 130	6	30
Perfluorooctanesulfonic acid (PFOS)	<2.0		120	121		ng/L		101	70 - 130	5	30
Perfluorooctanoic acid (PFOA)	<2.0		120	119		ng/L		99	70 - 130	1	30
Perfluoroundecanoic acid (PFUnA)	<2.0		120	125		ng/L		103	70 - 130	3	30
Perfluorobutanoic acid (PFBA)	<2.0		120	121		ng/L		100	70 - 130	7	30
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		120	115		ng/L		96	70 - 130	1	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		120	116		ng/L		97	70 - 130	2	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		120	120		ng/L		99	70 - 130	0	30
Nonfluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		120	112		ng/L		93	70 - 130	10	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		120	109		ng/L		90	70 - 130	5	30
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		120	133		ng/L		110	70 - 130	6	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		120	121		ng/L		100	70 - 130	1	30
Perfluoropentanoic acid (PFPeA)	<2.0		120	119		ng/L		99	70 - 130	1	30
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		120	121		ng/L		101	70 - 130	2	30
Perfluoropentanesulfonic acid (PFPeS)	<2.0		120	112		ng/L		93	70 - 130	2	30

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-109653-1
SDG: Weekly PFAS

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

Isotope Dilution	MSD MSD		Limits
	%Recovery	Qualifier	
13C3 HFPO-DA	92		50 - 200
13C6 PFDA	103		50 - 200
13C5 PFHxA	96		50 - 200
13C4 PFHpA	99		50 - 200
13C8 PFOA	98		50 - 200
13C9 PFNA	102		50 - 200
13C7 PFUnA	98		50 - 200
13C2 PFDoA	92		50 - 200
13C4 PFBA	99		50 - 200
13C5 PFPeA	119		50 - 200
13C3 PFBS	111		50 - 200
13C3 PFHxS	114		50 - 200
13C8 PFOS	106		50 - 200
13C2-4:2-FTS	166		50 - 200
13C2-6:2-FTS	151		50 - 200
13C2-8:2-FTS	130		50 - 200

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

Lab Sample ID: MBL 380-104831/19-A
Matrix: Water
Analysis Batch: 104962

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 104831

Analyte	MBL MBL		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<1.0		2.0	ng/L		08/22/24 08:59	08/22/24 17:30	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0	ng/L		08/22/24 08:59	08/22/24 17:30	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0	ng/L		08/22/24 08:59	08/22/24 17:30	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<0.58		2.0	ng/L		08/22/24 08:59	08/22/24 17:30	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<0.42		2.0	ng/L		08/22/24 08:59	08/22/24 17:30	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0	ng/L		08/22/24 08:59	08/22/24 17:30	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	ng/L		08/22/24 08:59	08/22/24 17:30	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0	ng/L		08/22/24 08:59	08/22/24 17:30	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	ng/L		08/22/24 08:59	08/22/24 17:30	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0	ng/L		08/22/24 08:59	08/22/24 17:30	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0	ng/L		08/22/24 08:59	08/22/24 17:30	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0	ng/L		08/22/24 08:59	08/22/24 17:30	1
Perfluorononanoic acid (PFNA)	<0.40		2.0	ng/L		08/22/24 08:59	08/22/24 17:30	1
Perfluorotetradecanoic acid (PFTA)	<0.54		2.0	ng/L		08/22/24 08:59	08/22/24 17:30	1
Perfluorotridecanoic acid (PFTrDA)	<0.36		2.0	ng/L		08/22/24 08:59	08/22/24 17:30	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<0.30		2.0	ng/L		08/22/24 08:59	08/22/24 17:30	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.30		2.0	ng/L		08/22/24 08:59	08/22/24 17:30	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0	ng/L		08/22/24 08:59	08/22/24 17:30	1
Surrogate	MBL MBL		Limits			Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier						
d5-NEtFOSAA	120		70 - 130			08/22/24 08:59	08/22/24 17:30	1
13C2 PFHxA	123		70 - 130			08/22/24 08:59	08/22/24 17:30	1
13C2 PFDA	128		70 - 130			08/22/24 08:59	08/22/24 17:30	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-109653-1
SDG: Weekly PFAS

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

Lab Sample ID: MBL 380-104831/19-A
Matrix: Water
Analysis Batch: 104962

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 104831

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C3-GenX	120		70 - 130	08/22/24 08:59	08/22/24 17:30	1

Lab Sample ID: LCS 380-104831/21-A
Matrix: Water
Analysis Batch: 104962

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 104831

<i>Analyte</i>	<i>Spike Added</i>	<i>LCS Result</i>	<i>LCS Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>Limits</i>
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	25.1	25.7		ng/L		103	70 - 130
Perfluorooctanesulfonic acid (PFOS)	25.1	24.8		ng/L		99	70 - 130
Perfluoroundecanoic acid (PFUnA)	25.1	27.2		ng/L		108	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	25.1	25.4		ng/L		101	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	25.1	26.4		ng/L		106	70 - 130
Perfluorohexanoic acid (PFHxA)	25.1	27.4		ng/L		109	70 - 130
Perfluorododecanoic acid (PFDoA)	25.1	25.8		ng/L		103	70 - 130
Perfluorooctanoic acid (PFOA)	25.1	27.6		ng/L		110	70 - 130
Perfluorodecanoic acid (PFDA)	25.1	27.2		ng/L		108	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	25.1	25.4		ng/L		101	70 - 130
Perfluorobutanesulfonic acid (PFBS)	25.1	24.6		ng/L		98	70 - 130
Perfluoroheptanoic acid (PFHpA)	25.1	28.8		ng/L		115	70 - 130
Perfluorononanoic acid (PFNA)	25.1	26.0		ng/L		104	70 - 130
Perfluorotetradecanoic acid (PFTA)	25.1	25.3		ng/L		101	70 - 130
Perfluorotridecanoic acid (PFTrDA)	25.1	26.0		ng/L		104	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	25.1	24.5		ng/L		98	70 - 130
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	25.1	24.3		ng/L		97	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	25.1	26.5		ng/L		106	70 - 130

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
d5-NEtFOSAA	117		70 - 130
13C2 PFHxA	117		70 - 130
13C2 PFDA	122		70 - 130
13C3-GenX	115		70 - 130

QC Sample Results

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

Job ID: 380-109653-1
SDG: Weekly PFAS

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

Lab Sample ID: MRL 380-104831/20-A
Matrix: Water
Analysis Batch: 104962

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 104831

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.00	2.09	J	ng/L		104	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.00	2.03	J	ng/L		101	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.00	2.16	J	ng/L		108	50 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2.00	2.01	J	ng/L		100	50 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2.00	2.02	J	ng/L		101	50 - 150
Perfluorohexanoic acid (PFHxA)	2.00	2.23	J	ng/L		111	50 - 150
Perfluorododecanoic acid (PFDoA)	2.00	2.09	J	ng/L		105	50 - 150
Perfluorooctanoic acid (PFOA)	2.00	2.18	J	ng/L		109	50 - 150
Perfluorodecanoic acid (PFDA)	2.00	2.19	J	ng/L		109	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.00	2.15	J	ng/L		107	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.00	1.89	J	ng/L		94	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.00	2.26	J	ng/L		113	50 - 150
Perfluorononanoic acid (PFNA)	2.00	2.21	J	ng/L		110	50 - 150
Perfluorotetradecanoic acid (PFTA)	2.00	2.18	J	ng/L		109	50 - 150
Perfluorotridecanoic acid (PFTTrDA)	2.00	2.05	J	ng/L		102	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	2.00	1.99	J	ng/L		99	50 - 150
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.00	1.93	J	ng/L		96	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.00	2.16	J	ng/L		108	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
d5-NEtFOSAA	112		70 - 130
13C2 PFHxA	117		70 - 130
13C2 PFDA	118		70 - 130
13C3-GenX	116		70 - 130

Lab Sample ID: 380-109397-E-1-A MS
Matrix: Water
Analysis Batch: 104962

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 104831

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		25.1	24.7		ng/L		99	70 - 130
Perfluorooctanesulfonic acid (PFOS)	<2.0		25.1	25.3		ng/L		101	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		25.1	25.5		ng/L		102	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		25.1	25.9		ng/L		104	70 - 130

Eurofins Eaton Analytical Pomona

QC Association Summary

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

Job ID: 380-109653-1
SDG: Weekly PFAS

LCMS

Prep Batch: 104831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-109653-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Drinking Water	537.1 DW	
380-109653-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	537.1 DW	
380-109653-3	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Total/NA	Drinking Water	537.1 DW	
380-109653-4	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP072)	Total/NA	Drinking Water	537.1 DW	
380-109653-5	KA'AMILO WELLS	Total/NA	Water	537.1 DW	
380-109653-6	FB: MOANALUA WELLS (331-223-TP202)	Total/NA	Water	537.1 DW	
380-109653-7	FB: HALAWA WELLS UNITS 1 & 2 (331-206-TP01)	Total/NA	Water	537.1 DW	
380-109653-8	FB: AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Total/NA	Water	537.1 DW	
380-109653-9	FB: AIEA WELLS PUMPS 1&2 (260) (331-203-TP072)	Total/NA	Water	537.1 DW	
380-109653-10	FB: KA'AMILO WELLS	Total/NA	Water	537.1 DW	
MBL 380-104831/19-A	Method Blank	Total/NA	Water	537.1 DW	
LCS 380-104831/21-A	Lab Control Sample	Total/NA	Water	537.1 DW	
MRL 380-104831/20-A	Lab Control Sample	Total/NA	Water	537.1 DW	
380-109397-E-1-A MS	Matrix Spike	Total/NA	Water	537.1 DW	
380-109397-F-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	537.1 DW	

Prep Batch: 104942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-109653-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Drinking Water	533	
380-109653-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	533	
380-109653-3	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Total/NA	Drinking Water	533	
380-109653-4	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP072)	Total/NA	Drinking Water	533	
380-109653-5	KA'AMILO WELLS	Total/NA	Water	533	
380-109653-6	FB: MOANALUA WELLS (331-223-TP202)	Total/NA	Water	533	
380-109653-7	FB: HALAWA WELLS UNITS 1 & 2 (331-206-TP01)	Total/NA	Water	533	
380-109653-8	FB: AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Total/NA	Water	533	
380-109653-9	FB: AIEA WELLS PUMPS 1&2 (260) (331-203-TP072)	Total/NA	Water	533	
380-109653-10	FB: KA'AMILO WELLS	Total/NA	Water	533	
MBL 380-104942/20-A	Method Blank	Total/NA	Water	533	
LCS 380-104942/22-A	Lab Control Sample	Total/NA	Water	533	
MRL 380-104942/21-A	Lab Control Sample	Total/NA	Water	533	
380-109424-B-1-A MS	Matrix Spike	Total/NA	Water	533	
380-109424-C-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	533	

Analysis Batch: 104962

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-109653-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Drinking Water	537.1	104831
380-109653-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	537.1	104831
380-109653-3	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Total/NA	Drinking Water	537.1	104831
380-109653-4	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP072)	Total/NA	Drinking Water	537.1	104831
380-109653-5	KA'AMILO WELLS	Total/NA	Water	537.1	104831
380-109653-6	FB: MOANALUA WELLS (331-223-TP202)	Total/NA	Water	537.1	104831
380-109653-7	FB: HALAWA WELLS UNITS 1 & 2 (331-206-TP01)	Total/NA	Water	537.1	104831
380-109653-8	FB: AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Total/NA	Water	537.1	104831
380-109653-9	FB: AIEA WELLS PUMPS 1&2 (260) (331-203-TP072)	Total/NA	Water	537.1	104831
380-109653-10	FB: KA'AMILO WELLS	Total/NA	Water	537.1	104831
MBL 380-104831/19-A	Method Blank	Total/NA	Water	537.1	104831
LCS 380-104831/21-A	Lab Control Sample	Total/NA	Water	537.1	104831
MRL 380-104831/20-A	Lab Control Sample	Total/NA	Water	537.1	104831
380-109397-E-1-A MS	Matrix Spike	Total/NA	Water	537.1	104831
380-109397-F-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	537.1	104831

QC Association Summary

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

Job ID: 380-109653-1
SDG: Weekly PFAS

LCMS

Analysis Batch: 105073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-109653-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Drinking Water	533	104942
380-109653-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	533	104942
380-109653-3	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Total/NA	Drinking Water	533	104942
380-109653-4	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP072)	Total/NA	Drinking Water	533	104942
380-109653-5	KA'AMILO WELLS	Total/NA	Water	533	104942
380-109653-6	FB: MOANALUA WELLS (331-223-TP202)	Total/NA	Water	533	104942
380-109653-7	FB: HALAWA WELLS UNITS 1 & 2 (331-206-TP01)	Total/NA	Water	533	104942
380-109653-8	FB: AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Total/NA	Water	533	104942
380-109653-9	FB: AIEA WELLS PUMPS 1&2 (260) (331-203-TP072)	Total/NA	Water	533	104942
380-109653-10	FB: KA'AMILO WELLS	Total/NA	Water	533	104942
MBL 380-104942/20-A	Method Blank	Total/NA	Water	533	104942
LCS 380-104942/22-A	Lab Control Sample	Total/NA	Water	533	104942
MRL 380-104942/21-A	Lab Control Sample	Total/NA	Water	533	104942
380-109424-B-1-A MS	Matrix Spike	Total/NA	Water	533	104942
380-109424-C-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	533	104942

Lab Chronicle

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

Job ID: 380-109653-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-109653-1

Date Collected: 08/19/24 09:41

Matrix: Drinking Water

Date Received: 08/21/24 09:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			104942	N8NE	EA POM	08/22/24 16:02
Total/NA	Analysis	533		1	105073	Y5FM	EA POM	08/23/24 17:47
Total/NA	Prep	537.1 DW			104831	G9MN	EA POM	08/22/24 08:59
Total/NA	Analysis	537.1		1	104962	SZ9R	EA POM	08/22/24 19:37

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

Lab Sample ID: 380-109653-2

Date Collected: 08/19/24 10:07

Matrix: Drinking Water

Date Received: 08/21/24 09:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			104942	N8NE	EA POM	08/22/24 16:02
Total/NA	Analysis	533		1	105073	Y5FM	EA POM	08/23/24 18:06
Total/NA	Prep	537.1 DW			104831	G9MN	EA POM	08/22/24 08:59
Total/NA	Analysis	537.1		1	104962	SZ9R	EA POM	08/22/24 19:47

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

Lab Sample ID: 380-109653-3

Date Collected: 08/19/24 10:39

Matrix: Drinking Water

Date Received: 08/21/24 09:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			104942	N8NE	EA POM	08/22/24 16:02
Total/NA	Analysis	533		1	105073	Y5FM	EA POM	08/23/24 18:15
Total/NA	Prep	537.1 DW			104831	G9MN	EA POM	08/22/24 08:59
Total/NA	Analysis	537.1		1	104962	SZ9R	EA POM	08/22/24 20:07

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

Lab Sample ID: 380-109653-4

Date Collected: 08/19/24 11:08

Matrix: Drinking Water

Date Received: 08/21/24 09:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			104942	N8NE	EA POM	08/22/24 16:02
Total/NA	Analysis	533		1	105073	Y5FM	EA POM	08/23/24 18:25
Total/NA	Prep	537.1 DW			104831	G9MN	EA POM	08/22/24 08:59
Total/NA	Analysis	537.1		1	104962	SZ9R	EA POM	08/22/24 20:19

Client Sample ID: KA'AMILO WELLS

Lab Sample ID: 380-109653-5

Date Collected: 08/19/24 11:34

Matrix: Water

Date Received: 08/21/24 09:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			104942	N8NE	EA POM	08/22/24 16:02
Total/NA	Analysis	533		1	105073	Y5FM	EA POM	08/23/24 18:35

Lab Chronicle

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

Job ID: 380-109653-1
 SDG: Weekly PFAS

Client Sample ID: KA'AMILO WELLS

Lab Sample ID: 380-109653-5

Date Collected: 08/19/24 11:34

Matrix: Water

Date Received: 08/21/24 09:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	537.1 DW			104831	G9MN	EA POM	08/22/24 08:59
Total/NA	Analysis	537.1		1	104962	SZ9R	EA POM	08/22/24 20:28

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

Lab Sample ID: 380-109653-6

Date Collected: 08/19/24 09:41

Matrix: Water

Date Received: 08/21/24 09:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			104942	N8NE	EA POM	08/22/24 16:02
Total/NA	Analysis	533		1	105073	Y5FM	EA POM	08/23/24 18:44
Total/NA	Prep	537.1 DW			104831	G9MN	EA POM	08/22/24 08:59
Total/NA	Analysis	537.1		1	104962	SZ9R	EA POM	08/22/24 20:38

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

Lab Sample ID: 380-109653-7

Date Collected: 08/19/24 10:07

Matrix: Water

Date Received: 08/21/24 09:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			104942	N8NE	EA POM	08/22/24 16:02
Total/NA	Analysis	533		1	105073	Y5FM	EA POM	08/23/24 18:54
Total/NA	Prep	537.1 DW			104831	G9MN	EA POM	08/22/24 08:59
Total/NA	Analysis	537.1		1	104962	SZ9R	EA POM	08/22/24 20:48

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

Lab Sample ID: 380-109653-8

Date Collected: 08/19/24 10:39

Matrix: Water

Date Received: 08/21/24 09:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			104942	N8NE	EA POM	08/22/24 16:02
Total/NA	Analysis	533		1	105073	Y5FM	EA POM	08/23/24 19:03
Total/NA	Prep	537.1 DW			104831	G9MN	EA POM	08/22/24 08:59
Total/NA	Analysis	537.1		1	104962	SZ9R	EA POM	08/22/24 20:57

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

Lab Sample ID: 380-109653-9

Date Collected: 08/19/24 11:08

Matrix: Water

Date Received: 08/21/24 09:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			104942	N8NE	EA POM	08/22/24 16:02
Total/NA	Analysis	533		1	105073	Y5FM	EA POM	08/23/24 19:13
Total/NA	Prep	537.1 DW			104831	G9MN	EA POM	08/22/24 08:59
Total/NA	Analysis	537.1		1	104962	SZ9R	EA POM	08/22/24 21:07

Lab Chronicle

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

Job ID: 380-109653-1
SDG: Weekly PFAS

Client Sample ID: FB: KA'AMILO WELLS

Lab Sample ID: 380-109653-10

Date Collected: 08/19/24 11:34

Matrix: Water

Date Received: 08/21/24 09:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			104942	N8NE	EA POM	08/22/24 16:02
Total/NA	Analysis	533		1	105073	Y5FM	EA POM	08/23/24 19:22
Total/NA	Prep	537.1 DW			104831	G9MN	EA POM	08/22/24 08:59
Total/NA	Analysis	537.1		1	104962	SZ9R	EA POM	08/22/24 21:17

Laboratory References:

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

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

Accreditation/Certification Summary

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

Job ID: 380-109653-1
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
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17

Method Summary

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

Job ID: 380-109653-1
SDG: Weekly PFAS

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

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

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



Sample Summary

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

Job ID: 380-109653-1
 SDG: Weekly PFAS

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	PWSID Number
380-109653-1	MOANALUA WELLS (331-223-TP202)	Drinking Water	08/19/24 09:41	08/21/24 09:51	HI0000331
380-109653-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	Drinking Water	08/19/24 10:07	08/21/24 09:51	HI0000331
380-109653-3	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Drinking Water	08/19/24 10:39	08/21/24 09:51	HI0000331
380-109653-4	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP400)	Drinking Water	08/19/24 11:08	08/21/24 09:51	HI0000331
380-109653-5	KA'AMILO WELLS	Water	08/19/24 11:34	08/21/24 09:51	
380-109653-6	FB: MOANALUA WELLS (331-223-TP202)	Water	08/19/24 09:41	08/21/24 09:51	HI0000331
380-109653-7	FB: HALAWA WELLS UNITS 1 & 2 (331-206-TP065)	Water	08/19/24 10:07	08/21/24 09:51	HI0000331
380-109653-8	FB: AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Water	08/19/24 10:39	08/21/24 09:51	HI0000331
380-109653-9	FB: AIEA WELLS PUMPS 1&2 (260) (331-203-TP400)	Water	08/19/24 11:08	08/21/24 09:51	HI0000331
380-109653-10	FB: KA'AMILO WELLS	Water	08/19/24 11:34	08/21/24 09:51	

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

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

Chain of Custody Record



Client Information		Lab P/N: Arada, Rachelle		Carrier Tracking No(s)		COC No: 380-27941-2757.2	
Client Contact: Dr Ron Fenstermacher		E-Mail: Rachelle.Arada@get.eurofinsus.com		State of Origin:		Page: Page 2 of 2	
Company: City & County of Honolulu		FWSID:				Job #:	
Address: 630 South Beretania Street; Chemistry Lab		Due Date Requested:		Analysis Requested:		Preservation Codes:	
City: Honolulu		TAT Requested (days):		Perform MS/MSD (Yes or No)		A - HCL	
State Zip: HI, 96943		Compliance Project: Δ No		Field Filtered Sample (Yes or No)		M - Hexane	
Phone: 806-748-5091 (tel)		PO #: C20525101 exp 05312023		R A Q O A Y I		N - None	
Email: rfenstermacher@hbws.org		WO #:		537 1 DM_PREC - 537 1 Full List		O - AsNaO2	
Project Name: RED-HILL/HBWS sites Event Desc: RUSH Weekly Red Hill		Project #: 38001111		525 2 PREC - (MOD) 525plus PLUS TICs		P - Na2O4S	
Site:		SSOW#:		8015B_DRO_LL_CS HNL Ranges C10-C24/C24-C36/C8-C18		Q - Na2SO3	
				8015B_GRO_LL (MOD) GRO		R - Na2SO3	
				SUSCONTRACT 625 PAH Physis LL (EAL) + TICs		S - H2SO4	
				533 All Analytes		T - TSP Dodecahydrate	
				537 1 DM_PREC - 537 1 Full List		U - Acetone	
				525 2 PREC - (MOD) 525plus PLUS TICs		V - MCAA	
				8015B_DRO_LL_CS HNL Ranges C10-C24/C24-C36/C8-C18		W - pH 4-5	
				8015B_GRO_LL (MOD) GRO		Y - Trizma	
				SUSCONTRACT 625 PAH Physis LL (EAL) + TICs		Z - other (specify)	
				Perform MS/MSD (Yes or No)		Other	
				Field Filtered Sample (Yes or No)		Total Number of Containers	
				Matrix (Water, Seawater, Urine, etc.)		Special Instructions/Note:	
				Sample Type (C=Comp, G=grab)		chlorinated	
				Sample Time		chlorinated	
				Sample Date			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-2024 1134			
				19-Aug-2024 0941			
				19-Aug-2024 1007			
				19-Aug-2024 1039			
				19-Aug-2024 1108			
				19-Aug-20			

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-109653-1

SDG Number: Weekly PFAS

Login Number: 109653

List Number: 1

Creator: Segura, Ryan

List Source: Eurofins Eaton Analytical Pomona

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