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ANALYTICAL REPORT

PREPARED FOR

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City & County of Honolulu
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JOB DESCRIPTION

RED-HILL
PFAS: Ka'amilo Wells P1

JOB NUMBER

380-210988-1

Eurofins 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 Drinking Water and Wastewater West, 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
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Definitions/Glossary

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

Job ID: 380-210988-1
SDG: PFAS: Ka'amilo Wells P1

Qualifiers

LCMS

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

Glossary

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

Case Narrative

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

Job ID: 380-210988-1

Job ID: 380-210988-1

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Job Narrative 380-210988-1

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

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

Receipt

The samples were received on 4/29/2026 9:47 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 3.6°C.

PFAS

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

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Detection Summary

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

Job ID: 380-210988-1
SDG: PFAS: Ka'amilo Wells P1

Client Sample ID: Ka'amilo Wells P1 (331-031-WL008)
PWSID Number: HI0000331

Lab Sample ID: 380-210988-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanesulfonic acid (PFBS)	3.1		2.0	ng/L	1		533	Total/NA
Perfluoroheptanoic acid (PFHpA)	2.0		2.0	ng/L	1		533	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	3.7		2.0	ng/L	1		533	Total/NA
Perfluorohexanoic acid (PFHxA)	3.8		2.0	ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	5.1		2.0	ng/L	1		533	Total/NA
Perfluorooctanoic acid (PFOA)	3.9		2.0	ng/L	1		533	Total/NA
Perfluoropentanoic acid (PFPeA)	4.0		2.0	ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	5.7		2.0	ng/L	1		EPA 537.1 V2	Total/NA
Perfluorohexanoic acid (PFHxA)	4.8		2.0	ng/L	1		EPA 537.1 V2	Total/NA
Perfluorooctanoic acid (PFOA)	4.7		2.0	ng/L	1		EPA 537.1 V2	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	4.3		2.0	ng/L	1		EPA 537.1 V2	Total/NA
Perfluorobutanesulfonic acid (PFBS)	3.8		2.0	ng/L	1		EPA 537.1 V2	Total/NA
Perfluoroheptanoic acid (PFHpA)	2.3		2.0	ng/L	1		EPA 537.1 V2	Total/NA

Client Sample ID: FB: Ka'amilo Wells P1 (331-031-WL008)
PWSID Number: HI0000331

Lab Sample ID: 380-210988-2

No Detections.

This Detection Summary does not include radiochemical test results.

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Client Sample Results

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

Job ID: 380-210988-1
SDG: PFAS: Ka'amilo Wells P1

Client Sample ID: Ka'amilo Wells P1 (331-031-WL008)

Lab Sample ID: 380-210988-1

Date Collected: 04/27/26 12:23

Matrix: Water

Date Received: 04/29/26 09:47

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 18:59	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 18:59	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 18:59	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 18:59	1
Perfluorobutanesulfonic acid (PFBS)	3.1		2.0	ng/L		05/06/26 06:42	05/06/26 18:59	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 18:59	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 18:59	1
Perfluoroheptanoic acid (PFHpA)	2.0		2.0	ng/L		05/06/26 06:42	05/06/26 18:59	1
Perfluorohexanesulfonic acid (PFHxS)	3.7		2.0	ng/L		05/06/26 06:42	05/06/26 18:59	1
Perfluorohexanoic acid (PFHxA)	3.8		2.0	ng/L		05/06/26 06:42	05/06/26 18:59	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 18:59	1
Perfluorooctanesulfonic acid (PFOS)	5.1		2.0	ng/L		05/06/26 06:42	05/06/26 18:59	1
Perfluorooctanoic acid (PFOA)	3.9		2.0	ng/L		05/06/26 06:42	05/06/26 18:59	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 18:59	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 18:59	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 18:59	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 18:59	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 18:59	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 18:59	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEA)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 18:59	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 18:59	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 18:59	1
Perfluoropentanoic acid (PFPeA)	4.0		2.0	ng/L		05/06/26 06:42	05/06/26 18:59	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 18:59	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 18:59	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	99		50 - 200			05/06/26 06:42	05/06/26 18:59	1
13C6 PFDA	106		50 - 200			05/06/26 06:42	05/06/26 18:59	1
13C5 PFHxA	104		50 - 200			05/06/26 06:42	05/06/26 18:59	1
13C4 PFHpA	109		50 - 200			05/06/26 06:42	05/06/26 18:59	1
13C8 PFOA	104		50 - 200			05/06/26 06:42	05/06/26 18:59	1
13C9 PFNA	105		50 - 200			05/06/26 06:42	05/06/26 18:59	1
13C7 PFUnA	97		50 - 200			05/06/26 06:42	05/06/26 18:59	1
13C2 PFDoA	97		50 - 200			05/06/26 06:42	05/06/26 18:59	1
13C4 PFBA	106		50 - 200			05/06/26 06:42	05/06/26 18:59	1
13C5 PFPeA	114		50 - 200			05/06/26 06:42	05/06/26 18:59	1
13C3 PFBS	115		50 - 200			05/06/26 06:42	05/06/26 18:59	1

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Client Sample Results

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

Job ID: 380-210988-1
SDG: PFAS: Ka'amilo Wells P1

Client Sample ID: Ka'amilo Wells P1 (331-031-WL008)

Lab Sample ID: 380-210988-1

Date Collected: 04/27/26 12:23

Matrix: Water

Date Received: 04/29/26 09:47

PWSID Number: HI0000331

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFHxS	117		50 - 200	05/06/26 06:42	05/06/26 18:59	1
13C8 PFOS	112		50 - 200	05/06/26 06:42	05/06/26 18:59	1
13C2-4:2-FTS	134		50 - 200	05/06/26 06:42	05/06/26 18:59	1
13C2-6:2-FTS	112		50 - 200	05/06/26 06:42	05/06/26 18:59	1
13C2-8:2-FTS	103		50 - 200	05/06/26 06:42	05/06/26 18:59	1

Method: EPA 537.1 V2 - EPA 537.1 Ver. 2.0 March 2020

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		04/30/26 01:34	04/30/26 13:48	1
Perfluorooctanesulfonic acid (PFOS)	5.7		2.0	ng/L		04/30/26 01:34	04/30/26 13:48	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		04/30/26 01:34	04/30/26 13:48	1
N-methylperfluorooctanesulfonamide cetic acid (NMeFOSAA)	<2.0		2.0	ng/L		04/30/26 01:34	04/30/26 13:48	1
N-ethylperfluorooctanesulfonamide acetic acid (NEtFOSAA)	<2.0		2.0	ng/L		04/30/26 01:34	04/30/26 13:48	1
Perfluorohexanoic acid (PFHxA)	4.8		2.0	ng/L		04/30/26 01:34	04/30/26 13:48	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		04/30/26 01:34	04/30/26 13:48	1
Perfluorooctanoic acid (PFOA)	4.7		2.0	ng/L		04/30/26 01:34	04/30/26 13:48	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		04/30/26 01:34	04/30/26 13:48	1
Perfluorohexanesulfonic acid (PFHxS)	4.3		2.0	ng/L		04/30/26 01:34	04/30/26 13:48	1
Perfluorobutanesulfonic acid (PFBS)	3.8		2.0	ng/L		04/30/26 01:34	04/30/26 13:48	1
Perfluoroheptanoic acid (PFHpA)	2.3		2.0	ng/L		04/30/26 01:34	04/30/26 13:48	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		04/30/26 01:34	04/30/26 13:48	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		04/30/26 01:34	04/30/26 13:48	1
Perfluorotridecanoic acid (PFTDA)	<2.0		2.0	ng/L		04/30/26 01:34	04/30/26 13:48	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		04/30/26 01:34	04/30/26 13:48	1
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		04/30/26 01:34	04/30/26 13:48	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		04/30/26 01:34	04/30/26 13:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	115		70 - 130	04/30/26 01:34	04/30/26 13:48	1
13C2 PFHxA	115		70 - 130	04/30/26 01:34	04/30/26 13:48	1
13C2 PFDA	106		70 - 130	04/30/26 01:34	04/30/26 13:48	1
13C3-GenX	115		70 - 130	04/30/26 01:34	04/30/26 13:48	1

Client Sample ID: FB: Ka'amilo Wells P1 (331-031-WL008)

Lab Sample ID: 380-210988-2

Date Collected: 04/27/26 12:23

Matrix: Water

Date Received: 04/29/26 09:47

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 19:20	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 19:20	1

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Client Sample Results

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

Job ID: 380-210988-1
SDG: PFAS: Ka'amilo Wells P1

Client Sample ID: FB: Ka'amilo Wells P1 (331-031-WL008)

Lab Sample ID: 380-210988-2

Date Collected: 04/27/26 12:23

Matrix: Water

Date Received: 04/29/26 09:47

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 19:20	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 19:20	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 19:20	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 19:20	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 19:20	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 19:20	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 19:20	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 19:20	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 19:20	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 19:20	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 19:20	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 19:20	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 19:20	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 19:20	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 19:20	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 19:20	1
Nonafluoro-3,6-dioxahexanoic acid (NFDHA)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 19:20	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 19:20	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 19:20	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 19:20	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 19:20	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 19:20	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		05/06/26 06:42	05/06/26 19:20	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	99		50 - 200	05/06/26 06:42	05/06/26 19:20	1
13C6 PFDA	107		50 - 200	05/06/26 06:42	05/06/26 19:20	1
13C5 PFHxA	104		50 - 200	05/06/26 06:42	05/06/26 19:20	1
13C4 PFHpA	107		50 - 200	05/06/26 06:42	05/06/26 19:20	1
13C8 PFOA	111		50 - 200	05/06/26 06:42	05/06/26 19:20	1
13C9 PFNA	108		50 - 200	05/06/26 06:42	05/06/26 19:20	1
13C7 PFUnA	101		50 - 200	05/06/26 06:42	05/06/26 19:20	1
13C2 PFDoA	105		50 - 200	05/06/26 06:42	05/06/26 19:20	1
13C4 PFBA	109		50 - 200	05/06/26 06:42	05/06/26 19:20	1
13C5 PFPeA	111		50 - 200	05/06/26 06:42	05/06/26 19:20	1
13C3 PFBS	111		50 - 200	05/06/26 06:42	05/06/26 19:20	1
13C3 PFHxS	115		50 - 200	05/06/26 06:42	05/06/26 19:20	1
13C8 PFOS	111		50 - 200	05/06/26 06:42	05/06/26 19:20	1
13C2-4:2-FTS	129		50 - 200	05/06/26 06:42	05/06/26 19:20	1
13C2-6:2-FTS	115		50 - 200	05/06/26 06:42	05/06/26 19:20	1
13C2-8:2-FTS	105		50 - 200	05/06/26 06:42	05/06/26 19:20	1

Client Sample Results

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

Job ID: 380-210988-1
SDG: PFAS: Ka'amilo Wells P1

Client Sample ID: FB: Ka'amilo Wells P1 (331-031-WL008)

Lab Sample ID: 380-210988-2

Date Collected: 04/27/26 12:23

Matrix: Water

Date Received: 04/29/26 09:47

PWSID Number: HI0000331

Method: EPA 537.1 V2 - EPA 537.1 Ver. 2.0 March 2020

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		04/30/26 01:34	04/30/26 13:57	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		04/30/26 01:34	04/30/26 13:57	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		04/30/26 01:34	04/30/26 13:57	1
N-methylperfluorooctanesulfonamide acetic acid (NMeFOSAA)	<2.0		2.0	ng/L		04/30/26 01:34	04/30/26 13:57	1
N-ethylperfluorooctanesulfonamide acetic acid (NEtFOSAA)	<2.0		2.0	ng/L		04/30/26 01:34	04/30/26 13:57	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		04/30/26 01:34	04/30/26 13:57	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		04/30/26 01:34	04/30/26 13:57	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		04/30/26 01:34	04/30/26 13:57	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		04/30/26 01:34	04/30/26 13:57	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		04/30/26 01:34	04/30/26 13:57	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		04/30/26 01:34	04/30/26 13:57	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		04/30/26 01:34	04/30/26 13:57	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		04/30/26 01:34	04/30/26 13:57	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		04/30/26 01:34	04/30/26 13:57	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		04/30/26 01:34	04/30/26 13:57	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<2.0		2.0	ng/L		04/30/26 01:34	04/30/26 13:57	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		04/30/26 01:34	04/30/26 13:57	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		04/30/26 01:34	04/30/26 13:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	109		70 - 130	04/30/26 01:34	04/30/26 13:57	1
13C2 PFHxA	107		70 - 130	04/30/26 01:34	04/30/26 13:57	1
13C2 PFDA	103		70 - 130	04/30/26 01:34	04/30/26 13:57	1
13C3-GenX	102		70 - 130	04/30/26 01:34	04/30/26 13:57	1

Action Limit Summary

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

Job ID: 380-210988-1
SDG: PFAS: Ka'amilo Wells P1

Client Sample ID: Ka'amilo Wells P1 (331-031-WL008)

Lab Sample ID: 380-210988-1

PWSID Number: HI0000331

Compliance Check

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

Analyte	Result	Qualifier	Unit	EPAMCL	RL	Method	Prep Type
				Limit			
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	3.7		ng/L	10	2.0	533	Total/NA
Perfluorononanoic acid (PFNA)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	5.1		ng/L	4	2.0	533	Total/NA
Perfluorooctanoic acid (PFOA)	3.9		ng/L	4	2.0	533	Total/NA
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		ng/L	10	2.0	EPA 537.1 V2	Total/NA
Perfluorooctanesulfonic acid (PFOS)	5.7		ng/L	4	2.0	EPA 537.1 V2	Total/NA
Perfluorooctanoic acid (PFOA)	4.7		ng/L	4	2.0	EPA 537.1 V2	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	4.3		ng/L	10	2.0	EPA 537.1 V2	Total/NA
Perfluorononanoic acid (PFNA)	<2.0		ng/L	10	2.0	EPA 537.1 V2	Total/NA

Client Sample ID: FB: Ka'amilo Wells P1 (331-031-WL008)

Lab Sample ID: 380-210988-2

PWSID Number: HI0000331

Compliance Check

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

Analyte	Result	Qualifier	Unit	EPAMCL	RL	Method	Prep Type
				Limit			
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorononanoic acid (PFNA)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	<2.0		ng/L	4	2.0	533	Total/NA
Perfluorooctanoic acid (PFOA)	<2.0		ng/L	4	2.0	533	Total/NA
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		ng/L	10	2.0	EPA 537.1 V2	Total/NA
Perfluorooctanesulfonic acid (PFOS)	<2.0		ng/L	4	2.0	EPA 537.1 V2	Total/NA
Perfluorooctanoic acid (PFOA)	<2.0		ng/L	4	2.0	EPA 537.1 V2	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	<2.0		ng/L	10	2.0	EPA 537.1 V2	Total/NA
Perfluorononanoic acid (PFNA)	<2.0		ng/L	10	2.0	EPA 537.1 V2	Total/NA

Surrogate Summary

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

Job ID: 380-210988-1
 SDG: PFAS: Ka'amilo Wells P1

Method: EPA 537.1 V2 - EPA 537.1 Ver. 2.0 March 2020

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		d5NEFOS (70-130)	PFHxA (70-130)	PFDA (70-130)	GenX (70-130)
380-210984-B-1-A MS	Matrix Spike	105	114	104	114
380-210984-C-1-A MSD	Matrix Spike Duplicate	107	115	104	117
380-210988-1	Ka'amilo Wells P1 (331-031-WL008)	115	115	106	115
380-210988-2	FB: Ka'amilo Wells P1 (331-031-WL008)	109	107	103	102
LCS 380-223996/21-A	Lab Control Sample	102	115	105	112
MBL 380-223996/19-A	Method Blank	102	118	106	112
MRL 380-223996/20-A	Lab Control Sample	109	113	103	110

Surrogate Legend

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



Isotope Dilution Summary

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

Job ID: 380-210988-1
 SDG: PFAS: Ka'amilo Wells P1

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

Matrix: Water

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	HFPODA (50-200)	C6PFDA (50-200)	13C5PHA (50-200)	C4PFHA (50-200)	C8PFOA (50-200)	C9PFNA (50-200)	13C7PUA (50-200)	PFD _o A (50-200)
380-210759-B-2-A MS	Matrix Spike	114	107	113	109	108	108	108	108
380-210759-C-2-A MSD	Matrix Spike Duplicate	124	119	128	125	121	121	120	118
380-210988-1	Ka'amilo Wells P1 (331-031-WL008)	99	106	104	109	104	105	97	97
380-210988-2	FB: Ka'amilo Wells P1 (331-031-WL008)	99	107	104	107	111	108	101	105
LCS 380-225187/22-A	Lab Control Sample	113	112	118	121	111	115	103	108
MBL 380-225187/20-A	Method Blank	102	107	105	110	110	109	106	107
MRL 380-225187/21-A	Lab Control Sample	114	110	119	118	117	114	109	116

		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)
380-210759-B-2-A MS	Matrix Spike	109	115	107	112	109	125	106	102
380-210759-C-2-A MSD	Matrix Spike Duplicate	122	124	119	122	117	135	115	108
380-210988-1	Ka'amilo Wells P1 (331-031-WL008)	106	114	115	117	112	134	112	103
380-210988-2	FB: Ka'amilo Wells P1 (331-031-WL008)	109	111	111	115	111	129	115	105
LCS 380-225187/22-A	Lab Control Sample	112	113	111	124	113	124	109	102
MBL 380-225187/20-A	Method Blank	110	108	112	113	114	123	111	101
MRL 380-225187/21-A	Lab Control Sample	113	114	117	121	117	134	117	99

Surrogate Legend

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

QC Sample Results

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

Job ID: 380-210988-1
SDG: PFAS: Ka'amilo Wells P1

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

Lab Sample ID: MBL 380-225187/20-A
Matrix: Water
Analysis Batch: 225362

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 225187

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.30		2.0	ng/L		05/06/26 06:42	05/06/26 16:30	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<0.30		2.0	ng/L		05/06/26 06:42	05/06/26 16:30	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0	ng/L		05/06/26 06:42	05/06/26 16:30	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<1.0		2.0	ng/L		05/06/26 06:42	05/06/26 16:30	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0	ng/L		05/06/26 06:42	05/06/26 16:30	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	ng/L		05/06/26 06:42	05/06/26 16:30	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	ng/L		05/06/26 06:42	05/06/26 16:30	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0	ng/L		05/06/26 06:42	05/06/26 16:30	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0	ng/L		05/06/26 06:42	05/06/26 16:30	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0	ng/L		05/06/26 06:42	05/06/26 16:30	1
Perfluorononanoic acid (PFNA)	<0.40		2.0	ng/L		05/06/26 06:42	05/06/26 16:30	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0	ng/L		05/06/26 06:42	05/06/26 16:30	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0	ng/L		05/06/26 06:42	05/06/26 16:30	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0	ng/L		05/06/26 06:42	05/06/26 16:30	1
Perfluorobutanoic acid (PFBA)	<0.69		2.0	ng/L		05/06/26 06:42	05/06/26 16:30	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.38		2.0	ng/L		05/06/26 06:42	05/06/26 16:30	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.37		2.0	ng/L		05/06/26 06:42	05/06/26 16:30	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<0.48		2.0	ng/L		05/06/26 06:42	05/06/26 16:30	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<0.47		2.0	ng/L		05/06/26 06:42	05/06/26 16:30	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<0.25		2.0	ng/L		05/06/26 06:42	05/06/26 16:30	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.46		2.0	ng/L		05/06/26 06:42	05/06/26 16:30	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.15		2.0	ng/L		05/06/26 06:42	05/06/26 16:30	1
Perfluoropentanoic acid (PFPeA)	<0.38		2.0	ng/L		05/06/26 06:42	05/06/26 16:30	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.36		2.0	ng/L		05/06/26 06:42	05/06/26 16:30	1
Perfluoropentanesulfonic acid (PFPeS)	<0.39		2.0	ng/L		05/06/26 06:42	05/06/26 16:30	1

Isotope Dilution	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	102		50 - 200	05/06/26 06:42	05/06/26 16:30	1
13C6 PFDA	107		50 - 200	05/06/26 06:42	05/06/26 16:30	1
13C5 PFHxA	105		50 - 200	05/06/26 06:42	05/06/26 16:30	1
13C4 PFHpA	110		50 - 200	05/06/26 06:42	05/06/26 16:30	1
13C8 PFOA	110		50 - 200	05/06/26 06:42	05/06/26 16:30	1
13C9 PFNA	109		50 - 200	05/06/26 06:42	05/06/26 16:30	1
13C7 PFUnA	106		50 - 200	05/06/26 06:42	05/06/26 16:30	1
13C2 PFDoA	107		50 - 200	05/06/26 06:42	05/06/26 16:30	1
13C4 PFBA	110		50 - 200	05/06/26 06:42	05/06/26 16:30	1
13C5 PFPeA	108		50 - 200	05/06/26 06:42	05/06/26 16:30	1
13C3 PFBS	112		50 - 200	05/06/26 06:42	05/06/26 16:30	1
13C3 PFHxS	113		50 - 200	05/06/26 06:42	05/06/26 16:30	1

Eurofins Pomona

QC Sample Results

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

Job ID: 380-210988-1
SDG: PFAS: Ka'amilo Wells P1

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

Lab Sample ID: MBL 380-225187/20-A
Matrix: Water
Analysis Batch: 225362

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 225187

<i>Isotope Dilution</i>	<i>MBL</i>	<i>MBL</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
	<i>%Recovery</i>	<i>Qualifier</i>				
13C8 PFOS	114		50 - 200	05/06/26 06:42	05/06/26 16:30	1
13C2-4:2-FTS	123		50 - 200	05/06/26 06:42	05/06/26 16:30	1
13C2-6:2-FTS	111		50 - 200	05/06/26 06:42	05/06/26 16:30	1
13C2-8:2-FTS	101		50 - 200	05/06/26 06:42	05/06/26 16:30	1

Lab Sample ID: LCS 380-225187/22-A
Matrix: Water
Analysis Batch: 225362

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 225187

<i>Analyte</i>	<i>Spike</i>	<i>LCS</i>	<i>LCS</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec</i>
	<i>Added</i>	<i>Result</i>	<i>Qualifier</i>				<i>Limits</i>
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	60.1	54.3		ng/L		90	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	60.1	53.0		ng/L		88	70 - 130
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	60.1	53.7		ng/L		89	70 - 130
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	60.1	54.7		ng/L		91	70 - 130
Perfluorobutanesulfonic acid (PFBS)	60.1	55.3		ng/L		92	70 - 130
Perfluorodecanoic acid (PFDA)	60.1	56.6		ng/L		94	70 - 130
Perfluorododecanoic acid (PFDoA)	60.1	54.4		ng/L		90	70 - 130
Perfluoroheptanoic acid (PFHpA)	60.1	56.2		ng/L		93	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	60.1	53.1		ng/L		88	70 - 130
Perfluorohexanoic acid (PFHxA)	60.1	53.1		ng/L		88	70 - 130
Perfluorononanoic acid (PFNA)	60.1	55.7		ng/L		93	70 - 130
Perfluorooctanesulfonic acid (PFOS)	60.1	56.3		ng/L		94	70 - 130
Perfluorooctanoic acid (PFOA)	60.1	55.2		ng/L		92	70 - 130
Perfluoroundecanoic acid (PFUnA)	60.1	58.4		ng/L		97	70 - 130
Perfluorobutanoic acid (PFBA)	60.1	54.0		ng/L		90	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	60.1	57.0		ng/L		95	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	60.1	58.6		ng/L		97	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	60.1	56.2		ng/L		93	70 - 130
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	60.1	54.7		ng/L		91	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	60.1	56.8		ng/L		94	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	60.1	56.7		ng/L		94	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	60.1	56.7		ng/L		94	70 - 130
Perfluoropentanoic acid (PFPeA)	60.1	57.1		ng/L		95	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	60.1	55.7		ng/L		93	70 - 130

QC Sample Results

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

Job ID: 380-210988-1
SDG: PFAS: Ka'amilo Wells P1

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

Lab Sample ID: LCS 380-225187/22-A

Matrix: Water

Analysis Batch: 225362

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 225187

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoropentanesulfonic acid (PFPeS)	60.1	51.0		ng/L		85	70 - 130
LCS LCS							
Isotope Dilution	%Recovery	Qualifier	Limits				
13C3 HFPO-DA	113		50 - 200				
13C6 PFDA	112		50 - 200				
13C5 PFHxA	118		50 - 200				
13C4 PFHpA	121		50 - 200				
13C8 PFOA	111		50 - 200				
13C9 PFNA	115		50 - 200				
13C7 PFUnA	103		50 - 200				
13C2 PFDoA	108		50 - 200				
13C4 PFBA	112		50 - 200				
13C5 PFPeA	113		50 - 200				
13C3 PFBS	111		50 - 200				
13C3 PFHxS	124		50 - 200				
13C8 PFOS	113		50 - 200				
13C2-4:2-FTS	124		50 - 200				
13C2-6:2-FTS	109		50 - 200				
13C2-8:2-FTS	102		50 - 200				

Lab Sample ID: MRL 380-225187/21-A

Matrix: Water

Analysis Batch: 225362

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 225187

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.00	1.92	J	ng/L		96	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	2.00	1.81	J	ng/L		90	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.00	1.77	J	ng/L		89	50 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.00	1.96	J	ng/L		98	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.00	1.87	J	ng/L		93	50 - 150
Perfluorodecanoic acid (PFDA)	2.00	1.92	J	ng/L		96	50 - 150
Perfluorododecanoic acid (PFDoA)	2.00	1.86	J	ng/L		93	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.00	2.02	J	ng/L		101	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.00	1.88	J	ng/L		94	50 - 150
Perfluorohexanoic acid (PFHxA)	2.00	1.83	J	ng/L		91	50 - 150
Perfluorononanoic acid (PFNA)	2.00	1.90	J	ng/L		95	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.00	1.87	J	ng/L		93	50 - 150
Perfluorooctanoic acid (PFOA)	2.00	1.88	J	ng/L		94	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.00	1.99	J	ng/L		99	50 - 150
Perfluorobutanoic acid (PFBA)	2.00	1.95	J	ng/L		97	50 - 150

Eurofins Pomona

QC Sample Results

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

Job ID: 380-210988-1
SDG: PFAS: Ka'amilo Wells P1

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

Lab Sample ID: MRL 380-225187/21-A

Matrix: Water

Analysis Batch: 225362

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 225187

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	2.00	2.08	J	ng/L		104	50 - 150
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	2.00	2.22	J	ng/L		111	50 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	2.00	2.20	J	ng/L		110	50 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2.00	1.82	J	ng/L		91	50 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	2.00	1.84	J	ng/L		92	50 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.00	1.98	J	ng/L		99	50 - 150
Perfluoro-4-methoxybutanoic acid (PFMBA)	2.00	1.96	J	ng/L		98	50 - 150
Perfluoropentanoic acid (PFPeA)	2.00	2.09	J	ng/L		104	50 - 150
Perfluoroheptanesulfonic acid (PFHpS)	2.00	1.97	J	ng/L		98	50 - 150
Perfluoropentanesulfonic acid (PFPeS)	2.00	2.00	J	ng/L		100	50 - 150

Isotope Dilution	MRL %Recovery	MRL Qualifier	MRL Limits
13C3 HFPO-DA	114		50 - 200
13C6 PFDA	110		50 - 200
13C5 PFHxA	119		50 - 200
13C4 PFHpA	118		50 - 200
13C8 PFOA	117		50 - 200
13C9 PFNA	114		50 - 200
13C7 PFUnA	109		50 - 200
13C2 PFDoA	116		50 - 200
13C4 PFBA	113		50 - 200
13C5 PFPeA	114		50 - 200
13C3 PFBS	117		50 - 200
13C3 PFHxS	121		50 - 200
13C8 PFOS	117		50 - 200
13C2-4:2-FTS	134		50 - 200
13C2-6:2-FTS	117		50 - 200
13C2-8:2-FTS	99		50 - 200

Lab Sample ID: 380-210759-B-2-A MS

Matrix: Water

Analysis Batch: 225362

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 225187

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	55.6		ng/L		92	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		60.2	54.6		ng/L		91	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		60.2	56.8		ng/L		94	70 - 130

QC Sample Results

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

Job ID: 380-210988-1
SDG: PFAS: Ka'amilo Wells P1

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

Lab Sample ID: 380-210759-B-2-A MS

Client Sample ID: Matrix Spike

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 225362

Prep Batch: 225187

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier	Added	Result	Qualifier				
Hexafluoropropylene Oxide	<2.0		60.2	54.4		ng/L		90	70 - 130
Dimer Acid (HFPO-DA/GenX)									
Perfluorobutanesulfonic acid (PFBS)	<2.0		60.2	57.9		ng/L		96	70 - 130
Perfluorodecanoic acid (PFDA)	<2.0		60.2	57.1		ng/L		95	70 - 130
Perfluorododecanoic acid (PFDoA)	<2.0		60.2	56.6		ng/L		94	70 - 130
Perfluoroheptanoic acid (PFHpA)	<2.0		60.2	59.1		ng/L		98	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	<2.0		60.2	57.2		ng/L		95	70 - 130
Perfluorohexanoic acid (PFHxA)	<2.0		60.2	51.3		ng/L		85	70 - 130
Perfluorononanoic acid (PFNA)	<2.0		60.2	55.6		ng/L		92	70 - 130
Perfluorooctanesulfonic acid (PFOS)	<2.0		60.2	56.3		ng/L		93	70 - 130
Perfluorooctanoic acid (PFOA)	<2.0		60.2	55.1		ng/L		91	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		60.2	54.2		ng/L		90	70 - 130
Perfluorobutanoic acid (PFBA)	<2.0		60.2	58.4		ng/L		97	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		60.2	55.9		ng/L		93	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		60.2	56.6		ng/L		94	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		60.2	57.7		ng/L		96	70 - 130
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		60.2	55.6		ng/L		92	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		60.2	56.8		ng/L		94	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		60.2	59.9		ng/L		99	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		60.2	54.4		ng/L		90	70 - 130
Perfluoropentanoic acid (PFPeA)	<2.0		60.2	59.2		ng/L		98	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		60.2	56.7		ng/L		94	70 - 130
Perfluoropentanesulfonic acid (PFPeS)	<2.0		60.2	54.0		ng/L		90	70 - 130

Isotope Dilution	MS MS		Limits
	%Recovery	Qualifier	
13C3 HFPO-DA	114		50 - 200
13C6 PFDA	107		50 - 200
13C5 PFHxA	113		50 - 200
13C4 PFHpA	109		50 - 200
13C8 PFOA	108		50 - 200
13C9 PFNA	108		50 - 200
13C7 PFUnA	108		50 - 200
13C2 PFDoA	108		50 - 200
13C4 PFBA	109		50 - 200
13C5 PFPeA	115		50 - 200
13C3 PFBS	107		50 - 200
13C3 PFHxS	112		50 - 200
13C8 PFOS	109		50 - 200

QC Sample Results

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

Job ID: 380-210988-1
SDG: PFAS: Ka'amilo Wells P1

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

Lab Sample ID: 380-210759-B-2-A MS

Matrix: Water

Analysis Batch: 225362

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 225187

<i>Isotope Dilution</i>	<i>MS MS</i>	<i>Qualifier</i>	<i>Limits</i>
<i>%Recovery</i>			
13C2-4:2-FTS	125		50 - 200
13C2-6:2-FTS	106		50 - 200
13C2-8:2-FTS	102		50 - 200

Lab Sample ID: 380-210759-C-2-A MSD

Matrix: Water

Analysis Batch: 225362

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 225187

<i>Analyte</i>	<i>Sample Result</i>	<i>Sample Qualifier</i>	<i>Spike Added</i>	<i>MSD Result</i>	<i>MSD Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec Limits</i>	<i>RPD</i>	<i>RPD Limit</i>
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		60.2	57.0		ng/L		95	70 - 130	3	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		60.2	56.3		ng/L		93	70 - 130	3	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		60.2	55.0		ng/L		91	70 - 130	3	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		60.2	55.6		ng/L		92	70 - 130	2	30
Perfluorobutanesulfonic acid (PFBS)	<2.0		60.2	56.6		ng/L		94	70 - 130	2	30
Perfluorodecanoic acid (PFDA)	<2.0		60.2	57.4		ng/L		95	70 - 130	0	30
Perfluorododecanoic acid (PFDoA)	<2.0		60.2	56.6		ng/L		94	70 - 130	0	30
Perfluoroheptanoic acid (PFHpA)	<2.0		60.2	57.0		ng/L		95	70 - 130	4	30
Perfluorohexanesulfonic acid (PFHxS)	<2.0		60.2	57.3		ng/L		95	70 - 130	0	30
Perfluorohexanoic acid (PFHxA)	<2.0		60.2	54.0		ng/L		90	70 - 130	5	30
Perfluorononanoic acid (PFNA)	<2.0		60.2	56.4		ng/L		94	70 - 130	1	30
Perfluorooctanesulfonic acid (PFOS)	<2.0		60.2	58.5		ng/L		97	70 - 130	4	30
Perfluorooctanoic acid (PFOA)	<2.0		60.2	55.2		ng/L		92	70 - 130	0	30
Perfluoroundecanoic acid (PFUnA)	<2.0		60.2	55.3		ng/L		92	70 - 130	2	30
Perfluorobutanoic acid (PFBA)	<2.0		60.2	56.0		ng/L		93	70 - 130	4	30
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		60.2	57.2		ng/L		95	70 - 130	2	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		60.2	59.1		ng/L		98	70 - 130	4	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		60.2	57.3		ng/L		95	70 - 130	1	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		60.2	50.7		ng/L		84	70 - 130	9	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		60.2	57.7		ng/L		96	70 - 130	2	30
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		60.2	57.2		ng/L		95	70 - 130	5	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		60.2	58.6		ng/L		97	70 - 130	7	30
Perfluoropentanoic acid (PFPeA)	<2.0		60.2	57.9		ng/L		96	70 - 130	2	30
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		60.2	58.6		ng/L		97	70 - 130	3	30
Perfluoropentanesulfonic acid (PFPeS)	<2.0		60.2	55.6		ng/L		92	70 - 130	3	30

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QC Sample Results

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

Job ID: 380-210988-1
SDG: PFAS: Ka'amilo Wells P1

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

Isotope Dilution	MSD MSD		Limits
	%Recovery	Qualifier	
13C3 HFPO-DA	124		50 - 200
13C6 PFDA	119		50 - 200
13C5 PFHxA	128		50 - 200
13C4 PFHpA	125		50 - 200
13C8 PFOA	121		50 - 200
13C9 PFNA	121		50 - 200
13C7 PFUnA	120		50 - 200
13C2 PFDoA	118		50 - 200
13C4 PFBA	122		50 - 200
13C5 PFPeA	124		50 - 200
13C3 PFBS	119		50 - 200
13C3 PFHxS	122		50 - 200
13C8 PFOS	117		50 - 200
13C2-4:2-FTS	135		50 - 200
13C2-6:2-FTS	115		50 - 200
13C2-8:2-FTS	108		50 - 200

Method: EPA 537.1 V2 - EPA 537.1 Ver. 2.0 March 2020

Lab Sample ID: MBL 380-223996/19-A
Matrix: Water
Analysis Batch: 224070

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 223996

Analyte	MBL MBL		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<1.0		2.0	ng/L		04/30/26 01:34	04/30/26 12:03	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0	ng/L		04/30/26 01:34	04/30/26 12:03	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0	ng/L		04/30/26 01:34	04/30/26 12:03	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<0.58		2.0	ng/L		04/30/26 01:34	04/30/26 12:03	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<0.42		2.0	ng/L		04/30/26 01:34	04/30/26 12:03	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0	ng/L		04/30/26 01:34	04/30/26 12:03	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	ng/L		04/30/26 01:34	04/30/26 12:03	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0	ng/L		04/30/26 01:34	04/30/26 12:03	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	ng/L		04/30/26 01:34	04/30/26 12:03	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0	ng/L		04/30/26 01:34	04/30/26 12:03	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0	ng/L		04/30/26 01:34	04/30/26 12:03	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0	ng/L		04/30/26 01:34	04/30/26 12:03	1
Perfluorononanoic acid (PFNA)	<0.40		2.0	ng/L		04/30/26 01:34	04/30/26 12:03	1
Perfluorotetradecanoic acid (PFTA)	<0.54		2.0	ng/L		04/30/26 01:34	04/30/26 12:03	1
Perfluorotridecanoic acid (PFTTrDA)	<0.36		2.0	ng/L		04/30/26 01:34	04/30/26 12:03	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<0.30		2.0	ng/L		04/30/26 01:34	04/30/26 12:03	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.30		2.0	ng/L		04/30/26 01:34	04/30/26 12:03	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0	ng/L		04/30/26 01:34	04/30/26 12:03	1

Surrogate	MBL MBL		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
d5-NEtFOSAA	102		70 - 130	04/30/26 01:34	04/30/26 12:03	1
13C2 PFHxA	118		70 - 130	04/30/26 01:34	04/30/26 12:03	1
13C2 PFDA	106		70 - 130	04/30/26 01:34	04/30/26 12:03	1

Eurofins Pomona

QC Sample Results

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

Job ID: 380-210988-1
SDG: PFAS: Ka'amilo Wells P1

Method: EPA 537.1 V2 - EPA 537.1 Ver. 2.0 March 2020 (Continued)

Lab Sample ID: MBL 380-223996/19-A
Matrix: Water
Analysis Batch: 224070

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 223996

<i>Surrogate</i>	<i>MBL</i>	<i>MBL</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C3-GenX	112	Qualifier	70 - 130	04/30/26 01:34	04/30/26 12:03	1

Lab Sample ID: LCS 380-223996/21-A
Matrix: Water
Analysis Batch: 224070

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 223996

<i>Analyte</i>	<i>Spike</i>	<i>LCS</i>	<i>LCS</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec</i>
<i>Analyte</i>	<i>Added</i>	<i>Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>Limits</i>
Hexafluoropropylene Oxide	25.0	26.0		ng/L		104	70 - 130
Dimer Acid (HFPO-DA/GenX)							
Perfluorooctanesulfonic acid (PFOS)	25.0	26.7		ng/L		107	70 - 130
Perfluoroundecanoic acid (PFUnA)	25.0	25.3		ng/L		101	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	25.0	24.4		ng/L		98	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	25.0	26.0		ng/L		104	70 - 130
Perfluorohexanoic acid (PFHxA)	25.0	26.7		ng/L		107	70 - 130
Perfluorododecanoic acid (PFDoA)	25.0	24.2		ng/L		97	70 - 130
Perfluorooctanoic acid (PFOA)	25.0	26.2		ng/L		105	70 - 130
Perfluorodecanoic acid (PFDA)	25.0	25.5		ng/L		102	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	25.0	28.2		ng/L		113	70 - 130
Perfluorobutanesulfonic acid (PFBS)	25.0	27.4		ng/L		109	70 - 130
Perfluoroheptanoic acid (PFHpA)	25.0	27.1		ng/L		108	70 - 130
Perfluorononanoic acid (PFNA)	25.0	25.7		ng/L		103	70 - 130
Perfluorotetradecanoic acid (PFTA)	25.0	22.2		ng/L		89	70 - 130
Perfluorotridecanoic acid (PFTrDA)	25.0	25.5		ng/L		102	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	25.0	26.9		ng/L		108	70 - 130
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	25.0	27.3		ng/L		109	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	25.0	25.3		ng/L		101	70 - 130

<i>Surrogate</i>	<i>LCS</i>	<i>LCS</i>	<i>Limits</i>
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
d5-NEtFOSAA	102		70 - 130
13C2 PFHxA	115		70 - 130
13C2 PFDA	105		70 - 130
13C3-GenX	112		70 - 130

QC Sample Results

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

Job ID: 380-210988-1
SDG: PFAS: Ka'amilo Wells P1

Method: EPA 537.1 V2 - EPA 537.1 Ver. 2.0 March 2020 (Continued)

Lab Sample ID: MRL 380-223996/20-A
Matrix: Water
Analysis Batch: 224070

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 223996

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.00	2.01	J	ng/L		101	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.00	2.34	J	ng/L		117	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.00	1.91	J	ng/L		96	50 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2.00	2.11	J	ng/L		105	50 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2.00	2.17	J	ng/L		109	50 - 150
Perfluorohexanoic acid (PFHxA)	2.00	2.04	J	ng/L		102	50 - 150
Perfluorododecanoic acid (PFDoA)	2.00	1.98	J	ng/L		99	50 - 150
Perfluorooctanoic acid (PFOA)	2.00	2.17	J	ng/L		108	50 - 150
Perfluorodecanoic acid (PFDA)	2.00	1.91	J	ng/L		96	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.00	2.10	J	ng/L		105	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.00	2.24	J	ng/L		112	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.00	2.00	J	ng/L		100	50 - 150
Perfluorononanoic acid (PFNA)	2.00	2.26	J	ng/L		113	50 - 150
Perfluorotetradecanoic acid (PFTA)	2.00	1.81	J	ng/L		91	50 - 150
Perfluorotridecanoic acid (PFTrDA)	2.00	2.06	J	ng/L		103	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	2.00	2.01	J	ng/L		101	50 - 150
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.00	2.05	J	ng/L		102	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.00	2.07	J	ng/L		104	50 - 150
		MRL	MRL				
Surrogate	%Recovery	Qualifier	Limits				
d5-NEtFOSAA	109		70 - 130				
13C2 PFHxA	113		70 - 130				
13C2 PFDA	103		70 - 130				
13C3-GenX	110		70 - 130				

Lab Sample ID: 380-210984-B-1-A MS
Matrix: Water
Analysis Batch: 224070

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 223996

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	26.1		ng/L		104	70 - 130
Perfluorooctanesulfonic acid (PFOS)	5.0		25.1	30.8		ng/L		103	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		25.1	25.5		ng/L		102	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		25.1	26.4		ng/L		105	70 - 130

Eurofins Pomona

QC Association Summary

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

Job ID: 380-210988-1
 SDG: PFAS: Ka'amilo Wells P1

LCMS

Prep Batch: 223996

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-210988-1	Ka'amilo Wells P1 (331-031-WL008)	Total/NA	Water	537.1 DW	
380-210988-2	FB: Ka'amilo Wells P1 (331-031-WL008)	Total/NA	Water	537.1 DW	
MBL 380-223996/19-A	Method Blank	Total/NA	Water	537.1 DW	
LCS 380-223996/21-A	Lab Control Sample	Total/NA	Water	537.1 DW	
MRL 380-223996/20-A	Lab Control Sample	Total/NA	Water	537.1 DW	
380-210984-B-1-A MS	Matrix Spike	Total/NA	Water	537.1 DW	
380-210984-C-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	537.1 DW	

Analysis Batch: 224070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-210988-1	Ka'amilo Wells P1 (331-031-WL008)	Total/NA	Water	EPA 537.1 V2	223996
380-210988-2	FB: Ka'amilo Wells P1 (331-031-WL008)	Total/NA	Water	EPA 537.1 V2	223996
MBL 380-223996/19-A	Method Blank	Total/NA	Water	EPA 537.1 V2	223996
LCS 380-223996/21-A	Lab Control Sample	Total/NA	Water	EPA 537.1 V2	223996
MRL 380-223996/20-A	Lab Control Sample	Total/NA	Water	EPA 537.1 V2	223996
380-210984-B-1-A MS	Matrix Spike	Total/NA	Water	EPA 537.1 V2	223996
380-210984-C-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	EPA 537.1 V2	223996

Prep Batch: 225187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-210988-1	Ka'amilo Wells P1 (331-031-WL008)	Total/NA	Water	533	
380-210988-2	FB: Ka'amilo Wells P1 (331-031-WL008)	Total/NA	Water	533	
MBL 380-225187/20-A	Method Blank	Total/NA	Water	533	
LCS 380-225187/22-A	Lab Control Sample	Total/NA	Water	533	
MRL 380-225187/21-A	Lab Control Sample	Total/NA	Water	533	
380-210759-B-2-A MS	Matrix Spike	Total/NA	Water	533	
380-210759-C-2-A MSD	Matrix Spike Duplicate	Total/NA	Water	533	

Analysis Batch: 225362

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-210988-1	Ka'amilo Wells P1 (331-031-WL008)	Total/NA	Water	533	225187
380-210988-2	FB: Ka'amilo Wells P1 (331-031-WL008)	Total/NA	Water	533	225187
MBL 380-225187/20-A	Method Blank	Total/NA	Water	533	225187
LCS 380-225187/22-A	Lab Control Sample	Total/NA	Water	533	225187
MRL 380-225187/21-A	Lab Control Sample	Total/NA	Water	533	225187
380-210759-B-2-A MS	Matrix Spike	Total/NA	Water	533	225187
380-210759-C-2-A MSD	Matrix Spike Duplicate	Total/NA	Water	533	225187

Lab Chronicle

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

Job ID: 380-210988-1
SDG: PFAS: Ka'amilo Wells P1

Client Sample ID: Ka'amilo Wells P1 (331-031-WL008)

Lab Sample ID: 380-210988-1

Date Collected: 04/27/26 12:23

Matrix: Water

Date Received: 04/29/26 09:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			225187	XTD8	EA POM	05/06/26 06:42
Total/NA	Analysis	533		1	225362	M7ML	EA POM	05/06/26 18:59
Total/NA	Prep	537.1 DW			223996	G9MN	EA POM	04/30/26 01:34
Total/NA	Analysis	EPA 537.1 V2		1	224070	M7ML	EA POM	04/30/26 13:48

Client Sample ID: FB: Ka'amilo Wells P1 (331-031-WL008)

Lab Sample ID: 380-210988-2

Date Collected: 04/27/26 12:23

Matrix: Water

Date Received: 04/29/26 09:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			225187	XTD8	EA POM	05/06/26 06:42
Total/NA	Analysis	533		1	225362	M7ML	EA POM	05/06/26 19:20
Total/NA	Prep	537.1 DW			223996	G9MN	EA POM	04/30/26 01:34
Total/NA	Analysis	EPA 537.1 V2		1	224070	M7ML	EA POM	04/30/26 13:57

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 380-210988-1
SDG: PFAS: Ka'amilo Wells P1

Laboratory: Eurofins Pomona

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

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

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

Method Summary

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

Job ID: 380-210988-1
SDG: PFAS: Ka'amilo Wells P1

Method	Method Description	Protocol	Laboratory
533	Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water	EPA	EA POM
EPA 537.1 V2	EPA 537.1 Ver. 2.0 March 2020	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 Pomona, 941 Corporate Center Drive, Pomona, CA 91768-2642, TEL (626)386-1100



Sample Summary

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

Job ID: 380-210988-1
SDG: PFAS: Ka'amilo Wells P1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	PWSID Number
380-210988-1	Ka'amilo Wells P1 (331-031-WL008)	Water	04/27/26 12:23	04/29/26 09:47	HI0000331
380-210988-2	FB: Ka'amilo Wells P1 (331-031-WL008)	Water	04/27/26 12:23	04/29/26 09:47	HI0000331

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

Chain of Custody Record



Environmental Testline



380-210988 COC

Client Information
 Client Contact: **bailey** Lat PM: **Lopez, Maria**
 Phone: **+1 808 748 5840** E-Mail: **Maria.Lopez@et.euronisus.com**
 Company: **City & County of Honolulu** PWSID:
 Address: **630 South Beretania Street, Chemistry Lab**
 City: **Honolulu**
 State, Zip: **HI, 96843**
 Phone: **808-748-5840 (tel)**
 Email: **kiwamoto@hbws.org**
 Project Name: **RED-HILL/HBWS sites Event Desc: RUSH Weekly Red Hill**
 Site:

Analysis Requested
 Due Date Requested:
 TAT Requested (days): **RUSH**
 Compliance Project: No
 PO #: **C20525101 exp 05312023**
 WO #:
 Project #: **38001111**
 SSO#:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Preservation Code	Matrix (Hexane, Sp-Std, Oracetol)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Subcontract - 825 PAH Physic LL (EAL) + TICs	8015B_GRO_LL (MOD) GRO	8015B_GRO_LL_C8 - HNL Range - C10-C24/C24-C36/C8-C18	825.2_PRC - (MOD) 825plus PLUS TICs	837.1_DW_PRC - 837.1 Full List	533 - All Analytes	Carrier Tracking No(s)	State of Origin	Job #	COC No:
Ka'amilo Wells P1 (331-031-WL008)	27-Apr-2026	1223	G		Water												
FB: Ka'amilo Wells P1 (331-031-WL008)	27-Apr-2026	1223			Water												

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: **28Apr2026** Date/Time: **1400**
 Company: **HBWS** Company:
 Relinquished by: **W**
 Date/Time:
 Company:
 Custody Seals Intact: Yes No
 Custody Seal No.: **654 3.1A 4.0.3 3.6 9.1 F1004**
 Method of Shipment: **FED: 87A 8872 346**
 Date/Time: **4/28/26** Date/Time: **9:07**
 Company: **FEAP** Company:
 Date/Time: **9:07** Date/Time:
 Company: **FEAP** Company:



Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-210988-1
SDG Number: PFAS: Ka'amilo Wells P1

Login Number: 210988

List Number: 1

Creator: Gross, Drake

List Source: Eurofins Pomona

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

