

ANALYTICAL REPORT

PREPARED FOR

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

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JOB DESCRIPTION

SPECIAL
PFAS - Kaamilo Wells P1/P2

JOB NUMBER

380-145388-1

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



Authorized for release by
Maria Lopez, Project Manager
Maria.Lopez@et.eurofinsus.com
(626)386-1100

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Definitions/Glossary

Client: City & County of Honolulu
Project/Site: SPECIAL

Job ID: 380-145388-1
SDG: PFAS - Kaamilo 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: SPECIAL

Job ID: 380-145388-1

Job ID: 380-145388-1

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Job Narrative 380-145388-1

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 4/11/2025 10:20 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.4°C.

PFAS

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

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Detection Summary

Client: City & County of Honolulu
Project/Site: SPECIAL

Job ID: 380-145388-1
SDG: PFAS - Kaamilo Wells P1/P2

Client Sample ID: Kaamilo Wells P1

Lab Sample ID: 380-145388-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanesulfonic acid (PFBS)	2.4		2.0	ng/L	1		533	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.8		2.0	ng/L	1		533	Total/NA
Perfluorohexanoic acid (PFHxA)	2.9		2.0	ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	3.5		2.0	ng/L	1		533	Total/NA
Perfluorooctanoic acid (PFOA)	3.1		2.0	ng/L	1		533	Total/NA
Perfluoropentanoic acid (PFPeA)	3.2		2.0	ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	3.7		2.0	ng/L	1		537.1	Total/NA
Perfluorohexanoic acid (PFHxA)	2.8		2.0	ng/L	1		537.1	Total/NA
Perfluorooctanoic acid (PFOA)	3.4		2.0	ng/L	1		537.1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	3.1		2.0	ng/L	1		537.1	Total/NA
Perfluorobutanesulfonic acid (PFBS)	2.5		2.0	ng/L	1		537.1	Total/NA
4-PFAS Hazard Index	0.31			NONE	1		None	Total/NA

Client Sample ID: Kaamilo Wells P2

Lab Sample ID: 380-145388-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanesulfonic acid (PFHxS)	2.7		2.0	ng/L	1		533	Total/NA
Perfluorohexanoic acid (PFHxA)	2.2		2.0	ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.8		2.0	ng/L	1		533	Total/NA
Perfluorooctanoic acid (PFOA)	2.3		2.0	ng/L	1		533	Total/NA
Perfluoropentanoic acid (PFPeA)	2.2		2.0	ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	3.0		2.0	ng/L	1		537.1	Total/NA
Perfluorohexanoic acid (PFHxA)	2.1		2.0	ng/L	1		537.1	Total/NA
Perfluorooctanoic acid (PFOA)	2.3		2.0	ng/L	1		537.1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.8		2.0	ng/L	1		537.1	Total/NA
4-PFAS Hazard Index	0.28			NONE	1		None	Total/NA

Client Sample ID: FB: Kaamilo Wells P1

Lab Sample ID: 380-145388-3

No Detections.

Client Sample ID: FB: Kaamilo Wells P2

Lab Sample ID: 380-145388-4

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: SPECIAL

Job ID: 380-145388-1
SDG: PFAS - Kaamilo Wells P1/P2

Client Sample ID: Kaamilo Wells P1

Lab Sample ID: 380-145388-1

Date Collected: 04/10/25 10:28

Matrix: Drinking Water

Date Received: 04/11/25 10:20

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		04/14/25 12:11	04/16/25 03:42	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 03:42	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 03:42	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 03:42	1
Perfluorobutanesulfonic acid (PFBS)	2.4		2.0	ng/L		04/14/25 12:11	04/16/25 03:42	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 03:42	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 03:42	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 03:42	1
Perfluorohexanesulfonic acid (PFHxS)	2.8		2.0	ng/L		04/14/25 12:11	04/16/25 03:42	1
Perfluorohexanoic acid (PFHxA)	2.9		2.0	ng/L		04/14/25 12:11	04/16/25 03:42	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 03:42	1
Perfluorooctanesulfonic acid (PFOS)	3.5		2.0	ng/L		04/14/25 12:11	04/16/25 03:42	1
Perfluorooctanoic acid (PFOA)	3.1		2.0	ng/L		04/14/25 12:11	04/16/25 03:42	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 03:42	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 03:42	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 03:42	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 03:42	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 03:42	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 03:42	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 03:42	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 03:42	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 03:42	1
Perfluoropentanoic acid (PFPeA)	3.2		2.0	ng/L		04/14/25 12:11	04/16/25 03:42	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 03:42	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 03:42	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	95		50 - 200	04/14/25 12:11	04/16/25 03:42	1
13C6 PFDA	102		50 - 200	04/14/25 12:11	04/16/25 03:42	1
13C5 PFHxA	118		50 - 200	04/14/25 12:11	04/16/25 03:42	1
13C4 PFHpA	100		50 - 200	04/14/25 12:11	04/16/25 03:42	1
13C8 PFOA	96		50 - 200	04/14/25 12:11	04/16/25 03:42	1
13C9 PFNA	100		50 - 200	04/14/25 12:11	04/16/25 03:42	1
13C7 PFUnA	104		50 - 200	04/14/25 12:11	04/16/25 03:42	1
13C2 PFDoA	105		50 - 200	04/14/25 12:11	04/16/25 03:42	1
13C4 PFBA	101		50 - 200	04/14/25 12:11	04/16/25 03:42	1
13C5 PFPeA	94		50 - 200	04/14/25 12:11	04/16/25 03:42	1
13C3 PFBS	97		50 - 200	04/14/25 12:11	04/16/25 03:42	1

Eurofins Eaton Analytical Pomona

Client Sample Results

Client: City & County of Honolulu
Project/Site: SPECIAL

Job ID: 380-145388-1
SDG: PFAS - Kaamilo Wells P1/P2

Client Sample ID: Kaamilo Wells P1

Lab Sample ID: 380-145388-1

Date Collected: 04/10/25 10:28

Matrix: Drinking Water

Date Received: 04/11/25 10:20

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFHxS	99		50 - 200	04/14/25 12:11	04/16/25 03:42	1
13C8 PFOS	103		50 - 200	04/14/25 12:11	04/16/25 03:42	1
13C2-4:2-FTS	91		50 - 200	04/14/25 12:11	04/16/25 03:42	1
13C2-6:2-FTS	110		50 - 200	04/14/25 12:11	04/16/25 03:42	1
13C2-8:2-FTS	111		50 - 200	04/14/25 12:11	04/16/25 03:42	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		04/12/25 17:55	04/14/25 11:36	1
Perfluorooctanesulfonic acid (PFOS)	3.7		2.0	ng/L		04/12/25 17:55	04/14/25 11:36	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:36	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:36	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:36	1
Perfluorohexanoic acid (PFHxA)	2.8		2.0	ng/L		04/12/25 17:55	04/14/25 11:36	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:36	1
Perfluorooctanoic acid (PFOA)	3.4		2.0	ng/L		04/12/25 17:55	04/14/25 11:36	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:36	1
Perfluorohexanesulfonic acid (PFHxS)	3.1		2.0	ng/L		04/12/25 17:55	04/14/25 11:36	1
Perfluorobutanesulfonic acid (PFBS)	2.5		2.0	ng/L		04/12/25 17:55	04/14/25 11:36	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:36	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:36	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:36	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:36	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:36	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:36	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	109		70 - 130			04/12/25 17:55	04/14/25 11:36	1
13C2 PFHxA	109		70 - 130			04/12/25 17:55	04/14/25 11:36	1
13C2 PFDA	121		70 - 130			04/12/25 17:55	04/14/25 11:36	1
13C3-GenX	96		70 - 130			04/12/25 17:55	04/14/25 11:36	1

Method: EPA None - PFAS Hazard Index

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
4-PFAS Hazard Index	0.31			NONE			04/14/25 11:36	1

Client Sample Results

Client: City & County of Honolulu
Project/Site: SPECIAL

Job ID: 380-145388-1
SDG: PFAS - Kaamilo Wells P1/P2

Client Sample ID: Kaamilo Wells P2

Lab Sample ID: 380-145388-2

Date Collected: 04/10/25 09:41

Matrix: Drinking Water

Date Received: 04/11/25 10:20

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		04/14/25 12:11	04/16/25 03:52	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 03:52	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 03:52	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 03:52	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 03:52	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 03:52	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 03:52	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 03:52	1
Perfluorohexanesulfonic acid (PFHxS)	2.7		2.0	ng/L		04/14/25 12:11	04/16/25 03:52	1
Perfluorohexanoic acid (PFHxA)	2.2		2.0	ng/L		04/14/25 12:11	04/16/25 03:52	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 03:52	1
Perfluorooctanesulfonic acid (PFOS)	2.8		2.0	ng/L		04/14/25 12:11	04/16/25 03:52	1
Perfluorooctanoic acid (PFOA)	2.3		2.0	ng/L		04/14/25 12:11	04/16/25 03:52	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 03:52	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 03:52	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 03:52	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 03:52	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 03:52	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 03:52	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 03:52	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 03:52	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 03:52	1
Perfluoropentanoic acid (PFPeA)	2.2		2.0	ng/L		04/14/25 12:11	04/16/25 03:52	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 03:52	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 03:52	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	87		50 - 200	04/14/25 12:11	04/16/25 03:52	1
13C6 PFDA	96		50 - 200	04/14/25 12:11	04/16/25 03:52	1
13C5 PFHxA	111		50 - 200	04/14/25 12:11	04/16/25 03:52	1
13C4 PFHpA	95		50 - 200	04/14/25 12:11	04/16/25 03:52	1
13C8 PFOA	90		50 - 200	04/14/25 12:11	04/16/25 03:52	1
13C9 PFNA	94		50 - 200	04/14/25 12:11	04/16/25 03:52	1
13C7 PFUnA	100		50 - 200	04/14/25 12:11	04/16/25 03:52	1
13C2 PFDoA	100		50 - 200	04/14/25 12:11	04/16/25 03:52	1
13C4 PFBA	96		50 - 200	04/14/25 12:11	04/16/25 03:52	1
13C5 PFPeA	90		50 - 200	04/14/25 12:11	04/16/25 03:52	1
13C3 PFBS	96		50 - 200	04/14/25 12:11	04/16/25 03:52	1
13C3 PFHxS	97		50 - 200	04/14/25 12:11	04/16/25 03:52	1

Eurofins Eaton Analytical Pomona

Client Sample Results

Client: City & County of Honolulu
Project/Site: SPECIAL

Job ID: 380-145388-1
SDG: PFAS - Kaamilo Wells P1/P2

Client Sample ID: Kaamilo Wells P2

Lab Sample ID: 380-145388-2

Date Collected: 04/10/25 09:41

Matrix: Drinking Water

Date Received: 04/11/25 10:20

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 PFOS	102		50 - 200	04/14/25 12:11	04/16/25 03:52	1
13C2-4:2-FTS	90		50 - 200	04/14/25 12:11	04/16/25 03:52	1
13C2-6:2-FTS	108		50 - 200	04/14/25 12:11	04/16/25 03:52	1
13C2-8:2-FTS	109		50 - 200	04/14/25 12:11	04/16/25 03:52	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		04/12/25 17:55	04/14/25 11:45	1
Perfluorooctanesulfonic acid (PFOS)	3.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:45	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:45	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:45	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:45	1
Perfluorohexanoic acid (PFHxA)	2.1		2.0	ng/L		04/12/25 17:55	04/14/25 11:45	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:45	1
Perfluorooctanoic acid (PFOA)	2.3		2.0	ng/L		04/12/25 17:55	04/14/25 11:45	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:45	1
Perfluorohexanesulfonic acid (PFHxS)	2.8		2.0	ng/L		04/12/25 17:55	04/14/25 11:45	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:45	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:45	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:45	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:45	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:45	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:45	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:45	1
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	109		70 - 130	04/12/25 17:55	04/14/25 11:45	1
13C2 PFHxA	111		70 - 130	04/12/25 17:55	04/14/25 11:45	1
13C2 PFDA	122		70 - 130	04/12/25 17:55	04/14/25 11:45	1
13C3-GenX	103		70 - 130	04/12/25 17:55	04/14/25 11:45	1

Method: EPA None - PFAS Hazard Index

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
4-PFAS Hazard Index	0.28			NONE			04/14/25 11:45	1

Client Sample ID: FB: Kaamilo Wells P1

Lab Sample ID: 380-145388-3

Date Collected: 04/10/25 10:28

Matrix: Drinking Water

Date Received: 04/11/25 10:20

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		04/14/25 12:11	04/16/25 04:01	1

Eurofins Eaton Analytical Pomona

Client Sample Results

Client: City & County of Honolulu
Project/Site: SPECIAL

Job ID: 380-145388-1
SDG: PFAS - Kaamilo Wells P1/P2

Client Sample ID: FB: Kaamilo Wells P1

Lab Sample ID: 380-145388-3

Date Collected: 04/10/25 10:28

Matrix: Drinking Water

Date Received: 04/11/25 10:20

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 04:01	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 04:01	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 04:01	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 04:01	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 04:01	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 04:01	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 04:01	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 04:01	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 04:01	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 04:01	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 04:01	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 04:01	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 04:01	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 04:01	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 04:01	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 04:01	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 04:01	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 04:01	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 04:01	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 04:01	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 04:01	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 04:01	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 04:01	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		04/14/25 12:11	04/16/25 04:01	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	80		50 - 200	04/14/25 12:11	04/16/25 04:01	1
13C6 PFDA	109		50 - 200	04/14/25 12:11	04/16/25 04:01	1
13C5 PFHxA	122		50 - 200	04/14/25 12:11	04/16/25 04:01	1
13C4 PFHpA	107		50 - 200	04/14/25 12:11	04/16/25 04:01	1
13C8 PFOA	102		50 - 200	04/14/25 12:11	04/16/25 04:01	1
13C9 PFNA	107		50 - 200	04/14/25 12:11	04/16/25 04:01	1
13C7 PFUnA	108		50 - 200	04/14/25 12:11	04/16/25 04:01	1
13C2 PFDoA	108		50 - 200	04/14/25 12:11	04/16/25 04:01	1
13C4 PFBA	105		50 - 200	04/14/25 12:11	04/16/25 04:01	1
13C5 PFPeA	96		50 - 200	04/14/25 12:11	04/16/25 04:01	1
13C3 PFBS	99		50 - 200	04/14/25 12:11	04/16/25 04:01	1
13C3 PFHxS	99		50 - 200	04/14/25 12:11	04/16/25 04:01	1
13C8 PFOS	102		50 - 200	04/14/25 12:11	04/16/25 04:01	1
13C2-4:2-FTS	90		50 - 200	04/14/25 12:11	04/16/25 04:01	1
13C2-6:2-FTS	111		50 - 200	04/14/25 12:11	04/16/25 04:01	1

Eurofins Eaton Analytical Pomona

Client Sample Results

Client: City & County of Honolulu
Project/Site: SPECIAL

Job ID: 380-145388-1
SDG: PFAS - Kaamilo Wells P1/P2

Client Sample ID: FB: Kaamilo Wells P1

Lab Sample ID: 380-145388-3

Date Collected: 04/10/25 10:28

Matrix: Drinking Water

Date Received: 04/11/25 10:20

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	109		50 - 200	04/14/25 12:11	04/16/25 04:01	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		04/12/25 17:55	04/14/25 11:55	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:55	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:55	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:55	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:55	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:55	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:55	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:55	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:55	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:55	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:55	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:55	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:55	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:55	1
Perfluorotridecanoic acid (PFTTrDA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:55	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:55	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:55	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 11:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	98		70 - 130	04/12/25 17:55	04/14/25 11:55	1
13C2 PFHxA	105		70 - 130	04/12/25 17:55	04/14/25 11:55	1
13C2 PFDA	120		70 - 130	04/12/25 17:55	04/14/25 11:55	1
13C3-GenX	93		70 - 130	04/12/25 17:55	04/14/25 11:55	1

Client Sample ID: FB: Kaamilo Wells P2

Lab Sample ID: 380-145388-4

Date Collected: 04/10/25 09:41

Matrix: Drinking Water

Date Received: 04/11/25 10:20

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		04/13/25 11:29	04/14/25 23:16	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		04/13/25 11:29	04/14/25 23:16	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		04/13/25 11:29	04/14/25 23:16	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<2.0		2.0	ng/L		04/13/25 11:29	04/14/25 23:16	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		04/13/25 11:29	04/14/25 23:16	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		04/13/25 11:29	04/14/25 23:16	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		04/13/25 11:29	04/14/25 23:16	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		04/13/25 11:29	04/14/25 23:16	1

Eurofins Eaton Analytical Pomona

Client Sample Results

Client: City & County of Honolulu
Project/Site: SPECIAL

Job ID: 380-145388-1
SDG: PFAS - Kaamilo Wells P1/P2

Client Sample ID: FB: Kaamilo Wells P2

Lab Sample ID: 380-145388-4

Date Collected: 04/10/25 09:41

Matrix: Drinking Water

Date Received: 04/11/25 10:20

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		04/13/25 11:29	04/14/25 23:16	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		04/13/25 11:29	04/14/25 23:16	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		04/13/25 11:29	04/14/25 23:16	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		04/13/25 11:29	04/14/25 23:16	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		04/13/25 11:29	04/14/25 23:16	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		04/13/25 11:29	04/14/25 23:16	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		04/13/25 11:29	04/14/25 23:16	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		04/13/25 11:29	04/14/25 23:16	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		04/13/25 11:29	04/14/25 23:16	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		04/13/25 11:29	04/14/25 23:16	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		04/13/25 11:29	04/14/25 23:16	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEA)	<2.0		2.0	ng/L		04/13/25 11:29	04/14/25 23:16	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		04/13/25 11:29	04/14/25 23:16	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		04/13/25 11:29	04/14/25 23:16	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		04/13/25 11:29	04/14/25 23:16	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		04/13/25 11:29	04/14/25 23:16	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		04/13/25 11:29	04/14/25 23:16	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	88		50 - 200	04/13/25 11:29	04/14/25 23:16	1
13C6 PFDA	108		50 - 200	04/13/25 11:29	04/14/25 23:16	1
13C5 PFHxA	107		50 - 200	04/13/25 11:29	04/14/25 23:16	1
13C4 PFHpA	107		50 - 200	04/13/25 11:29	04/14/25 23:16	1
13C8 PFOA	100		50 - 200	04/13/25 11:29	04/14/25 23:16	1
13C9 PFNA	107		50 - 200	04/13/25 11:29	04/14/25 23:16	1
13C7 PFUnA	106		50 - 200	04/13/25 11:29	04/14/25 23:16	1
13C2 PFDoA	106		50 - 200	04/13/25 11:29	04/14/25 23:16	1
13C4 PFBA	103		50 - 200	04/13/25 11:29	04/14/25 23:16	1
13C5 PFPeA	100		50 - 200	04/13/25 11:29	04/14/25 23:16	1
13C3 PFBS	100		50 - 200	04/13/25 11:29	04/14/25 23:16	1
13C3 PFHxS	99		50 - 200	04/13/25 11:29	04/14/25 23:16	1
13C8 PFOS	103		50 - 200	04/13/25 11:29	04/14/25 23:16	1
13C2-4:2-FTS	99		50 - 200	04/13/25 11:29	04/14/25 23:16	1
13C2-6:2-FTS	107		50 - 200	04/13/25 11:29	04/14/25 23:16	1
13C2-8:2-FTS	100		50 - 200	04/13/25 11:29	04/14/25 23:16	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		04/12/25 17:55	04/14/25 12:05	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 12:05	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 12:05	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 12:05	1

Eurofins Eaton Analytical Pomona

Client Sample Results

Client: City & County of Honolulu
Project/Site: SPECIAL

Job ID: 380-145388-1
SDG: PFAS - Kaamilo Wells P1/P2

Client Sample ID: FB: Kaamilo Wells P2

Lab Sample ID: 380-145388-4

Date Collected: 04/10/25 09:41

Matrix: Drinking Water

Date Received: 04/11/25 10:20

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 12:05	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 12:05	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 12:05	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 12:05	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 12:05	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 12:05	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 12:05	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 12:05	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 12:05	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 12:05	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 12:05	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 12:05	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 12:05	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		04/12/25 17:55	04/14/25 12:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	112		70 - 130	04/12/25 17:55	04/14/25 12:05	1
13C2 PFHxA	115		70 - 130	04/12/25 17:55	04/14/25 12:05	1
13C2 PFDA	123		70 - 130	04/12/25 17:55	04/14/25 12:05	1
13C3-GenX	106		70 - 130	04/12/25 17:55	04/14/25 12:05	1

Surrogate Summary

Client: City & County of Honolulu
Project/Site: SPECIAL

Job ID: 380-145388-1
SDG: PFAS - Kaamilo Wells P1/P2

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

Matrix: Drinking Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		d5NEFOS (70-130)	PFHxA (70-130)	PFDA (70-130)	GenX (70-130)
380-145388-1	Kaamilo Wells P1	109	109	121	96
380-145388-2	Kaamilo Wells P2	109	111	122	103
380-145388-3	FB: Kaamilo Wells P1	98	105	120	93
380-145388-4	FB: Kaamilo Wells P2	112	115	123	106
380-145392-B-1-A MS	Matrix Spike	105	108	120	90
380-145392-C-1-A MSD	Matrix Spike Duplicate	105	106	119	96
LCS 380-146926/21-A	Lab Control Sample	107	110	117	104
MBL 380-146926/19-A	Method Blank	94	99	122	93
MRL 380-146926/20-A	Lab Control Sample	98	97	115	90

Surrogate Legend

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

Isotope Dilution Summary

Client: City & County of Honolulu
Project/Site: SPECIAL

Job ID: 380-145388-1
SDG: PFAS - Kaamilo Wells P1/P2

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

Matrix: Drinking Water

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	HFPODA (50-200)	C6PFDA (50-200)	13C5PHA (50-200)	C4PFHA (50-200)	C8PFOA (50-200)	C9PFNA (50-200)	13C7PUA (50-200)	PFDaA (50-200)
380-144924-E-1-A MS	Matrix Spike	95	81	113	96	87	81	86	93
380-144924-F-1-A MSD	Matrix Spike Duplicate	93	81	107	94	86	82	84	88
380-145368-B-1-A MS	Matrix Spike	94	98	97	101	95	98	98	100
380-145368-C-1-A MSD	Matrix Spike Duplicate	92	94	96	97	91	92	92	95
380-145388-1	Kaamilo Wells P1	95	102	118	100	96	100	104	105
380-145388-2	Kaamilo Wells P2	87	96	111	95	90	94	100	100
380-145388-3	FB: Kaamilo Wells P1	80	109	122	107	102	107	108	108
380-145388-4	FB: Kaamilo Wells P2	88	108	107	107	100	107	106	106
LCS 380-146931/23-A	Lab Control Sample	94	109	103	105	103	107	106	106
LCS 380-147050/22-A	Lab Control Sample	86	107	119	105	99	103	107	107
MBL 380-146931/21-A	Method Blank	78	99	84	90	89	94	93	96
MBL 380-147050/20-A	Method Blank	79	109	122	105	99	105	104	107
MRL 380-146931/22-A	Lab Control Sample	90	106	106	102	101	104	103	103
MRL 380-147050/21-A	Lab Control Sample	88	106	120	105	100	103	105	105

		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)
380-144924-E-1-A MS	Matrix Spike	101	110	86	93	101	84	108	111
380-144924-F-1-A MSD	Matrix Spike Duplicate	100	109	86	92	100	79	109	109
380-145368-B-1-A MS	Matrix Spike	102	108	100	103	103	102	115	108
380-145368-C-1-A MSD	Matrix Spike Duplicate	97	104	99	99	101	103	111	107
380-145388-1	Kaamilo Wells P1	101	94	97	99	103	91	110	111
380-145388-2	Kaamilo Wells P2	96	90	96	97	102	90	108	109
380-145388-3	FB: Kaamilo Wells P1	105	96	99	99	102	90	111	109
380-145388-4	FB: Kaamilo Wells P2	103	100	100	99	103	99	107	100
LCS 380-146931/23-A	Lab Control Sample	101	97	102	103	105	99	114	108
LCS 380-147050/22-A	Lab Control Sample	102	92	92	98	103	91	106	110
MBL 380-146931/21-A	Method Blank	91	83	104	100	106	96	107	108
MBL 380-147050/20-A	Method Blank	102	93	96	97	101	91	107	109
MRL 380-146931/22-A	Lab Control Sample	103	98	104	101	106	106	113	106
MRL 380-147050/21-A	Lab Control Sample	100	93	95	97	99	86	104	109

Surrogate Legend

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

QC Sample Results

Client: City & County of Honolulu
Project/Site: SPECIAL

Job ID: 380-145388-1
SDG: PFAS - Kaamilo Wells P1/P2

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

Lab Sample ID: MBL 380-146931/21-A
Matrix: Drinking Water
Analysis Batch: 146985

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 146931

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<0.30		2.0	ng/L		04/13/25 11:29	04/14/25 19:49	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<0.30		2.0	ng/L		04/13/25 11:29	04/14/25 19:49	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0	ng/L		04/13/25 11:29	04/14/25 19:49	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<1.0		2.0	ng/L		04/13/25 11:29	04/14/25 19:49	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0	ng/L		04/13/25 11:29	04/14/25 19:49	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	ng/L		04/13/25 11:29	04/14/25 19:49	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	ng/L		04/13/25 11:29	04/14/25 19:49	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0	ng/L		04/13/25 11:29	04/14/25 19:49	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0	ng/L		04/13/25 11:29	04/14/25 19:49	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0	ng/L		04/13/25 11:29	04/14/25 19:49	1
Perfluorononanoic acid (PFNA)	<0.40		2.0	ng/L		04/13/25 11:29	04/14/25 19:49	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0	ng/L		04/13/25 11:29	04/14/25 19:49	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0	ng/L		04/13/25 11:29	04/14/25 19:49	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0	ng/L		04/13/25 11:29	04/14/25 19:49	1
Perfluorobutanoic acid (PFBA)	<0.69		2.0	ng/L		04/13/25 11:29	04/14/25 19:49	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.38		2.0	ng/L		04/13/25 11:29	04/14/25 19:49	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.37		2.0	ng/L		04/13/25 11:29	04/14/25 19:49	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<0.48		2.0	ng/L		04/13/25 11:29	04/14/25 19:49	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<0.47		2.0	ng/L		04/13/25 11:29	04/14/25 19:49	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<0.25		2.0	ng/L		04/13/25 11:29	04/14/25 19:49	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.46		2.0	ng/L		04/13/25 11:29	04/14/25 19:49	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.15		2.0	ng/L		04/13/25 11:29	04/14/25 19:49	1
Perfluoropentanoic acid (PFPeA)	<0.38		2.0	ng/L		04/13/25 11:29	04/14/25 19:49	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.36		2.0	ng/L		04/13/25 11:29	04/14/25 19:49	1
Perfluoropentanesulfonic acid (PFPeS)	<0.39		2.0	ng/L		04/13/25 11:29	04/14/25 19:49	1

Isotope Dilution	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	78		50 - 200	04/13/25 11:29	04/14/25 19:49	1
13C6 PFDA	99		50 - 200	04/13/25 11:29	04/14/25 19:49	1
13C5 PFHxA	84		50 - 200	04/13/25 11:29	04/14/25 19:49	1
13C4 PFHpA	90		50 - 200	04/13/25 11:29	04/14/25 19:49	1
13C8 PFOA	89		50 - 200	04/13/25 11:29	04/14/25 19:49	1
13C9 PFNA	94		50 - 200	04/13/25 11:29	04/14/25 19:49	1
13C7 PFUnA	93		50 - 200	04/13/25 11:29	04/14/25 19:49	1
13C2 PFDoA	96		50 - 200	04/13/25 11:29	04/14/25 19:49	1
13C4 PFBA	91		50 - 200	04/13/25 11:29	04/14/25 19:49	1
13C5 PFPeA	83		50 - 200	04/13/25 11:29	04/14/25 19:49	1
13C3 PFBS	104		50 - 200	04/13/25 11:29	04/14/25 19:49	1
13C3 PFHxS	100		50 - 200	04/13/25 11:29	04/14/25 19:49	1

Eurofins Eaton Analytical Pomona

QC Sample Results

Client: City & County of Honolulu
Project/Site: SPECIAL

Job ID: 380-145388-1
SDG: PFAS - Kaamilo Wells P1/P2

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

Lab Sample ID: MBL 380-146931/21-A

Matrix: Drinking Water

Analysis Batch: 146985

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 146931

Isotope Dilution	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 PFOS	106		50 - 200	04/13/25 11:29	04/14/25 19:49	1
13C2-4:2-FTS	96		50 - 200	04/13/25 11:29	04/14/25 19:49	1
13C2-6:2-FTS	107		50 - 200	04/13/25 11:29	04/14/25 19:49	1
13C2-8:2-FTS	108		50 - 200	04/13/25 11:29	04/14/25 19:49	1

Lab Sample ID: LCS 380-146931/23-A

Matrix: Drinking Water

Analysis Batch: 146985

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 146931

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	60.1	56.2		ng/L		93	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	60.1	55.7		ng/L		93	70 - 130
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	60.1	56.8		ng/L		94	70 - 130
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	60.1	58.0		ng/L		97	70 - 130
Perfluorobutanesulfonic acid (PFBS)	60.1	57.2		ng/L		95	70 - 130
Perfluorodecanoic acid (PFDA)	60.1	57.0		ng/L		95	70 - 130
Perfluorododecanoic acid (PFDoA)	60.1	59.6		ng/L		99	70 - 130
Perfluoroheptanoic acid (PFHpA)	60.1	57.0		ng/L		95	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	60.1	57.1		ng/L		95	70 - 130
Perfluorohexanoic acid (PFHxA)	60.1	60.1		ng/L		100	70 - 130
Perfluorononanoic acid (PFNA)	60.1	59.2		ng/L		98	70 - 130
Perfluorooctanesulfonic acid (PFOS)	60.1	56.4		ng/L		94	70 - 130
Perfluorooctanoic acid (PFOA)	60.1	59.5		ng/L		99	70 - 130
Perfluoroundecanoic acid (PFUnA)	60.1	58.5		ng/L		97	70 - 130
Perfluorobutanoic acid (PFBA)	60.1	58.8		ng/L		98	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	60.1	59.3		ng/L		99	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	60.1	63.0		ng/L		105	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	60.1	59.0		ng/L		98	70 - 130
Nonfluoro-3,6-dioxahexanoic acid (NFDHA)	60.1	61.1		ng/L		102	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	60.1	58.9		ng/L		98	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	60.1	58.0		ng/L		96	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	60.1	61.3		ng/L		102	70 - 130
Perfluoropentanoic acid (PFPeA)	60.1	61.3		ng/L		102	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	60.1	58.2		ng/L		97	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

Client: City & County of Honolulu
Project/Site: SPECIAL

Job ID: 380-145388-1
SDG: PFAS - Kaamilo Wells P1/P2

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

Lab Sample ID: LCS 380-146931/23-A

Matrix: Drinking Water

Analysis Batch: 146985

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 146931

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoropentanesulfonic acid (PFPeS)	60.1	57.3		ng/L		95	70 - 130
	LCS	LCS					
Isotope Dilution	%Recovery	Qualifier	Limits				
13C3 HFPO-DA	94		50 - 200				
13C6 PFDA	109		50 - 200				
13C5 PFHxA	103		50 - 200				
13C4 PFHpA	105		50 - 200				
13C8 PFOA	103		50 - 200				
13C9 PFNA	107		50 - 200				
13C7 PFUnA	106		50 - 200				
13C2 PFDoA	106		50 - 200				
13C4 PFBA	101		50 - 200				
13C5 PFPeA	97		50 - 200				
13C3 PFBS	102		50 - 200				
13C3 PFHxS	103		50 - 200				
13C8 PFOS	105		50 - 200				
13C2-4:2-FTS	99		50 - 200				
13C2-6:2-FTS	114		50 - 200				
13C2-8:2-FTS	108		50 - 200				

Lab Sample ID: MRL 380-146931/22-A

Matrix: Drinking Water

Analysis Batch: 146985

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 146931

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.00	2.30	J	ng/L		115	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	2.00	2.12	J	ng/L		106	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.00	2.16	J	ng/L		108	50 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	2.00	2.16	J	ng/L		108	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.00	2.13	J	ng/L		106	50 - 150
Perfluorodecanoic acid (PFDA)	2.00	2.15	J	ng/L		107	50 - 150
Perfluorododecanoic acid (PFDoA)	2.00	2.34	J	ng/L		117	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.00	2.09	J	ng/L		104	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.00	2.24	J	ng/L		112	50 - 150
Perfluorohexanoic acid (PFHxA)	2.00	2.16	J	ng/L		108	50 - 150
Perfluorononanoic acid (PFNA)	2.00	2.22	J	ng/L		111	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.00	2.32	J	ng/L		116	50 - 150
Perfluorooctanoic acid (PFOA)	2.00	2.25	J	ng/L		113	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.00	2.30	J	ng/L		115	50 - 150
Perfluorobutanoic acid (PFBA)	2.00	2.38	J	ng/L		119	50 - 150

Eurofins Eaton Analytical Pomona

QC Sample Results

Client: City & County of Honolulu
Project/Site: SPECIAL

Job ID: 380-145388-1
SDG: PFAS - Kaamilo Wells P1/P2

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

Lab Sample ID: MRL 380-146931/22-A

Matrix: Drinking Water

Analysis Batch: 146985

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 146931

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	2.00	2.30	J	ng/L		115	50 - 150
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	2.00	2.38	J	ng/L		119	50 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	2.00	2.31	J	ng/L		115	50 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2.00	2.20	J	ng/L		110	50 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEA)	2.00	2.13	J	ng/L		106	50 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.00	2.14	J	ng/L		107	50 - 150
Perfluoro-4-methoxybutanoic acid (PFMBA)	2.00	2.31	J	ng/L		115	50 - 150
Perfluoropentanoic acid (PFPeA)	2.00	2.27	J	ng/L		113	50 - 150
Perfluoroheptanesulfonic acid (PFHpS)	2.00	2.00	J	ng/L		100	50 - 150
Perfluoropentanesulfonic acid (PFPeS)	2.00	2.18	J	ng/L		109	50 - 150

Isotope Dilution	%Recovery	MRL Qualifier	MRL Limits
13C3 HFPO-DA	90		50 - 200
13C6 PFDA	106		50 - 200
13C5 PFHxA	106		50 - 200
13C4 PFHpA	102		50 - 200
13C8 PFOA	101		50 - 200
13C9 PFNA	104		50 - 200
13C7 PFUnA	103		50 - 200
13C2 PFDoA	103		50 - 200
13C4 PFBA	103		50 - 200
13C5 PFPeA	98		50 - 200
13C3 PFBS	104		50 - 200
13C3 PFHxS	101		50 - 200
13C8 PFOS	106		50 - 200
13C2-4:2-FTS	106		50 - 200
13C2-6:2-FTS	113		50 - 200
13C2-8:2-FTS	106		50 - 200

Lab Sample ID: 380-145368-B-1-A MS

Matrix: Drinking Water

Analysis Batch: 146985

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 146931

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	59.1		ng/L		98	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		60.4	57.5		ng/L		95	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		60.4	55.6		ng/L		92	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

Client: City & County of Honolulu
Project/Site: SPECIAL

Job ID: 380-145388-1
SDG: PFAS - Kaamilo Wells P1/P2

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

Lab Sample ID: 380-145368-B-1-A MS

Matrix: Drinking Water

Analysis Batch: 146985

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 146931

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide	<2.0		60.4	58.6		ng/L		97	70 - 130
Dimer Acid (HFPO-DA)									
Perfluorobutanesulfonic acid (PFBS)	<2.0		60.4	58.7		ng/L		97	70 - 130
Perfluorodecanoic acid (PFDA)	<2.0		60.4	57.7		ng/L		96	70 - 130
Perfluorododecanoic acid (PFDoA)	<2.0		60.4	59.1		ng/L		98	70 - 130
Perfluoroheptanoic acid (PFHpA)	<2.0		60.4	54.9		ng/L		91	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	<2.0		60.4	58.5		ng/L		96	70 - 130
Perfluorohexanoic acid (PFHxA)	<2.0		60.4	60.4		ng/L		100	70 - 130
Perfluorononanoic acid (PFNA)	<2.0		60.4	57.9		ng/L		96	70 - 130
Perfluorooctanesulfonic acid (PFOS)	<2.0		60.4	58.5		ng/L		97	70 - 130
Perfluorooctanoic acid (PFOA)	<2.0		60.4	60.7		ng/L		101	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		60.4	58.9		ng/L		98	70 - 130
Perfluorobutanoic acid (PFBA)	<2.0		60.4	58.5		ng/L		97	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		60.4	61.4		ng/L		102	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		60.4	62.3		ng/L		103	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		60.4	58.9		ng/L		98	70 - 130
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		60.4	57.1		ng/L		95	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		60.4	60.3		ng/L		100	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	60.7		ng/L		100	70 - 130
Perfluoropentanoic acid (PFPeA)	<2.0		60.4	61.3		ng/L		101	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		60.4	59.5		ng/L		99	70 - 130
Perfluoropentanesulfonic acid (PFPeS)	<2.0		60.4	58.5		ng/L		97	70 - 130

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
13C3 HFPO-DA	94		50 - 200
13C6 PFDA	98		50 - 200
13C5 PFHxA	97		50 - 200
13C4 PFHpA	101		50 - 200
13C8 PFOA	95		50 - 200
13C9 PFNA	98		50 - 200
13C7 PFUnA	98		50 - 200
13C2 PFDoA	100		50 - 200
13C4 PFBA	102		50 - 200
13C5 PFPeA	108		50 - 200
13C3 PFBS	100		50 - 200
13C3 PFHxS	103		50 - 200
13C8 PFOS	103		50 - 200

Eurofins Eaton Analytical Pomona

QC Sample Results

Client: City & County of Honolulu
Project/Site: SPECIAL

Job ID: 380-145388-1
SDG: PFAS - Kaamilo Wells P1/P2

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

Lab Sample ID: 380-145368-B-1-A MS

Matrix: Drinking Water

Analysis Batch: 146985

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 146931

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
13C2-4:2-FTS	102		50 - 200
13C2-6:2-FTS	115		50 - 200
13C2-8:2-FTS	108		50 - 200

Lab Sample ID: 380-145368-C-1-A MSD

Matrix: Drinking Water

Analysis Batch: 146985

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 146931

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		60.4	59.3		ng/L		98	70 - 130	0	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		60.4	58.3		ng/L		97	70 - 130	1	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		60.4	57.9		ng/L		96	70 - 130	4	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<2.0		60.4	58.4		ng/L		97	70 - 130	0	30
Perfluorobutanesulfonic acid (PFBS)	<2.0		60.4	59.0		ng/L		98	70 - 130	1	30
Perfluorodecanoic acid (PFDA)	<2.0		60.4	58.5		ng/L		97	70 - 130	1	30
Perfluorododecanoic acid (PFDoA)	<2.0		60.4	60.6		ng/L		100	70 - 130	3	30
Perfluoroheptanoic acid (PFHpA)	<2.0		60.4	57.6		ng/L		95	70 - 130	5	30
Perfluorohexanesulfonic acid (PFHxS)	<2.0		60.4	61.0		ng/L		101	70 - 130	4	30
Perfluorohexanoic acid (PFHxA)	<2.0		60.4	61.8		ng/L		102	70 - 130	2	30
Perfluorononanoic acid (PFNA)	<2.0		60.4	60.6		ng/L		100	70 - 130	5	30
Perfluorooctanesulfonic acid (PFOS)	<2.0		60.4	60.5		ng/L		100	70 - 130	3	30
Perfluorooctanoic acid (PFOA)	<2.0		60.4	62.9		ng/L		104	70 - 130	4	30
Perfluoroundecanoic acid (PFUnA)	<2.0		60.4	60.9		ng/L		101	70 - 130	3	30
Perfluorobutanoic acid (PFBA)	<2.0		60.4	60.8		ng/L		101	70 - 130	4	30
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		60.4	63.3		ng/L		105	70 - 130	3	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		60.4	62.8		ng/L		104	70 - 130	1	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		60.4	61.8		ng/L		102	70 - 130	5	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		60.4	61.1		ng/L		101	70 - 130	7	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		60.4	60.1		ng/L		100	70 - 130	0	30
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		60.4	62.4		ng/L		103	70 - 130	3	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		60.4	62.5		ng/L		103	70 - 130	3	30
Perfluoropentanoic acid (PFPeA)	<2.0		60.4	62.1		ng/L		103	70 - 130	1	30
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		60.4	60.3		ng/L		100	70 - 130	1	30
Perfluoropentanesulfonic acid (PFPeS)	<2.0		60.4	60.4		ng/L		100	70 - 130	3	30

Eurofins Eaton Analytical Pomona

QC Sample Results

Client: City & County of Honolulu
Project/Site: SPECIAL

Job ID: 380-145388-1
SDG: PFAS - Kaamilo Wells P1/P2

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

Isotope Dilution	MSD MSD		Limits
	%Recovery	Qualifier	
13C3 HFPO-DA	92		50 - 200
13C6 PFDA	94		50 - 200
13C5 PFHxA	96		50 - 200
13C4 PFHpA	97		50 - 200
13C8 PFOA	91		50 - 200
13C9 PFNA	92		50 - 200
13C7 PFUnA	92		50 - 200
13C2 PFDoA	95		50 - 200
13C4 PFBA	97		50 - 200
13C5 PFPeA	104		50 - 200
13C3 PFBS	99		50 - 200
13C3 PFHxS	99		50 - 200
13C8 PFOS	101		50 - 200
13C2-4:2-FTS	103		50 - 200
13C2-6:2-FTS	111		50 - 200
13C2-8:2-FTS	107		50 - 200

Lab Sample ID: MBL 380-147050/20-A

Matrix: Drinking Water

Analysis Batch: 147264

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 147050

Analyte	MBL MBL		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid (11CI-PF3OUdS)	<0.30		2.0	ng/L		04/14/25 12:11	04/16/25 00:05	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9CI-PF3ONS)	<0.30		2.0	ng/L		04/14/25 12:11	04/16/25 00:05	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0	ng/L		04/14/25 12:11	04/16/25 00:05	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<1.0		2.0	ng/L		04/14/25 12:11	04/16/25 00:05	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0	ng/L		04/14/25 12:11	04/16/25 00:05	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	ng/L		04/14/25 12:11	04/16/25 00:05	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	ng/L		04/14/25 12:11	04/16/25 00:05	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0	ng/L		04/14/25 12:11	04/16/25 00:05	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0	ng/L		04/14/25 12:11	04/16/25 00:05	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0	ng/L		04/14/25 12:11	04/16/25 00:05	1
Perfluorononanoic acid (PFNA)	<0.40		2.0	ng/L		04/14/25 12:11	04/16/25 00:05	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0	ng/L		04/14/25 12:11	04/16/25 00:05	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0	ng/L		04/14/25 12:11	04/16/25 00:05	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0	ng/L		04/14/25 12:11	04/16/25 00:05	1
Perfluorobutanoic acid (PFBA)	<0.69		2.0	ng/L		04/14/25 12:11	04/16/25 00:05	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.38		2.0	ng/L		04/14/25 12:11	04/16/25 00:05	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.37		2.0	ng/L		04/14/25 12:11	04/16/25 00:05	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<0.48		2.0	ng/L		04/14/25 12:11	04/16/25 00:05	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<0.47		2.0	ng/L		04/14/25 12:11	04/16/25 00:05	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<0.25		2.0	ng/L		04/14/25 12:11	04/16/25 00:05	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.46		2.0	ng/L		04/14/25 12:11	04/16/25 00:05	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.15		2.0	ng/L		04/14/25 12:11	04/16/25 00:05	1

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QC Sample Results

Client: City & County of Honolulu
Project/Site: SPECIAL

Job ID: 380-145388-1
SDG: PFAS - Kaamilo Wells P1/P2

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

Lab Sample ID: MBL 380-147050/20-A

Matrix: Drinking Water

Analysis Batch: 147264

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 147050

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoropentanoic acid (PFPeA)	<0.38		2.0	ng/L		04/14/25 12:11	04/16/25 00:05	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.36		2.0	ng/L		04/14/25 12:11	04/16/25 00:05	1
Perfluoropentanesulfonic acid (PFPeS)	<0.39		2.0	ng/L		04/14/25 12:11	04/16/25 00:05	1
Isotope Dilution	MBL %Recovery	MBL Qualifier	Limits			Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	79		50 - 200			04/14/25 12:11	04/16/25 00:05	1
13C6 PFDA	109		50 - 200			04/14/25 12:11	04/16/25 00:05	1
13C5 PFHxA	122		50 - 200			04/14/25 12:11	04/16/25 00:05	1
13C4 PFHpA	105		50 - 200			04/14/25 12:11	04/16/25 00:05	1
13C8 PFOA	99		50 - 200			04/14/25 12:11	04/16/25 00:05	1
13C9 PFNA	105		50 - 200			04/14/25 12:11	04/16/25 00:05	1
13C7 PFUnA	104		50 - 200			04/14/25 12:11	04/16/25 00:05	1
13C2 PFDoA	107		50 - 200			04/14/25 12:11	04/16/25 00:05	1
13C4 PFBA	102		50 - 200			04/14/25 12:11	04/16/25 00:05	1
13C5 PFPeA	93		50 - 200			04/14/25 12:11	04/16/25 00:05	1
13C3 PFBS	96		50 - 200			04/14/25 12:11	04/16/25 00:05	1
13C3 PFHxS	97		50 - 200			04/14/25 12:11	04/16/25 00:05	1
13C8 PFOS	101		50 - 200			04/14/25 12:11	04/16/25 00:05	1
13C2-4:2-FTS	91		50 - 200			04/14/25 12:11	04/16/25 00:05	1
13C2-6:2-FTS	107		50 - 200			04/14/25 12:11	04/16/25 00:05	1
13C2-8:2-FTS	109		50 - 200			04/14/25 12:11	04/16/25 00:05	1

Lab Sample ID: LCS 380-147050/22-A

Matrix: Drinking Water

Analysis Batch: 147264

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 147050

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	60.2	54.5		ng/L		90	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	60.2	54.0		ng/L		90	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	60.2	57.0		ng/L		95	70 - 130
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	60.2	57.9		ng/L		96	70 - 130
Perfluorobutanesulfonic acid (PFBS)	60.2	59.8		ng/L		99	70 - 130
Perfluorodecanoic acid (PFDA)	60.2	56.5		ng/L		94	70 - 130
Perfluorododecanoic acid (PFDoA)	60.2	57.9		ng/L		96	70 - 130
Perfluoroheptanoic acid (PFHpA)	60.2	55.7		ng/L		93	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	60.2	58.5		ng/L		97	70 - 130
Perfluorohexanoic acid (PFHxA)	60.2	58.6		ng/L		97	70 - 130
Perfluorononanoic acid (PFNA)	60.2	57.6		ng/L		96	70 - 130
Perfluorooctanesulfonic acid (PFOS)	60.2	56.4		ng/L		94	70 - 130
Perfluorooctanoic acid (PFOA)	60.2	59.6		ng/L		99	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

Client: City & County of Honolulu
Project/Site: SPECIAL

Job ID: 380-145388-1
SDG: PFAS - Kaamilo Wells P1/P2

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

Lab Sample ID: LCS 380-147050/22-A

Matrix: Drinking Water

Analysis Batch: 147264

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 147050

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoroundecanoic acid (PFUnA)	60.2	58.7		ng/L		97	70 - 130
Perfluorobutanoic acid (PFBA)	60.2	57.3		ng/L		95	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	60.2	56.9		ng/L		94	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	60.2	60.7		ng/L		101	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	60.2	59.1		ng/L		98	70 - 130
Nonfluoro-3,6-dioxahепtanoic acid (NFDHA)	60.2	64.9		ng/L		108	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEA)	60.2	59.8		ng/L		99	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	60.2	57.0		ng/L		95	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	60.2	59.8		ng/L		99	70 - 130
Perfluoropentanoic acid (PFPeA)	60.2	58.9		ng/L		98	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	60.2	56.3		ng/L		94	70 - 130
Perfluoropentanesulfonic acid (PFPeS)	60.2	60.2		ng/L		100	70 - 130

Isotope Dilution	LCS		Limits
	%Recovery	Qualifier	
13C3 HFPO-DA	86		50 - 200
13C6 PFDA	107		50 - 200
13C5 PFHxA	119		50 - 200
13C4 PFHpA	105		50 - 200
13C8 PFOA	99		50 - 200
13C9 PFNA	103		50 - 200
13C7 PFUnA	107		50 - 200
13C2 PFDoA	107		50 - 200
13C4 PFBA	102		50 - 200
13C5 PFPeA	92		50 - 200
13C3 PFBS	92		50 - 200
13C3 PFHxS	98		50 - 200
13C8 PFOS	103		50 - 200
13C2-4:2-FTS	91		50 - 200
13C2-6:2-FTS	106		50 - 200
13C2-8:2-FTS	110		50 - 200

Lab Sample ID: MRL 380-147050/21-A

Matrix: Drinking Water

Analysis Batch: 147264

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 147050

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.00	2.14	J	ng/L		107	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	2.00	1.94	J	ng/L		97	50 - 150

Eurofins Eaton Analytical Pomona

QC Sample Results

Client: City & County of Honolulu
Project/Site: SPECIAL

Job ID: 380-145388-1
SDG: PFAS - Kaamilo Wells P1/P2

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

Lab Sample ID: MRL 380-147050/21-A

Matrix: Drinking Water

Analysis Batch: 147264

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 147050

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.00	2.00	J	ng/L		100	50 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	2.00	2.09	J	ng/L		105	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.00	2.10	J	ng/L		105	50 - 150
Perfluorodecanoic acid (PFDA)	2.00	2.03	J	ng/L		101	50 - 150
Perfluorododecanoic acid (PFDoA)	2.00	2.02	J	ng/L		101	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.00	2.01	J	ng/L		100	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.00	2.11	J	ng/L		105	50 - 150
Perfluorohexanoic acid (PFHxA)	2.00	2.12	J	ng/L		106	50 - 150
Perfluorononanoic acid (PFNA)	2.00	2.01	J	ng/L		100	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.00	2.15	J	ng/L		107	50 - 150
Perfluorooctanoic acid (PFOA)	2.00	2.14	J	ng/L		107	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.00	2.10	J	ng/L		105	50 - 150
Perfluorobutanoic acid (PFBA)	2.00	2.17	J	ng/L		108	50 - 150
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	2.00	2.13	J	ng/L		106	50 - 150
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	2.00	2.35	J	ng/L		117	50 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	2.00	2.25	J	ng/L		112	50 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2.00	2.13	J	ng/L		106	50 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	2.00	2.02	J	ng/L		101	50 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.00	2.03	J	ng/L		101	50 - 150
Perfluoro-4-methoxybutanoic acid (PFMBA)	2.00	2.05	J	ng/L		102	50 - 150
Perfluoropentanoic acid (PFPeA)	2.00	2.06	J	ng/L		103	50 - 150
Perfluoroheptanesulfonic acid (PFHpS)	2.00	1.95	J	ng/L		97	50 - 150
Perfluoropentanesulfonic acid (PFPeS)	2.00	2.09	J	ng/L		104	50 - 150

Isotope Dilution	MRL %Recovery	MRL Qualifier	Limits
13C3 HFPO-DA	88		50 - 200
13C6 PFDA	106		50 - 200
13C5 PFHxA	120		50 - 200
13C4 PFHpA	105		50 - 200
13C8 PFOA	100		50 - 200
13C9 PFNA	103		50 - 200
13C7 PFUnA	105		50 - 200
13C2 PFDoA	105		50 - 200
13C4 PFBA	100		50 - 200
13C5 PFPeA	93		50 - 200
13C3 PFBS	95		50 - 200
13C3 PFHxS	97		50 - 200

Eurofins Eaton Analytical Pomona

QC Sample Results

Client: City & County of Honolulu
Project/Site: SPECIAL

Job ID: 380-145388-1
SDG: PFAS - Kaamilo Wells P1/P2

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

Lab Sample ID: MRL 380-147050/21-A

Matrix: Drinking Water

Analysis Batch: 147264

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 147050

Isotope Dilution	MRL %Recovery	MRL Qualifier	Limits
13C8 PFOS	99		50 - 200
13C2-4:2-FTS	86		50 - 200
13C2-6:2-FTS	104		50 - 200
13C2-8:2-FTS	109		50 - 200

Lab Sample ID: 380-144924-E-1-A MS

Matrix: Drinking Water

Analysis Batch: 147264

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 147050

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	55.7		ng/L		93	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		60.2	55.2		ng/L		92	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		60.2	55.4		ng/L		92	70 - 130
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<2.0		60.2	57.4		ng/L		95	70 - 130
Perfluorobutanesulfonic acid (PFBS)	<2.0		60.2	59.9		ng/L		99	70 - 130
Perfluorodecanoic acid (PFDA)	<2.0		60.2	57.4		ng/L		95	70 - 130
Perfluorododecanoic acid (PFDoA)	<2.0		60.2	57.2		ng/L		95	70 - 130
Perfluoroheptanoic acid (PFHpA)	<2.0		60.2	56.6		ng/L		94	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	<2.0		60.2	59.9		ng/L		99	70 - 130
Perfluorohexanoic acid (PFHxA)	<2.0		60.2	58.5		ng/L		97	70 - 130
Perfluorononanoic acid (PFNA)	<2.0		60.2	58.3		ng/L		97	70 - 130
Perfluorooctanesulfonic acid (PFOS)	<2.0		60.2	56.4		ng/L		94	70 - 130
Perfluorooctanoic acid (PFOA)	<2.0		60.2	58.1		ng/L		96	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		60.2	58.2		ng/L		97	70 - 130
Perfluorobutanoic acid (PFBA)	5.7		60.2	64.9		ng/L		98	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		60.2	60.2		ng/L		100	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		60.2	59.3		ng/L		98	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		60.2	59.6		ng/L		99	70 - 130
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		60.2	59.4		ng/L		99	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		60.2	61.4		ng/L		102	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		60.2	61.9		ng/L		103	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		60.2	61.8		ng/L		103	70 - 130
Perfluoropentanoic acid (PFPeA)	<2.0		60.2	58.8		ng/L		98	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		60.2	55.9		ng/L		93	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

Client: City & County of Honolulu
Project/Site: SPECIAL

Job ID: 380-145388-1
SDG: PFAS - Kaamilo Wells P1/P2

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

Lab Sample ID: 380-144924-E-1-A MS

Matrix: Drinking Water

Analysis Batch: 147264

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 147050

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoropentanesulfonic acid (PFPeS)	<2.0		60.2	62.6		ng/L		104	70 - 130
Isotope Dilution	MS %Recovery	MS Qualifier	Limits						
13C3 HFPO-DA	95		50 - 200						
13C6 PFDA	81		50 - 200						
13C5 PFHxA	113		50 - 200						
13C4 PFHpA	96		50 - 200						
13C8 PFOA	87		50 - 200						
13C9 PFNA	81		50 - 200						
13C7 PFUnA	86		50 - 200						
13C2 PFDoA	93		50 - 200						
13C4 PFBA	101		50 - 200						
13C5 PFPeA	110		50 - 200						
13C3 PFBS	86		50 - 200						
13C3 PFHxS	93		50 - 200						
13C8 PFOS	101		50 - 200						
13C2-4:2-FTS	84		50 - 200						
13C2-6:2-FTS	108		50 - 200						
13C2-8:2-FTS	111		50 - 200						

Lab Sample ID: 380-144924-F-1-A MSD

Matrix: Drinking Water

Analysis Batch: 147264

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 147050

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		60.4	55.3		ng/L		92	70 - 130	1	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		60.4	53.8		ng/L		89	70 - 130	2	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		60.4	56.7		ng/L		94	70 - 130	2	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	<2.0		60.4	58.0		ng/L		96	70 - 130	1	30
Perfluorobutanesulfonic acid (PFBS)	<2.0		60.4	60.5		ng/L		100	70 - 130	1	30
Perfluorodecanoic acid (PFDA)	<2.0		60.4	56.8		ng/L		94	70 - 130	1	30
Perfluorododecanoic acid (PFDoA)	<2.0		60.4	59.0		ng/L		98	70 - 130	3	30
Perfluoroheptanoic acid (PFHpA)	<2.0		60.4	57.1		ng/L		95	70 - 130	1	30
Perfluorohexanesulfonic acid (PFHxS)	<2.0		60.4	60.8		ng/L		101	70 - 130	2	30
Perfluorohexanoic acid (PFHxA)	<2.0		60.4	58.5		ng/L		97	70 - 130	0	30
Perfluorononanoic acid (PFNA)	<2.0		60.4	57.6		ng/L		95	70 - 130	1	30
Perfluorooctanesulfonic acid (PFOS)	<2.0		60.4	55.9		ng/L		93	70 - 130	1	30
Perfluorooctanoic acid (PFOA)	<2.0		60.4	59.7		ng/L		99	70 - 130	3	30
Perfluoroundecanoic acid (PFUnA)	<2.0		60.4	59.2		ng/L		98	70 - 130	2	30
Perfluorobutanoic acid (PFBA)	5.7		60.4	65.3		ng/L		99	70 - 130	1	30

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QC Sample Results

Client: City & County of Honolulu
Project/Site: SPECIAL

Job ID: 380-145388-1
SDG: PFAS - Kaamilo Wells P1/P2

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

Lab Sample ID: 380-144924-F-1-A MSD

Matrix: Drinking Water

Analysis Batch: 147264

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 147050

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		60.4	59.9		ng/L		99	70 - 130	0	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		60.4	61.8		ng/L		102	70 - 130	4	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		60.4	57.7		ng/L		96	70 - 130	3	30
Nonafluoro-3,6-dioxahexanoic acid (NFDHA)	<2.0		60.4	61.9		ng/L		103	70 - 130	4	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEA)	<2.0		60.4	61.6		ng/L		102	70 - 130	0	30
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		60.4	63.1		ng/L		105	70 - 130	2	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		60.4	62.3		ng/L		103	70 - 130	1	30
Perfluoropentanoic acid (PFPeA)	<2.0		60.4	59.6		ng/L		99	70 - 130	1	30
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		60.4	55.6		ng/L		92	70 - 130	1	30
Perfluoropentanesulfonic acid (PFPeS)	<2.0		60.4	61.8		ng/L		102	70 - 130	1	30

Isotope Dilution	MSD MSD		Limits
	%Recovery	Qualifier	
13C3 HFPO-DA	93		50 - 200
13C6 PFDA	81		50 - 200
13C5 PFHxA	107		50 - 200
13C4 PFHpA	94		50 - 200
13C8 PFOA	86		50 - 200
13C9 PFNA	82		50 - 200
13C7 PFUnA	84		50 - 200
13C2 PFDoA	88		50 - 200
13C4 PFBA	100		50 - 200
13C5 PFPeA	109		50 - 200
13C3 PFBS	86		50 - 200
13C3 PFHxS	92		50 - 200
13C8 PFOS	100		50 - 200
13C2-4:2-FTS	79		50 - 200
13C2-6:2-FTS	109		50 - 200
13C2-8:2-FTS	109		50 - 200

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

Lab Sample ID: MBL 380-146926/19-A

Matrix: Drinking Water

Analysis Batch: 146939

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 146926

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		04/12/25 17:55	04/14/25 08:03	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0	ng/L		04/12/25 17:55	04/14/25 08:03	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0	ng/L		04/12/25 17:55	04/14/25 08:03	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<0.58		2.0	ng/L		04/12/25 17:55	04/14/25 08:03	1

Eurofins Eaton Analytical Pomona

QC Sample Results

Client: City & County of Honolulu
Project/Site: SPECIAL

Job ID: 380-145388-1
SDG: PFAS - Kaamilo Wells P1/P2

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

Lab Sample ID: MBL 380-146926/19-A

Matrix: Drinking Water

Analysis Batch: 146939

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 146926

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<0.42		2.0	ng/L		04/12/25 17:55	04/14/25 08:03	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0	ng/L		04/12/25 17:55	04/14/25 08:03	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	ng/L		04/12/25 17:55	04/14/25 08:03	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0	ng/L		04/12/25 17:55	04/14/25 08:03	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	ng/L		04/12/25 17:55	04/14/25 08:03	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0	ng/L		04/12/25 17:55	04/14/25 08:03	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0	ng/L		04/12/25 17:55	04/14/25 08:03	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0	ng/L		04/12/25 17:55	04/14/25 08:03	1
Perfluorononanoic acid (PFNA)	<0.40		2.0	ng/L		04/12/25 17:55	04/14/25 08:03	1
Perfluorotetradecanoic acid (PFTA)	<0.54		2.0	ng/L		04/12/25 17:55	04/14/25 08:03	1
Perfluorotridecanoic acid (PFTDA)	<0.36		2.0	ng/L		04/12/25 17:55	04/14/25 08:03	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<0.30		2.0	ng/L		04/12/25 17:55	04/14/25 08:03	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.30		2.0	ng/L		04/12/25 17:55	04/14/25 08:03	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0	ng/L		04/12/25 17:55	04/14/25 08:03	1

Surrogate	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	94		70 - 130	04/12/25 17:55	04/14/25 08:03	1
13C2 PFHxA	99		70 - 130	04/12/25 17:55	04/14/25 08:03	1
13C2 PFDA	122		70 - 130	04/12/25 17:55	04/14/25 08:03	1
13C3-GenX	93		70 - 130	04/12/25 17:55	04/14/25 08:03	1

Lab Sample ID: LCS 380-146926/21-A

Matrix: Drinking Water

Analysis Batch: 146939

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 146926

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	50.1	48.1		ng/L		96	70 - 130
Perfluorooctanesulfonic acid (PFOS)	50.1	55.3		ng/L		110	70 - 130
Perfluoroundecanoic acid (PFUnA)	50.1	56.5		ng/L		113	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	50.1	51.4		ng/L		103	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	50.1	49.4		ng/L		99	70 - 130
Perfluorohexanoic acid (PFHxA)	50.1	49.6		ng/L		99	70 - 130
Perfluorododecanoic acid (PFDoA)	50.1	55.9		ng/L		112	70 - 130
Perfluorooctanoic acid (PFOA)	50.1	51.8		ng/L		103	70 - 130
Perfluorodecanoic acid (PFDA)	50.1	53.1		ng/L		106	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	50.1	54.3		ng/L		108	70 - 130
Perfluorobutanesulfonic acid (PFBS)	50.1	51.9		ng/L		104	70 - 130
Perfluoroheptanoic acid (PFHpA)	50.1	50.3		ng/L		100	70 - 130
Perfluorononanoic acid (PFNA)	50.1	54.8		ng/L		109	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

Client: City & County of Honolulu
Project/Site: SPECIAL

Job ID: 380-145388-1
SDG: PFAS - Kaamilo Wells P1/P2

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

Lab Sample ID: LCS 380-146926/21-A

Matrix: Drinking Water

Analysis Batch: 146939

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 146926

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorotetradecanoic acid (PFTA)	50.1	52.5		ng/L		105	70 - 130
Perfluorotridecanoic acid (PFTTrDA)	50.1	53.5		ng/L		107	70 - 130
9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid(9Cl-PF3ONS)	50.1	54.2		ng/L		108	70 - 130
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	50.1	53.0		ng/L		106	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	50.1	49.2		ng/L		98	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
d5-NeFOSAA	107		70 - 130
13C2 PFHxA	110		70 - 130
13C2 PFDA	117		70 - 130
13C3-GenX	104		70 - 130

Lab Sample ID: MRL 380-146926/20-A

Matrix: Drinking Water

Analysis Batch: 146939

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 146926

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.00	1.73	J	ng/L		86	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.00	2.17	J	ng/L		109	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.00	2.21	J	ng/L		110	50 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2.00	1.96	J	ng/L		98	50 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2.00	1.78	J	ng/L		89	50 - 150
Perfluorohexanoic acid (PFHxA)	2.00	1.86	J	ng/L		93	50 - 150
Perfluorododecanoic acid (PFDoA)	2.00	2.22	J	ng/L		111	50 - 150
Perfluorooctanoic acid (PFOA)	2.00	2.14	J	ng/L		107	50 - 150
Perfluorodecanoic acid (PFDA)	2.00	2.19	J	ng/L		110	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.00	2.29	J	ng/L		114	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.00	2.15	J	ng/L		107	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.00	2.02	J	ng/L		101	50 - 150
Perfluorononanoic acid (PFNA)	2.00	2.11	J	ng/L		105	50 - 150
Perfluorotetradecanoic acid (PFTA)	2.00	2.21	J	ng/L		111	50 - 150
Perfluorotridecanoic acid (PFTTrDA)	2.00	2.17	J	ng/L		109	50 - 150
9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid(9Cl-PF3ONS)	2.00	2.25	J	ng/L		112	50 - 150

Eurofins Eaton Analytical Pomona

QC Sample Results

Client: City & County of Honolulu
Project/Site: SPECIAL

Job ID: 380-145388-1
SDG: PFAS - Kaamilo Wells P1/P2

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

Lab Sample ID: MRL 380-146926/20-A

Matrix: Drinking Water

Analysis Batch: 146939

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 146926

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.00	2.18	J	ng/L		109	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.00	1.89	J	ng/L		94	50 - 150
Surrogate	MRL %Recovery	MRL Qualifier	Limits				
d5-NEtFOSAA	98		70 - 130				
13C2 PFHxA	97		70 - 130				
13C2 PFDA	115		70 - 130				
13C3-GenX	90		70 - 130				

Lab Sample ID: 380-145392-B-1-A MS

Matrix: Drinking Water

Analysis Batch: 146939

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 146926

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		25.1	20.5		ng/L		82	70 - 130
Perfluorooctanesulfonic acid (PFOS)	<2.0		25.1	28.2		ng/L		112	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		25.1	28.5		ng/L		114	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		25.1	26.4		ng/L		105	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		25.1	24.9		ng/L		99	70 - 130
Perfluorohexanoic acid (PFHxA)	<2.0		25.1	25.2		ng/L		100	70 - 130
Perfluorododecanoic acid (PFDoA)	<2.0		25.1	28.5		ng/L		113	70 - 130
Perfluorooctanoic acid (PFOA)	<2.0		25.1	26.7		ng/L		106	70 - 130
Perfluorodecanoic acid (PFDA)	<2.0		25.1	28.0		ng/L		112	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	<2.0		25.1	29.0		ng/L		115	70 - 130
Perfluorobutanesulfonic acid (PFBS)	<2.0		25.1	27.9		ng/L		111	70 - 130
Perfluoroheptanoic acid (PFHpA)	2.0		25.1	26.0		ng/L		104	70 - 130
Perfluorononanoic acid (PFNA)	<2.0		25.1	28.1		ng/L		112	70 - 130
Perfluorotetradecanoic acid (PFTA)	<2.0		25.1	28.5		ng/L		113	70 - 130
Perfluorotridecanoic acid (PFTTrDA)	<2.0		25.1	27.6		ng/L		110	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<2.0		25.1	28.6		ng/L		114	70 - 130
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		25.1	27.6		ng/L		110	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		25.1	25.4		ng/L		101	70 - 130

QC Sample Results

Client: City & County of Honolulu
Project/Site: SPECIAL

Job ID: 380-145388-1
SDG: PFAS - Kaamilo Wells P1/P2

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

Lab Sample ID: 380-145392-B-1-A MS

Matrix: Drinking Water

Analysis Batch: 146939

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 146926

Surrogate	MS %Recovery	MS Qualifier	Limits
d5-NEtFOSAA	105		70 - 130
13C2 PFHxA	108		70 - 130
13C2 PFDA	120		70 - 130
13C3-GenX	90		70 - 130

Lab Sample ID: 380-145392-C-1-A MSD

Matrix: Drinking Water

Analysis Batch: 146939

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 146926

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Hexafluoropropylene Oxide	<2.0		25.1	23.0		ng/L		91	70 - 130	11	30
Dimer Acid (HFPO-DA/GenX)											
Perfluorooctanesulfonic acid (PFOS)	<2.0		25.1	27.0		ng/L		107	70 - 130	5	30
Perfluoroundecanoic acid (PFUnA)	<2.0		25.1	28.2		ng/L		112	70 - 130	1	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		25.1	26.0		ng/L		104	70 - 130	1	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		25.1	24.4		ng/L		97	70 - 130	2	30
Perfluorohexanoic acid (PFHxA)	<2.0		25.1	25.0		ng/L		100	70 - 130	1	30
Perfluorododecanoic acid (PFDoA)	<2.0		25.1	27.6		ng/L		110	70 - 130	3	30
Perfluorooctanoic acid (PFOA)	<2.0		25.1	27.2		ng/L		108	70 - 130	2	30
Perfluorodecanoic acid (PFDA)	<2.0		25.1	28.0		ng/L		111	70 - 130	0	30
Perfluorohexanesulfonic acid (PFHxS)	<2.0		25.1	28.3		ng/L		113	70 - 130	2	30
Perfluorobutanesulfonic acid (PFBS)	<2.0		25.1	26.8		ng/L		107	70 - 130	4	30
Perfluoroheptanoic acid (PFHpA)	<2.0		25.1	26.2		ng/L		104	70 - 130	1	30
Perfluorononanoic acid (PFNA)	<2.0		25.1	27.8		ng/L		111	70 - 130	1	30
Perfluorotetradecanoic acid (PFTA)	<2.0		25.1	27.6		ng/L		110	70 - 130	3	30
Perfluorotridecanoic acid (PFTrDA)	<2.0		25.1	26.1		ng/L		104	70 - 130	5	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		25.1	27.7		ng/L		110	70 - 130	3	30
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		25.1	26.6		ng/L		106	70 - 130	4	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		25.1	25.2		ng/L		100	70 - 130	1	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
d5-NEtFOSAA	105		70 - 130
13C2 PFHxA	106		70 - 130
13C2 PFDA	119		70 - 130
13C3-GenX	96		70 - 130

QC Association Summary

Client: City & County of Honolulu
Project/Site: SPECIAL

Job ID: 380-145388-1
SDG: PFAS - Kaamilo Wells P1/P2

LCMS

Prep Batch: 146926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-145388-1	Kaamilo Wells P1	Total/NA	Drinking Water	537.1 DW	
380-145388-2	Kaamilo Wells P2	Total/NA	Drinking Water	537.1 DW	
380-145388-3	FB: Kaamilo Wells P1	Total/NA	Drinking Water	537.1 DW	
380-145388-4	FB: Kaamilo Wells P2	Total/NA	Drinking Water	537.1 DW	
MBL 380-146926/19-A	Method Blank	Total/NA	Drinking Water	537.1 DW	
LCS 380-146926/21-A	Lab Control Sample	Total/NA	Drinking Water	537.1 DW	
MRL 380-146926/20-A	Lab Control Sample	Total/NA	Drinking Water	537.1 DW	
380-145392-B-1-A MS	Matrix Spike	Total/NA	Drinking Water	537.1 DW	
380-145392-C-1-A MSD	Matrix Spike Duplicate	Total/NA	Drinking Water	537.1 DW	

Prep Batch: 146931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-145388-4	FB: Kaamilo Wells P2	Total/NA	Drinking Water	533	
MBL 380-146931/21-A	Method Blank	Total/NA	Drinking Water	533	
LCS 380-146931/23-A	Lab Control Sample	Total/NA	Drinking Water	533	
MRL 380-146931/22-A	Lab Control Sample	Total/NA	Drinking Water	533	
380-145368-B-1-A MS	Matrix Spike	Total/NA	Drinking Water	533	
380-145368-C-1-A MSD	Matrix Spike Duplicate	Total/NA	Drinking Water	533	

Analysis Batch: 146939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-145388-1	Kaamilo Wells P1	Total/NA	Drinking Water	537.1	146926
380-145388-2	Kaamilo Wells P2	Total/NA	Drinking Water	537.1	146926
380-145388-3	FB: Kaamilo Wells P1	Total/NA	Drinking Water	537.1	146926
380-145388-4	FB: Kaamilo Wells P2	Total/NA	Drinking Water	537.1	146926
MBL 380-146926/19-A	Method Blank	Total/NA	Drinking Water	537.1	146926
LCS 380-146926/21-A	Lab Control Sample	Total/NA	Drinking Water	537.1	146926
MRL 380-146926/20-A	Lab Control Sample	Total/NA	Drinking Water	537.1	146926
380-145392-B-1-A MS	Matrix Spike	Total/NA	Drinking Water	537.1	146926
380-145392-C-1-A MSD	Matrix Spike Duplicate	Total/NA	Drinking Water	537.1	146926

Analysis Batch: 146985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-145388-4	FB: Kaamilo Wells P2	Total/NA	Drinking Water	533	146931
MBL 380-146931/21-A	Method Blank	Total/NA	Drinking Water	533	146931
LCS 380-146931/23-A	Lab Control Sample	Total/NA	Drinking Water	533	146931
MRL 380-146931/22-A	Lab Control Sample	Total/NA	Drinking Water	533	146931
380-145368-B-1-A MS	Matrix Spike	Total/NA	Drinking Water	533	146931
380-145368-C-1-A MSD	Matrix Spike Duplicate	Total/NA	Drinking Water	533	146931

Prep Batch: 147050

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-145388-1	Kaamilo Wells P1	Total/NA	Drinking Water	533	
380-145388-2	Kaamilo Wells P2	Total/NA	Drinking Water	533	
380-145388-3	FB: Kaamilo Wells P1	Total/NA	Drinking Water	533	
MBL 380-147050/20-A	Method Blank	Total/NA	Drinking Water	533	
LCS 380-147050/22-A	Lab Control Sample	Total/NA	Drinking Water	533	
MRL 380-147050/21-A	Lab Control Sample	Total/NA	Drinking Water	533	
380-144924-E-1-A MS	Matrix Spike	Total/NA	Drinking Water	533	
380-144924-F-1-A MSD	Matrix Spike Duplicate	Total/NA	Drinking Water	533	

Eurofins Eaton Analytical Pomona

QC Association Summary

Client: City & County of Honolulu
Project/Site: SPECIAL

Job ID: 380-145388-1
SDG: PFAS - Kaamilo Wells P1/P2

LCMS

Analysis Batch: 147150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-145388-1	Kaamilo Wells P1	Total/NA	Drinking Water	None	
380-145388-2	Kaamilo Wells P2	Total/NA	Drinking Water	None	

Analysis Batch: 147264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-145388-1	Kaamilo Wells P1	Total/NA	Drinking Water	533	147050
380-145388-2	Kaamilo Wells P2	Total/NA	Drinking Water	533	147050
380-145388-3	FB: Kaamilo Wells P1	Total/NA	Drinking Water	533	147050
MBL 380-147050/20-A	Method Blank	Total/NA	Drinking Water	533	147050
LCS 380-147050/22-A	Lab Control Sample	Total/NA	Drinking Water	533	147050
MRL 380-147050/21-A	Lab Control Sample	Total/NA	Drinking Water	533	147050
380-144924-E-1-A MS	Matrix Spike	Total/NA	Drinking Water	533	147050
380-144924-F-1-A MSD	Matrix Spike Duplicate	Total/NA	Drinking Water	533	147050

Lab Chronicle

Client: City & County of Honolulu
Project/Site: SPECIAL

Job ID: 380-145388-1
SDG: PFAS - Kaamilo Wells P1/P2

Client Sample ID: Kaamilo Wells P1

Lab Sample ID: 380-145388-1

Date Collected: 04/10/25 10:28

Matrix: Drinking Water

Date Received: 04/11/25 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			147050	HM3M	EA POM	04/14/25 12:11
Total/NA	Analysis	533		1	147264	M7ML	EA POM	04/16/25 03:42
Total/NA	Prep	537.1 DW			146926	N8NE	EA POM	04/12/25 17:55
Total/NA	Analysis	537.1		1	146939	M7ML	EA POM	04/14/25 11:36
Total/NA	Analysis	None		1	147150	USZZ	EA POM	04/14/25 11:36

Client Sample ID: Kaamilo Wells P2

Lab Sample ID: 380-145388-2

Date Collected: 04/10/25 09:41

Matrix: Drinking Water

Date Received: 04/11/25 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			147050	HM3M	EA POM	04/14/25 12:11
Total/NA	Analysis	533		1	147264	M7ML	EA POM	04/16/25 03:52
Total/NA	Prep	537.1 DW			146926	N8NE	EA POM	04/12/25 17:55
Total/NA	Analysis	537.1		1	146939	M7ML	EA POM	04/14/25 11:45
Total/NA	Analysis	None		1	147150	USZZ	EA POM	04/14/25 11:45

Client Sample ID: FB: Kaamilo Wells P1

Lab Sample ID: 380-145388-3

Date Collected: 04/10/25 10:28

Matrix: Drinking Water

Date Received: 04/11/25 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			147050	HM3M	EA POM	04/14/25 12:11
Total/NA	Analysis	533		1	147264	M7ML	EA POM	04/16/25 04:01
Total/NA	Prep	537.1 DW			146926	N8NE	EA POM	04/12/25 17:55
Total/NA	Analysis	537.1		1	146939	M7ML	EA POM	04/14/25 11:55

Client Sample ID: FB: Kaamilo Wells P2

Lab Sample ID: 380-145388-4

Date Collected: 04/10/25 09:41

Matrix: Drinking Water

Date Received: 04/11/25 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			146931	E9PK	EA POM	04/13/25 11:29
Total/NA	Analysis	533		1	146985	SZ9R	EA POM	04/14/25 23:16
Total/NA	Prep	537.1 DW			146926	N8NE	EA POM	04/12/25 17:55
Total/NA	Analysis	537.1		1	146939	M7ML	EA POM	04/14/25 12:05

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: SPECIAL

Job ID: 380-145388-1
SDG: PFAS - Kaamilo Wells P1/P2

Laboratory: Eurofins Eaton Analytical Pomona

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Hawaii	State	CA00006	03-13-25 *

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
None		Drinking Water	4-PFAS Hazard Index

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

Eurofins Eaton Analytical Pomona

Method Summary

Client: City & County of Honolulu
Project/Site: SPECIAL

Job ID: 380-145388-1
SDG: PFAS - Kaamilo 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
None	PFAS Hazard Index	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: SPECIAL

Job ID: 380-145388-1
SDG: PFAS - Kaamilo Wells P1/P2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
380-145388-1	Kaamilo Wells P1	Drinking Water	04/10/25 10:28	04/11/25 10:20
380-145388-2	Kaamilo Wells P2	Drinking Water	04/10/25 09:41	04/11/25 10:20
380-145388-3	FB: Kaamilo Wells P1	Drinking Water	04/10/25 10:28	04/11/25 10:20
380-145388-4	FB: Kaamilo Wells P2	Drinking Water	04/10/25 09:41	04/11/25 10:20

Eurofins Eaton Analytical Pomona

941 Corporate Center Drive
Pomona CA 91768-2642
Phone (626) 386-1100

Chain of Custody Record



Environment Testing

Client Information		Sampler	Lab PM	Carrier Tracking No(s)	COC No:													
Client Contact: Mr. Erwin Kawata		bailey	Arada Rachelle		380-82899-24463 1													
Company:		+1 8087485840	E-Mail: Rachelle.Arada@et.eurofins.com	State of Origin:	Page: 1 of 1													
City & County of Honolulu			PWSID:	Job #:														
Address: 630 South Beretania Street Public Service Bldg Room 310		Due Date Requested:																
City: Honolulu		TAT Requested (days)																
State Zip: HI 96843		Compliance Project: ☐ Yes ☒ No																
Phone: 808-748-5091(Tel)		PO #: C20525101 exp 05312023																
Email: ekawata@hbws.org		WO #:																
Project Name: SPECIAL		Project #: 38000519																
Site: Hawaii		SSOW#:																
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Preservation Code: (ST=Stabilizer, A=Acid)	Matrix (W=Water, S=Solid, O=Organic)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	537 1 DW, PREC - 537 1 Full Lat	PFAS_HazIndex - Local Method	533 - All Analytes	Analysis Requested				Preservation Codes: Y - Trizma N - None L - NH4 Acetate	Other	Total Number of Containers	Special Instructions/Note:
Kaamilo Wells P1	10-Apr-2025	1028	G															
Kaamilo Wells P2	10-Apr-2025	0941	G															
FB: Kaamilo Wells P1	10-Apr-2025	1028																
FB: Kaamilo Wells P2	10-Apr-2025	0941																
																		380-145388 COC
Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological																		
Deliverable Requested I II III IV Other (specify)																		
Empty Kit Relinquished by																		
Date/Time: 10/21/2025 1400 Company: HBWS																		
Relinquished by:																		
Relinquished by:																		
Custody Seals Intact: ☐ Yes ☒ No																		
Custody Seal No																		
Cooler Temperature(s) °C and Other Remarks: 2.4°-0.0°=2.4° 0°C-10°C																		
Received by: [Signature] Date/Time: 09/11/25 10:20 Company: EETAF																		
Method of Shipment: FEDEX 88046892 1812																		

APRIL 2025 x336 777x x = district number 36 sites			
Waianae		Pumps	Collection Date
Waianae I		DFR	
Waianae II			
Waianae III 1409/4311		1,2	
Waianae Plantation Tunnel (Res 765)		1922	
Waianae Tunnel			
Kamaile ✓ 9701 8191		1(DFR),2	
Makaha I 97020 97210/5151			
Makaha II 970X 9721/1227		DFR	
Makaha III			
Makaha IV		O/S	
Makaha V			
Makaha VI		DFR	
Makaha Shaft		O/S	
Glover Tunnel			
			TOTAL
Ewa			
Honouliuli I* 4401		1(DFR), 2	
Honouliuli II		1,2,3,4(DFR)	
Makakilo Well* ✓ 9701 5941			
Barbers Pt. P1 ✓ 9701 2151/6301			
Barbers Pt. P2 2151/6301			
			TOTAL
Honolulu 2			
Aiea 2774		1(DFR),2	DFR
Aiea Gulch		1(497), 2(533)	
Halawa Shaft			DFR
Halawa Wells* 2774		1,2	DFR
HECO-Waiiau		1A, 1B, 2A, 2B	
Kaahumanu		1,2	2(4/2)
Kaamilo		1, 2	
Kalauao (Kalauao EPD 2521)		1,2,3,4,5,6	
Kalauao Springs			
Kaonohi I 7774		1,2	2(4/2)
Manana* 7774			
Moanalua 9224		1(DFR),2,3(DFR)	
Newtown 2854		1,2,3	3(4/2)
Punanani		1,2(DFR),3,4,5,6	
Waiiau 2854		1,2,3	1(4/2)
			TOTAL

Order Completion Information

Creator *Rachelle Arada*
Filled by.
Sent Date
Sent Via
Tracking #

Sets	Bottles/Set	Qty	Bottle Type Description	Preservative	Method	Matrix	Sample Type	Comments	Lot #
1	3	3	Plastic 250ml – Ammonium Acetate	Ammonium Acetate	533 - E533 PFAS	Drinking W	Normal		
1	3	3	Plastic 250ml - Trizma	Trizma	537 1_DW_PREC - 537 1 PFAS	Drinking W	Normal		

Please notify your PM immediately if an error is found in shipment. When returning samples, please return all provided QC samples.

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-145388-1

SDG Number: PFAS - Kaamilo Wells P1/P2

Login Number: 145388

List Number: 1

Creator: Ngo, Theodore

List Source: Eurofins Eaton Analytical Pomona

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