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ANALYTICAL REPORT

PREPARED FOR

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

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JOB DESCRIPTION

RED-HILL
Weekly: Ka'amilo Wells P2

JOB NUMBER

380-220533-1

Eurofins Pomona

Job Notes

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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
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: RED-HILL

Job ID: 380-220533-1
SDG: Weekly: Ka'amilo Wells P2

Qualifiers

LCMS

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

Glossary

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

Case Narrative

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

Job ID: 380-220533-1

Job ID: 380-220533-1

Eurofins Pomona

Job Narrative 380-220533-1

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 6/18/2026 9:43 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 4.4°C.

PFAS

EPA 537.1 and EPA 533 are two distinct methods for the analysis of PFAS in drinking water. The analyses are conducted on differing instrumentation, with calibrations, extraction solvents and sample preservatives being dissimilar among the two methods. Therefore it is probable and not unexpected to see the methods having slight variations in analytical results: Ka'amilo Wells P2 (331-600-WL085) (380-220533-1). (XWB4)

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: 380-220533-1
SDG: Weekly: Ka'amilo Wells P2

Client Sample ID: KA'AMILO WELLS P2 (331-600-WL085)

Lab Sample ID: 380-220533-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanesulfonic acid (PFBS)	3.0		2.0	ng/L	1		533	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	3.5		2.0	ng/L	1		533	Total/NA
Perfluorohexanoic acid (PFHxA)	3.9		2.0	ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	4.5		2.0	ng/L	1		533	Total/NA
Perfluorooctanoic acid (PFOA)	4.0		2.0	ng/L	1		533	Total/NA
Perfluoropentanoic acid (PFPeA)	4.1		2.0	ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	4.8		2.0	ng/L	1		EPA 537.1 V2	Total/NA
Perfluorohexanoic acid (PFHxA)	4.5		2.0	ng/L	1		EPA 537.1 V2	Total/NA
Perfluorooctanoic acid (PFOA)	4.1		2.0	ng/L	1		EPA 537.1 V2	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	4.2		2.0	ng/L	1		EPA 537.1 V2	Total/NA
Perfluorobutanesulfonic acid (PFBS)	3.4		2.0	ng/L	1		EPA 537.1 V2	Total/NA
Perfluoroheptanoic acid (PFHpA)	2.1		2.0	ng/L	1		EPA 537.1 V2	Total/NA

Client Sample ID: FB: KA'AMILO WELLS P2 (331-600-WL085)

Lab Sample ID: 380-220533-2

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Pomona

Client Sample Results

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

Job ID: 380-220533-1
SDG: Weekly: Ka'amilo Wells P2

Client Sample ID: KA'AMILO WELLS P2 (331-600-WL085)

Lab Sample ID: 380-220533-1

Date Collected: 06/16/26 11:40

Matrix: Water

Date Received: 06/18/26 09:43

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafuoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:19	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:19	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:19	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:19	1
Perfluorobutanesulfonic acid (PFBS)	3.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:19	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:19	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:19	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:19	1
Perfluorohexanesulfonic acid (PFHxS)	3.5		2.0	ng/L		06/19/26 08:53	06/19/26 22:19	1
Perfluorohexanoic acid (PFHxA)	3.9		2.0	ng/L		06/19/26 08:53	06/19/26 22:19	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:19	1
Perfluorooctanesulfonic acid (PFOS)	4.5		2.0	ng/L		06/19/26 08:53	06/19/26 22:19	1
Perfluorooctanoic acid (PFOA)	4.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:19	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:19	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:19	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:19	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:19	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:19	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:19	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:19	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:19	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:19	1
Perfluoropentanoic acid (PFPeA)	4.1		2.0	ng/L		06/19/26 08:53	06/19/26 22:19	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:19	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:19	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	66		50 - 200	06/19/26 08:53	06/19/26 22:19	1
13C6 PFDA	63		50 - 200	06/19/26 08:53	06/19/26 22:19	1
13C5 PFHxA	72		50 - 200	06/19/26 08:53	06/19/26 22:19	1
13C4 PFHpA	72		50 - 200	06/19/26 08:53	06/19/26 22:19	1
13C8 PFOA	72		50 - 200	06/19/26 08:53	06/19/26 22:19	1
13C9 PFNA	73		50 - 200	06/19/26 08:53	06/19/26 22:19	1
13C7 PFUnA	70		50 - 200	06/19/26 08:53	06/19/26 22:19	1
13C2 PFDoA	77		50 - 200	06/19/26 08:53	06/19/26 22:19	1
13C4 PFBA	84		50 - 200	06/19/26 08:53	06/19/26 22:19	1
13C5 PFPeA	79		50 - 200	06/19/26 08:53	06/19/26 22:19	1
13C3 PFBS	106		50 - 200	06/19/26 08:53	06/19/26 22:19	1

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Client Sample Results

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

Job ID: 380-220533-1
SDG: Weekly: Ka'amilo Wells P2

Client Sample ID: KA'AMILO WELLS P2 (331-600-WL085)

Lab Sample ID: 380-220533-1

Date Collected: 06/16/26 11:40

Matrix: Water

Date Received: 06/18/26 09:43

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 PFHxS	108		50 - 200	06/19/26 08:53	06/19/26 22:19	1
13C8 PFOS	114		50 - 200	06/19/26 08:53	06/19/26 22:19	1
13C2-4:2-FTS	116		50 - 200	06/19/26 08:53	06/19/26 22:19	1
13C2-6:2-FTS	124		50 - 200	06/19/26 08:53	06/19/26 22:19	1
13C2-8:2-FTS	122		50 - 200	06/19/26 08:53	06/19/26 22:19	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		06/19/26 17:12	06/20/26 17:25	1
Perfluorooctanesulfonic acid (PFOS)	4.8		2.0	ng/L		06/19/26 17:12	06/20/26 17:25	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		06/19/26 17:12	06/20/26 17:25	1
N-methylperfluorooctanesulfonamide cetic acid (NMeFOSAA)	<2.0		2.0	ng/L		06/19/26 17:12	06/20/26 17:25	1
N-ethylperfluorooctanesulfonamide cetic acid (NEtFOSAA)	<2.0		2.0	ng/L		06/19/26 17:12	06/20/26 17:25	1
Perfluorohexanoic acid (PFHxA)	4.5		2.0	ng/L		06/19/26 17:12	06/20/26 17:25	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		06/19/26 17:12	06/20/26 17:25	1
Perfluorooctanoic acid (PFOA)	4.1		2.0	ng/L		06/19/26 17:12	06/20/26 17:25	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		06/19/26 17:12	06/20/26 17:25	1
Perfluorohexanesulfonic acid (PFHxS)	4.2		2.0	ng/L		06/19/26 17:12	06/20/26 17:25	1
Perfluorobutanesulfonic acid (PFBS)	3.4		2.0	ng/L		06/19/26 17:12	06/20/26 17:25	1
Perfluoroheptanoic acid (PFHpA)	2.1		2.0	ng/L		06/19/26 17:12	06/20/26 17:25	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		06/19/26 17:12	06/20/26 17:25	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		06/19/26 17:12	06/20/26 17:25	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		06/19/26 17:12	06/20/26 17:25	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		06/19/26 17:12	06/20/26 17:25	1
11-Chloroeicosfluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		06/19/26 17:12	06/20/26 17:25	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		06/19/26 17:12	06/20/26 17:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	105		70 - 130	06/19/26 17:12	06/20/26 17:25	1
13C2 PFHxA	104		70 - 130	06/19/26 17:12	06/20/26 17:25	1
13C2 PFDA	106		70 - 130	06/19/26 17:12	06/20/26 17:25	1
13C3-GenX	102		70 - 130	06/19/26 17:12	06/20/26 17:25	1

Client Sample ID: FB: KA'AMILO WELLS P2 (331-600-WL085)

Lab Sample ID: 380-220533-2

Date Collected: 06/16/26 11:40

Matrix: Water

Date Received: 06/18/26 09:43

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosfluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:30	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:30	1

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Client Sample Results

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

Job ID: 380-220533-1
SDG: Weekly: Ka'amilo Wells P2

Client Sample ID: FB: KA'AMILO WELLS P2 (331-600-WL085)

Lab Sample ID: 380-220533-2

Date Collected: 06/16/26 11:40

Matrix: Water

Date Received: 06/18/26 09:43

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		06/19/26 08:53	06/19/26 22:30	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:30	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:30	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:30	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:30	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:30	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:30	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:30	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:30	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:30	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:30	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:30	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:30	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:30	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:30	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:30	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:30	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:30	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:30	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:30	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:30	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:30	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		06/19/26 08:53	06/19/26 22:30	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	78		50 - 200	06/19/26 08:53	06/19/26 22:30	1
13C6 PFDA	85		50 - 200	06/19/26 08:53	06/19/26 22:30	1
13C5 PFHxA	87		50 - 200	06/19/26 08:53	06/19/26 22:30	1
13C4 PFHpA	88		50 - 200	06/19/26 08:53	06/19/26 22:30	1
13C8 PFOA	91		50 - 200	06/19/26 08:53	06/19/26 22:30	1
13C9 PFNA	98		50 - 200	06/19/26 08:53	06/19/26 22:30	1
13C7 PFUnA	92		50 - 200	06/19/26 08:53	06/19/26 22:30	1
13C2 PFDoA	91		50 - 200	06/19/26 08:53	06/19/26 22:30	1
13C4 PFBA	93		50 - 200	06/19/26 08:53	06/19/26 22:30	1
13C5 PFPeA	89		50 - 200	06/19/26 08:53	06/19/26 22:30	1
13C3 PFBS	107		50 - 200	06/19/26 08:53	06/19/26 22:30	1
13C3 PFHxS	108		50 - 200	06/19/26 08:53	06/19/26 22:30	1
13C8 PFOS	113		50 - 200	06/19/26 08:53	06/19/26 22:30	1
13C2-4:2-FTS	110		50 - 200	06/19/26 08:53	06/19/26 22:30	1
13C2-6:2-FTS	120		50 - 200	06/19/26 08:53	06/19/26 22:30	1
13C2-8:2-FTS	119		50 - 200	06/19/26 08:53	06/19/26 22:30	1

Client Sample Results

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

Job ID: 380-220533-1
SDG: Weekly: Ka'amilo Wells P2

Client Sample ID: FB: KA'AMILO WELLS P2 (331-600-WL085)

Lab Sample ID: 380-220533-2

Date Collected: 06/16/26 11:40

Matrix: Water

Date Received: 06/18/26 09:43

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		06/19/26 17:12	06/20/26 17:45	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		06/19/26 17:12	06/20/26 17:45	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		06/19/26 17:12	06/20/26 17:45	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		06/19/26 17:12	06/20/26 17:45	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		06/19/26 17:12	06/20/26 17:45	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		06/19/26 17:12	06/20/26 17:45	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		06/19/26 17:12	06/20/26 17:45	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		06/19/26 17:12	06/20/26 17:45	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		06/19/26 17:12	06/20/26 17:45	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		06/19/26 17:12	06/20/26 17:45	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		06/19/26 17:12	06/20/26 17:45	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		06/19/26 17:12	06/20/26 17:45	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		06/19/26 17:12	06/20/26 17:45	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		06/19/26 17:12	06/20/26 17:45	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		06/19/26 17:12	06/20/26 17:45	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		06/19/26 17:12	06/20/26 17:45	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		06/19/26 17:12	06/20/26 17:45	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		06/19/26 17:12	06/20/26 17:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	94		70 - 130			06/19/26 17:12	06/20/26 17:45	1
13C2 PFHxA	104		70 - 130			06/19/26 17:12	06/20/26 17:45	1
13C2 PFDA	110		70 - 130			06/19/26 17:12	06/20/26 17:45	1
13C3-GenX	96		70 - 130			06/19/26 17:12	06/20/26 17:45	1

Action Limit Summary

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

Job ID: 380-220533-1
SDG: Weekly: Ka'amilo Wells P2

Client Sample ID: KA'AMILO WELLS P2 (331-600-WL085)

Lab Sample ID: 380-220533-1

Compliance Check

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

Analyte	Result	Qualifier	Unit	EPAMCL Limit	RL	Method	Prep Type
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	3.5		ng/L	10	2.0	533	Total/NA
Perfluorononanoic acid (PFNA)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	4.5		ng/L	4	2.0	533	Total/NA
Perfluorooctanoic acid (PFOA)	4.0		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)	4.8		ng/L	4	2.0	EPA 537.1 V2	Total/NA
Perfluorooctanoic acid (PFOA)	4.1		ng/L	4	2.0	EPA 537.1 V2	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	4.2		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 P2 (331-600-WL085)

Lab Sample ID: 380-220533-2

Compliance Check

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

Analyte	Result	Qualifier	Unit	EPAMCL Limit	RL	Method	Prep Type
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorononanoic acid (PFNA)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	<2.0		ng/L	4	2.0	533	Total/NA
Perfluorooctanoic acid (PFOA)	<2.0		ng/L	4	2.0	533	Total/NA
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		ng/L	10	2.0	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: 380-220533-1
 SDG: Weekly: Ka'amilo Wells P2

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)
380-220371-B-1-A MSD	Matrix Spike Duplicate	98	106	105	103
380-220371-C-1-A MS	Matrix Spike	94	99	101	91
380-220533-1	KA'AMILO WELLS P2 (331-600-WL085)	105	104	106	102
380-220533-2	FB: KA'AMILO WELLS P2 (331-600-WL085)	94	104	110	96
LCS 380-235114/22-A	Lab Control Sample	97	88	100	90
MBL 380-235114/20-A	Method Blank	95	103	99	89
MRL 380-235114/21-A	Lab Control Sample	90	106	102	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: RED-HILL

Job ID: 380-220533-1
SDG: Weekly: Ka'amilo Wells P2

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

Matrix: Water

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	HFPODA (50-200)	C6PFDA (50-200)	13C5PHA (50-200)	C4PFHA (50-200)	C8PFOA (50-200)	C9PFNA (50-200)	13C7PUA (50-200)	PFDaA (50-200)
380-219760-B-6-B MS	Matrix Spike	67	80	76	75	78	84	89	89
380-219760-B-6-C MSD	Matrix Spike Duplicate	60	72	66	70	68	75	84	89
380-220533-1	KA'AMILO WELLS P2 (331-600-WL085)	66	63	72	72	72	73	70	77
380-220533-2	FB: KA'AMILO WELLS P2 (331-600-WL085)	78	85	87	88	91	98	92	91
LCS 380-234965/37-A	Lab Control Sample	84	94	90	90	94	102	103	99
MBL 380-234965/35-A	Method Blank	72	79	80	82	84	86	90	89
MRL 380-234965/36-A	Lab Control Sample	79	85	89	88	91	93	95	92

		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)
380-219760-B-6-B MS	Matrix Spike	78	76	110	110	113	107	119	121
380-219760-B-6-C MSD	Matrix Spike Duplicate	62	62	107	108	114	106	118	126
380-220533-1	KA'AMILO WELLS P2 (331-600-WL085)	84	79	106	108	114	116	124	122
380-220533-2	FB: KA'AMILO WELLS P2 (331-600-WL085)	93	89	107	108	113	110	120	119
LCS 380-234965/37-A	Lab Control Sample	93	88	108	109	113	100	112	122
MBL 380-234965/35-A	Method Blank	84	77	100	106	107	103	114	113
MRL 380-234965/36-A	Lab Control Sample	91	89	108	110	112	104	114	117

Surrogate Legend

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

QC Sample Results

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

Job ID: 380-220533-1
SDG: Weekly: Ka'amilo Wells P2

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

Lab Sample ID: MBL 380-234965/35-A
Matrix: Water
Analysis Batch: 235128

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 234965

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosfluoro-3-oxaundecan e-1-sulfonic acid (11Cl-PF3OUdS)	<0.30		2.0	ng/L		06/19/26 08:53	06/19/26 18:37	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<0.30		2.0	ng/L		06/19/26 08:53	06/19/26 18:37	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0	ng/L		06/19/26 08:53	06/19/26 18:37	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<1.0		2.0	ng/L		06/19/26 08:53	06/19/26 18:37	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0	ng/L		06/19/26 08:53	06/19/26 18:37	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	ng/L		06/19/26 08:53	06/19/26 18:37	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	ng/L		06/19/26 08:53	06/19/26 18:37	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0	ng/L		06/19/26 08:53	06/19/26 18:37	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0	ng/L		06/19/26 08:53	06/19/26 18:37	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0	ng/L		06/19/26 08:53	06/19/26 18:37	1
Perfluorononanoic acid (PFNA)	<0.40		2.0	ng/L		06/19/26 08:53	06/19/26 18:37	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0	ng/L		06/19/26 08:53	06/19/26 18:37	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0	ng/L		06/19/26 08:53	06/19/26 18:37	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0	ng/L		06/19/26 08:53	06/19/26 18:37	1
Perfluorobutanoic acid (PFBA)	<0.69		2.0	ng/L		06/19/26 08:53	06/19/26 18:37	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.38		2.0	ng/L		06/19/26 08:53	06/19/26 18:37	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.37		2.0	ng/L		06/19/26 08:53	06/19/26 18:37	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<0.48		2.0	ng/L		06/19/26 08:53	06/19/26 18:37	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<0.47		2.0	ng/L		06/19/26 08:53	06/19/26 18:37	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<0.25		2.0	ng/L		06/19/26 08:53	06/19/26 18:37	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.46		2.0	ng/L		06/19/26 08:53	06/19/26 18:37	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.15		2.0	ng/L		06/19/26 08:53	06/19/26 18:37	1
Perfluoropentanoic acid (PFPeA)	<0.38		2.0	ng/L		06/19/26 08:53	06/19/26 18:37	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.36		2.0	ng/L		06/19/26 08:53	06/19/26 18:37	1
Perfluoropentanesulfonic acid (PFPeS)	<0.39		2.0	ng/L		06/19/26 08:53	06/19/26 18:37	1

Isotope Dilution	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	72		50 - 200	06/19/26 08:53	06/19/26 18:37	1
13C6 PFDA	79		50 - 200	06/19/26 08:53	06/19/26 18:37	1
13C5 PFHxA	80		50 - 200	06/19/26 08:53	06/19/26 18:37	1
13C4 PFHpA	82		50 - 200	06/19/26 08:53	06/19/26 18:37	1
13C8 PFOA	84		50 - 200	06/19/26 08:53	06/19/26 18:37	1
13C9 PFNA	86		50 - 200	06/19/26 08:53	06/19/26 18:37	1
13C7 PFUnA	90		50 - 200	06/19/26 08:53	06/19/26 18:37	1
13C2 PFDoA	89		50 - 200	06/19/26 08:53	06/19/26 18:37	1
13C4 PFBA	84		50 - 200	06/19/26 08:53	06/19/26 18:37	1
13C5 PFPeA	77		50 - 200	06/19/26 08:53	06/19/26 18:37	1
13C3 PFBS	100		50 - 200	06/19/26 08:53	06/19/26 18:37	1
13C3 PFHxS	106		50 - 200	06/19/26 08:53	06/19/26 18:37	1

Eurofins Pomona

QC Sample Results

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

Job ID: 380-220533-1
SDG: Weekly: Ka'amilo Wells P2

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

Lab Sample ID: MBL 380-234965/35-A
Matrix: Water
Analysis Batch: 235128

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 234965

<i>Isotope Dilution</i>	<i>MBL %Recovery</i>	<i>MBL Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C8 PFOS	107		50 - 200	06/19/26 08:53	06/19/26 18:37	1
13C2-4:2-FTS	103		50 - 200	06/19/26 08:53	06/19/26 18:37	1
13C2-6:2-FTS	114		50 - 200	06/19/26 08:53	06/19/26 18:37	1
13C2-8:2-FTS	113		50 - 200	06/19/26 08:53	06/19/26 18:37	1

Lab Sample ID: LCS 380-234965/37-A
Matrix: Water
Analysis Batch: 235128

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 234965

<i>Analyte</i>	<i>Spike Added</i>	<i>LCS Result</i>	<i>LCS Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec Limits</i>
11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	60.2	52.9		ng/L		88	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	60.2	53.8		ng/L		89	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	60.2	50.4		ng/L		84	70 - 130
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	60.2	55.1		ng/L		92	70 - 130
Perfluorobutanesulfonic acid (PFBS)	60.2	54.3		ng/L		90	70 - 130
Perfluorodecanoic acid (PFDA)	60.2	58.1		ng/L		96	70 - 130
Perfluorododecanoic acid (PFDoA)	60.2	55.4		ng/L		92	70 - 130
Perfluoroheptanoic acid (PFHpA)	60.2	54.9		ng/L		91	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	60.2	53.4		ng/L		89	70 - 130
Perfluorohexanoic acid (PFHxA)	60.2	53.9		ng/L		89	70 - 130
Perfluorononanoic acid (PFNA)	60.2	53.4		ng/L		89	70 - 130
Perfluorooctanesulfonic acid (PFOS)	60.2	52.6		ng/L		87	70 - 130
Perfluorooctanoic acid (PFOA)	60.2	56.2		ng/L		93	70 - 130
Perfluoroundecanoic acid (PFUnA)	60.2	54.3		ng/L		90	70 - 130
Perfluorobutanoic acid (PFBA)	60.2	56.7		ng/L		94	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	60.2	55.6		ng/L		92	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	60.2	55.4		ng/L		92	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	60.2	55.6		ng/L		92	70 - 130
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	60.2	50.2		ng/L		83	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	60.2	53.7		ng/L		89	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	60.2	54.0		ng/L		90	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	60.2	54.5		ng/L		90	70 - 130
Perfluoropentanoic acid (PFPeA)	60.2	57.3		ng/L		95	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	60.2	53.4		ng/L		89	70 - 130

QC Sample Results

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

Job ID: 380-220533-1
SDG: Weekly: Ka'amilo Wells P2

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

Lab Sample ID: LCS 380-234965/37-A
Matrix: Water
Analysis Batch: 235128

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 234965

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoropentanesulfonic acid (PFPeS)	60.2	53.3		ng/L		88	70 - 130
LCS LCS							
Isotope Dilution	%Recovery	Qualifier	Limits				
13C3 HFPO-DA	84		50 - 200				
13C6 PFDA	94		50 - 200				
13C5 PFHxA	90		50 - 200				
13C4 PFHpA	90		50 - 200				
13C8 PFOA	94		50 - 200				
13C9 PFNA	102		50 - 200				
13C7 PFUnA	103		50 - 200				
13C2 PFDoA	99		50 - 200				
13C4 PFBA	93		50 - 200				
13C5 PFPeA	88		50 - 200				
13C3 PFBS	108		50 - 200				
13C3 PFHxS	109		50 - 200				
13C8 PFOS	113		50 - 200				
13C2-4:2-FTS	100		50 - 200				
13C2-6:2-FTS	112		50 - 200				
13C2-8:2-FTS	122		50 - 200				

Lab Sample ID: MRL 380-234965/36-A
Matrix: Water
Analysis Batch: 235128

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 234965

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.01	1.70	J	ng/L		84	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	2.01	1.79	J	ng/L		89	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.01	1.63	J	ng/L		81	50 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.01	1.81	J	ng/L		90	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.01	1.87	J	ng/L		93	50 - 150
Perfluorodecanoic acid (PFDA)	2.01	1.96	J	ng/L		98	50 - 150
Perfluorododecanoic acid (PFDoA)	2.01	1.82	J	ng/L		91	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.01	1.85	J	ng/L		92	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.01	1.73	J	ng/L		86	50 - 150
Perfluorohexanoic acid (PFHxA)	2.01	1.76	J	ng/L		88	50 - 150
Perfluorononanoic acid (PFNA)	2.01	1.81	J	ng/L		90	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.01	1.74	J	ng/L		87	50 - 150
Perfluorooctanoic acid (PFOA)	2.01	1.87	J	ng/L		93	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.01	1.69	J	ng/L		84	50 - 150
Perfluorobutanoic acid (PFBA)	2.01	2.06	J	ng/L		102	50 - 150

Eurofins Pomona

QC Sample Results

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

Job ID: 380-220533-1
SDG: Weekly: Ka'amilo Wells P2

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

Lab Sample ID: MRL 380-234965/36-A
Matrix: Water
Analysis Batch: 235128

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 234965

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	2.01	1.85	J	ng/L		92	50 - 150
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	2.01	2.00	J	ng/L		99	50 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	2.01	1.81	J	ng/L		90	50 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2.01	1.56	J	ng/L		77	50 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	2.01	1.78	J	ng/L		89	50 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.01	1.67	J	ng/L		83	50 - 150
Perfluoro-4-methoxybutanoic acid (PFMBA)	2.01	1.76	J	ng/L		88	50 - 150
Perfluoropentanoic acid (PFPeA)	2.01	2.00	J	ng/L		99	50 - 150
Perfluoroheptanesulfonic acid (PFHpS)	2.01	1.74	J	ng/L		87	50 - 150
Perfluoropentanesulfonic acid (PFPeS)	2.01	1.84	J	ng/L		92	50 - 150

Isotope Dilution	MRL %Recovery	MRL Qualifier	MRL Limits
13C3 HFPO-DA	79		50 - 200
13C6 PFDA	85		50 - 200
13C5 PFHxA	89		50 - 200
13C4 PFHpA	88		50 - 200
13C8 PFOA	91		50 - 200
13C9 PFNA	93		50 - 200
13C7 PFUnA	95		50 - 200
13C2 PFDoA	92		50 - 200
13C4 PFBA	91		50 - 200
13C5 PFPeA	89		50 - 200
13C3 PFBS	108		50 - 200
13C3 PFHxS	110		50 - 200
13C8 PFOS	112		50 - 200
13C2-4:2-FTS	104		50 - 200
13C2-6:2-FTS	114		50 - 200
13C2-8:2-FTS	117		50 - 200

Lab Sample ID: 380-219760-B-6-B MS
Matrix: Water
Analysis Batch: 235128

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 234965

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		60.1	53.5		ng/L		89	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		60.1	54.0		ng/L		90	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		60.1	52.6		ng/L		87	70 - 130

QC Sample Results

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

Job ID: 380-220533-1
SDG: Weekly: Ka'amilo Wells P2

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

Lab Sample ID: 380-219760-B-6-B MS
Matrix: Water
Analysis Batch: 235128

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 234965

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	*5-	60.1	55.7		ng/L		93	70 - 130
Perfluorobutanesulfonic acid (PFBS)	<2.0		60.1	55.8		ng/L		93	70 - 130
Perfluorodecanoic acid (PFDA)	<2.0		60.1	60.0		ng/L		100	70 - 130
Perfluorododecanoic acid (PFDoA)	<2.0		60.1	55.8		ng/L		93	70 - 130
Perfluoroheptanoic acid (PFHpA)	<2.0		60.1	56.2		ng/L		94	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	<2.0		60.1	56.8		ng/L		95	70 - 130
Perfluorohexanoic acid (PFHxA)	<2.0	*5-	60.1	54.8		ng/L		91	70 - 130
Perfluorononanoic acid (PFNA)	<2.0		60.1	55.1		ng/L		92	70 - 130
Perfluorooctanesulfonic acid (PFOS)	<2.0		60.1	54.9		ng/L		91	70 - 130
Perfluorooctanoic acid (PFOA)	<2.0		60.1	57.5		ng/L		96	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		60.1	54.9		ng/L		91	70 - 130
Perfluorobutanoic acid (PFBA)	<2.0	*5-	60.1	55.1		ng/L		92	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		60.1	55.5		ng/L		92	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		60.1	55.8		ng/L		93	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		60.1	55.5		ng/L		92	70 - 130
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0	*5-	60.1	47.5		ng/L		79	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		60.1	54.5		ng/L		91	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0	*5-	60.1	51.8		ng/L		86	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0	*5-	60.1	53.0		ng/L		88	70 - 130
Perfluoropentanoic acid (PFPeA)	<2.0	*5-	60.1	57.1		ng/L		95	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		60.1	54.8		ng/L		91	70 - 130
Perfluoropentanesulfonic acid (PFPeS)	<2.0		60.1	54.4		ng/L		90	70 - 130

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
13C3 HFPO-DA	67		50 - 200
13C6 PFDA	80		50 - 200
13C5 PFHxA	76		50 - 200
13C4 PFHpA	75		50 - 200
13C8 PFOA	78		50 - 200
13C9 PFNA	84		50 - 200
13C7 PFUnA	89		50 - 200
13C2 PFDoA	89		50 - 200
13C4 PFBA	78		50 - 200
13C5 PFPeA	76		50 - 200
13C3 PFBS	110		50 - 200
13C3 PFHxS	110		50 - 200
13C8 PFOS	113		50 - 200

QC Sample Results

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

Job ID: 380-220533-1
SDG: Weekly: Ka'amilo Wells P2

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

Lab Sample ID: 380-219760-B-6-B MS
Matrix: Water
Analysis Batch: 235128

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 234965

<i>Isotope Dilution</i>	<i>%Recovery</i>	<i>MS MS Qualifier</i>	<i>Limits</i>
13C2-4:2-FTS	107		50 - 200
13C2-6:2-FTS	119		50 - 200
13C2-8:2-FTS	121		50 - 200

Lab Sample ID: 380-219760-B-6-C MSD
Matrix: Water
Analysis Batch: 235128

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 234965

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		60.1	53.2		ng/L		88	70 - 130	1	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		60.1	53.6		ng/L		89	70 - 130	1	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		60.1	54.4		ng/L		91	70 - 130	3	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0	*5-	60.1	56.8		ng/L		94	70 - 130	2	30
Perfluorobutanesulfonic acid (PFBS)	<2.0		60.1	56.5		ng/L		94	70 - 130	1	30
Perfluorodecanoic acid (PFDA)	<2.0		60.1	61.3		ng/L		102	70 - 130	2	30
Perfluorododecanoic acid (PFDoA)	<2.0		60.1	57.9		ng/L		96	70 - 130	4	30
Perfluoroheptanoic acid (PFHpA)	<2.0		60.1	56.9		ng/L		95	70 - 130	1	30
Perfluorohexanesulfonic acid (PFHxS)	<2.0		60.1	57.2		ng/L		95	70 - 130	1	30
Perfluorohexanoic acid (PFHxA)	<2.0	*5-	60.1	57.1		ng/L		95	70 - 130	4	30
Perfluorononanoic acid (PFNA)	<2.0		60.1	57.1		ng/L		95	70 - 130	4	30
Perfluorooctanesulfonic acid (PFOS)	<2.0		60.1	55.2		ng/L		92	70 - 130	0	30
Perfluorooctanoic acid (PFOA)	<2.0		60.1	60.7		ng/L		101	70 - 130	5	30
Perfluoroundecanoic acid (PFUnA)	<2.0		60.1	56.2		ng/L		93	70 - 130	2	30
Perfluorobutanoic acid (PFBA)	<2.0	*5-	60.1	57.0		ng/L		95	70 - 130	3	30
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		60.1	56.0		ng/L		93	70 - 130	1	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		60.1	56.4		ng/L		94	70 - 130	1	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		60.1	57.5		ng/L		96	70 - 130	4	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0	*5-	60.1	46.9		ng/L		78	70 - 130	1	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		60.1	58.5		ng/L		97	70 - 130	7	30
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0	*5-	60.1	53.2		ng/L		88	70 - 130	3	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0	*5-	60.1	60.9		ng/L		101	70 - 130	14	30
Perfluoropentanoic acid (PFPeA)	<2.0	*5-	60.1	58.8		ng/L		98	70 - 130	3	30
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		60.1	55.1		ng/L		92	70 - 130	0	30
Perfluoropentanesulfonic acid (PFPeS)	<2.0		60.1	55.5		ng/L		92	70 - 130	2	30

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QC Sample Results

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

Job ID: 380-220533-1
SDG: Weekly: Ka'amilo Wells P2

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

Isotope Dilution	MSD MSD		Limits
	%Recovery	Qualifier	
13C3 HFPO-DA	60		50 - 200
13C6 PFDA	72		50 - 200
13C5 PFHxA	66		50 - 200
13C4 PFHpA	70		50 - 200
13C8 PFOA	68		50 - 200
13C9 PFNA	75		50 - 200
13C7 PFUnA	84		50 - 200
13C2 PFDoA	89		50 - 200
13C4 PFBA	62		50 - 200
13C5 PFPeA	62		50 - 200
13C3 PFBS	107		50 - 200
13C3 PFHxS	108		50 - 200
13C8 PFOS	114		50 - 200
13C2-4:2-FTS	106		50 - 200
13C2-6:2-FTS	118		50 - 200
13C2-8:2-FTS	126		50 - 200

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

Lab Sample ID: MBL 380-235114/20-A
Matrix: Water
Analysis Batch: 235169

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 235114

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		06/19/26 17:12	06/20/26 15:11	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0	ng/L		06/19/26 17:12	06/20/26 15:11	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0	ng/L		06/19/26 17:12	06/20/26 15:11	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<0.58		2.0	ng/L		06/19/26 17:12	06/20/26 15:11	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<0.42		2.0	ng/L		06/19/26 17:12	06/20/26 15:11	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0	ng/L		06/19/26 17:12	06/20/26 15:11	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	ng/L		06/19/26 17:12	06/20/26 15:11	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0	ng/L		06/19/26 17:12	06/20/26 15:11	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	ng/L		06/19/26 17:12	06/20/26 15:11	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0	ng/L		06/19/26 17:12	06/20/26 15:11	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0	ng/L		06/19/26 17:12	06/20/26 15:11	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0	ng/L		06/19/26 17:12	06/20/26 15:11	1
Perfluorononanoic acid (PFNA)	<0.40		2.0	ng/L		06/19/26 17:12	06/20/26 15:11	1
Perfluorotetradecanoic acid (PFTA)	<0.54		2.0	ng/L		06/19/26 17:12	06/20/26 15:11	1
Perfluorotridecanoic acid (PFTrDA)	<0.36		2.0	ng/L		06/19/26 17:12	06/20/26 15:11	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<0.30		2.0	ng/L		06/19/26 17:12	06/20/26 15:11	1
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.30		2.0	ng/L		06/19/26 17:12	06/20/26 15:11	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0	ng/L		06/19/26 17:12	06/20/26 15:11	1
Surrogate	MBL MBL		Limits			Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier						
d5-NEtFOSAA	95		70 - 130			06/19/26 17:12	06/20/26 15:11	1
13C2 PFHxA	103		70 - 130			06/19/26 17:12	06/20/26 15:11	1
13C2 PFDA	99		70 - 130			06/19/26 17:12	06/20/26 15:11	1

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QC Sample Results

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

Job ID: 380-220533-1
SDG: Weekly: Ka'amilo Wells P2

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

Lab Sample ID: MBL 380-235114/20-A
Matrix: Water
Analysis Batch: 235169

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 235114

<i>Surrogate</i>	<i>MBL</i>	<i>MBL</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C3-GenX	89	Qualifier	70 - 130	06/19/26 17:12	06/20/26 15:11	1

Lab Sample ID: LCS 380-235114/22-A
Matrix: Water
Analysis Batch: 235169

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 235114

<i>Analyte</i>	<i>Spike</i>	<i>LCS</i>	<i>LCS</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec</i>	<i>Limits</i>
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>					
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	25.1	23.5	ng/L	94	70 - 130			
Perfluorooctanesulfonic acid (PFOS)	25.1	25.0	ng/L	100	70 - 130			
Perfluoroundecanoic acid (PFUnA)	25.1	24.9	ng/L	99	70 - 130			
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	25.1	25.4	ng/L	101	70 - 130			
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	25.1	26.1	ng/L	104	70 - 130			
Perfluorohexanoic acid (PFHxA)	25.1	26.1	ng/L	104	70 - 130			
Perfluorododecanoic acid (PFDoA)	25.1	24.4	ng/L	97	70 - 130			
Perfluorooctanoic acid (PFOA)	25.1	25.3	ng/L	101	70 - 130			
Perfluorodecanoic acid (PFDA)	25.1	25.4	ng/L	101	70 - 130			
Perfluorohexanesulfonic acid (PFHxS)	25.1	25.1	ng/L	100	70 - 130			
Perfluorobutanesulfonic acid (PFBS)	25.1	25.9	ng/L	103	70 - 130			
Perfluoroheptanoic acid (PFHpA)	25.1	25.6	ng/L	102	70 - 130			
Perfluorononanoic acid (PFNA)	25.1	25.4	ng/L	101	70 - 130			
Perfluorotetradecanoic acid (PFTA)	25.1	21.1	ng/L	84	70 - 130			
Perfluorotridecanoic acid (PFTrDA)	25.1	24.8	ng/L	99	70 - 130			
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	25.1	26.1	ng/L	104	70 - 130			
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	25.1	24.9	ng/L	99	70 - 130			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	25.1	25.4	ng/L	101	70 - 130			
<i>Surrogate</i>	<i>LCS</i>	<i>LCS</i>	<i>Limits</i>					
d5-NEtFOSAA	97	Qualifier	70 - 130					
13C2 PFHxA	88	Qualifier	70 - 130					
13C2 PFDA	100	Qualifier	70 - 130					
13C3-GenX	90	Qualifier	70 - 130					

QC Sample Results

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

Job ID: 380-220533-1
SDG: Weekly: Ka'amilo Wells P2

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

Lab Sample ID: MRL 380-235114/21-A
Matrix: Water
Analysis Batch: 235169

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 235114

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.01	1.76	J	ng/L		87	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.01	1.99	J	ng/L		99	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.01	2.06	J	ng/L		103	50 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2.01	1.89	J	ng/L		94	50 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2.01	2.08	J	ng/L		104	50 - 150
Perfluorohexanoic acid (PFHxA)	2.01	2.09	J	ng/L		104	50 - 150
Perfluorododecanoic acid (PFDoA)	2.01	1.96	J	ng/L		97	50 - 150
Perfluorooctanoic acid (PFOA)	2.01	2.02	J	ng/L		101	50 - 150
Perfluorodecanoic acid (PFDA)	2.01	2.07	J	ng/L		103	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.01	2.09	J	ng/L		104	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.01	1.98	J	ng/L		99	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.01	2.11	J	ng/L		105	50 - 150
Perfluorononanoic acid (PFNA)	2.01	2.16	J	ng/L		108	50 - 150
Perfluorotetradecanoic acid (PFTA)	2.01	1.76	J	ng/L		88	50 - 150
Perfluorotridecanoic acid (PFTrDA)	2.01	2.01	J	ng/L		100	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	2.01	2.09	J	ng/L		104	50 - 150
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.01	1.99	J	ng/L		99	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.01	1.93	J	ng/L		96	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
d5-NEtFOSAA	90		70 - 130
13C2 PFHxA	106		70 - 130
13C2 PFDA	102		70 - 130
13C3-GenX	90		70 - 130

Lab Sample ID: 380-220371-B-1-A MSD
Matrix: Water
Analysis Batch: 235169

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 235114

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		25.1	26.5		ng/L		106	70 - 130	7	30
Perfluorooctanesulfonic acid (PFOS)	<2.0		25.1	27.1		ng/L		106	70 - 130	0	30
Perfluoroundecanoic acid (PFUnA)	<2.0		25.1	25.9		ng/L		103	70 - 130	3	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		25.1	26.3		ng/L		105	70 - 130	5	30

Eurofins Pomona

QC Sample Results

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

Job ID: 380-220533-1
SDG: Weekly: Ka'amilo Wells P2

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

Lab Sample ID: 380-220371-B-1-A MSD

Matrix: Water

Analysis Batch: 235169

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 235114

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		25.1	26.8		ng/L		107	70 - 130	6	30
Perfluorohexanoic acid (PFHxA)	<2.0		25.1	28.5		ng/L		114	70 - 130	6	30
Perfluorododecanoic acid (PFDoA)	<2.0		25.1	26.3		ng/L		105	70 - 130	7	30
Perfluorooctanoic acid (PFOA)	<2.0		25.1	28.4		ng/L		110	70 - 130	8	30
Perfluorodecanoic acid (PFDA)	<2.0		25.1	27.5		ng/L		109	70 - 130	5	30
Perfluorohexanesulfonic acid (PFHxS)	<2.0		25.1	27.7		ng/L		110	70 - 130	2	30
Perfluorobutanesulfonic acid (PFBS)	<2.0		25.1	27.8		ng/L		111	70 - 130	1	30
Perfluoroheptanoic acid (PFHpA)	<2.0		25.1	27.1		ng/L		108	70 - 130	3	30
Perfluorononanoic acid (PFNA)	<2.0		25.1	28.1		ng/L		112	70 - 130	8	30
Perfluorotetradecanoic acid (PFTA)	<2.0		25.1	23.7		ng/L		94	70 - 130	2	30
Perfluorotridecanoic acid (PFTrDA)	<2.0		25.1	26.5		ng/L		106	70 - 130	7	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		25.1	27.5		ng/L		109	70 - 130	1	30
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		25.1	27.8		ng/L		111	70 - 130	5	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		25.1	28.0		ng/L		112	70 - 130	7	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
d5-NEtFOSAA	98		70 - 130
13C2 PFHxA	106		70 - 130
13C2 PFDA	105		70 - 130
13C3-GenX	103		70 - 130

Lab Sample ID: 380-220371-C-1-A MS

Matrix: Water

Analysis Batch: 235169

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 235114

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		25.2	24.6		ng/L		98	70 - 130
Perfluorooctanesulfonic acid (PFOS)	<2.0		25.2	27.2		ng/L		106	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		25.2	25.1		ng/L		100	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		25.2	25.0		ng/L		99	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		25.2	25.2		ng/L		100	70 - 130
Perfluorohexanoic acid (PFHxA)	<2.0		25.2	26.9		ng/L		107	70 - 130
Perfluorododecanoic acid (PFDoA)	<2.0		25.2	24.5		ng/L		98	70 - 130
Perfluorooctanoic acid (PFOA)	<2.0		25.2	26.3		ng/L		101	70 - 130
Perfluorodecanoic acid (PFDA)	<2.0		25.2	26.2		ng/L		104	70 - 130

Eurofins Pomona

QC Association Summary

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

Job ID: 380-220533-1
SDG: Weekly: Ka'amilo Wells P2

LCMS

Prep Batch: 234965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-220533-1	KA'AMILO WELLS P2 (331-600-WL085)	Total/NA	Water	533	
380-220533-2	FB: KA'AMILO WELLS P2 (331-600-WL085)	Total/NA	Water	533	
MBL 380-234965/35-A	Method Blank	Total/NA	Water	533	
LCS 380-234965/37-A	Lab Control Sample	Total/NA	Water	533	
MRL 380-234965/36-A	Lab Control Sample	Total/NA	Water	533	
380-219760-B-6-B MS	Matrix Spike	Total/NA	Water	533	
380-219760-B-6-C MSD	Matrix Spike Duplicate	Total/NA	Water	533	

Prep Batch: 235114

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-220533-1	KA'AMILO WELLS P2 (331-600-WL085)	Total/NA	Water	537.1 DW	
380-220533-2	FB: KA'AMILO WELLS P2 (331-600-WL085)	Total/NA	Water	537.1 DW	
MBL 380-235114/20-A	Method Blank	Total/NA	Water	537.1 DW	
LCS 380-235114/22-A	Lab Control Sample	Total/NA	Water	537.1 DW	
MRL 380-235114/21-A	Lab Control Sample	Total/NA	Water	537.1 DW	
380-220371-B-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	537.1 DW	
380-220371-C-1-A MS	Matrix Spike	Total/NA	Water	537.1 DW	

Analysis Batch: 235128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-220533-1	KA'AMILO WELLS P2 (331-600-WL085)	Total/NA	Water	533	234965
380-220533-2	FB: KA'AMILO WELLS P2 (331-600-WL085)	Total/NA	Water	533	234965
MBL 380-234965/35-A	Method Blank	Total/NA	Water	533	234965
LCS 380-234965/37-A	Lab Control Sample	Total/NA	Water	533	234965
MRL 380-234965/36-A	Lab Control Sample	Total/NA	Water	533	234965
380-219760-B-6-B MS	Matrix Spike	Total/NA	Water	533	234965
380-219760-B-6-C MSD	Matrix Spike Duplicate	Total/NA	Water	533	234965

Analysis Batch: 235169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-220533-1	KA'AMILO WELLS P2 (331-600-WL085)	Total/NA	Water	EPA 537.1 V2	235114
380-220533-2	FB: KA'AMILO WELLS P2 (331-600-WL085)	Total/NA	Water	EPA 537.1 V2	235114
MBL 380-235114/20-A	Method Blank	Total/NA	Water	EPA 537.1 V2	235114
LCS 380-235114/22-A	Lab Control Sample	Total/NA	Water	EPA 537.1 V2	235114
MRL 380-235114/21-A	Lab Control Sample	Total/NA	Water	EPA 537.1 V2	235114
380-220371-B-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	EPA 537.1 V2	235114
380-220371-C-1-A MS	Matrix Spike	Total/NA	Water	EPA 537.1 V2	235114

Lab Chronicle

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

Job ID: 380-220533-1
 SDG: Weekly: Ka'amilo Wells P2

Client Sample ID: KA'AMILO WELLS P2 (331-600-WL085)

Lab Sample ID: 380-220533-1

Date Collected: 06/16/26 11:40

Matrix: Water

Date Received: 06/18/26 09:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			234965	XTD8	EA POM	06/19/26 08:53
Total/NA	Analysis	533		1	235128	Y5FM	EA POM	06/19/26 22:19
Total/NA	Prep	537.1 DW			235114	E2HD	EA POM	06/19/26 17:12
Total/NA	Analysis	EPA 537.1 V2		1	235169	M7ML	EA POM	06/20/26 17:25

Client Sample ID: FB: KA'AMILO WELLS P2 (331-600-WL085)

Lab Sample ID: 380-220533-2

Date Collected: 06/16/26 11:40

Matrix: Water

Date Received: 06/18/26 09:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			234965	XTD8	EA POM	06/19/26 08:53
Total/NA	Analysis	533		1	235128	Y5FM	EA POM	06/19/26 22:30
Total/NA	Prep	537.1 DW			235114	E2HD	EA POM	06/19/26 17:12
Total/NA	Analysis	EPA 537.1 V2		1	235169	M7ML	EA POM	06/20/26 17:45

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: 380-220533-1
SDG: Weekly: Ka'amilo Wells P2

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 *

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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: 380-220533-1
SDG: Weekly: Ka'amilo Wells P2

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: 380-220533-1
SDG: Weekly: Ka'amilo Wells P2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
380-220533-1	KA'AMILO WELLS P2 (331-600-WL085)	Water	06/16/26 11:40	06/18/26 09:43	Hawaii
380-220533-2	FB: KA'AMILO WELLS P2 (331-600-WL085)	Water	06/16/26 11:40	06/18/26 09:43	Hawaii

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

Chain of Custody Record



Environment Testing
 Amer



380-220533 COC

Client Information		Sampler	Lab PM	Carrier Tracking No(s)	COC No:					
Client Contact Kirk Iwamoto		Patrick Regan	Lopez, Maria	State of Origin:	Page 1 of 1 Job #:					
Company City & County of Honolulu		Phone: +1 808 748 5840	E-Mail: Maria.Lopez@et.eurofinsus.com							
Address: 630 South Beretania Street, Chemistry Lab		PWSID:								
City: Honolulu		Due Date Requested								
State Zip: HI, 96843		TAT Requested (days)								
Phone: 808-748-5840 (tel)		Compliance Project: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes								
Email: kiwamoto@hbws.org		PO #: C20525101 exp 05312023								
Project Name: RED-HILL/HBWS sites Event Desc: RUSH Weekly Red Hill		WO #:								
Site:		Project #: 38001111								
		SSOW#:								
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, G=soil, O=water, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	537 1_DW_PRC 537 1 Full List	533 - All Analytes	Total Number of Containers	Special Instructions/Note:
KA'AMILO WELLS P2 (331-600-WL085)	16-Jun-2026	11:40	G	Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3 3		
FB KA'AMILO WELLS P2 (331-600-WL085)	16-Jun-2026	11:40			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1 1		
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested I, II, III, IV Other (specify)										
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months										
Special Instructions/QC Requirements.										
Empty Kit Relinquished by:		Date		Time		Method of Shipment:		FPO: 5732 1680 9160		
Relinquish		6/17/26 12:00				Received by		Company		
Relinquish						Received by		Company		
Relinquish by						Received by		Company		
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No				Cooler Temperature(s) °C and Other Remarks:		75A 441 444 9e1 Fm 44		



Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-220533-1
SDG Number: Weekly: Ka'amilo Wells P2

Login Number: 220533

List Number: 1

Creator: Avila, Ivan

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	

