

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

ANALYTICAL REPORT

PREPARED FOR

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JOB DESCRIPTION

RED-HILL
PFAS: Ka'amilo Wells P1/P2

JOB NUMBER

380-182499-1

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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Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Detection Summary	6
Client Sample Results	7
Action Limit Summary	15
Surrogate Summary	17
Isotope Dilution Summary	18
QC Sample Results	19
QC Association Summary	30
Lab Chronicle	31
Certification Summary	32
Method Summary	33
Sample Summary	34
Chain of Custody	35
Receipt Checklists	36

Definitions/Glossary

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

Job ID: 380-182499-1
SDG: PFAS: Ka'amilo Wells P1/P2

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: 380-182499-1

Job ID: 380-182499-1

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Job Narrative 380-182499-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 11/13/2025 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.5°C.

PFAS

PFAS results by 533 for Kaamilo Wells P1 (380-182499) collected on 11/10/25 are a resample for Kaamilo Wells P1 job # (380-181198-1) collected on 11/3/25. XWB4)

Ka'amilo Wells P1 (380-182499-1)

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: 380-182499-1
SDG: PFAS: Ka'amilo Wells P1/P2

Client Sample ID: Ka'amilo Wells P1

Lab Sample ID: 380-182499-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanesulfonic acid (PFBS)	3.0		2.0	ng/L	1		533	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	3.3		2.0	ng/L	1		533	Total/NA
Perfluorohexanoic acid (PFHxA)	3.7		2.0	ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	4.6		2.0	ng/L	1		533	Total/NA
Perfluorooctanoic acid (PFOA)	3.8		2.0	ng/L	1		533	Total/NA
Perfluoropentanoic acid (PFPeA)	3.7		2.0	ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	5.0		2.0	ng/L	1		537.1	Total/NA
Perfluorohexanoic acid (PFHxA)	3.7		2.0	ng/L	1		537.1	Total/NA
Perfluorooctanoic acid (PFOA)	3.9		2.0	ng/L	1		537.1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	3.5		2.0	ng/L	1		537.1	Total/NA
Perfluorobutanesulfonic acid (PFBS)	3.1		2.0	ng/L	1		537.1	Total/NA

Client Sample ID: Ka'amilo Wells P2

Lab Sample ID: 380-182499-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanesulfonic acid (PFBS)	2.7		2.0	ng/L	1		533	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	3.0		2.0	ng/L	1		533	Total/NA
Perfluorohexanoic acid (PFHxA)	3.4		2.0	ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	4.0		2.0	ng/L	1		533	Total/NA
Perfluorooctanoic acid (PFOA)	3.5		2.0	ng/L	1		533	Total/NA
Perfluoropentanoic acid (PFPeA)	3.6		2.0	ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	4.8		2.0	ng/L	1		537.1	Total/NA
Perfluorohexanoic acid (PFHxA)	3.6		2.0	ng/L	1		537.1	Total/NA
Perfluorooctanoic acid (PFOA)	3.9		2.0	ng/L	1		537.1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	3.4		2.0	ng/L	1		537.1	Total/NA
Perfluorobutanesulfonic acid (PFBS)	3.1		2.0	ng/L	1		537.1	Total/NA

Client Sample ID: FB: Ka'amilo Wells P1

Lab Sample ID: 380-182499-3

No Detections.

Client Sample ID: FB: Ka'amilo Wells P2

Lab Sample ID: 380-182499-4

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: 380-182499-1
SDG: PFAS: Ka'amilo Wells P1/P2

Client Sample ID: Ka'amilo Wells P1

Lab Sample ID: 380-182499-1

Date Collected: 11/10/25 12:31

Matrix: Water

Date Received: 11/13/25 09:30

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		11/14/25 06:41	11/14/25 21:55	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		11/14/25 06:41	11/14/25 21:55	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		11/14/25 06:41	11/14/25 21:55	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		11/14/25 06:41	11/14/25 21:55	1
Perfluorobutanesulfonic acid (PFBS)	3.0		2.0	ng/L		11/14/25 06:41	11/14/25 21:55	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		11/14/25 06:41	11/14/25 21:55	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		11/14/25 06:41	11/14/25 21:55	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		11/14/25 06:41	11/14/25 21:55	1
Perfluorohexanesulfonic acid (PFHxS)	3.3		2.0	ng/L		11/14/25 06:41	11/14/25 21:55	1
Perfluorohexanoic acid (PFHxA)	3.7		2.0	ng/L		11/14/25 06:41	11/14/25 21:55	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		11/14/25 06:41	11/14/25 21:55	1
Perfluorooctanesulfonic acid (PFOS)	4.6		2.0	ng/L		11/14/25 06:41	11/14/25 21:55	1
Perfluorooctanoic acid (PFOA)	3.8		2.0	ng/L		11/14/25 06:41	11/14/25 21:55	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		11/14/25 06:41	11/14/25 21:55	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		11/14/25 06:41	11/14/25 21:55	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		11/14/25 06:41	11/14/25 21:55	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		11/14/25 06:41	11/14/25 21:55	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		11/14/25 06:41	11/14/25 21:55	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		11/14/25 06:41	11/14/25 21:55	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		11/14/25 06:41	11/14/25 21:55	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		11/14/25 06:41	11/14/25 21:55	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		11/14/25 06:41	11/14/25 21:55	1
Perfluoropentanoic acid (PFPeA)	3.7		2.0	ng/L		11/14/25 06:41	11/14/25 21:55	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		11/14/25 06:41	11/14/25 21:55	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		11/14/25 06:41	11/14/25 21:55	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	97		50 - 200	11/14/25 06:41	11/14/25 21:55	1
13C6 PFDA	97		50 - 200	11/14/25 06:41	11/14/25 21:55	1
13C5 PFHxA	98		50 - 200	11/14/25 06:41	11/14/25 21:55	1
13C4 PFHpA	102		50 - 200	11/14/25 06:41	11/14/25 21:55	1
13C8 PFOA	99		50 - 200	11/14/25 06:41	11/14/25 21:55	1
13C9 PFNA	99		50 - 200	11/14/25 06:41	11/14/25 21:55	1
13C7 PFUnA	94		50 - 200	11/14/25 06:41	11/14/25 21:55	1
13C2 PFDoA	99		50 - 200	11/14/25 06:41	11/14/25 21:55	1
13C4 PFBA	100		50 - 200	11/14/25 06:41	11/14/25 21:55	1
13C5 PFPeA	109		50 - 200	11/14/25 06:41	11/14/25 21:55	1
13C3 PFBS	113		50 - 200	11/14/25 06:41	11/14/25 21:55	1

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Client Sample Results

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

Job ID: 380-182499-1
SDG: PFAS: Ka'amilo Wells P1/P2

Client Sample ID: Ka'amilo Wells P1

Lab Sample ID: 380-182499-1

Date Collected: 11/10/25 12:31

Matrix: Water

Date Received: 11/13/25 09:30

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFHxS	112		50 - 200	11/14/25 06:41	11/14/25 21:55	1
13C8 PFOS	108		50 - 200	11/14/25 06:41	11/14/25 21:55	1
13C2-4:2-FTS	128		50 - 200	11/14/25 06:41	11/14/25 21:55	1
13C2-6:2-FTS	121		50 - 200	11/14/25 06:41	11/14/25 21:55	1
13C2-8:2-FTS	115		50 - 200	11/14/25 06:41	11/14/25 21:55	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 19:41	1
Perfluorooctanesulfonic acid (PFOS)	5.0		2.0	ng/L		11/14/25 01:43	11/15/25 19:41	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 19:41	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 19:41	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 19:41	1
Perfluorohexanoic acid (PFHxA)	3.7		2.0	ng/L		11/14/25 01:43	11/15/25 19:41	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 19:41	1
Perfluorooctanoic acid (PFOA)	3.9		2.0	ng/L		11/14/25 01:43	11/15/25 19:41	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 19:41	1
Perfluorohexanesulfonic acid (PFHxS)	3.5		2.0	ng/L		11/14/25 01:43	11/15/25 19:41	1
Perfluorobutanesulfonic acid (PFBS)	3.1		2.0	ng/L		11/14/25 01:43	11/15/25 19:41	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 19:41	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 19:41	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 19:41	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 19:41	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 19:41	1
11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 19:41	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 19:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	105		70 - 130	11/14/25 01:43	11/15/25 19:41	1
13C2 PFHxA	102		70 - 130	11/14/25 01:43	11/15/25 19:41	1
13C2 PFDA	114		70 - 130	11/14/25 01:43	11/15/25 19:41	1
13C3-GenX	103		70 - 130	11/14/25 01:43	11/15/25 19:41	1

Client Sample ID: Ka'amilo Wells P2

Lab Sample ID: 380-182499-2

Date Collected: 11/10/25 13:10

Matrix: Water

Date Received: 11/13/25 09:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 00:52	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 00:52	1

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Client Sample Results

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

Job ID: 380-182499-1
SDG: PFAS: Ka'amilo Wells P1/P2

Client Sample ID: Ka'amilo Wells P2

Lab Sample ID: 380-182499-2

Date Collected: 11/10/25 13:10

Matrix: Water

Date Received: 11/13/25 09:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 00:52	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 00:52	1
Perfluorobutanesulfonic acid (PFBS)	2.7		2.0	ng/L		11/14/25 06:41	11/15/25 00:52	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 00:52	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 00:52	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 00:52	1
Perfluorohexanesulfonic acid (PFHxS)	3.0		2.0	ng/L		11/14/25 06:41	11/15/25 00:52	1
Perfluorohexanoic acid (PFHxA)	3.4		2.0	ng/L		11/14/25 06:41	11/15/25 00:52	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 00:52	1
Perfluorooctanesulfonic acid (PFOS)	4.0		2.0	ng/L		11/14/25 06:41	11/15/25 00:52	1
Perfluorooctanoic acid (PFOA)	3.5		2.0	ng/L		11/14/25 06:41	11/15/25 00:52	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 00:52	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 00:52	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 00:52	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 00:52	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 00:52	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 00:52	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 00:52	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 00:52	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 00:52	1
Perfluoropentanoic acid (PFPeA)	3.6		2.0	ng/L		11/14/25 06:41	11/15/25 00:52	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 00:52	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 00:52	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	97		50 - 200	11/14/25 06:41	11/15/25 00:52	1
13C6 PFDA	103		50 - 200	11/14/25 06:41	11/15/25 00:52	1
13C5 PFHxA	101		50 - 200	11/14/25 06:41	11/15/25 00:52	1
13C4 PFHpA	106		50 - 200	11/14/25 06:41	11/15/25 00:52	1
13C8 PFOA	103		50 - 200	11/14/25 06:41	11/15/25 00:52	1
13C9 PFNA	103		50 - 200	11/14/25 06:41	11/15/25 00:52	1
13C7 PFUnA	101		50 - 200	11/14/25 06:41	11/15/25 00:52	1
13C2 PFDoA	104		50 - 200	11/14/25 06:41	11/15/25 00:52	1
13C4 PFBA	104		50 - 200	11/14/25 06:41	11/15/25 00:52	1
13C5 PFPeA	110		50 - 200	11/14/25 06:41	11/15/25 00:52	1
13C3 PFBS	119		50 - 200	11/14/25 06:41	11/15/25 00:52	1
13C3 PFHxS	122		50 - 200	11/14/25 06:41	11/15/25 00:52	1
13C8 PFOS	113		50 - 200	11/14/25 06:41	11/15/25 00:52	1
13C2-4:2-FTS	134		50 - 200	11/14/25 06:41	11/15/25 00:52	1
13C2-6:2-FTS	126		50 - 200	11/14/25 06:41	11/15/25 00:52	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-182499-1
SDG: PFAS: Ka'amilo Wells P1/P2

Client Sample ID: Ka'amilo Wells P2

Lab Sample ID: 380-182499-2

Date Collected: 11/10/25 13:10

Matrix: Water

Date Received: 11/13/25 09:30

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2-8:2-FTS	124		50 - 200	11/14/25 06:41	11/15/25 00:52	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	-	11/14/25 01:43	11/15/25 19:51	1
Perfluorooctanesulfonic acid (PFOS)	4.8		2.0	ng/L	-	11/14/25 01:43	11/15/25 19:51	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L	-	11/14/25 01:43	11/15/25 19:51	1
N-methylperfluorooctanesulfonamide acetic acid (NMeFOSAA)	<2.0		2.0	ng/L	-	11/14/25 01:43	11/15/25 19:51	1
N-ethylperfluorooctanesulfonamide acetic acid (NEtFOSAA)	<2.0		2.0	ng/L	-	11/14/25 01:43	11/15/25 19:51	1
Perfluorohexanoic acid (PFHxA)	3.6		2.0	ng/L	-	11/14/25 01:43	11/15/25 19:51	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L	-	11/14/25 01:43	11/15/25 19:51	1
Perfluorooctanoic acid (PFOA)	3.9		2.0	ng/L	-	11/14/25 01:43	11/15/25 19:51	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L	-	11/14/25 01:43	11/15/25 19:51	1
Perfluorohexanesulfonic acid (PFHxS)	3.4		2.0	ng/L	-	11/14/25 01:43	11/15/25 19:51	1
Perfluorobutanesulfonic acid (PFBS)	3.1		2.0	ng/L	-	11/14/25 01:43	11/15/25 19:51	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L	-	11/14/25 01:43	11/15/25 19:51	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L	-	11/14/25 01:43	11/15/25 19:51	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L	-	11/14/25 01:43	11/15/25 19:51	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L	-	11/14/25 01:43	11/15/25 19:51	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L	-	11/14/25 01:43	11/15/25 19:51	1
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L	-	11/14/25 01:43	11/15/25 19:51	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L	-	11/14/25 01:43	11/15/25 19:51	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
d5-NEtFOSAA	106		70 - 130	11/14/25 01:43	11/15/25 19:51	1		
13C2 PFHxA	98		70 - 130	11/14/25 01:43	11/15/25 19:51	1		
13C2 PFDA	114		70 - 130	11/14/25 01:43	11/15/25 19:51	1		
13C3-GenX	97		70 - 130	11/14/25 01:43	11/15/25 19:51	1		

Client Sample ID: FB: Ka'amilo Wells P1

Lab Sample ID: 380-182499-3

Date Collected: 11/10/25 12:31

Matrix: Water

Date Received: 11/13/25 09:30

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	-	11/14/25 06:41	11/15/25 01:02	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L	-	11/14/25 06:41	11/15/25 01:02	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L	-	11/14/25 06:41	11/15/25 01:02	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L	-	11/14/25 06:41	11/15/25 01:02	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L	-	11/14/25 06:41	11/15/25 01:02	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L	-	11/14/25 06:41	11/15/25 01:02	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-182499-1
SDG: PFAS: Ka'amilo Wells P1/P2

Client Sample ID: FB: Ka'amilo Wells P1

Lab Sample ID: 380-182499-3

Date Collected: 11/10/25 12:31

Matrix: Water

Date Received: 11/13/25 09:30

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		11/14/25 06:41	11/15/25 01:02	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:02	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:02	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:02	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:02	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:02	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:02	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:02	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:02	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:02	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:02	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:02	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:02	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:02	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:02	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:02	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:02	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:02	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:02	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	102		50 - 200	11/14/25 06:41	11/15/25 01:02	1
13C6 PFDA	112		50 - 200	11/14/25 06:41	11/15/25 01:02	1
13C5 PFHxA	111		50 - 200	11/14/25 06:41	11/15/25 01:02	1
13C4 PFHpA	114		50 - 200	11/14/25 06:41	11/15/25 01:02	1
13C8 PFOA	111		50 - 200	11/14/25 06:41	11/15/25 01:02	1
13C9 PFNA	110		50 - 200	11/14/25 06:41	11/15/25 01:02	1
13C7 PFUnA	109		50 - 200	11/14/25 06:41	11/15/25 01:02	1
13C2 PFDoA	108		50 - 200	11/14/25 06:41	11/15/25 01:02	1
13C4 PFBA	111		50 - 200	11/14/25 06:41	11/15/25 01:02	1
13C5 PFPeA	114		50 - 200	11/14/25 06:41	11/15/25 01:02	1
13C3 PFBS	117		50 - 200	11/14/25 06:41	11/15/25 01:02	1
13C3 PFHxS	115		50 - 200	11/14/25 06:41	11/15/25 01:02	1
13C8 PFOS	110		50 - 200	11/14/25 06:41	11/15/25 01:02	1
13C2-4:2-FTS	131		50 - 200	11/14/25 06:41	11/15/25 01:02	1
13C2-6:2-FTS	124		50 - 200	11/14/25 06:41	11/15/25 01:02	1
13C2-8:2-FTS	120		50 - 200	11/14/25 06:41	11/15/25 01:02	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 20:02	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 20:02	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 20:02	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-182499-1
SDG: PFAS: Ka'amilo Wells P1/P2

Client Sample ID: FB: Ka'amilo Wells P1

Lab Sample ID: 380-182499-3

Date Collected: 11/10/25 12:31

Matrix: Water

Date Received: 11/13/25 09:30

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		11/14/25 01:43	11/15/25 20:02	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 20:02	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 20:02	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 20:02	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 20:02	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 20:02	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 20:02	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 20:02	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 20:02	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 20:02	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 20:02	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 20:02	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 20:02	1
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 20:02	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 20:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	109		70 - 130			11/14/25 01:43	11/15/25 20:02	1
13C2 PFHxA	105		70 - 130			11/14/25 01:43	11/15/25 20:02	1
13C2 PFDA	116		70 - 130			11/14/25 01:43	11/15/25 20:02	1
13C3-GenX	104		70 - 130			11/14/25 01:43	11/15/25 20:02	1

Client Sample ID: FB: Ka'amilo Wells P2

Lab Sample ID: 380-182499-4

Date Collected: 11/10/25 13:10

Matrix: Water

Date Received: 11/13/25 09:30

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		11/14/25 06:41	11/15/25 01:11	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:11	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:11	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:11	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:11	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:11	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:11	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:11	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:11	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:11	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:11	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:11	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:11	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:11	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:11	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-182499-1
SDG: PFAS: Ka'amilo Wells P1/P2

Client Sample ID: FB: Ka'amilo Wells P2

Lab Sample ID: 380-182499-4

Date Collected: 11/10/25 13:10

Matrix: Water

Date Received: 11/13/25 09:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:11	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:11	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:11	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:11	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:11	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:11	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:11	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:11	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:11	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		11/14/25 06:41	11/15/25 01:11	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	95		50 - 200	11/14/25 06:41	11/15/25 01:11	1
13C6 PFDA	111		50 - 200	11/14/25 06:41	11/15/25 01:11	1
13C5 PFHxA	110		50 - 200	11/14/25 06:41	11/15/25 01:11	1
13C4 PFHpA	112		50 - 200	11/14/25 06:41	11/15/25 01:11	1
13C8 PFOA	110		50 - 200	11/14/25 06:41	11/15/25 01:11	1
13C9 PFNA	108		50 - 200	11/14/25 06:41	11/15/25 01:11	1
13C7 PFUnA	107		50 - 200	11/14/25 06:41	11/15/25 01:11	1
13C2 PFDoA	110		50 - 200	11/14/25 06:41	11/15/25 01:11	1
13C4 PFBA	109		50 - 200	11/14/25 06:41	11/15/25 01:11	1
13C5 PFPeA	115		50 - 200	11/14/25 06:41	11/15/25 01:11	1
13C3 PFBS	114		50 - 200	11/14/25 06:41	11/15/25 01:11	1
13C3 PFHxS	114		50 - 200	11/14/25 06:41	11/15/25 01:11	1
13C8 PFOS	108		50 - 200	11/14/25 06:41	11/15/25 01:11	1
13C2-4:2-FTS	128		50 - 200	11/14/25 06:41	11/15/25 01:11	1
13C2-6:2-FTS	123		50 - 200	11/14/25 06:41	11/15/25 01:11	1
13C2-8:2-FTS	119		50 - 200	11/14/25 06:41	11/15/25 01:11	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		11/14/25 01:43	11/15/25 20:13	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 20:13	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 20:13	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 20:13	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 20:13	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 20:13	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 20:13	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 20:13	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 20:13	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 20:13	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-182499-1
 SDG: PFAS: Ka'amilo Wells P1/P2

Client Sample ID: FB: Ka'amilo Wells P2

Lab Sample ID: 380-182499-4

Date Collected: 11/10/25 13:10

Matrix: Water

Date Received: 11/13/25 09:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 20:13	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 20:13	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 20:13	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 20:13	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 20:13	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 20:13	1
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 20:13	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		11/14/25 01:43	11/15/25 20:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	102		70 - 130			11/14/25 01:43	11/15/25 20:13	1
13C2 PFHxA	116		70 - 130			11/14/25 01:43	11/15/25 20:13	1
13C2 PFDA	121		70 - 130			11/14/25 01:43	11/15/25 20:13	1
13C3-GenX	107		70 - 130			11/14/25 01:43	11/15/25 20:13	1

Action Limit Summary

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

Job ID: 380-182499-1
SDG: PFAS: Ka'amilo Wells P1/P2

Client Sample ID: Ka'amilo Wells P1

Lab Sample ID: 380-182499-1

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)	3.3		ng/L	10	2.0	533	Total/NA
Perfluorononanoic acid (PFNA)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	4.6		ng/L	4	2.0	533	Total/NA
Perfluorooctanoic acid (PFOA)	3.8		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)	5.0		ng/L	4	2.0	537.1	Total/NA
Perfluorooctanoic acid (PFOA)	3.9		ng/L	4	2.0	537.1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	3.5		ng/L	10	2.0	537.1	Total/NA
Perfluorononanoic acid (PFNA)	<2.0		ng/L	10	2.0	537.1	Total/NA

Client Sample ID: Ka'amilo Wells P2

Lab Sample ID: 380-182499-2

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)	3.0		ng/L	10	2.0	533	Total/NA
Perfluorononanoic acid (PFNA)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	4.0		ng/L	4	2.0	533	Total/NA
Perfluorooctanoic acid (PFOA)	3.5		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)	4.8		ng/L	4	2.0	537.1	Total/NA
Perfluorooctanoic acid (PFOA)	3.9		ng/L	4	2.0	537.1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	3.4		ng/L	10	2.0	537.1	Total/NA
Perfluorononanoic acid (PFNA)	<2.0		ng/L	10	2.0	537.1	Total/NA

Client Sample ID: FB: Ka'amilo Wells P1

Lab Sample ID: 380-182499-3

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: 380-182499-1
SDG: PFAS: Ka'amilo Wells P1/P2

Client Sample ID: FB: Ka'amilo Wells P1 (Continued)

Lab Sample ID: 380-182499-3

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: FB: Ka'amilo Wells P2

Lab Sample ID: 380-182499-4

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

Surrogate Summary

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

Job ID: 380-182499-1
 SDG: PFAS: Ka'amilo Wells P1/P2

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)
380-182219-AN-1-A MS	Matrix Spike	107	114	115	108
380-182219-AO-1-A MSD	Matrix Spike Duplicate	106	112	115	109
380-182499-1	Ka'amilo Wells P1	105	102	114	103
380-182499-2	Ka'amilo Wells P2	106	98	114	97
380-182499-3	FB: Ka'amilo Wells P1	109	105	116	104
380-182499-4	FB: Ka'amilo Wells P2	102	116	121	107
LCS 380-186485/22-A	Lab Control Sample	96	111	114	104
MBL 380-186485/20-A	Method Blank	113	113	122	113
MRL 380-186485/21-A	Lab Control Sample	108	107	118	101

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: 380-182499-1
 SDG: PFAS: Ka'amilo Wells P1/P2

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

Matrix: Water

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	HFPODA (50-200)	C6PFDA (50-200)	13C5PHA (50-200)	C4PFHA (50-200)	C8PFOA (50-200)	C9PFNA (50-200)	13C7PUA (50-200)	PFDoA (50-200)
380-182499-1	Ka'amilo Wells P1	97	97	98	102	99	99	94	99
380-182499-1 MS	Ka'amilo Wells P1	108	108	108	113	109	108	103	105
380-182499-1 MSD	Ka'amilo Wells P1	102	109	103	108	106	105	104	107
380-182499-2	Ka'amilo Wells P2	97	103	101	106	103	103	101	104
380-182499-3	FB: Ka'amilo Wells P1	102	112	111	114	111	110	109	108
380-182499-4	FB: Ka'amilo Wells P2	95	111	110	112	110	108	107	110
LCS 380-186491/22-A	Lab Control Sample	98	104	106	108	105	107	102	104
MBL 380-186491/20-A	Method Blank	91	104	104	108	102	102	97	101
MRL 380-186491/21-A	Lab Control Sample	105	113	115	118	114	111	110	112

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFBA (50-200)	PFPeA (50-200)	C3PFBS (50-200)	C3PFHS (50-200)	C8PFOS (50-200)	42FTS (50-200)	62FTS (50-200)	82FTS (50-200)
380-182499-1	Ka'amilo Wells P1	100	109	113	112	108	128	121	115
380-182499-1 MS	Ka'amilo Wells P1	106	114	107	109	105	127	114	116
380-182499-1 MSD	Ka'amilo Wells P1	106	113	111	112	110	125	120	123
380-182499-2	Ka'amilo Wells P2	104	110	119	122	113	134	126	124
380-182499-3	FB: Ka'amilo Wells P1	111	114	117	115	110	131	124	120
380-182499-4	FB: Ka'amilo Wells P2	109	115	114	114	108	128	123	119
LCS 380-186491/22-A	Lab Control Sample	108	112	110	110	104	122	118	116
MBL 380-186491/20-A	Method Blank	103	114	110	111	100	137	126	114
MRL 380-186491/21-A	Lab Control Sample	113	123	122	122	115	143	136	129

Surrogate Legend

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

QC Sample Results

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

Job ID: 380-182499-1
SDG: PFAS: Ka'amilo Wells P1/P2

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

Lab Sample ID: MBL 380-186491/20-A
Matrix: Water
Analysis Batch: 186658

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 186491

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		11/14/25 06:41	11/14/25 21:25	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<0.30		2.0	ng/L		11/14/25 06:41	11/14/25 21:25	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0	ng/L		11/14/25 06:41	11/14/25 21:25	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<1.0		2.0	ng/L		11/14/25 06:41	11/14/25 21:25	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0	ng/L		11/14/25 06:41	11/14/25 21:25	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	ng/L		11/14/25 06:41	11/14/25 21:25	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	ng/L		11/14/25 06:41	11/14/25 21:25	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0	ng/L		11/14/25 06:41	11/14/25 21:25	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0	ng/L		11/14/25 06:41	11/14/25 21:25	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0	ng/L		11/14/25 06:41	11/14/25 21:25	1
Perfluorononanoic acid (PFNA)	<0.40		2.0	ng/L		11/14/25 06:41	11/14/25 21:25	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0	ng/L		11/14/25 06:41	11/14/25 21:25	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0	ng/L		11/14/25 06:41	11/14/25 21:25	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0	ng/L		11/14/25 06:41	11/14/25 21:25	1
Perfluorobutanoic acid (PFBA)	<0.69		2.0	ng/L		11/14/25 06:41	11/14/25 21:25	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.38		2.0	ng/L		11/14/25 06:41	11/14/25 21:25	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.37		2.0	ng/L		11/14/25 06:41	11/14/25 21:25	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<0.48		2.0	ng/L		11/14/25 06:41	11/14/25 21:25	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<0.47		2.0	ng/L		11/14/25 06:41	11/14/25 21:25	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<0.25		2.0	ng/L		11/14/25 06:41	11/14/25 21:25	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.46		2.0	ng/L		11/14/25 06:41	11/14/25 21:25	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.15		2.0	ng/L		11/14/25 06:41	11/14/25 21:25	1
Perfluoropentanoic acid (PFPeA)	<0.38		2.0	ng/L		11/14/25 06:41	11/14/25 21:25	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.36		2.0	ng/L		11/14/25 06:41	11/14/25 21:25	1
Perfluoropentanesulfonic acid (PFPeS)	<0.39		2.0	ng/L		11/14/25 06:41	11/14/25 21:25	1

Isotope Dilution	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	91		50 - 200	11/14/25 06:41	11/14/25 21:25	1
13C6 PFDA	104		50 - 200	11/14/25 06:41	11/14/25 21:25	1
13C5 PFHxA	104		50 - 200	11/14/25 06:41	11/14/25 21:25	1
13C4 PFHpA	108		50 - 200	11/14/25 06:41	11/14/25 21:25	1
13C8 PFOA	102		50 - 200	11/14/25 06:41	11/14/25 21:25	1
13C9 PFNA	102		50 - 200	11/14/25 06:41	11/14/25 21:25	1
13C7 PFUnA	97		50 - 200	11/14/25 06:41	11/14/25 21:25	1
13C2 PFDoA	101		50 - 200	11/14/25 06:41	11/14/25 21:25	1
13C4 PFBA	103		50 - 200	11/14/25 06:41	11/14/25 21:25	1
13C5 PFPeA	114		50 - 200	11/14/25 06:41	11/14/25 21:25	1
13C3 PFBS	110		50 - 200	11/14/25 06:41	11/14/25 21:25	1
13C3 PFHxS	111		50 - 200	11/14/25 06:41	11/14/25 21:25	1

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QC Sample Results

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

Job ID: 380-182499-1
SDG: PFAS: Ka'amilo Wells P1/P2

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

Lab Sample ID: MBL 380-186491/20-A
Matrix: Water
Analysis Batch: 186658

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 186491

<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	100		50 - 200	11/14/25 06:41	11/14/25 21:25	1
13C2-4:2-FTS	137		50 - 200	11/14/25 06:41	11/14/25 21:25	1
13C2-6:2-FTS	126		50 - 200	11/14/25 06:41	11/14/25 21:25	1
13C2-8:2-FTS	114		50 - 200	11/14/25 06:41	11/14/25 21:25	1

Lab Sample ID: LCS 380-186491/22-A
Matrix: Water
Analysis Batch: 186658

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 186491

<i>Analyte</i>	<i>Spike Added</i>	<i>LCS Result</i>	<i>LCS Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec Limits</i>
11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	60.2	60.4		ng/L		100	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	60.2	59.0		ng/L		98	70 - 130
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	60.2	57.2		ng/L		95	70 - 130
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	60.2	54.2		ng/L		90	70 - 130
Perfluorobutanesulfonic acid (PFBS)	60.2	57.3		ng/L		95	70 - 130
Perfluorodecanoic acid (PFDA)	60.2	61.8		ng/L		103	70 - 130
Perfluorododecanoic acid (PFDoA)	60.2	58.2		ng/L		97	70 - 130
Perfluoroheptanoic acid (PFHpA)	60.2	57.8		ng/L		96	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	60.2	56.5		ng/L		94	70 - 130
Perfluorohexanoic acid (PFHxA)	60.2	60.0		ng/L		100	70 - 130
Perfluorononanoic acid (PFNA)	60.2	56.9		ng/L		94	70 - 130
Perfluorooctanesulfonic acid (PFOS)	60.2	59.2		ng/L		98	70 - 130
Perfluorooctanoic acid (PFOA)	60.2	60.7		ng/L		101	70 - 130
Perfluoroundecanoic acid (PFUnA)	60.2	61.4		ng/L		102	70 - 130
Perfluorobutanoic acid (PFBA)	60.2	55.9		ng/L		93	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	60.2	64.8		ng/L		108	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	60.2	63.8		ng/L		106	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	60.2	59.3		ng/L		98	70 - 130
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	60.2	60.2		ng/L		100	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	60.2	57.8		ng/L		96	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	60.2	59.0		ng/L		98	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	60.2	54.5		ng/L		90	70 - 130
Perfluoropentanoic acid (PFPeA)	60.2	57.7		ng/L		96	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	60.2	64.3		ng/L		107	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-182499-1
SDG: PFAS: Ka'amilo Wells P1/P2

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

Lab Sample ID: LCS 380-186491/22-A
Matrix: Water
Analysis Batch: 186658

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 186491

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoropentanesulfonic acid (PFPeS)	60.2	56.1		ng/L		93	70 - 130
LCS LCS							
Isotope Dilution	%Recovery	Qualifier	Limits				
13C3 HFPO-DA	98		50 - 200				
13C6 PFDA	104		50 - 200				
13C5 PFHxA	106		50 - 200				
13C4 PFHpA	108		50 - 200				
13C8 PFOA	105		50 - 200				
13C9 PFNA	107		50 - 200				
13C7 PFUnA	102		50 - 200				
13C2 PFDoA	104		50 - 200				
13C4 PFBA	108		50 - 200				
13C5 PFPeA	112		50 - 200				
13C3 PFBS	110		50 - 200				
13C3 PFHxS	110		50 - 200				
13C8 PFOS	104		50 - 200				
13C2-4:2-FTS	122		50 - 200				
13C2-6:2-FTS	118		50 - 200				
13C2-8:2-FTS	116		50 - 200				

Lab Sample ID: MRL 380-186491/21-A
Matrix: Water
Analysis Batch: 186658

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 186491

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.00	2.00	J	ng/L		100	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	2.00	2.02	J	ng/L		101	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.00	1.88	J	ng/L		94	50 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.00	1.97	J	ng/L		98	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.00	2.04	J	ng/L		102	50 - 150
Perfluorodecanoic acid (PFDA)	2.00	2.09	J	ng/L		104	50 - 150
Perfluorododecanoic acid (PFDoA)	2.00	2.05	J	ng/L		102	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.00	1.93	J	ng/L		96	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.00	1.88	J	ng/L		94	50 - 150
Perfluorohexanoic acid (PFHxA)	2.00	2.08	J	ng/L		104	50 - 150
Perfluorononanoic acid (PFNA)	2.00	1.96	J	ng/L		98	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.00	2.02	J	ng/L		101	50 - 150
Perfluorooctanoic acid (PFOA)	2.00	2.03	J	ng/L		101	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.00	2.10	J	ng/L		105	50 - 150
Perfluorobutanoic acid (PFBA)	2.00	2.01	J	ng/L		100	50 - 150

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-182499-1
SDG: PFAS: Ka'amilo Wells P1/P2

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

Lab Sample ID: MRL 380-186491/21-A
Matrix: Water
Analysis Batch: 186658

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 186491

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	2.00	2.07	J	ng/L		103	50 - 150
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	2.00	2.18	J	ng/L		109	50 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	2.00	2.24	J	ng/L		112	50 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2.00	2.03	J	ng/L		101	50 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	2.00	1.93	J	ng/L		97	50 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.00	2.03	J	ng/L		102	50 - 150
Perfluoro-4-methoxybutanoic acid (PFMBA)	2.00	1.78	J	ng/L		89	50 - 150
Perfluoropentanoic acid (PFPeA)	2.00	2.02	J	ng/L		101	50 - 150
Perfluoroheptanesulfonic acid (PFHpS)	2.00	2.18	J	ng/L		109	50 - 150
Perfluoropentanesulfonic acid (PFPeS)	2.00	1.85	J	ng/L		93	50 - 150

Isotope Dilution	MRL %Recovery	MRL Qualifier	MRL Limits
13C3 HFPO-DA	105		50 - 200
13C6 PFDA	113		50 - 200
13C5 PFHxA	115		50 - 200
13C4 PFHpA	118		50 - 200
13C8 PFOA	114		50 - 200
13C9 PFNA	111		50 - 200
13C7 PFUnA	110		50 - 200
13C2 PFDoA	112		50 - 200
13C4 PFBA	113		50 - 200
13C5 PFPeA	123		50 - 200
13C3 PFBS	122		50 - 200
13C3 PFHxS	122		50 - 200
13C8 PFOS	115		50 - 200
13C2-4:2-FTS	143		50 - 200
13C2-6:2-FTS	136		50 - 200
13C2-8:2-FTS	129		50 - 200

Lab Sample ID: 380-182499-1 MS
Matrix: Water
Analysis Batch: 186658

Client Sample ID: Ka'amilo Wells P1
Prep Type: Total/NA
Prep Batch: 186491

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		60.4	60.0		ng/L		99	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		60.4	59.1		ng/L		98	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		60.4	56.6		ng/L		94	70 - 130

QC Sample Results

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

Job ID: 380-182499-1
SDG: PFAS: Ka'amilo Wells P1/P2

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

Lab Sample ID: 380-182499-1 MS
Matrix: Water
Analysis Batch: 186658

Client Sample ID: Ka'amilo Wells P1
Prep Type: Total/NA
Prep Batch: 186491

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide	<2.0		60.4	55.3		ng/L		92	70 - 130
Dimer Acid (HFPO-DA/GenX)									
Perfluorobutanesulfonic acid (PFBS)	3.0		60.4	62.9		ng/L		99	70 - 130
Perfluorodecanoic acid (PFDA)	<2.0		60.4	60.5		ng/L		100	70 - 130
Perfluorododecanoic acid (PFDoA)	<2.0		60.4	61.4		ng/L		102	70 - 130
Perfluoroheptanoic acid (PFHpA)	<2.0		60.4	58.7		ng/L		94	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	3.3		60.4	61.7		ng/L		97	70 - 130
Perfluorohexanoic acid (PFHxA)	3.7		60.4	63.3		ng/L		99	70 - 130
Perfluorononanoic acid (PFNA)	<2.0		60.4	58.6		ng/L		97	70 - 130
Perfluorooctanesulfonic acid (PFOS)	4.6		60.4	64.7		ng/L		99	70 - 130
Perfluorooctanoic acid (PFOA)	3.8		60.4	62.7		ng/L		98	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		60.4	62.0		ng/L		103	70 - 130
Perfluorobutanoic acid (PFBA)	<2.0		60.4	59.5		ng/L		96	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		60.4	64.6		ng/L		107	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		60.4	59.9		ng/L		99	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		60.4	62.2		ng/L		103	70 - 130
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		60.4	60.0		ng/L		99	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		60.4	61.1		ng/L		101	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		60.4	60.7		ng/L		101	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		60.4	53.9		ng/L		89	70 - 130
Perfluoropentanoic acid (PFPeA)	3.7		60.4	59.7		ng/L		93	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		60.4	64.2		ng/L		106	70 - 130
Perfluoropentanesulfonic acid (PFPeS)	<2.0		60.4	60.3		ng/L		99	70 - 130

Isotope Dilution	MS MS		Limits
	%Recovery	Qualifier	
13C3 HFPO-DA	108		50 - 200
13C6 PFDA	108		50 - 200
13C5 PFHxA	108		50 - 200
13C4 PFHpA	113		50 - 200
13C8 PFOA	109		50 - 200
13C9 PFNA	108		50 - 200
13C7 PFUnA	103		50 - 200
13C2 PFDoA	105		50 - 200
13C4 PFBA	106		50 - 200
13C5 PFPeA	114		50 - 200
13C3 PFBS	107		50 - 200
13C3 PFHxS	109		50 - 200
13C8 PFOS	105		50 - 200

QC Sample Results

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

Job ID: 380-182499-1
SDG: PFAS: Ka'amilo Wells P1/P2

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

Lab Sample ID: 380-182499-1 MS
Matrix: Water
Analysis Batch: 186658

Client Sample ID: Ka'amilo Wells P1
Prep Type: Total/NA
Prep Batch: 186491

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>MS MS Qualifier</i>	<i>Limits</i>
13C2-4:2-FTS	127		50 - 200
13C2-6:2-FTS	114		50 - 200
13C2-8:2-FTS	116		50 - 200

Lab Sample ID: 380-182499-1 MSD
Matrix: Water
Analysis Batch: 186658

Client Sample ID: Ka'amilo Wells P1
Prep Type: Total/NA
Prep Batch: 186491

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		60.4	59.5		ng/L		99	70 - 130	1	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		60.4	58.1		ng/L		96	70 - 130	2	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		60.4	58.0		ng/L		96	70 - 130	2	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		60.4	57.9		ng/L		96	70 - 130	5	30
Perfluorobutanesulfonic acid (PFBS)	3.0		60.4	62.5		ng/L		99	70 - 130	1	30
Perfluorodecanoic acid (PFDA)	<2.0		60.4	60.5		ng/L		100	70 - 130	0	30
Perfluorododecanoic acid (PFDoA)	<2.0		60.4	61.2		ng/L		101	70 - 130	0	30
Perfluoroheptanoic acid (PFHpA)	<2.0		60.4	60.0		ng/L		96	70 - 130	2	30
Perfluorohexanesulfonic acid (PFHxS)	3.3		60.4	62.0		ng/L		97	70 - 130	0	30
Perfluorohexanoic acid (PFHxA)	3.7		60.4	63.4		ng/L		99	70 - 130	0	30
Perfluorononanoic acid (PFNA)	<2.0		60.4	59.9		ng/L		99	70 - 130	2	30
Perfluorooctanesulfonic acid (PFOS)	4.6		60.4	64.5		ng/L		99	70 - 130	0	30
Perfluorooctanoic acid (PFOA)	3.8		60.4	64.6		ng/L		101	70 - 130	3	30
Perfluoroundecanoic acid (PFUnA)	<2.0		60.4	62.2		ng/L		103	70 - 130	0	30
Perfluorobutanoic acid (PFBA)	<2.0		60.4	59.0		ng/L		95	70 - 130	1	30
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		60.4	62.6		ng/L		104	70 - 130	3	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		60.4	61.3		ng/L		102	70 - 130	2	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		60.4	60.7		ng/L		101	70 - 130	2	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		60.4	61.1		ng/L		101	70 - 130	2	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		60.4	60.2		ng/L		100	70 - 130	1	30
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		60.4	61.4		ng/L		102	70 - 130	1	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		60.4	53.6		ng/L		89	70 - 130	0	30
Perfluoropentanoic acid (PFPeA)	3.7		60.4	61.0		ng/L		95	70 - 130	2	30
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		60.4	64.6		ng/L		107	70 - 130	1	30
Perfluoropentanesulfonic acid (PFPeS)	<2.0		60.4	60.3		ng/L		99	70 - 130	0	30

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QC Sample Results

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

Job ID: 380-182499-1
SDG: PFAS: Ka'amilo Wells P1/P2

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

<i>Isotope Dilution</i>	<i>MSD</i>	<i>MSD</i>	<i>Limits</i>
<i>%Recovery</i>	<i>Qualifier</i>		
13C3 HFPO-DA	102		50 - 200
13C6 PFDA	109		50 - 200
13C5 PFHxA	103		50 - 200
13C4 PFHpA	108		50 - 200
13C8 PFOA	106		50 - 200
13C9 PFNA	105		50 - 200
13C7 PFUnA	104		50 - 200
13C2 PFDoA	107		50 - 200
13C4 PFBA	106		50 - 200
13C5 PFPeA	113		50 - 200
13C3 PFBS	111		50 - 200
13C3 PFHxS	112		50 - 200
13C8 PFOS	110		50 - 200
13C2-4:2-FTS	125		50 - 200
13C2-6:2-FTS	120		50 - 200
13C2-8:2-FTS	123		50 - 200

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

Lab Sample ID: MBL 380-186485/20-A
Matrix: Water
Analysis Batch: 186695

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 186485

<i>Analyte</i>	<i>MBL</i>	<i>MBL</i>	<i>RL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
	<i>Result</i>	<i>Qualifier</i>						
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<1.0		2.0	ng/L		11/14/25 01:43	11/15/25 17:53	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0	ng/L		11/14/25 01:43	11/15/25 17:53	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0	ng/L		11/14/25 01:43	11/15/25 17:53	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<0.58		2.0	ng/L		11/14/25 01:43	11/15/25 17:53	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<0.42		2.0	ng/L		11/14/25 01:43	11/15/25 17:53	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0	ng/L		11/14/25 01:43	11/15/25 17:53	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	ng/L		11/14/25 01:43	11/15/25 17:53	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0	ng/L		11/14/25 01:43	11/15/25 17:53	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	ng/L		11/14/25 01:43	11/15/25 17:53	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0	ng/L		11/14/25 01:43	11/15/25 17:53	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0	ng/L		11/14/25 01:43	11/15/25 17:53	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0	ng/L		11/14/25 01:43	11/15/25 17:53	1
Perfluorononanoic acid (PFNA)	<0.40		2.0	ng/L		11/14/25 01:43	11/15/25 17:53	1
Perfluorotetradecanoic acid (PFTA)	<0.54		2.0	ng/L		11/14/25 01:43	11/15/25 17:53	1
Perfluorotridecanoic acid (PFTrDA)	<0.36		2.0	ng/L		11/14/25 01:43	11/15/25 17:53	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<0.30		2.0	ng/L		11/14/25 01:43	11/15/25 17:53	1
11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.30		2.0	ng/L		11/14/25 01:43	11/15/25 17:53	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0	ng/L		11/14/25 01:43	11/15/25 17:53	1
<i>Surrogate</i>	<i>MBL</i>	<i>MBL</i>	<i>Limits</i>			<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
	<i>%Recovery</i>	<i>Qualifier</i>						
d5-NEtFOSAA	113		70 - 130			11/14/25 01:43	11/15/25 17:53	1
13C2 PFHxA	113		70 - 130			11/14/25 01:43	11/15/25 17:53	1
13C2 PFDA	122		70 - 130			11/14/25 01:43	11/15/25 17:53	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-182499-1
SDG: PFAS: Ka'amilo Wells P1/P2

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

Lab Sample ID: MBL 380-186485/20-A
Matrix: Water
Analysis Batch: 186695

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 186485

<i>Surrogate</i>	<i>MBL</i>	<i>MBL</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C3-GenX	113	Qualifier	70 - 130	11/14/25 01:43	11/15/25 17:53	1

Lab Sample ID: LCS 380-186485/22-A
Matrix: Water
Analysis Batch: 186695

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 186485

<i>Analyte</i>	<i>Spike</i>	<i>LCS</i>	<i>LCS</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec</i>	<i>Limits</i>
	<i>Added</i>	<i>Result</i>	<i>Qualifier</i>					
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	50.2	48.8		ng/L		97		70 - 130
Perfluorooctanesulfonic acid (PFOS)	50.2	50.4		ng/L		100		70 - 130
Perfluoroundecanoic acid (PFUnA)	50.2	51.5		ng/L		103		70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	50.2	47.2		ng/L		94		70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	50.2	48.9		ng/L		97		70 - 130
Perfluorohexanoic acid (PFHxA)	50.2	50.2		ng/L		100		70 - 130
Perfluorododecanoic acid (PFDoA)	50.2	52.2		ng/L		104		70 - 130
Perfluorooctanoic acid (PFOA)	50.2	49.7		ng/L		99		70 - 130
Perfluorodecanoic acid (PFDA)	50.2	52.2		ng/L		104		70 - 130
Perfluorohexanesulfonic acid (PFHxS)	50.2	47.0		ng/L		94		70 - 130
Perfluorobutanesulfonic acid (PFBS)	50.2	51.5		ng/L		103		70 - 130
Perfluoroheptanoic acid (PFHpA)	50.2	53.0		ng/L		106		70 - 130
Perfluorononanoic acid (PFNA)	50.2	51.5		ng/L		103		70 - 130
Perfluorotetradecanoic acid (PFTA)	50.2	39.3		ng/L		78		70 - 130
Perfluorotridecanoic acid (PFTrDA)	50.2	53.5		ng/L		107		70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	50.2	47.7		ng/L		95		70 - 130
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	50.2	46.6		ng/L		93		70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	50.2	47.9		ng/L		95		70 - 130

<i>Surrogate</i>	<i>LCS</i>	<i>LCS</i>	<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
d5-NEtFOSAA	96		70 - 130
13C2 PFHxA	111		70 - 130
13C2 PFDA	114		70 - 130
13C3-GenX	104		70 - 130

QC Sample Results

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

Job ID: 380-182499-1
SDG: PFAS: Ka'amilo Wells P1/P2

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

Lab Sample ID: MRL 380-186485/21-A
Matrix: Water
Analysis Batch: 186695

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 186485

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.01	2.05	J	ng/L		102	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.01	2.46	J	ng/L		123	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.01	2.30	J	ng/L		115	50 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2.01	2.22	J	ng/L		111	50 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2.01	2.27	J	ng/L		113	50 - 150
Perfluorohexanoic acid (PFHxA)	2.01	2.12	J	ng/L		106	50 - 150
Perfluorododecanoic acid (PFDoA)	2.01	2.29	J	ng/L		114	50 - 150
Perfluorooctanoic acid (PFOA)	2.01	2.26	J	ng/L		113	50 - 150
Perfluorodecanoic acid (PFDA)	2.01	2.31	J	ng/L		115	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.01	2.31	J	ng/L		115	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.01	2.10	J	ng/L		105	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.01	2.25	J	ng/L		112	50 - 150
Perfluorononanoic acid (PFNA)	2.01	2.41	J	ng/L		120	50 - 150
Perfluorotetradecanoic acid (PFTA)	2.01	1.77	J	ng/L		88	50 - 150
Perfluorotridecanoic acid (PFTTrDA)	2.01	2.35	J	ng/L		117	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	2.01	2.21	J	ng/L		110	50 - 150
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.01	2.17	J	ng/L		108	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.01	2.00	J	ng/L		100	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
d5-NEtFOSAA	108		70 - 130
13C2 PFHxA	107		70 - 130
13C2 PFDA	118		70 - 130
13C3-GenX	101		70 - 130

Lab Sample ID: 380-182219-AN-1-A MS
Matrix: Water
Analysis Batch: 186695

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 186485

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		25.3	24.8		ng/L		98	70 - 130
Perfluorooctanesulfonic acid (PFOS)	<2.0		25.3	26.6		ng/L		105	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		25.3	26.4		ng/L		104	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		25.3	24.1		ng/L		96	70 - 130

Eurofins Eaton Analytical Pomona

QC Association Summary

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

Job ID: 380-182499-1
SDG: PFAS: Ka'amilo Wells P1/P2

LCMS

Prep Batch: 186485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-182499-1	Ka'amilo Wells P1	Total/NA	Water	537.1 DW	
380-182499-2	Ka'amilo Wells P2	Total/NA	Water	537.1 DW	
380-182499-3	FB: Ka'amilo Wells P1	Total/NA	Water	537.1 DW	
380-182499-4	FB: Ka'amilo Wells P2	Total/NA	Water	537.1 DW	
MBL 380-186485/20-A	Method Blank	Total/NA	Water	537.1 DW	
LCS 380-186485/22-A	Lab Control Sample	Total/NA	Water	537.1 DW	
MRL 380-186485/21-A	Lab Control Sample	Total/NA	Water	537.1 DW	
380-182219-AN-1-A MS	Matrix Spike	Total/NA	Water	537.1 DW	
380-182219-AO-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	537.1 DW	

Prep Batch: 186491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-182499-1	Ka'amilo Wells P1	Total/NA	Water	533	
380-182499-2	Ka'amilo Wells P2	Total/NA	Water	533	
380-182499-3	FB: Ka'amilo Wells P1	Total/NA	Water	533	
380-182499-4	FB: Ka'amilo Wells P2	Total/NA	Water	533	
MBL 380-186491/20-A	Method Blank	Total/NA	Water	533	
LCS 380-186491/22-A	Lab Control Sample	Total/NA	Water	533	
MRL 380-186491/21-A	Lab Control Sample	Total/NA	Water	533	
380-182499-1 MS	Ka'amilo Wells P1	Total/NA	Water	533	
380-182499-1 MSD	Ka'amilo Wells P1	Total/NA	Water	533	

Analysis Batch: 186658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-182499-1	Ka'amilo Wells P1	Total/NA	Water	533	186491
380-182499-2	Ka'amilo Wells P2	Total/NA	Water	533	186491
380-182499-3	FB: Ka'amilo Wells P1	Total/NA	Water	533	186491
380-182499-4	FB: Ka'amilo Wells P2	Total/NA	Water	533	186491
MBL 380-186491/20-A	Method Blank	Total/NA	Water	533	186491
LCS 380-186491/22-A	Lab Control Sample	Total/NA	Water	533	186491
MRL 380-186491/21-A	Lab Control Sample	Total/NA	Water	533	186491
380-182499-1 MS	Ka'amilo Wells P1	Total/NA	Water	533	186491
380-182499-1 MSD	Ka'amilo Wells P1	Total/NA	Water	533	186491

Analysis Batch: 186695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-182499-1	Ka'amilo Wells P1	Total/NA	Water	537.1	186485
380-182499-2	Ka'amilo Wells P2	Total/NA	Water	537.1	186485
380-182499-3	FB: Ka'amilo Wells P1	Total/NA	Water	537.1	186485
380-182499-4	FB: Ka'amilo Wells P2	Total/NA	Water	537.1	186485
MBL 380-186485/20-A	Method Blank	Total/NA	Water	537.1	186485
LCS 380-186485/22-A	Lab Control Sample	Total/NA	Water	537.1	186485
MRL 380-186485/21-A	Lab Control Sample	Total/NA	Water	537.1	186485
380-182219-AN-1-A MS	Matrix Spike	Total/NA	Water	537.1	186485
380-182219-AO-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	537.1	186485

Lab Chronicle

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

Job ID: 380-182499-1
SDG: PFAS: Ka'amilo Wells P1/P2

Client Sample ID: Ka'amilo Wells P1

Lab Sample ID: 380-182499-1

Date Collected: 11/10/25 12:31

Matrix: Water

Date Received: 11/13/25 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			186491	XTD8	EA POM	11/14/25 06:41
Total/NA	Analysis	533		1	186658	Y5FM	EA POM	11/14/25 21:55
Total/NA	Prep	537.1 DW			186485	G9MN	EA POM	11/14/25 01:43
Total/NA	Analysis	537.1		1	186695	M7ML	EA POM	11/15/25 19:41

Client Sample ID: Ka'amilo Wells P2

Lab Sample ID: 380-182499-2

Date Collected: 11/10/25 13:10

Matrix: Water

Date Received: 11/13/25 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			186491	XTD8	EA POM	11/14/25 06:41
Total/NA	Analysis	533		1	186658	Y5FM	EA POM	11/15/25 00:52
Total/NA	Prep	537.1 DW			186485	G9MN	EA POM	11/14/25 01:43
Total/NA	Analysis	537.1		1	186695	M7ML	EA POM	11/15/25 19:51

Client Sample ID: FB: Ka'amilo Wells P1

Lab Sample ID: 380-182499-3

Date Collected: 11/10/25 12:31

Matrix: Water

Date Received: 11/13/25 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			186491	XTD8	EA POM	11/14/25 06:41
Total/NA	Analysis	533		1	186658	Y5FM	EA POM	11/15/25 01:02
Total/NA	Prep	537.1 DW			186485	G9MN	EA POM	11/14/25 01:43
Total/NA	Analysis	537.1		1	186695	M7ML	EA POM	11/15/25 20:02

Client Sample ID: FB: Ka'amilo Wells P2

Lab Sample ID: 380-182499-4

Date Collected: 11/10/25 13:10

Matrix: Water

Date Received: 11/13/25 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			186491	XTD8	EA POM	11/14/25 06:41
Total/NA	Analysis	533		1	186658	Y5FM	EA POM	11/15/25 01:11
Total/NA	Prep	537.1 DW			186485	G9MN	EA POM	11/14/25 01:43
Total/NA	Analysis	537.1		1	186695	M7ML	EA POM	11/15/25 20:13

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: 380-182499-1
SDG: PFAS: Ka'amilo Wells P1/P2

Laboratory: Eurofins Eaton Analytical Pomona

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

Authority	Program	Identification Number	Expiration Date
Hawaii	State	CA00006	01-31-26

- 1
- 2
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Method Summary

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

Job ID: 380-182499-1
SDG: PFAS: Ka'amilo Wells P1/P2

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: 380-182499-1
SDG: PFAS: Ka'amilo Wells P1/P2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
380-182499-1	Ka'amilo Wells P1	Water	11/10/25 12:31	11/13/25 09:30	Hawaii
380-182499-2	Ka'amilo Wells P2	Water	11/10/25 13:10	11/13/25 09:30	Hawaii
380-182499-3	FB: Ka'amilo Wells P1	Water	11/10/25 12:31	11/13/25 09:30	Hawaii
380-182499-4	FB: Ka'amilo Wells P2	Water	11/10/25 13:10	11/13/25 09:30	Hawaii

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- 17

Mc7. rovia, CA (Suite 100)
 750 Royal Oaks Drive Suite 100
 Monrovia CA 91016
 Phone (626) 386-1100

Chain of Custody Record



eurofins | Environment Testing
 America

Client Information		Lab PM Arada Rachelle	Carrier Tracking No(s) 380-182499 COC	COC No. 380-27941-2757.2
Client Contact kirk iwamoto		E-Mail Rachelle.Arada@et.euronisus.com	State of Origin:	Page: Page 2 of 2
Company City & County of Honolulu		PWSID:	Job #:	
Address: 630 South Beretania Street, Chemistry Lab		Analysis Requested		
City: Honolulu		Total Number of Containers		
State, Zip: HI 96843		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K EDTA L - EDA Other		
Phone: 808-748-5940 (tel)		M - Hexane N - None O - AsNaO2 P - Na2OAS Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodisacrylate U - Acetone V - MCAA W - pH 4-5 Y - Trizma Z - other (specify)		
Email: kiwamoto@hbws.org		Other		
Project Name: RED-HILL/HBWS sites Event Desc: RUSH Weekly Red Hill		Special Instructions/Note		
Site:				
Due Date Requested				
TAT Requested (days):				
Compliance Project: Δ No				
PO #: C20525101 exp 05312023				
WO #:				
Project #: 38001111				
SSOW#:				
Sample Identification		Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Subcontract - 625 PAH Physis LL (EAL) + TICs
Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Preservation Code:	Matrix (W=water, S=solid, O=water, A=air)
10-Nov-2025	1231 G			Water
10-Nov-2025	1310 G			Water
10-Nov-2025	1231			Water
10-Nov-2025	1310			Water
FB: Ka'amilo Wells P1				
FB: Ka'amilo Wells P2				
Possible Hazard Identification		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		
Deliverable Requested I II III IV Other (specify)		Special Instructions/QC Requirements		
Empty Kit Relinquished by		Method of Shipment: Fed X 8859 8619 4270		
Date/Time: 12 November 2025 1400		Date/Time: 11/13/25 930		
Company: HBWS		Company: K&K Uratics		
Date/Time:		Date/Time:		
Relinquished by:		Received by:		
Custody Seals Intact: Δ Yes Δ No		Cooler Temperature(s) °C and Other Remarks: (631A) 1.5+0.0-1.5 gel frozen		



Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-182499-1
SDG Number: PFAS: Ka'amilo Wells P1/P2

Login Number: 182499

List Number: 1

Creator: Tran, Kristine

List Source: Eurofins Eaton Analytical Pomona

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

