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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 12/18/2024 11:10:24 AM

JOB DESCRIPTION

RED-HILL
Weekly PFAS

JOB NUMBER

380-125976-1

Eurofins Eaton Analytical Pomona

Job Notes

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

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

Compliance Statement

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

Authorization



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Definitions/Glossary

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

Job ID: 380-125976-1
SDG: Weekly PFAS

Qualifiers

LCMS

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

Glossary

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

Case Narrative

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

Job ID: 380-125976-1

Job ID: 380-125976-1

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Job Narrative 380-125976-1

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 12/11/2024 9:31 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.7°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: 380-125976-1
SDG: Weekly PFAS

Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1

Lab Sample ID: 380-125976-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanesulfonic acid (PFHxS)	2.4		2.0	ng/L	1		533	Total/NA
Perfluorohexanoic acid (PFHxA)	2.0		2.0	ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.3		2.0	ng/L	1		533	Total/NA
Perfluoropentanoic acid (PFPeA)	2.3		2.0	ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.4		2.0	ng/L	1		537.1	Total/NA
Perfluorohexanoic acid (PFHxA)	2.2		2.0	ng/L	1		537.1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.8		2.0	ng/L	1		537.1	Total/NA

Client Sample ID: AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-125976-2

No Detections.

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

Lab Sample ID: 380-125976-3

No Detections.

Client Sample ID: KA'AMILO WELLS

Lab Sample ID: 380-125976-4

No Detections.

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

Lab Sample ID: 380-125976-5

No Detections.

Client Sample ID: FB AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-125976-6

No Detections.

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

Lab Sample ID: 380-125976-7

No Detections.

Client Sample ID: FB KA'AMILO WELLS

Lab Sample ID: 380-125976-8

No Detections.

This Detection Summary does not include radiochemical test results.

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Client Sample Results

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

Job ID: 380-125976-1
SDG: Weekly PFAS

Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1

Lab Sample ID: 380-125976-1

Date Collected: 12/09/24 09:50

Matrix: Water

Date Received: 12/11/24 09:31

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		12/14/24 10:43	12/16/24 14:05	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:05	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:05	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:05	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:05	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:05	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:05	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:05	1
Perfluorohexanesulfonic acid (PFHxS)	2.4		2.0	ng/L		12/14/24 10:43	12/16/24 14:05	1
Perfluorohexanoic acid (PFHxA)	2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:05	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:05	1
Perfluorooctanesulfonic acid (PFOS)	2.3		2.0	ng/L		12/14/24 10:43	12/16/24 14:05	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:05	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:05	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:05	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:05	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:05	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:05	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:05	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:05	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:05	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:05	1
Perfluoropentanoic acid (PFPeA)	2.3		2.0	ng/L		12/14/24 10:43	12/16/24 14:05	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:05	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:05	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	102		50 - 200	12/14/24 10:43	12/16/24 14:05	1
13C6 PFDA	100		50 - 200	12/14/24 10:43	12/16/24 14:05	1
13C5 PFHxA	99		50 - 200	12/14/24 10:43	12/16/24 14:05	1
13C4 PFHpA	106		50 - 200	12/14/24 10:43	12/16/24 14:05	1
13C8 PFOA	105		50 - 200	12/14/24 10:43	12/16/24 14:05	1
13C9 PFNA	104		50 - 200	12/14/24 10:43	12/16/24 14:05	1
13C7 PFUnA	108		50 - 200	12/14/24 10:43	12/16/24 14:05	1
13C2 PFDoA	105		50 - 200	12/14/24 10:43	12/16/24 14:05	1
13C4 PFBA	104		50 - 200	12/14/24 10:43	12/16/24 14:05	1
13C5 PFPeA	108		50 - 200	12/14/24 10:43	12/16/24 14:05	1
13C3 PFBS	104		50 - 200	12/14/24 10:43	12/16/24 14:05	1
13C3 PFHxS	105		50 - 200	12/14/24 10:43	12/16/24 14:05	1

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Client Sample Results

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

Job ID: 380-125976-1
SDG: Weekly PFAS

Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1

Lab Sample ID: 380-125976-1

Date Collected: 12/09/24 09:50

Matrix: Water

Date Received: 12/11/24 09:31

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 PFOS	104		50 - 200	12/14/24 10:43	12/16/24 14:05	1
13C2-4:2-FTS	127		50 - 200	12/14/24 10:43	12/16/24 14:05	1
13C2-6:2-FTS	128		50 - 200	12/14/24 10:43	12/16/24 14:05	1
13C2-8:2-FTS	120		50 - 200	12/14/24 10:43	12/16/24 14:05	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:15	1
Perfluorooctanesulfonic acid (PFOS)	2.4		2.0	ng/L		12/13/24 06:29	12/14/24 04:15	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:15	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:15	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:15	1
Perfluorohexanoic acid (PFHxA)	2.2		2.0	ng/L		12/13/24 06:29	12/14/24 04:15	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:15	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:15	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:15	1
Perfluorohexanesulfonic acid (PFHxS)	2.8		2.0	ng/L		12/13/24 06:29	12/14/24 04:15	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:15	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:15	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:15	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:15	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:15	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:15	1
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:15	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:15	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
d5-NEtFOSAA	107		70 - 130	12/13/24 06:29	12/14/24 04:15	1		
13C2 PFHxA	112		70 - 130	12/13/24 06:29	12/14/24 04:15	1		
13C2 PFDA	113		70 - 130	12/13/24 06:29	12/14/24 04:15	1		
13C3-GenX	104		70 - 130	12/13/24 06:29	12/14/24 04:15	1		

Client Sample ID: AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-125976-2

Date Collected: 12/09/24 10:18

Matrix: Water

Date Received: 12/11/24 09:31

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		12/14/24 10:43	12/16/24 14:15	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:15	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:15	1

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Client Sample Results

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

Job ID: 380-125976-1
SDG: Weekly PFAS

Client Sample ID: AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-125976-2

Date Collected: 12/09/24 10:18

Matrix: Water

Date Received: 12/11/24 09:31

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		12/14/24 10:43	12/16/24 14:15	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:15	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:15	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:15	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:15	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:15	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:15	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:15	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:15	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:15	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:15	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:15	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:15	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:15	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:15	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:15	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:15	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:15	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:15	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:15	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:15	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:15	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	95		50 - 200			12/14/24 10:43	12/16/24 14:15	1
13C6 PFDA	104		50 - 200			12/14/24 10:43	12/16/24 14:15	1
13C5 PFHxA	102		50 - 200			12/14/24 10:43	12/16/24 14:15	1
13C4 PFHpA	107		50 - 200			12/14/24 10:43	12/16/24 14:15	1
13C8 PFOA	109		50 - 200			12/14/24 10:43	12/16/24 14:15	1
13C9 PFNA	105		50 - 200			12/14/24 10:43	12/16/24 14:15	1
13C7 PFUnA	106		50 - 200			12/14/24 10:43	12/16/24 14:15	1
13C2 PFDoA	102		50 - 200			12/14/24 10:43	12/16/24 14:15	1
13C4 PFBA	107		50 - 200			12/14/24 10:43	12/16/24 14:15	1
13C5 PFPeA	109		50 - 200			12/14/24 10:43	12/16/24 14:15	1
13C3 PFBS	105		50 - 200			12/14/24 10:43	12/16/24 14:15	1
13C3 PFHxS	105		50 - 200			12/14/24 10:43	12/16/24 14:15	1
13C8 PFOS	104		50 - 200			12/14/24 10:43	12/16/24 14:15	1
13C2-4:2-FTS	126		50 - 200			12/14/24 10:43	12/16/24 14:15	1
13C2-6:2-FTS	131		50 - 200			12/14/24 10:43	12/16/24 14:15	1
13C2-8:2-FTS	122		50 - 200			12/14/24 10:43	12/16/24 14:15	1

Client Sample Results

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

Job ID: 380-125976-1
SDG: Weekly PFAS

Client Sample ID: AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-125976-2

Date Collected: 12/09/24 10:18

Matrix: Water

Date Received: 12/11/24 09:31

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		12/13/24 06:29	12/14/24 04:24	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:24	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:24	1
N-methylperfluorooctanesulfonamideacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:24	1
N-ethylperfluorooctanesulfonamideacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:24	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:24	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:24	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:24	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:24	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:24	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:24	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:24	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:24	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:24	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:24	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:24	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:24	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	109		70 - 130			12/13/24 06:29	12/14/24 04:24	1
13C2 PFHxA	117		70 - 130			12/13/24 06:29	12/14/24 04:24	1
13C2 PFDA	116		70 - 130			12/13/24 06:29	12/14/24 04:24	1
13C3-GenX	107		70 - 130			12/13/24 06:29	12/14/24 04:24	1

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

Lab Sample ID: 380-125976-3

Date Collected: 12/09/24 10:49

Matrix: Water

Date Received: 12/11/24 09:31

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		12/14/24 10:43	12/16/24 14:24	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:24	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:24	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:24	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:24	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:24	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:24	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:24	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:24	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:24	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:24	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:24	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-125976-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-125976-3

Date Collected: 12/09/24 10:49

Matrix: Water

Date Received: 12/11/24 09:31

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:24	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:24	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:24	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:24	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:24	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:24	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:24	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:24	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:24	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:24	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:24	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:24	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:24	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	103		50 - 200	12/14/24 10:43	12/16/24 14:24	1
13C6 PFDA	105		50 - 200	12/14/24 10:43	12/16/24 14:24	1
13C5 PFHxA	104		50 - 200	12/14/24 10:43	12/16/24 14:24	1
13C4 PFHpA	107		50 - 200	12/14/24 10:43	12/16/24 14:24	1
13C8 PFOA	111		50 - 200	12/14/24 10:43	12/16/24 14:24	1
13C9 PFNA	103		50 - 200	12/14/24 10:43	12/16/24 14:24	1
13C7 PFUnA	111		50 - 200	12/14/24 10:43	12/16/24 14:24	1
13C2 PFDoA	109		50 - 200	12/14/24 10:43	12/16/24 14:24	1
13C4 PFBA	105		50 - 200	12/14/24 10:43	12/16/24 14:24	1
13C5 PFPeA	106		50 - 200	12/14/24 10:43	12/16/24 14:24	1
13C3 PFBS	108		50 - 200	12/14/24 10:43	12/16/24 14:24	1
13C3 PFHxS	107		50 - 200	12/14/24 10:43	12/16/24 14:24	1
13C8 PFOS	106		50 - 200	12/14/24 10:43	12/16/24 14:24	1
13C2-4:2-FTS	124		50 - 200	12/14/24 10:43	12/16/24 14:24	1
13C2-6:2-FTS	134		50 - 200	12/14/24 10:43	12/16/24 14:24	1
13C2-8:2-FTS	113		50 - 200	12/14/24 10:43	12/16/24 14:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:34	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:34	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:34	1
N-methylperfluorooctanesulfonamideacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:34	1
N-ethylperfluorooctanesulfonamideacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:34	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:34	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:34	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-125976-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-125976-3

Date Collected: 12/09/24 10:49

Matrix: Water

Date Received: 12/11/24 09:31

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		12/13/24 06:29	12/14/24 04:34	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:34	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:34	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:34	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:34	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:34	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:34	1
Perfluorotridecanoic acid (PFTTrDA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:34	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:34	1
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:34	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	110		70 - 130			12/13/24 06:29	12/14/24 04:34	1
13C2 PFHxA	114		70 - 130			12/13/24 06:29	12/14/24 04:34	1
13C2 PFDA	111		70 - 130			12/13/24 06:29	12/14/24 04:34	1
13C3-GenX	105		70 - 130			12/13/24 06:29	12/14/24 04:34	1

Client Sample ID: KA'AMILO WELLS

Lab Sample ID: 380-125976-4

Date Collected: 12/09/24 11:23

Matrix: Water

Date Received: 12/11/24 09:31

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		12/14/24 10:43	12/16/24 11:32	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 11:32	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 11:32	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 11:32	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 11:32	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 11:32	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 11:32	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 11:32	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 11:32	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 11:32	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 11:32	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 11:32	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 11:32	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 11:32	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 11:32	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 11:32	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 11:32	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 11:32	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-125976-1
SDG: Weekly PFAS

Client Sample ID: KA'AMILO WELLS

Lab Sample ID: 380-125976-4

Date Collected: 12/09/24 11:23

Matrix: Water

Date Received: 12/11/24 09:31

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 11:32	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 11:32	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 11:32	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 11:32	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 11:32	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 11:32	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 11:32	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	96		50 - 200	12/14/24 10:43	12/16/24 11:32	1
13C6 PFDA	108		50 - 200	12/14/24 10:43	12/16/24 11:32	1
13C5 PFHxA	102		50 - 200	12/14/24 10:43	12/16/24 11:32	1
13C4 PFHpA	107		50 - 200	12/14/24 10:43	12/16/24 11:32	1
13C8 PFOA	108		50 - 200	12/14/24 10:43	12/16/24 11:32	1
13C9 PFNA	102		50 - 200	12/14/24 10:43	12/16/24 11:32	1
13C7 PFUnA	108		50 - 200	12/14/24 10:43	12/16/24 11:32	1
13C2 PFDoA	109		50 - 200	12/14/24 10:43	12/16/24 11:32	1
13C4 PFBA	109		50 - 200	12/14/24 10:43	12/16/24 11:32	1
13C5 PFPeA	117		50 - 200	12/14/24 10:43	12/16/24 11:32	1
13C3 PFBS	104		50 - 200	12/14/24 10:43	12/16/24 11:32	1
13C3 PFHxS	107		50 - 200	12/14/24 10:43	12/16/24 11:32	1
13C8 PFOS	104		50 - 200	12/14/24 10:43	12/16/24 11:32	1
13C2-4:2-FTS	136		50 - 200	12/14/24 10:43	12/16/24 11:32	1
13C2-6:2-FTS	133		50 - 200	12/14/24 10:43	12/16/24 11:32	1
13C2-8:2-FTS	124		50 - 200	12/14/24 10:43	12/16/24 11:32	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		12/13/24 06:29	12/14/24 04:44	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:44	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:44	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:44	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:44	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:44	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:44	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:44	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:44	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:44	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:44	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:44	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:44	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:44	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:44	1

Client Sample Results

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

Job ID: 380-125976-1
SDG: Weekly PFAS

Client Sample ID: KA'AMILO WELLS

Lab Sample ID: 380-125976-4

Date Collected: 12/09/24 11:23

Matrix: Water

Date Received: 12/11/24 09:31

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:44	1
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:44	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	111		70 - 130			12/13/24 06:29	12/14/24 04:44	1
13C2 PFHxA	111		70 - 130			12/13/24 06:29	12/14/24 04:44	1
13C2 PFDA	110		70 - 130			12/13/24 06:29	12/14/24 04:44	1
13C3-GenX	108		70 - 130			12/13/24 06:29	12/14/24 04:44	1

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

Lab Sample ID: 380-125976-5

Date Collected: 12/09/24 09:50

Matrix: Water

Date Received: 12/11/24 09:31

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		12/14/24 10:43	12/16/24 14:34	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:34	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:34	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:34	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:34	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:34	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:34	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:34	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:34	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:34	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:34	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:34	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:34	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:34	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:34	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:34	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:34	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:34	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:34	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:34	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:34	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:34	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:34	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-125976-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-125976-5

Date Collected: 12/09/24 09:50

Matrix: Water

Date Received: 12/11/24 09:31

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		12/14/24 10:43	12/16/24 14:34	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:34	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	102		50 - 200			12/14/24 10:43	12/16/24 14:34	1
13C6 PFDA	108		50 - 200			12/14/24 10:43	12/16/24 14:34	1
13C5 PFHxA	101		50 - 200			12/14/24 10:43	12/16/24 14:34	1
13C4 PFHpA	107		50 - 200			12/14/24 10:43	12/16/24 14:34	1
13C8 PFOA	106		50 - 200			12/14/24 10:43	12/16/24 14:34	1
13C9 PFNA	106		50 - 200			12/14/24 10:43	12/16/24 14:34	1
13C7 PFUnA	108		50 - 200			12/14/24 10:43	12/16/24 14:34	1
13C2 PFDoA	105		50 - 200			12/14/24 10:43	12/16/24 14:34	1
13C4 PFBA	103		50 - 200			12/14/24 10:43	12/16/24 14:34	1
13C5 PFPeA	103		50 - 200			12/14/24 10:43	12/16/24 14:34	1
13C3 PFBS	102		50 - 200			12/14/24 10:43	12/16/24 14:34	1
13C3 PFHxS	104		50 - 200			12/14/24 10:43	12/16/24 14:34	1
13C8 PFOS	101		50 - 200			12/14/24 10:43	12/16/24 14:34	1
13C2-4:2-FTS	114		50 - 200			12/14/24 10:43	12/16/24 14:34	1
13C2-6:2-FTS	131		50 - 200			12/14/24 10:43	12/16/24 14:34	1
13C2-8:2-FTS	113		50 - 200			12/14/24 10:43	12/16/24 14:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:53	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:53	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:53	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:53	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:53	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:53	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:53	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:53	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:53	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:53	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:53	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:53	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:53	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:53	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:53	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:53	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:53	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 04:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	113		70 - 130			12/13/24 06:29	12/14/24 04:53	1
13C2 PFHxA	120		70 - 130			12/13/24 06:29	12/14/24 04:53	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-125976-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-125976-5

Date Collected: 12/09/24 09:50

Matrix: Water

Date Received: 12/11/24 09:31

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2 PFDA	116		70 - 130	12/13/24 06:29	12/14/24 04:53	1
13C3-GenX	112		70 - 130	12/13/24 06:29	12/14/24 04:53	1

Client Sample ID: FB AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-125976-6

Date Collected: 12/09/24 10:18

Matrix: Water

Date Received: 12/11/24 09:31

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		12/14/24 10:43	12/16/24 14:43	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:43	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:43	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:43	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:43	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:43	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:43	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:43	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:43	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:43	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:43	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:43	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:43	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:43	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:43	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:43	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:43	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:43	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:43	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:43	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:43	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:43	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:43	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:43	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:43	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	103		50 - 200	12/14/24 10:43	12/16/24 14:43	1
13C6 PFDA	109		50 - 200	12/14/24 10:43	12/16/24 14:43	1
13C5 PFHxA	105		50 - 200	12/14/24 10:43	12/16/24 14:43	1
13C4 PFHpA	111		50 - 200	12/14/24 10:43	12/16/24 14:43	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-125976-1
SDG: Weekly PFAS

Client Sample ID: FB AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-125976-6

Date Collected: 12/09/24 10:18

Matrix: Water

Date Received: 12/11/24 09:31

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 PFOA	108		50 - 200	12/14/24 10:43	12/16/24 14:43	1
13C9 PFNA	106		50 - 200	12/14/24 10:43	12/16/24 14:43	1
13C7 PFUnA	113		50 - 200	12/14/24 10:43	12/16/24 14:43	1
13C2 PFDoA	111		50 - 200	12/14/24 10:43	12/16/24 14:43	1
13C4 PFBA	110		50 - 200	12/14/24 10:43	12/16/24 14:43	1
13C5 PFPeA	115		50 - 200	12/14/24 10:43	12/16/24 14:43	1
13C3 PFBS	106		50 - 200	12/14/24 10:43	12/16/24 14:43	1
13C3 PFHxS	107		50 - 200	12/14/24 10:43	12/16/24 14:43	1
13C8 PFOS	103		50 - 200	12/14/24 10:43	12/16/24 14:43	1
13C2-4:2-FTS	116		50 - 200	12/14/24 10:43	12/16/24 14:43	1
13C2-6:2-FTS	125		50 - 200	12/14/24 10:43	12/16/24 14:43	1
13C2-8:2-FTS	111		50 - 200	12/14/24 10:43	12/16/24 14:43	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		12/13/24 06:29	12/14/24 05:03	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:03	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:03	1
N-methylperfluorooctanesulfonamide acetic acid (NMeFOSAA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:03	1
N-ethylperfluorooctanesulfonamide acetic acid (NEtFOSAA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:03	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:03	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:03	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:03	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:03	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:03	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:03	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:03	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:03	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:03	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:03	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:03	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:03	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	111		70 - 130	12/13/24 06:29	12/14/24 05:03	1
13C2 PFHxA	113		70 - 130	12/13/24 06:29	12/14/24 05:03	1
13C2 PFDA	118		70 - 130	12/13/24 06:29	12/14/24 05:03	1
13C3-GenX	112		70 - 130	12/13/24 06:29	12/14/24 05:03	1

Client Sample Results

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

Job ID: 380-125976-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-125976-7

Date Collected: 12/09/24 10:49

Matrix: Water

Date Received: 12/11/24 09:31

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		12/14/24 10:43	12/16/24 14:53	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:53	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:53	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:53	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:53	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:53	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:53	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:53	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:53	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:53	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:53	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:53	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:53	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:53	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:53	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:53	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:53	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:53	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:53	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:53	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:53	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:53	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:53	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:53	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		12/14/24 10:43	12/16/24 14:53	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	98		50 - 200	12/14/24 10:43	12/16/24 14:53	1
13C6 PFDA	109		50 - 200	12/14/24 10:43	12/16/24 14:53	1
13C5 PFHxA	103		50 - 200	12/14/24 10:43	12/16/24 14:53	1
13C4 PFHpA	107		50 - 200	12/14/24 10:43	12/16/24 14:53	1
13C8 PFOA	109		50 - 200	12/14/24 10:43	12/16/24 14:53	1
13C9 PFNA	110		50 - 200	12/14/24 10:43	12/16/24 14:53	1
13C7 PFUnA	112		50 - 200	12/14/24 10:43	12/16/24 14:53	1
13C2 PFDoA	109		50 - 200	12/14/24 10:43	12/16/24 14:53	1
13C4 PFBA	109		50 - 200	12/14/24 10:43	12/16/24 14:53	1
13C5 PFPeA	109		50 - 200	12/14/24 10:43	12/16/24 14:53	1
13C3 PFBS	110		50 - 200	12/14/24 10:43	12/16/24 14:53	1
13C3 PFHxS	111		50 - 200	12/14/24 10:43	12/16/24 14:53	1
13C8 PFOS	108		50 - 200	12/14/24 10:43	12/16/24 14:53	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-125976-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-125976-7

Date Collected: 12/09/24 10:49

Matrix: Water

Date Received: 12/11/24 09:31

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	121		50 - 200	12/14/24 10:43	12/16/24 14:53	1
13C2-6:2-FTS	132		50 - 200	12/14/24 10:43	12/16/24 14:53	1
13C2-8:2-FTS	125		50 - 200	12/14/24 10:43	12/16/24 14:53	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:13	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:13	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:13	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:13	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:13	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:13	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:13	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:13	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:13	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:13	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:13	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:13	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:13	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:13	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:13	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:13	1
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:13	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:13	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
d5-NEtFOSAA	110		70 - 130	12/13/24 06:29	12/14/24 05:13	1		
13C2 PFHxA	113		70 - 130	12/13/24 06:29	12/14/24 05:13	1		
13C2 PFDA	116		70 - 130	12/13/24 06:29	12/14/24 05:13	1		
13C3-GenX	106		70 - 130	12/13/24 06:29	12/14/24 05:13	1		

Client Sample ID: FB KA'AMILO WELLS

Lab Sample ID: 380-125976-8

Date Collected: 12/09/24 11:23

Matrix: Water

Date Received: 12/11/24 09:31

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		12/15/24 08:38	12/16/24 21:05	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		12/15/24 08:38	12/16/24 21:05	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		12/15/24 08:38	12/16/24 21:05	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		12/15/24 08:38	12/16/24 21:05	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		12/15/24 08:38	12/16/24 21:05	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		12/15/24 08:38	12/16/24 21:05	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-125976-1
SDG: Weekly PFAS

Client Sample ID: FB KA'AMILO WELLS

Lab Sample ID: 380-125976-8

Date Collected: 12/09/24 11:23

Matrix: Water

Date Received: 12/11/24 09:31

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		12/15/24 08:38	12/16/24 21:05	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		12/15/24 08:38	12/16/24 21:05	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		12/15/24 08:38	12/16/24 21:05	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		12/15/24 08:38	12/16/24 21:05	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		12/15/24 08:38	12/16/24 21:05	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		12/15/24 08:38	12/16/24 21:05	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		12/15/24 08:38	12/16/24 21:05	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		12/15/24 08:38	12/16/24 21:05	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		12/15/24 08:38	12/16/24 21:05	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		12/15/24 08:38	12/16/24 21:05	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		12/15/24 08:38	12/16/24 21:05	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		12/15/24 08:38	12/16/24 21:05	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		12/15/24 08:38	12/16/24 21:05	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		12/15/24 08:38	12/16/24 21:05	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		12/15/24 08:38	12/16/24 21:05	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		12/15/24 08:38	12/16/24 21:05	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		12/15/24 08:38	12/16/24 21:05	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		12/15/24 08:38	12/16/24 21:05	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		12/15/24 08:38	12/16/24 21:05	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	102		50 - 200	12/15/24 08:38	12/16/24 21:05	1
13C6 PFDA	110		50 - 200	12/15/24 08:38	12/16/24 21:05	1
13C5 PFHxA	107		50 - 200	12/15/24 08:38	12/16/24 21:05	1
13C4 PFHpA	113		50 - 200	12/15/24 08:38	12/16/24 21:05	1
13C8 PFOA	113		50 - 200	12/15/24 08:38	12/16/24 21:05	1
13C9 PFNA	109		50 - 200	12/15/24 08:38	12/16/24 21:05	1
13C7 PFUnA	115		50 - 200	12/15/24 08:38	12/16/24 21:05	1
13C2 PFDoA	112		50 - 200	12/15/24 08:38	12/16/24 21:05	1
13C4 PFBA	117		50 - 200	12/15/24 08:38	12/16/24 21:05	1
13C5 PFPeA	118		50 - 200	12/15/24 08:38	12/16/24 21:05	1
13C3 PFBS	108		50 - 200	12/15/24 08:38	12/16/24 21:05	1
13C3 PFHxS	116		50 - 200	12/15/24 08:38	12/16/24 21:05	1
13C8 PFOS	112		50 - 200	12/15/24 08:38	12/16/24 21:05	1
13C2-4:2-FTS	138		50 - 200	12/15/24 08:38	12/16/24 21:05	1
13C2-6:2-FTS	153		50 - 200	12/15/24 08:38	12/16/24 21:05	1
13C2-8:2-FTS	126		50 - 200	12/15/24 08:38	12/16/24 21:05	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:22	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:22	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:22	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-125976-1
SDG: Weekly PFAS

Client Sample ID: FB KA'AMILO WELLS

Lab Sample ID: 380-125976-8

Date Collected: 12/09/24 11:23

Matrix: Water

Date Received: 12/11/24 09:31

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		12/13/24 06:29	12/14/24 05:22	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:22	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:22	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:22	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:22	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:22	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:22	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:22	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:22	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:22	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:22	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:22	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:22	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:22	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		12/13/24 06:29	12/14/24 05:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	113		70 - 130			12/13/24 06:29	12/14/24 05:22	1
13C2 PFHxA	121		70 - 130			12/13/24 06:29	12/14/24 05:22	1
13C2 PFDA	119		70 - 130			12/13/24 06:29	12/14/24 05:22	1
13C3-GenX	112		70 - 130			12/13/24 06:29	12/14/24 05:22	1

Action Limit Summary

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

Job ID: 380-125976-1
SDG: Weekly PFAS

Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1

Lab Sample ID: 380-125976-1

Compliance Check

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

Analyte	Result	Qualifier	Unit	EPAMCL	RL	Method	Prep Type
				Limit			
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.4		ng/L	10	2.0	533	Total/NA
Perfluorononanoic acid (PFNA)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.3		ng/L	4	2.0	533	Total/NA
Perfluorooctanoic acid (PFOA)	<2.0		ng/L	4	2.0	533	Total/NA
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		ng/L	10	2.0	537.1	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.4		ng/L	4	2.0	537.1	Total/NA
Perfluorooctanoic acid (PFOA)	<2.0		ng/L	4	2.0	537.1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.8		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: 380-125976-2

Compliance Check

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

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

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

Lab Sample ID: 380-125976-3

Compliance Check

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

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

Eurofins Eaton Analytical Pomona

Action Limit Summary

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

Job ID: 380-125976-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-125976-3

Compliance Check

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

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

Client Sample ID: KA'AMILO WELLS

Lab Sample ID: 380-125976-4

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: FB HALAWA WELLS UNITS 1 & 2 P1

Lab Sample ID: 380-125976-5

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
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: 380-125976-1
SDG: Weekly PFAS

Client Sample ID: FB AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-125976-6

Compliance Check

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

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

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

Lab Sample ID: 380-125976-7

Compliance Check

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

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

Client Sample ID: FB KA'AMILO WELLS

Lab Sample ID: 380-125976-8

Compliance Check

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

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

Eurofins Eaton Analytical Pomona

Action Limit Summary

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

Job ID: 380-125976-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-125976-8

Compliance Check

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

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

Surrogate Summary

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

Job ID: 380-125976-1
 SDG: Weekly PFAS

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		d5NEFOS (70-130)	PFHxA (70-130)	PFDA (70-130)	GenX (70-130)
380-125976-1	HALAWA WELLS UNITS 1 & 2 F	107	112	113	104
380-125976-2	AIEA GULCH WELLS PUMP 2	109	117	116	107
380-125976-3	AIEA WELLS PUMPS 1&2 (260) P2	110	114	111	105
380-125976-4	KA'AMILO WELLS	111	111	110	108
380-125976-5	FB HALAWA WELLS UNITS 1 & 2 P1	113	120	116	112
380-125976-6	FB AIEA GULCH WELLS PUMP 2	111	113	118	112
380-125976-7	FB AIEA WELLS PUMPS 1&2 (260) P2	110	113	116	106
380-125976-8	FB KA'AMILO WELLS	113	121	119	112
380-126012-A-1-B MS	Matrix Spike	107	111	111	106
380-126012-A-1-C MSD	Matrix Spike Duplicate	106	109	113	105
LCS 380-123597/22-A	Lab Control Sample	105	110	106	103
MBL 380-123597/20-A	Method Blank	116	118	118	110
MRL 380-123597/21-A	Lab Control Sample	102	101	109	92

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: 380-125976-1
SDG: Weekly PFAS

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Isotope Dilution Recovery (Acceptance Limits)							
		HFPODA (50-200)	C6PFDA (50-200)	13C5PHA (50-200)	C4PFHA (50-200)	C8PFOA (50-200)	C9PFNA (50-200)	13C7PUA (50-200)	PFDaA (50-200)
380-125976-1	HALAWA WELLS UNITS 1 & 2 F	102	100	99	106	105	104	108	105
380-125976-2	AIEA GULCH WELLS PUMP 2	95	104	102	107	109	105	106	102
380-125976-3	AIEA WELLS PUMPS 1&2 (260) P2	103	105	104	107	111	103	111	109
380-125976-4	KA'AMILO WELLS	96	108	102	107	108	102	108	109
380-125976-4 MS	KA'AMILO WELLS	99	112	102	106	113	108	116	111
380-125976-4 MSD	KA'AMILO WELLS	101	106	101	105	107	105	110	113
380-125976-5	FB HALAWA WELLS UNITS 1 & 2 P1	102	108	101	107	106	106	108	105
380-125976-6	FB AIEA GULCH WELLS PUMP 2	103	109	105	111	108	106	113	111
380-125976-7	FB AIEA WELLS PUMPS 1&2 (260) P2	98	109	103	107	109	110	112	109
380-125976-8	FB KA'AMILO WELLS	102	110	107	113	113	109	115	112
380-126012-B-1-A MS	Matrix Spike	110	121	110	113	119	118	120	118
380-126012-B-1-B MSD	Matrix Spike Duplicate	107	111	102	107	109	109	116	111
LCS 380-123769/24-A	Lab Control Sample	95	109	103	105	109	106	107	110
LCS 380-123798/21-A	Lab Control Sample	104	111	106	109	113	110	114	107
MBL 380-123769/22-A	Method Blank	97	108	105	108	108	107	108	107
MBL 380-123798/19-A	Method Blank	104	115	107	116	110	112	118	110
MRL 380-123769/23-A	Lab Control Sample	102	115	112	117	115	113	112	115
MRL 380-123798/20-A	Lab Control Sample	104	109	106	110	113	108	112	110

Lab Sample ID	Client Sample ID	Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFBA (50-200)	PFPeA (50-200)	C3PFBS (50-200)	C3PFHS (50-200)	C8PFOS (50-200)	42FTS (50-200)	62FTS (50-200)	82FTS (50-200)
380-125976-1	HALAWA WELLS UNITS 1 & 2 F	104	108	104	105	104	127	128	120
380-125976-2	AIEA GULCH WELLS PUMP 2	107	109	105	105	104	126	131	122
380-125976-3	AIEA WELLS PUMPS 1&2 (260) P2	105	106	108	107	106	124	134	113
380-125976-4	KA'AMILO WELLS	109	117	104	107	104	136	133	124
380-125976-4 MS	KA'AMILO WELLS	111	118	109	107	108	128	136	120
380-125976-4 MSD	KA'AMILO WELLS	106	115	112	112	106	128	135	125
380-125976-5	FB HALAWA WELLS UNITS 1 & 2 P1	103	103	102	104	101	114	131	113
380-125976-6	FB AIEA GULCH WELLS PUMP 2	110	115	106	107	103	116	125	111
380-125976-7	FB AIEA WELLS PUMPS 1&2 (260) P2	109	109	110	111	108	121	132	125
380-125976-8	FB KA'AMILO WELLS	117	118	108	116	112	138	153	126
380-126012-B-1-A MS	Matrix Spike	115	118	114	116	115	126	138	128
380-126012-B-1-B MSD	Matrix Spike Duplicate	107	111	104	105	104	120	132	119
LCS 380-123769/24-A	Lab Control Sample	109	110	107	112	110	123	137	123
LCS 380-123798/21-A	Lab Control Sample	108	112	106	108	109	118	134	119
MBL 380-123769/22-A	Method Blank	105	104	107	112	107	127	136	124
MBL 380-123798/19-A	Method Blank	111	113	107	113	111	125	134	123
MRL 380-123769/23-A	Lab Control Sample	114	115	113	112	113	131	144	132
MRL 380-123798/20-A	Lab Control Sample	113	117	110	109	107	131	134	125

Surrogate Legend

HFPODA = 13C3 HFPO-DA
C6PFDA = 13C6 PFDA
13C5PHA = 13C5 PFHxA

Isotope Dilution Summary

Client: City & County of Honolulu

Project/Site: RED-HILL

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

Job ID: 380-125976-1
SDG: Weekly PFAS

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QC Sample Results

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

Job ID: 380-125976-1
SDG: Weekly PFAS

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

Lab Sample ID: MBL 380-123769/22-A
Matrix: Water
Analysis Batch: 123874

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 123769

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		12/14/24 10:43	12/16/24 11:03	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<0.30		2.0	ng/L		12/14/24 10:43	12/16/24 11:03	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0	ng/L		12/14/24 10:43	12/16/24 11:03	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<1.0		2.0	ng/L		12/14/24 10:43	12/16/24 11:03	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0	ng/L		12/14/24 10:43	12/16/24 11:03	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	ng/L		12/14/24 10:43	12/16/24 11:03	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	ng/L		12/14/24 10:43	12/16/24 11:03	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0	ng/L		12/14/24 10:43	12/16/24 11:03	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0	ng/L		12/14/24 10:43	12/16/24 11:03	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0	ng/L		12/14/24 10:43	12/16/24 11:03	1
Perfluorononanoic acid (PFNA)	<0.40		2.0	ng/L		12/14/24 10:43	12/16/24 11:03	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0	ng/L		12/14/24 10:43	12/16/24 11:03	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0	ng/L		12/14/24 10:43	12/16/24 11:03	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0	ng/L		12/14/24 10:43	12/16/24 11:03	1
Perfluorobutanoic acid (PFBA)	<0.69		2.0	ng/L		12/14/24 10:43	12/16/24 11:03	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.38		2.0	ng/L		12/14/24 10:43	12/16/24 11:03	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.37		2.0	ng/L		12/14/24 10:43	12/16/24 11:03	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<0.48		2.0	ng/L		12/14/24 10:43	12/16/24 11:03	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<0.47		2.0	ng/L		12/14/24 10:43	12/16/24 11:03	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<0.25		2.0	ng/L		12/14/24 10:43	12/16/24 11:03	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.46		2.0	ng/L		12/14/24 10:43	12/16/24 11:03	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.15		2.0	ng/L		12/14/24 10:43	12/16/24 11:03	1
Perfluoropentanoic acid (PFPeA)	<0.38		2.0	ng/L		12/14/24 10:43	12/16/24 11:03	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.36		2.0	ng/L		12/14/24 10:43	12/16/24 11:03	1
Perfluoropentanesulfonic acid (PFPeS)	<0.39		2.0	ng/L		12/14/24 10:43	12/16/24 11:03	1

Isotope Dilution	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	97		50 - 200	12/14/24 10:43	12/16/24 11:03	1
13C6 PFDA	108		50 - 200	12/14/24 10:43	12/16/24 11:03	1
13C5 PFHxA	105		50 - 200	12/14/24 10:43	12/16/24 11:03	1
13C4 PFHpA	108		50 - 200	12/14/24 10:43	12/16/24 11:03	1
13C8 PFOA	108		50 - 200	12/14/24 10:43	12/16/24 11:03	1
13C9 PFNA	107		50 - 200	12/14/24 10:43	12/16/24 11:03	1
13C7 PFUnA	108		50 - 200	12/14/24 10:43	12/16/24 11:03	1
13C2 PFDoA	107		50 - 200	12/14/24 10:43	12/16/24 11:03	1
13C4 PFBA	105		50 - 200	12/14/24 10:43	12/16/24 11:03	1
13C5 PFPeA	104		50 - 200	12/14/24 10:43	12/16/24 11:03	1
13C3 PFBS	107		50 - 200	12/14/24 10:43	12/16/24 11:03	1
13C3 PFHxS	112		50 - 200	12/14/24 10:43	12/16/24 11:03	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-125976-1
SDG: Weekly PFAS

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

Lab Sample ID: MBL 380-123769/22-A
Matrix: Water
Analysis Batch: 123874

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 123769

<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	12/14/24 10:43	12/16/24 11:03	1
13C2-4:2-FTS	127		50 - 200	12/14/24 10:43	12/16/24 11:03	1
13C2-6:2-FTS	136		50 - 200	12/14/24 10:43	12/16/24 11:03	1
13C2-8:2-FTS	124		50 - 200	12/14/24 10:43	12/16/24 11:03	1

Lab Sample ID: LCS 380-123769/24-A
Matrix: Water
Analysis Batch: 123874

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 123769

<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	60.9		ng/L		101	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	60.1	57.4		ng/L		95	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	60.1	61.1		ng/L		102	70 - 130
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	60.1	63.4		ng/L		105	70 - 130
Perfluorobutanesulfonic acid (PFBS)	60.1	62.2		ng/L		103	70 - 130
Perfluorodecanoic acid (PFDA)	60.1	60.6		ng/L		101	70 - 130
Perfluorododecanoic acid (PFDoA)	60.1	60.6		ng/L		101	70 - 130
Perfluoroheptanoic acid (PFHpA)	60.1	60.5		ng/L		101	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	60.1	58.4		ng/L		97	70 - 130
Perfluorohexanoic acid (PFHxA)	60.1	61.4		ng/L		102	70 - 130
Perfluorononanoic acid (PFNA)	60.1	60.5		ng/L		101	70 - 130
Perfluorooctanesulfonic acid (PFOS)	60.1	58.9		ng/L		98	70 - 130
Perfluorooctanoic acid (PFOA)	60.1	58.4		ng/L		97	70 - 130
Perfluoroundecanoic acid (PFUnA)	60.1	61.5		ng/L		102	70 - 130
Perfluorobutanoic acid (PFBA)	60.1	61.6		ng/L		102	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	60.1	62.5		ng/L		104	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	60.1	62.4		ng/L		104	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	60.1	60.1		ng/L		100	70 - 130
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	60.1	60.1		ng/L		100	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	60.1	57.6		ng/L		96	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	60.1	61.7		ng/L		103	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	60.1	61.2		ng/L		102	70 - 130
Perfluoropentanoic acid (PFPeA)	60.1	62.7		ng/L		104	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	60.1	59.6		ng/L		99	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-125976-1
SDG: Weekly PFAS

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

Lab Sample ID: LCS 380-123769/24-A
Matrix: Water
Analysis Batch: 123874

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 123769

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoropentanesulfonic acid (PFPeS)	60.1	55.6		ng/L		93	70 - 130
LCS LCS							
Isotope Dilution	%Recovery	Qualifier	Limits				
13C3 HFPO-DA	95		50 - 200				
13C6 PFDA	109		50 - 200				
13C5 PFHxA	103		50 - 200				
13C4 PFHpA	105		50 - 200				
13C8 PFOA	109		50 - 200				
13C9 PFNA	106		50 - 200				
13C7 PFUnA	107		50 - 200				
13C2 PFDoA	110		50 - 200				
13C4 PFBA	109		50 - 200				
13C5 PFPeA	110		50 - 200				
13C3 PFBS	107		50 - 200				
13C3 PFHxS	112		50 - 200				
13C8 PFOS	110		50 - 200				
13C2-4:2-FTS	123		50 - 200				
13C2-6:2-FTS	137		50 - 200				
13C2-8:2-FTS	123		50 - 200				

Lab Sample ID: MRL 380-123769/23-A
Matrix: Water
Analysis Batch: 123874

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 123769

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.01	2.24	J	ng/L		112	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	2.01	1.97	J	ng/L		98	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.01	2.14	J	ng/L		106	50 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.01	2.06	J	ng/L		103	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.01	2.19	J	ng/L		109	50 - 150
Perfluorodecanoic acid (PFDA)	2.01	2.17	J	ng/L		108	50 - 150
Perfluorododecanoic acid (PFDoA)	2.01	2.21	J	ng/L		110	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.01	2.22	J	ng/L		111	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.01	2.19	J	ng/L		109	50 - 150
Perfluorohexanoic acid (PFHxA)	2.01	2.09	J	ng/L		104	50 - 150
Perfluorononanoic acid (PFNA)	2.01	2.14	J	ng/L		107	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.01	2.36	J	ng/L		118	50 - 150
Perfluorooctanoic acid (PFOA)	2.01	2.19	J	ng/L		109	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.01	2.27	J	ng/L		113	50 - 150
Perfluorobutanoic acid (PFBA)	2.01	2.06	J	ng/L		103	50 - 150

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-125976-1
SDG: Weekly PFAS

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

Lab Sample ID: MRL 380-123769/23-A
Matrix: Water
Analysis Batch: 123874

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 123769

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	2.01	2.39	J	ng/L		119	50 - 150
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	2.01	2.27	J	ng/L		113	50 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	2.01	2.33	J	ng/L		116	50 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2.01	2.07	J	ng/L		103	50 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	2.01	1.98	J	ng/L		99	50 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.01	2.06	J	ng/L		103	50 - 150
Perfluoro-4-methoxybutanoic acid (PFMBA)	2.01	2.12	J	ng/L		106	50 - 150
Perfluoropentanoic acid (PFPeA)	2.01	2.02	J	ng/L		100	50 - 150
Perfluoroheptanesulfonic acid (PFHpS)	2.01	2.12	J	ng/L		106	50 - 150
Perfluoropentanesulfonic acid (PFPeS)	2.01	1.99	J	ng/L		99	50 - 150

Isotope Dilution	MRL %Recovery	MRL Qualifier	MRL Limits
13C3 HFPO-DA	102		50 - 200
13C6 PFDA	115		50 - 200
13C5 PFHxA	112		50 - 200
13C4 PFHpA	117		50 - 200
13C8 PFOA	115		50 - 200
13C9 PFNA	113		50 - 200
13C7 PFUnA	112		50 - 200
13C2 PFDoA	115		50 - 200
13C4 PFBA	114		50 - 200
13C5 PFPeA	115		50 - 200
13C3 PFBS	113		50 - 200
13C3 PFHxS	112		50 - 200
13C8 PFOS	113		50 - 200
13C2-4:2-FTS	131		50 - 200
13C2-6:2-FTS	144		50 - 200
13C2-8:2-FTS	132		50 - 200

Lab Sample ID: 380-125976-4 MS
Matrix: Water
Analysis Batch: 123874

Client Sample ID: KA'AMILO WELLS
Prep Type: Total/NA
Prep Batch: 123769

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		60.2	58.9		ng/L		98	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		60.2	56.5		ng/L		94	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		60.2	60.5		ng/L		100	70 - 130

QC Sample Results

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

Job ID: 380-125976-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-125976-4 MS

Matrix: Water

Analysis Batch: 123874

Client Sample ID: KA'AMILO WELLS

Prep Type: Total/NA

Prep Batch: 123769

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide	<2.0		60.2	58.1		ng/L		96	70 - 130
Dimer Acid (HFPO-DA/GenX)									
Perfluorobutanesulfonic acid (PFBS)	<2.0		60.2	57.8		ng/L		95	70 - 130
Perfluorodecanoic acid (PFDA)	<2.0		60.2	60.2		ng/L		100	70 - 130
Perfluorododecanoic acid (PFDoA)	<2.0		60.2	59.3		ng/L		98	70 - 130
Perfluoroheptanoic acid (PFHpA)	<2.0		60.2	59.5		ng/L		98	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	<2.0		60.2	59.7		ng/L		97	70 - 130
Perfluorohexanoic acid (PFHxA)	<2.0		60.2	61.4		ng/L		101	70 - 130
Perfluorononanoic acid (PFNA)	<2.0		60.2	58.2		ng/L		97	70 - 130
Perfluorooctanesulfonic acid (PFOS)	<2.0		60.2	58.6		ng/L		95	70 - 130
Perfluorooctanoic acid (PFOA)	<2.0		60.2	57.4		ng/L		94	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		60.2	58.0		ng/L		96	70 - 130
Perfluorobutanoic acid (PFBA)	<2.0		60.2	59.6		ng/L		99	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		60.2	62.2		ng/L		103	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		60.2	59.4		ng/L		99	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		60.2	60.3		ng/L		100	70 - 130
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		60.2	53.0		ng/L		88	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		60.2	53.9		ng/L		89	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		60.2	60.8		ng/L		101	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		60.2	59.6		ng/L		99	70 - 130
Perfluoropentanoic acid (PFPeA)	<2.0		60.2	59.0		ng/L		97	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		60.2	58.6		ng/L		97	70 - 130
Perfluoropentanesulfonic acid (PFPeS)	<2.0		60.2	55.8		ng/L		93	70 - 130

Isotope Dilution	MS MS		Limits
	%Recovery	Qualifier	
13C3 HFPO-DA	99		50 - 200
13C6 PFDA	112		50 - 200
13C5 PFHxA	102		50 - 200
13C4 PFHpA	106		50 - 200
13C8 PFOA	113		50 - 200
13C9 PFNA	108		50 - 200
13C7 PFUnA	116		50 - 200
13C2 PFDoA	111		50 - 200
13C4 PFBA	111		50 - 200
13C5 PFPeA	118		50 - 200
13C3 PFBS	109		50 - 200
13C3 PFHxS	107		50 - 200
13C8 PFOS	108		50 - 200

QC Sample Results

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

Job ID: 380-125976-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-125976-4 MS
Matrix: Water
Analysis Batch: 123874

Client Sample ID: KA'AMILO WELLS
Prep Type: Total/NA
Prep Batch: 123769

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>MS MS Qualifier</i>	<i>Limits</i>
13C2-4:2-FTS	128		50 - 200
13C2-6:2-FTS	136		50 - 200
13C2-8:2-FTS	120		50 - 200

Lab Sample ID: 380-125976-4 MSD
Matrix: Water
Analysis Batch: 123874

Client Sample ID: KA'AMILO WELLS
Prep Type: Total/NA
Prep Batch: 123769

<i>Analyte</i>	<i>Sample Result</i>	<i>Sample Qualifier</i>	<i>Spike Added</i>	<i>MSD Result</i>	<i>MSD Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec Limits</i>	<i>RPD</i>	<i>RPD Limit</i>
11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		60.2	62.5		ng/L		104	70 - 130	6	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		60.2	58.7		ng/L		97	70 - 130	4	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		60.2	60.6		ng/L		101	70 - 130	0	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		60.2	59.4		ng/L		99	70 - 130	2	30
Perfluorobutanesulfonic acid (PFBS)	<2.0		60.2	60.0		ng/L		98	70 - 130	4	30
Perfluorodecanoic acid (PFDA)	<2.0		60.2	60.0		ng/L		100	70 - 130	0	30
Perfluorododecanoic acid (PFDoA)	<2.0		60.2	59.6		ng/L		99	70 - 130	1	30
Perfluoroheptanoic acid (PFHpA)	<2.0		60.2	60.1		ng/L		99	70 - 130	1	30
Perfluorohexanesulfonic acid (PFHxS)	<2.0		60.2	58.9		ng/L		96	70 - 130	1	30
Perfluorohexanoic acid (PFHxA)	<2.0		60.2	59.6		ng/L		98	70 - 130	3	30
Perfluorononanoic acid (PFNA)	<2.0		60.2	58.4		ng/L		97	70 - 130	0	30
Perfluorooctanesulfonic acid (PFOS)	<2.0		60.2	62.9		ng/L		102	70 - 130	7	30
Perfluorooctanoic acid (PFOA)	<2.0		60.2	60.9		ng/L		100	70 - 130	6	30
Perfluoroundecanoic acid (PFUnA)	<2.0		60.2	60.0		ng/L		100	70 - 130	3	30
Perfluorobutanoic acid (PFBA)	<2.0		60.2	60.3		ng/L		100	70 - 130	1	30
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		60.2	64.1		ng/L		106	70 - 130	3	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		60.2	60.3		ng/L		100	70 - 130	1	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		60.2	59.8		ng/L		99	70 - 130	1	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		60.2	71.3		ng/L		118	70 - 130	29	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		60.2	53.7		ng/L		89	70 - 130	0	30
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		60.2	61.9		ng/L		103	70 - 130	2	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		60.2	59.1		ng/L		98	70 - 130	1	30
Perfluoropentanoic acid (PFPeA)	<2.0		60.2	58.5		ng/L		96	70 - 130	1	30
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		60.2	61.4		ng/L		102	70 - 130	5	30
Perfluoropentanesulfonic acid (PFPeS)	<2.0		60.2	55.2		ng/L		92	70 - 130	1	30

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-125976-1
SDG: Weekly PFAS

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

Isotope Dilution	MSD MSD		Limits
	%Recovery	Qualifier	
13C3 HFPO-DA	101		50 - 200
13C6 PFDA	106		50 - 200
13C5 PFHxA	101		50 - 200
13C4 PFHpA	105		50 - 200
13C8 PFOA	107		50 - 200
13C9 PFNA	105		50 - 200
13C7 PFUnA	110		50 - 200
13C2 PFDoA	113		50 - 200
13C4 PFBA	106		50 - 200
13C5 PFPeA	115		50 - 200
13C3 PFBS	112		50 - 200
13C3 PFHxS	112		50 - 200
13C8 PFOS	106		50 - 200
13C2-4:2-FTS	128		50 - 200
13C2-6:2-FTS	135		50 - 200
13C2-8:2-FTS	125		50 - 200

Lab Sample ID: MBL 380-123798/19-A
Matrix: Water
Analysis Batch: 123895

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 123798

Analyte	MBL MBL		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
11-Chloroeicosfluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<0.30		2.0	ng/L		12/15/24 08:38	12/16/24 19:58	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<0.30		2.0	ng/L		12/15/24 08:38	12/16/24 19:58	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0	ng/L		12/15/24 08:38	12/16/24 19:58	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<1.0		2.0	ng/L		12/15/24 08:38	12/16/24 19:58	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0	ng/L		12/15/24 08:38	12/16/24 19:58	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	ng/L		12/15/24 08:38	12/16/24 19:58	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	ng/L		12/15/24 08:38	12/16/24 19:58	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0	ng/L		12/15/24 08:38	12/16/24 19:58	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0	ng/L		12/15/24 08:38	12/16/24 19:58	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0	ng/L		12/15/24 08:38	12/16/24 19:58	1
Perfluorononanoic acid (PFNA)	<0.40		2.0	ng/L		12/15/24 08:38	12/16/24 19:58	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0	ng/L		12/15/24 08:38	12/16/24 19:58	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0	ng/L		12/15/24 08:38	12/16/24 19:58	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0	ng/L		12/15/24 08:38	12/16/24 19:58	1
Perfluorobutanoic acid (PFBA)	<0.69		2.0	ng/L		12/15/24 08:38	12/16/24 19:58	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.38		2.0	ng/L		12/15/24 08:38	12/16/24 19:58	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.37		2.0	ng/L		12/15/24 08:38	12/16/24 19:58	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<0.48		2.0	ng/L		12/15/24 08:38	12/16/24 19:58	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<0.47		2.0	ng/L		12/15/24 08:38	12/16/24 19:58	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<0.25		2.0	ng/L		12/15/24 08:38	12/16/24 19:58	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.46		2.0	ng/L		12/15/24 08:38	12/16/24 19:58	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.15		2.0	ng/L		12/15/24 08:38	12/16/24 19:58	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-125976-1
SDG: Weekly PFAS

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

Lab Sample ID: MBL 380-123798/19-A
Matrix: Water
Analysis Batch: 123895

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 123798

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoropentanoic acid (PFPeA)	<0.38		2.0	ng/L		12/15/24 08:38	12/16/24 19:58	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.36		2.0	ng/L		12/15/24 08:38	12/16/24 19:58	1
Perfluoropentanesulfonic acid (PFPeS)	<0.39		2.0	ng/L		12/15/24 08:38	12/16/24 19:58	1

Isotope Dilution	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	104		50 - 200	12/15/24 08:38	12/16/24 19:58	1
13C6 PFDA	115		50 - 200	12/15/24 08:38	12/16/24 19:58	1
13C5 PFHxA	107		50 - 200	12/15/24 08:38	12/16/24 19:58	1
13C4 PFHpA	116		50 - 200	12/15/24 08:38	12/16/24 19:58	1
13C8 PFOA	110		50 - 200	12/15/24 08:38	12/16/24 19:58	1
13C9 PFNA	112		50 - 200	12/15/24 08:38	12/16/24 19:58	1
13C7 PFUnA	118		50 - 200	12/15/24 08:38	12/16/24 19:58	1
13C2 PFDoA	110		50 - 200	12/15/24 08:38	12/16/24 19:58	1
13C4 PFBA	111		50 - 200	12/15/24 08:38	12/16/24 19:58	1
13C5 PFPeA	113		50 - 200	12/15/24 08:38	12/16/24 19:58	1
13C3 PFBS	107		50 - 200	12/15/24 08:38	12/16/24 19:58	1
13C3 PFHxS	113		50 - 200	12/15/24 08:38	12/16/24 19:58	1
13C8 PFOS	111		50 - 200	12/15/24 08:38	12/16/24 19:58	1
13C2-4:2-FTS	125		50 - 200	12/15/24 08:38	12/16/24 19:58	1
13C2-6:2-FTS	134		50 - 200	12/15/24 08:38	12/16/24 19:58	1
13C2-8:2-FTS	123		50 - 200	12/15/24 08:38	12/16/24 19:58	1

Lab Sample ID: LCS 380-123798/21-A
Matrix: Water
Analysis Batch: 123895

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 123798

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	60.2	58.9		ng/L		98	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	60.2	57.9		ng/L		96	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	60.2	62.6		ng/L		104	70 - 130
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	60.2	59.8		ng/L		99	70 - 130
Perfluorobutanesulfonic acid (PFBS)	60.2	61.5		ng/L		102	70 - 130
Perfluorodecanoic acid (PFDA)	60.2	62.1		ng/L		103	70 - 130
Perfluorododecanoic acid (PFDoA)	60.2	66.0		ng/L		110	70 - 130
Perfluoroheptanoic acid (PFHpA)	60.2	61.6		ng/L		102	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	60.2	60.9		ng/L		101	70 - 130
Perfluorohexanoic acid (PFHxA)	60.2	62.3		ng/L		103	70 - 130
Perfluorononanoic acid (PFNA)	60.2	60.2		ng/L		100	70 - 130
Perfluorooctanesulfonic acid (PFOS)	60.2	60.8		ng/L		101	70 - 130
Perfluorooctanoic acid (PFOA)	60.2	60.1		ng/L		100	70 - 130

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QC Sample Results

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

Job ID: 380-125976-1
SDG: Weekly PFAS

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

Lab Sample ID: LCS 380-123798/21-A
Matrix: Water
Analysis Batch: 123895

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 123798

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoroundecanoic acid (PFUnA)	60.2	63.4		ng/L		105	70 - 130
Perfluorobutanoic acid (PFBA)	60.2	62.0		ng/L		103	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	60.2	67.3		ng/L		112	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	60.2	67.2		ng/L		112	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	60.2	63.7		ng/L		106	70 - 130
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	60.2	62.3		ng/L		103	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	60.2	56.4		ng/L		94	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	60.2	62.2		ng/L		103	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	60.2	61.0		ng/L		101	70 - 130
Perfluoropentanoic acid (PFPeA)	60.2	61.8		ng/L		103	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	60.2	61.7		ng/L		102	70 - 130
Perfluoropentanesulfonic acid (PFPeS)	60.2	57.5		ng/L		95	70 - 130

Isotope Dilution	LCS LCS		Limits
	%Recovery	Qualifier	
13C3 HFPO-DA	104		50 - 200
13C6 PFDA	111		50 - 200
13C5 PFHxA	106		50 - 200
13C4 PFHpA	109		50 - 200
13C8 PFOA	113		50 - 200
13C9 PFNA	110		50 - 200
13C7 PFUnA	114		50 - 200
13C2 PFDoA	107		50 - 200
13C4 PFBA	108		50 - 200
13C5 PFPeA	112		50 - 200
13C3 PFBS	106		50 - 200
13C3 PFHxS	108		50 - 200
13C8 PFOS	109		50 - 200
13C2-4:2-FTS	118		50 - 200
13C2-6:2-FTS	134		50 - 200
13C2-8:2-FTS	119		50 - 200

Lab Sample ID: MRL 380-123798/20-A
Matrix: Water
Analysis Batch: 123895

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 123798

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.01	2.06	J	ng/L		103	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	2.01	1.97	J	ng/L		98	50 - 150

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QC Sample Results

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

Job ID: 380-125976-1
SDG: Weekly PFAS

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

Lab Sample ID: MRL 380-123798/20-A
Matrix: Water
Analysis Batch: 123895

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 123798

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.01	2.09	J	ng/L		104	50 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.01	2.04	J	ng/L		102	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.01	2.05	J	ng/L		102	50 - 150
Perfluorodecanoic acid (PFDA)	2.01	2.09	J	ng/L		104	50 - 150
Perfluorododecanoic acid (PFDoA)	2.01	2.23	J	ng/L		111	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.01	2.13	J	ng/L		106	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.01	2.14	J	ng/L		107	50 - 150
Perfluorohexanoic acid (PFHxA)	2.01	1.95	J	ng/L		97	50 - 150
Perfluorononanoic acid (PFNA)	2.01	2.18	J	ng/L		109	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.01	2.36	J	ng/L		117	50 - 150
Perfluorooctanoic acid (PFOA)	2.01	2.04	J	ng/L		101	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.01	2.08	J	ng/L		104	50 - 150
Perfluorobutanoic acid (PFBA)	2.01	2.06	J	ng/L		102	50 - 150
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	2.01	2.22	J	ng/L		111	50 - 150
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	2.01	2.09	J	ng/L		104	50 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	2.01	2.34	J	ng/L		117	50 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2.01	2.15	J	ng/L		107	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	2.07	J	ng/L		103	50 - 150
Perfluoro-4-methoxybutanoic acid (PFMBA)	2.01	1.98	J	ng/L		99	50 - 150
Perfluoropentanoic acid (PFPeA)	2.01	2.05	J	ng/L		102	50 - 150
Perfluoroheptanesulfonic acid (PFHpS)	2.01	2.19	J	ng/L		109	50 - 150
Perfluoropentanesulfonic acid (PFPeS)	2.01	2.07	J	ng/L		103	50 - 150

Isotope Dilution	MRL %Recovery	MRL Qualifier	MRL Limits
13C3 HFPO-DA	104		50 - 200
13C6 PFDA	109		50 - 200
13C5 PFHxA	106		50 - 200
13C4 PFHpA	110		50 - 200
13C8 PFOA	113		50 - 200
13C9 PFNA	108		50 - 200
13C7 PFUnA	112		50 - 200
13C2 PFDoA	110		50 - 200
13C4 PFBA	113		50 - 200
13C5 PFPeA	117		50 - 200
13C3 PFBS	110		50 - 200
13C3 PFHxS	109		50 - 200

QC Sample Results

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

Job ID: 380-125976-1
SDG: Weekly PFAS

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

Lab Sample ID: MRL 380-123798/20-A
Matrix: Water
Analysis Batch: 123895

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 123798

<i>Isotope Dilution</i>	<i>MRL %Recovery</i>	<i>MRL Qualifier</i>	<i>Limits</i>
13C8 PFOS	107		50 - 200
13C2-4:2-FTS	131		50 - 200
13C2-6:2-FTS	134		50 - 200
13C2-8:2-FTS	125		50 - 200

Lab Sample ID: 380-126012-B-1-A MS
Matrix: Water
Analysis Batch: 123895

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 123798

<i>Analyte</i>	<i>Sample Result</i>	<i>Sample Qualifier</i>	<i>Spike Added</i>	<i>MS Result</i>	<i>MS Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec Limits</i>
11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		120	116		ng/L		97	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	120		ng/L		99	70 - 130
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		120	125		ng/L		104	70 - 130
Perfluorobutanesulfonic acid (PFBS)	<2.0		120	118		ng/L		98	70 - 130
Perfluorodecanoic acid (PFDA)	<2.0		120	119		ng/L		99	70 - 130
Perfluorododecanoic acid (PFDoA)	<2.0		120	119		ng/L		99	70 - 130
Perfluoroheptanoic acid (PFHpA)	<2.0		120	119		ng/L		99	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	<2.0		120	120		ng/L		98	70 - 130
Perfluorohexanoic acid (PFHxA)	<2.0		120	122		ng/L		100	70 - 130
Perfluorononanoic acid (PFNA)	<2.0		120	117		ng/L		97	70 - 130
Perfluorooctanesulfonic acid (PFOS)	<2.0		120	121		ng/L		101	70 - 130
Perfluorooctanoic acid (PFOA)	<2.0		120	117		ng/L		97	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		120	125		ng/L		104	70 - 130
Perfluorobutanoic acid (PFBA)	<2.0		120	120		ng/L		99	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		120	122		ng/L		101	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		120	121		ng/L		101	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		120	117		ng/L		97	70 - 130
Nonfluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		120	109		ng/L		91	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		120	106		ng/L		88	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		120	125		ng/L		104	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		120	126		ng/L		105	70 - 130
Perfluoropentanoic acid (PFPeA)	<2.0		120	123		ng/L		101	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		120	118		ng/L		98	70 - 130

QC Sample Results

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

Job ID: 380-125976-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-126012-B-1-A MS
Matrix: Water
Analysis Batch: 123895

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 123798

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoropentanesulfonic acid (PFPeS)	<2.0		120	113		ng/L		94	70 - 130
MS MS									
Isotope Dilution	%Recovery	Qualifier	Limits						
13C3 HFPO-DA	110		50 - 200						
13C6 PFDA	121		50 - 200						
13C5 PFHxA	110		50 - 200						
13C4 PFHpA	113		50 - 200						
13C8 PFOA	119		50 - 200						
13C9 PFNA	118		50 - 200						
13C7 PFUnA	120		50 - 200						
13C2 PFDoA	118		50 - 200						
13C4 PFBA	115		50 - 200						
13C5 PFPeA	118		50 - 200						
13C3 PFBS	114		50 - 200						
13C3 PFHxS	116		50 - 200						
13C8 PFOS	115		50 - 200						
13C2-4:2-FTS	126		50 - 200						
13C2-6:2-FTS	138		50 - 200						
13C2-8:2-FTS	128		50 - 200						

Lab Sample ID: 380-126012-B-1-B MSD
Matrix: Water
Analysis Batch: 123895

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 123798

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	118		ng/L		98	70 - 130	1	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		120	116		ng/L		96	70 - 130	4	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		120	119		ng/L		99	70 - 130	1	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		120	122		ng/L		102	70 - 130	3	30
Perfluorobutanesulfonic acid (PFBS)	<2.0		120	122		ng/L		101	70 - 130	3	30
Perfluorodecanoic acid (PFDA)	<2.0		120	122		ng/L		101	70 - 130	2	30
Perfluorododecanoic acid (PFDoA)	<2.0		120	119		ng/L		99	70 - 130	0	30
Perfluoroheptanoic acid (PFHpA)	<2.0		120	119		ng/L		99	70 - 130	0	30
Perfluorohexanesulfonic acid (PFHxS)	<2.0		120	123		ng/L		100	70 - 130	2	30
Perfluorohexanoic acid (PFHxA)	<2.0		120	124		ng/L		102	70 - 130	1	30
Perfluorononanoic acid (PFNA)	<2.0		120	119		ng/L		99	70 - 130	2	30
Perfluorooctanesulfonic acid (PFOS)	<2.0		120	121		ng/L		100	70 - 130	0	30
Perfluorooctanoic acid (PFOA)	<2.0		120	120		ng/L		99	70 - 130	2	30
Perfluoroundecanoic acid (PFUnA)	<2.0		120	121		ng/L		100	70 - 130	3	30
Perfluorobutanoic acid (PFBA)	<2.0		120	126		ng/L		104	70 - 130	5	30

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QC Sample Results

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

Job ID: 380-125976-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-126012-B-1-B MSD
Matrix: Water
Analysis Batch: 123895

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 123798

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		120	123		ng/L		102	70 - 130	1	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		120	117		ng/L		97	70 - 130	4	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		120	121		ng/L		101	70 - 130	3	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		120	136		ng/L		113	70 - 130	22	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		120	115		ng/L		96	70 - 130	8	30
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		120	126		ng/L		105	70 - 130	1	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		120	125		ng/L		104	70 - 130	1	30
Perfluoropentanoic acid (PFPeA)	<2.0		120	124		ng/L		102	70 - 130	0	30
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		120	124		ng/L		103	70 - 130	5	30
Perfluoropentanesulfonic acid (PFPeS)	<2.0		120	119		ng/L		99	70 - 130	5	30

Isotope Dilution	MSD %Recovery	MSD Qualifier	MSD Limits
13C3 HFPO-DA	107		50 - 200
13C6 PFDA	111		50 - 200
13C5 PFHxA	102		50 - 200
13C4 PFHpA	107		50 - 200
13C8 PFOA	109		50 - 200
13C9 PFNA	109		50 - 200
13C7 PFUnA	116		50 - 200
13C2 PFDoA	111		50 - 200
13C4 PFBA	107		50 - 200
13C5 PFPeA	111		50 - 200
13C3 PFBS	104		50 - 200
13C3 PFHxS	105		50 - 200
13C8 PFOS	104		50 - 200
13C2-4:2-FTS	120		50 - 200
13C2-6:2-FTS	132		50 - 200
13C2-8:2-FTS	119		50 - 200

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

Lab Sample ID: MBL 380-123597/20-A
Matrix: Water
Analysis Batch: 123725

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 123597

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<1.0		2.0	ng/L		12/13/24 06:29	12/14/24 03:05	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0	ng/L		12/13/24 06:29	12/14/24 03:05	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0	ng/L		12/13/24 06:29	12/14/24 03:05	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<0.58		2.0	ng/L		12/13/24 06:29	12/14/24 03:05	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-125976-1
SDG: Weekly PFAS

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

Lab Sample ID: MBL 380-123597/20-A
Matrix: Water
Analysis Batch: 123725

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 123597

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<0.42		2.0	ng/L		12/13/24 06:29	12/14/24 03:05	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0	ng/L		12/13/24 06:29	12/14/24 03:05	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	ng/L		12/13/24 06:29	12/14/24 03:05	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0	ng/L		12/13/24 06:29	12/14/24 03:05	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	ng/L		12/13/24 06:29	12/14/24 03:05	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0	ng/L		12/13/24 06:29	12/14/24 03:05	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0	ng/L		12/13/24 06:29	12/14/24 03:05	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0	ng/L		12/13/24 06:29	12/14/24 03:05	1
Perfluorononanoic acid (PFNA)	<0.40		2.0	ng/L		12/13/24 06:29	12/14/24 03:05	1
Perfluorotetradecanoic acid (PFTA)	<0.54		2.0	ng/L		12/13/24 06:29	12/14/24 03:05	1
Perfluorotridecanoic acid (PFTrDA)	<0.36		2.0	ng/L		12/13/24 06:29	12/14/24 03:05	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<0.30		2.0	ng/L		12/13/24 06:29	12/14/24 03:05	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.30		2.0	ng/L		12/13/24 06:29	12/14/24 03:05	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0	ng/L		12/13/24 06:29	12/14/24 03:05	1

Surrogate	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	116		70 - 130	12/13/24 06:29	12/14/24 03:05	1
13C2 PFHxA	118		70 - 130	12/13/24 06:29	12/14/24 03:05	1
13C2 PFDA	118		70 - 130	12/13/24 06:29	12/14/24 03:05	1
13C3-GenX	110		70 - 130	12/13/24 06:29	12/14/24 03:05	1

Lab Sample ID: LCS 380-123597/22-A
Matrix: Water
Analysis Batch: 123725

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 123597

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	25.2	26.3		ng/L		105	70 - 130
Perfluorooctanesulfonic acid (PFOS)	25.2	28.1		ng/L		112	70 - 130
Perfluoroundecanoic acid (PFUnA)	25.2	26.5		ng/L		105	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	25.2	26.6		ng/L		106	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	25.2	26.0		ng/L		103	70 - 130
Perfluorohexanoic acid (PFHxA)	25.2	26.4		ng/L		105	70 - 130
Perfluorododecanoic acid (PFDoA)	25.2	25.7		ng/L		102	70 - 130
Perfluorooctanoic acid (PFOA)	25.2	27.0		ng/L		107	70 - 130
Perfluorodecanoic acid (PFDA)	25.2	27.1		ng/L		108	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	25.2	28.4		ng/L		113	70 - 130
Perfluorobutanesulfonic acid (PFBS)	25.2	26.8		ng/L		106	70 - 130
Perfluoroheptanoic acid (PFHpA)	25.2	28.8		ng/L		115	70 - 130
Perfluorononanoic acid (PFNA)	25.2	27.1		ng/L		108	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-125976-1
SDG: Weekly PFAS

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

Lab Sample ID: LCS 380-123597/22-A
Matrix: Water
Analysis Batch: 123725

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 123597

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorotetradecanoic acid (PFTA)	25.2	26.0		ng/L		103	70 - 130
Perfluorotridecanoic acid (PFTrDA)	25.2	25.7		ng/L		102	70 - 130
9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid(9Cl-PF3ONS)	25.2	27.3		ng/L		109	70 - 130
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	25.2	26.4		ng/L		105	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	25.2	26.5		ng/L		105	70 - 130
LCS LCS							
Surrogate	%Recovery	Qualifier	Limits				
d5-NEtFOSAA	105		70 - 130				
13C2 PFHxA	110		70 - 130				
13C2 PFDA	106		70 - 130				
13C3-GenX	103		70 - 130				

Lab Sample ID: MRL 380-123597/21-A
Matrix: Water
Analysis Batch: 123725

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 123597

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.01	1.91	J	ng/L		95	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.01	2.22	J	ng/L		110	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.01	2.06	J	ng/L		103	50 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2.01	2.09	J	ng/L		104	50 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2.01	2.01	J	ng/L		100	50 - 150
Perfluorohexanoic acid (PFHxA)	2.01	2.10	J	ng/L		105	50 - 150
Perfluorododecanoic acid (PFDoA)	2.01	2.04	J	ng/L		102	50 - 150
Perfluorooctanoic acid (PFOA)	2.01	2.09	J	ng/L		104	50 - 150
Perfluorodecanoic acid (PFDA)	2.01	2.10	J	ng/L		105	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.01	2.27	J	ng/L		113	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.01	2.23	J	ng/L		111	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.01	2.23	J	ng/L		111	50 - 150
Perfluorononanoic acid (PFNA)	2.01	2.09	J	ng/L		104	50 - 150
Perfluorotetradecanoic acid (PFTA)	2.01	2.20	J	ng/L		110	50 - 150
Perfluorotridecanoic acid (PFTrDA)	2.01	2.07	J	ng/L		103	50 - 150
9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid(9Cl-PF3ONS)	2.01	2.25	J	ng/L		112	50 - 150

QC Sample Results

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

Job ID: 380-125976-1
SDG: Weekly PFAS

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

Lab Sample ID: MRL 380-123597/21-A
Matrix: Water
Analysis Batch: 123725

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 123597

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.01	2.11	J	ng/L		105	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.01	2.10	J	ng/L		105	50 - 150
Surrogate	MRL %Recovery	MRL Qualifier	Limits				
d5-NEtFOSAA	102		70 - 130				
13C2 PFHxA	101		70 - 130				
13C2 PFDA	109		70 - 130				
13C3-GenX	92		70 - 130				

Lab Sample ID: 380-126012-A-1-B MS
Matrix: Water
Analysis Batch: 123725

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 123597

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		25.2	26.2		ng/L		104	70 - 130
Perfluorooctanesulfonic acid (PFOS)	<2.0		25.2	27.6		ng/L		110	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		25.2	27.3		ng/L		108	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		25.2	26.1		ng/L		104	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		25.2	26.3		ng/L		105	70 - 130
Perfluorohexanoic acid (PFHxA)	<2.0		25.2	29.3		ng/L		111	70 - 130
Perfluorododecanoic acid (PFDoA)	<2.0		25.2	27.2		ng/L		108	70 - 130
Perfluorooctanoic acid (PFOA)	<2.0		25.2	28.6		ng/L		110	70 - 130
Perfluorodecanoic acid (PFDA)	<2.0		25.2	27.4		ng/L		109	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	<2.0		25.2	29.8		ng/L		112	70 - 130
Perfluorobutanesulfonic acid (PFBS)	<2.0		25.2	27.4		ng/L		106	70 - 130
Perfluoroheptanoic acid (PFHpA)	2.0		25.2	30.7		ng/L		121	70 - 130
Perfluorononanoic acid (PFNA)	<2.0		25.2	27.4		ng/L		109	70 - 130
Perfluorotetradecanoic acid (PFTA)	<2.0		25.2	26.6		ng/L		106	70 - 130
Perfluorotridecanoic acid (PFTrDA)	<2.0		25.2	26.8		ng/L		107	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		25.2	26.8		ng/L		107	70 - 130
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		25.2	25.3		ng/L		101	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		25.2	27.7		ng/L		110	70 - 130

QC Sample Results

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

Job ID: 380-125976-1
SDG: Weekly PFAS

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

Lab Sample ID: 380-126012-A-1-B MS
Matrix: Water
Analysis Batch: 123725

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 123597

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

Lab Sample ID: 380-126012-A-1-C MSD
Matrix: Water
Analysis Batch: 123725

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 123597

<i>Analyte</i>	<i>Sample Result</i>	<i>Sample Qualifier</i>	<i>Spike Added</i>	<i>MSD Result</i>	<i>MSD Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec Limits</i>	<i>RPD</i>	<i>RPD Limit</i>
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		25.2	25.6		ng/L		102	70 - 130	2	30
Perfluorooctanesulfonic acid (PFOS)	<2.0		25.2	27.8		ng/L		110	70 - 130	1	30
Perfluoroundecanoic acid (PFUnA)	<2.0		25.2	27.8		ng/L		111	70 - 130	2	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		25.2	26.7		ng/L		106	70 - 130	2	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		25.2	25.8		ng/L		103	70 - 130	2	30
Perfluorohexanoic acid (PFHxA)	<2.0		25.2	28.4		ng/L		108	70 - 130	3	30
Perfluorododecanoic acid (PFDoA)	<2.0		25.2	26.5		ng/L		105	70 - 130	3	30
Perfluorooctanoic acid (PFOA)	<2.0		25.2	28.8		ng/L		111	70 - 130	1	30
Perfluorodecanoic acid (PFDA)	<2.0		25.2	27.6		ng/L		110	70 - 130	1	30
Perfluorohexanesulfonic acid (PFHxS)	<2.0		25.2	29.6		ng/L		111	70 - 130	1	30
Perfluorobutanesulfonic acid (PFBS)	<2.0		25.2	29.1		ng/L		113	70 - 130	6	30
Perfluoroheptanoic acid (PFHpA)	<2.0		25.2	29.8		ng/L		117	70 - 130	3	30
Perfluorononanoic acid (PFNA)	<2.0		25.2	27.0		ng/L		107	70 - 130	1	30
Perfluorotetradecanoic acid (PFTA)	<2.0		25.2	26.3		ng/L		104	70 - 130	1	30
Perfluorotridecanoic acid (PFTrDA)	<2.0		25.2	26.3		ng/L		105	70 - 130	2	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		25.2	27.4		ng/L		109	70 - 130	2	30
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		25.2	26.5		ng/L		105	70 - 130	5	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		25.2	28.0		ng/L		111	70 - 130	1	30

<i>Surrogate</i>	<i>%Recovery</i>	<i>MSD MSD Qualifier</i>	<i>Limits</i>
d5-NEtFOSAA	106		70 - 130
13C2 PFHxA	109		70 - 130
13C2 PFDA	113		70 - 130
13C3-GenX	105		70 - 130

QC Association Summary

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

Job ID: 380-125976-1
SDG: Weekly PFAS

LCMS

Prep Batch: 123597

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-125976-1	HALAWA WELLS UNITS 1 & 2 P1	Total/NA	Water	537.1 DW	
380-125976-2	AIEA GULCH WELLS PUMP 2	Total/NA	Water	537.1 DW	
380-125976-3	AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Water	537.1 DW	
380-125976-4	KA'AMILO WELLS	Total/NA	Water	537.1 DW	
380-125976-5	FB HALAWA WELLS UNITS 1 & 2 P1	Total/NA	Water	537.1 DW	
380-125976-6	FB AIEA GULCH WELLS PUMP 2	Total/NA	Water	537.1 DW	
380-125976-7	FB AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Water	537.1 DW	
380-125976-8	FB KA'AMILO WELLS	Total/NA	Water	537.1 DW	
MBL 380-123597/20-A	Method Blank	Total/NA	Water	537.1 DW	
LCS 380-123597/22-A	Lab Control Sample	Total/NA	Water	537.1 DW	
MRL 380-123597/21-A	Lab Control Sample	Total/NA	Water	537.1 DW	
380-126012-A-1-B MS	Matrix Spike	Total/NA	Water	537.1 DW	
380-126012-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	537.1 DW	

Analysis Batch: 123725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-125976-1	HALAWA WELLS UNITS 1 & 2 P1	Total/NA	Water	537.1	123597
380-125976-2	AIEA GULCH WELLS PUMP 2	Total/NA	Water	537.1	123597
380-125976-3	AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Water	537.1	123597
380-125976-4	KA'AMILO WELLS	Total/NA	Water	537.1	123597
380-125976-5	FB HALAWA WELLS UNITS 1 & 2 P1	Total/NA	Water	537.1	123597
380-125976-6	FB AIEA GULCH WELLS PUMP 2	Total/NA	Water	537.1	123597
380-125976-7	FB AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Water	537.1	123597
380-125976-8	FB KA'AMILO WELLS	Total/NA	Water	537.1	123597
MBL 380-123597/20-A	Method Blank	Total/NA	Water	537.1	123597
LCS 380-123597/22-A	Lab Control Sample	Total/NA	Water	537.1	123597
MRL 380-123597/21-A	Lab Control Sample	Total/NA	Water	537.1	123597
380-126012-A-1-B MS	Matrix Spike	Total/NA	Water	537.1	123597
380-126012-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	537.1	123597

Prep Batch: 123769

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-125976-1	HALAWA WELLS UNITS 1 & 2 P1	Total/NA	Water	533	
380-125976-2	AIEA GULCH WELLS PUMP 2	Total/NA	Water	533	
380-125976-3	AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Water	533	
380-125976-4	KA'AMILO WELLS	Total/NA	Water	533	
380-125976-5	FB HALAWA WELLS UNITS 1 & 2 P1	Total/NA	Water	533	
380-125976-6	FB AIEA GULCH WELLS PUMP 2	Total/NA	Water	533	
380-125976-7	FB AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Water	533	
MBL 380-123769/22-A	Method Blank	Total/NA	Water	533	
LCS 380-123769/24-A	Lab Control Sample	Total/NA	Water	533	
MRL 380-123769/23-A	Lab Control Sample	Total/NA	Water	533	
380-125976-4 MS	KA'AMILO WELLS	Total/NA	Water	533	
380-125976-4 MSD	KA'AMILO WELLS	Total/NA	Water	533	

Prep Batch: 123798

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-125976-8	FB KA'AMILO WELLS	Total/NA	Water	533	
MBL 380-123798/19-A	Method Blank	Total/NA	Water	533	
LCS 380-123798/21-A	Lab Control Sample	Total/NA	Water	533	
MRL 380-123798/20-A	Lab Control Sample	Total/NA	Water	533	

QC Association Summary

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

Job ID: 380-125976-1
SDG: Weekly PFAS

LCMS (Continued)

Prep Batch: 123798 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-126012-B-1-A MS	Matrix Spike	Total/NA	Water	533	
380-126012-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	533	

Analysis Batch: 123874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-125976-1	HALAWA WELLS UNITS 1 & 2 P1	Total/NA	Water	533	123769
380-125976-2	AIEA GULCH WELLS PUMP 2	Total/NA	Water	533	123769
380-125976-3	AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Water	533	123769
380-125976-4	KA'AMILO WELLS	Total/NA	Water	533	123769
380-125976-5	FB HALAWA WELLS UNITS 1 & 2 P1	Total/NA	Water	533	123769
380-125976-6	FB AIEA GULCH WELLS PUMP 2	Total/NA	Water	533	123769
380-125976-7	FB AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Water	533	123769
MBL 380-123769/22-A	Method Blank	Total/NA	Water	533	123769
LCS 380-123769/24-A	Lab Control Sample	Total/NA	Water	533	123769
MRL 380-123769/23-A	Lab Control Sample	Total/NA	Water	533	123769
380-125976-4 MS	KA'AMILO WELLS	Total/NA	Water	533	123769
380-125976-4 MSD	KA'AMILO WELLS	Total/NA	Water	533	123769

Analysis Batch: 123895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-125976-8	FB KA'AMILO WELLS	Total/NA	Water	533	123798
MBL 380-123798/19-A	Method Blank	Total/NA	Water	533	123798
LCS 380-123798/21-A	Lab Control Sample	Total/NA	Water	533	123798
MRL 380-123798/20-A	Lab Control Sample	Total/NA	Water	533	123798
380-126012-B-1-A MS	Matrix Spike	Total/NA	Water	533	123798
380-126012-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	533	123798

Lab Chronicle

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

Job ID: 380-125976-1
SDG: Weekly PFAS

Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1

Lab Sample ID: 380-125976-1

Date Collected: 12/09/24 09:50

Matrix: Water

Date Received: 12/11/24 09:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			123769	E9PK	EA POM	12/14/24 10:43
Total/NA	Analysis	533		1	123874	SZ9R	EA POM	12/16/24 14:05
Total/NA	Prep	537.1 DW			123597	G9MN	EA POM	12/13/24 06:29
Total/NA	Analysis	537.1		1	123725	Y5FM	EA POM	12/14/24 04:15

Client Sample ID: AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-125976-2

Date Collected: 12/09/24 10:18

Matrix: Water

Date Received: 12/11/24 09:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			123769	E9PK	EA POM	12/14/24 10:43
Total/NA	Analysis	533		1	123874	SZ9R	EA POM	12/16/24 14:15
Total/NA	Prep	537.1 DW			123597	G9MN	EA POM	12/13/24 06:29
Total/NA	Analysis	537.1		1	123725	Y5FM	EA POM	12/14/24 04:24

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

Lab Sample ID: 380-125976-3

Date Collected: 12/09/24 10:49

Matrix: Water

Date Received: 12/11/24 09:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			123769	E9PK	EA POM	12/14/24 10:43
Total/NA	Analysis	533		1	123874	SZ9R	EA POM	12/16/24 14:24
Total/NA	Prep	537.1 DW			123597	G9MN	EA POM	12/13/24 06:29
Total/NA	Analysis	537.1		1	123725	Y5FM	EA POM	12/14/24 04:34

Client Sample ID: KA'AMILO WELLS

Lab Sample ID: 380-125976-4

Date Collected: 12/09/24 11:23

Matrix: Water

Date Received: 12/11/24 09:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			123769	E9PK	EA POM	12/14/24 10:43
Total/NA	Analysis	533		1	123874	SZ9R	EA POM	12/16/24 11:32
Total/NA	Prep	537.1 DW			123597	G9MN	EA POM	12/13/24 06:29
Total/NA	Analysis	537.1		1	123725	Y5FM	EA POM	12/14/24 04:44

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

Lab Sample ID: 380-125976-5

Date Collected: 12/09/24 09:50

Matrix: Water

Date Received: 12/11/24 09:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			123769	E9PK	EA POM	12/14/24 10:43
Total/NA	Analysis	533		1	123874	SZ9R	EA POM	12/16/24 14:34
Total/NA	Prep	537.1 DW			123597	G9MN	EA POM	12/13/24 06:29
Total/NA	Analysis	537.1		1	123725	Y5FM	EA POM	12/14/24 04:53

Lab Chronicle

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

Job ID: 380-125976-1
SDG: Weekly PFAS

Client Sample ID: FB AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-125976-6

Date Collected: 12/09/24 10:18

Matrix: Water

Date Received: 12/11/24 09:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			123769	E9PK	EA POM	12/14/24 10:43
Total/NA	Analysis	533		1	123874	SZ9R	EA POM	12/16/24 14:43
Total/NA	Prep	537.1 DW			123597	G9MN	EA POM	12/13/24 06:29
Total/NA	Analysis	537.1		1	123725	Y5FM	EA POM	12/14/24 05:03

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

Lab Sample ID: 380-125976-7

Date Collected: 12/09/24 10:49

Matrix: Water

Date Received: 12/11/24 09:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			123769	E9PK	EA POM	12/14/24 10:43
Total/NA	Analysis	533		1	123874	SZ9R	EA POM	12/16/24 14:53
Total/NA	Prep	537.1 DW			123597	G9MN	EA POM	12/13/24 06:29
Total/NA	Analysis	537.1		1	123725	Y5FM	EA POM	12/14/24 05:13

Client Sample ID: FB KA'AMILO WELLS

Lab Sample ID: 380-125976-8

Date Collected: 12/09/24 11:23

Matrix: Water

Date Received: 12/11/24 09:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			123798	N8NE	EA POM	12/15/24 08:38
Total/NA	Analysis	533		1	123895	SZ9R	EA POM	12/16/24 21:05
Total/NA	Prep	537.1 DW			123597	G9MN	EA POM	12/13/24 06:29
Total/NA	Analysis	537.1		1	123725	Y5FM	EA POM	12/14/24 05:22

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 380-125976-1
SDG: Weekly PFAS

Laboratory: Eurofins Eaton Analytical Pomona

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

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

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Method Summary

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

Job ID: 380-125976-1
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: 380-125976-1
SDG: Weekly PFAS

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
380-125976-1	HALAWA WELLS UNITS 1 & 2 P1	Water	12/09/24 09:50	12/11/24 09:31
380-125976-2	AIEA GULCH WELLS PUMP 2	Water	12/09/24 10:18	12/11/24 09:31
380-125976-3	AIEA WELLS PUMPS 1&2 (260) P2	Water	12/09/24 10:49	12/11/24 09:31
380-125976-4	KA'AMILO WELLS	Water	12/09/24 11:23	12/11/24 09:31
380-125976-5	FB HALAWA WELLS UNITS 1 & 2 P1	Water	12/09/24 09:50	12/11/24 09:31
380-125976-6	FB AIEA GULCH WELLS PUMP 2	Water	12/09/24 10:18	12/11/24 09:31
380-125976-7	FB AIEA WELLS PUMPS 1&2 (260) P2	Water	12/09/24 10:49	12/11/24 09:31
380-125976-8	FB KA'AMILO WELLS	Water	12/09/24 11:23	12/11/24 09:31

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

Chain of Custody Record



Environment Testing
 America

Client Information		Sampler: bailey		Lab PM: Arada Rachelle		Carrier Tracking No(s): 380-27941-2757 2		COC No: 380-27941-2757 2	
Client Contact: Dr. Ron Fenstermacher		Phone: +1 808 748 5840		E-Mail: Rachelle.Arada@et.eurofins.com		State of Origin:		Page: Page 2 of 2	
Company: City & County of Honolulu		PWSID:		Analysis Requested		Total Number of Containers:		Job #:	
Address: 630 South Beretania Street; Chemistry Lab		Due Date Requested:		Perform MS/MSD (Yes or No)		537 1, DW, PREC 537 1 Full List		Preservation Codes:	
City: Honolulu		TAT Requested (days):		Field Filtered Sample (Yes or No)		537 2, PREC (MOD) 525plus PLUS TICs		M - Hexane	
State Zip: HI 96843		Compliance Project: Δ No		8015B_DR0_LL_CS HNL Ranges C10-C24/C24-C36/C8-		8015B_GRO_LL (MOD) GRO		N - None	
Phone: 808-748-5091 (tel)		PO #:		SUBCONTRACT - 625 PAH Physis LL (EAL) + TICs		8015B_DR0_LL_CS HNL Ranges C10-C24/C24-C36/C8-		O - AsNaO2	
Email: rfenstermacher@hbws.org		WO #:		818		8015B_DR0_LL_CS HNL Ranges C10-C24/C24-C36/C8-		P - Na2OAS	
Project Name: RED-HILL/HBWS sites Event Desc: RUSH Weekly Red Hill		Project #: 38001111		818		8015B_DR0_LL_CS HNL Ranges C10-C24/C24-C36/C8-		Q - Na2SO3	
Site:		SSOW#:		818		8015B_DR0_LL_CS HNL Ranges C10-C24/C24-C36/C8-		R - Na2SO3	
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=wastewater, BT=BIOTIN, A=Air)	
HALAWA WELLS UNITS 1&2 P1		9-Dec-2024		0950		G		Water	
AIEA GULCH WELLS PUMP 2		9-Dec-2024		1018		G		Water	
AIEA WELLS PUMPS 1&2 (260) PZ		9-Dec-2024		1049		G		Water	
KA'AMILO WELLS		9-Dec-2024		1123		G		Water	
FB HALAWA WELLS UNITS 1&2		9-Dec-2024		0950					
FB AIEA GULCH WELLS PUMP 2		9-Dec-2024		1018					
FB AIEA WELLS PUMPS 1&2 (260)		9-Dec-2024		1049					
FB KA'AMILO WELLS		9-Dec-2024		1123					
Possible Hazard Identification		Poison B		Unknown		Radiological		Special Instructions/Note:	
Deliverable Requested I, II, III, IV, Other (specify)		Flammable		Skin Irritant		Other (specify)		chlorinated	
Empty Kit Relinquished by:		Date		Time		Return To Client		Archive For	
Relinquished by:		Date/Time: 12/11/24 09:31		Time		Disposal By Lab		Months	
Relinquished by:		Date/Time: 12/11/24 09:31		Time		Special Instructions/QC Requirements:		Method of Shipment: FedEx 7706 4917 0274	
Relinquished by:		Date/Time: 12/11/24 09:31		Time		Company: HBWS		Company: EEF	
Relinquished by:		Date/Time: 12/11/24 09:31		Time		Company: HBWS		Company: EEF	
Custody Seals Intact: Δ Yes Δ No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks: 757A 0.7°-0.0°=0.7° GEL FROZEN		Date/Time: 12/11/24 09:31		Date/Time: 12/11/24 09:31	



Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-125976-1

SDG Number: Weekly PFAS

Login Number: 125976

List Source: Eurofins Eaton Analytical Pomona

List Number: 1

Creator: Sanchez Velasquez, Gustavo

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

