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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  
PFAS: Aiea Wells Units 1&2 P2  
RUSH Weekly Red Hill

## JOB NUMBER

380-192259-1

# 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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(626)386-1100

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# Definitions/Glossary

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

Job ID: 380-192259-1  
SDG: PFAS: Aiea Wells Units 1&2 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: 380-192259-1

**Job ID: 380-192259-1**

**Eurofins Pomona**

## Job Narrative 380-192259-1

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 1/14/2026 9:38 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 4.9°C.

### PFAS

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

# Detection Summary

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

Job ID: 380-192259-1  
SDG: PFAS: Aiea Wells Units 1&2 P2

**Client Sample ID: AIEA WELLS PUMPS 1&2 (260) P2**  
**PWSID Number: HI0000331**

**Lab Sample ID: 380-192259-1**

No Detections.

**Client Sample ID: FB AIEA WELLS PUMPS 1&2**  
**PWSID Number: HI0000331**

**Lab Sample ID: 380-192259-2**

No Detections.

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This Detection Summary does not include radiochemical test results.

# Client Sample Results

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

Job ID: 380-192259-1  
SDG: PFAS: Aiea Wells Units 1&2 P2

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

**Lab Sample ID: 380-192259-1**

Date Collected: 01/12/26 09:10

Matrix: Drinking Water

Date Received: 01/14/26 09:38

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		01/15/26 05:57	01/15/26 21:00	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:00	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:00	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:00	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:00	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:00	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:00	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:00	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:00	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:00	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:00	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:00	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:00	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:00	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:00	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:00	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:00	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:00	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:00	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:00	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:00	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:00	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:00	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:00	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:00	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	78		50 - 200	01/15/26 05:57	01/15/26 21:00	1
13C6 PFDA	102		50 - 200	01/15/26 05:57	01/15/26 21:00	1
13C5 PFHxA	95		50 - 200	01/15/26 05:57	01/15/26 21:00	1
13C4 PFHpA	95		50 - 200	01/15/26 05:57	01/15/26 21:00	1
13C8 PFOA	100		50 - 200	01/15/26 05:57	01/15/26 21:00	1
13C9 PFNA	103		50 - 200	01/15/26 05:57	01/15/26 21:00	1
13C7 PFUnA	101		50 - 200	01/15/26 05:57	01/15/26 21:00	1
13C2 PFDoA	102		50 - 200	01/15/26 05:57	01/15/26 21:00	1
13C4 PFBA	96		50 - 200	01/15/26 05:57	01/15/26 21:00	1
13C5 PFPeA	98		50 - 200	01/15/26 05:57	01/15/26 21:00	1
13C3 PFBS	103		50 - 200	01/15/26 05:57	01/15/26 21:00	1
13C3 PFHxS	108		50 - 200	01/15/26 05:57	01/15/26 21:00	1
13C8 PFOS	113		50 - 200	01/15/26 05:57	01/15/26 21:00	1

# Client Sample Results

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

Job ID: 380-192259-1  
SDG: PFAS: Aiea Wells Units 1&2 P2

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

**Lab Sample ID: 380-192259-1**

Date Collected: 01/12/26 09:10

Matrix: Drinking Water

Date Received: 01/14/26 09:38

PWSID Number: HI0000331

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2-4:2-FTS	113		50 - 200	01/15/26 05:57	01/15/26 21:00	1
13C2-6:2-FTS	120		50 - 200	01/15/26 05:57	01/15/26 21:00	1
13C2-8:2-FTS	116		50 - 200	01/15/26 05:57	01/15/26 21:00	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		01/15/26 02:55	01/15/26 16:13	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		01/15/26 02:55	01/15/26 16:13	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/15/26 02:55	01/15/26 16:13	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		01/15/26 02:55	01/15/26 16:13	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		01/15/26 02:55	01/15/26 16:13	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/15/26 02:55	01/15/26 16:13	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/15/26 02:55	01/15/26 16:13	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/15/26 02:55	01/15/26 16:13	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/15/26 02:55	01/15/26 16:13	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		01/15/26 02:55	01/15/26 16:13	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/15/26 02:55	01/15/26 16:13	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/15/26 02:55	01/15/26 16:13	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/15/26 02:55	01/15/26 16:13	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		01/15/26 02:55	01/15/26 16:13	1
Perfluorotridecanoic acid (PFTTrDA)	<2.0		2.0	ng/L		01/15/26 02:55	01/15/26 16:13	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/15/26 02:55	01/15/26 16:13	1
11-Chloroeicosafluoro-3-oxadecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		01/15/26 02:55	01/15/26 16:13	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/15/26 02:55	01/15/26 16:13	1

  

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	111		70 - 130	01/15/26 02:55	01/15/26 16:13	1
13C2 PFHxA	108		70 - 130	01/15/26 02:55	01/15/26 16:13	1
13C2 PFDA	115		70 - 130	01/15/26 02:55	01/15/26 16:13	1
13C3-GenX	111		70 - 130	01/15/26 02:55	01/15/26 16:13	1

**Client Sample ID: FB AIEA WELLS PUMPS 1&2**

**Lab Sample ID: 380-192259-2**

Date Collected: 01/12/26 09:10

Matrix: Water

Date Received: 01/14/26 09:38

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-oxadecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:10	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:10	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:10	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:10	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:10	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:10	1

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# Client Sample Results

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

Job ID: 380-192259-1  
SDG: PFAS: Aiea Wells Units 1&2 P2

**Client Sample ID: FB AIEA WELLS PUMPS 1&2**

**Lab Sample ID: 380-192259-2**

Date Collected: 01/12/26 09:10

Matrix: Water

Date Received: 01/14/26 09:38

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
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:10	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:10	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:10	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:10	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:10	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:10	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:10	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:10	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:10	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:10	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:10	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:10	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:10	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:10	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:10	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:10	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:10	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:10	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		01/15/26 05:57	01/15/26 21:10	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	92		50 - 200	01/15/26 05:57	01/15/26 21:10	1
13C6 PFDA	113		50 - 200	01/15/26 05:57	01/15/26 21:10	1
13C5 PFHxA	115		50 - 200	01/15/26 05:57	01/15/26 21:10	1
13C4 PFHpA	108		50 - 200	01/15/26 05:57	01/15/26 21:10	1
13C8 PFOA	111		50 - 200	01/15/26 05:57	01/15/26 21:10	1
13C9 PFNA	114		50 - 200	01/15/26 05:57	01/15/26 21:10	1
13C7 PFUnA	106		50 - 200	01/15/26 05:57	01/15/26 21:10	1
13C2 PFDoA	104		50 - 200	01/15/26 05:57	01/15/26 21:10	1
13C4 PFBA	110		50 - 200	01/15/26 05:57	01/15/26 21:10	1
13C5 PFPeA	107		50 - 200	01/15/26 05:57	01/15/26 21:10	1
13C3 PFBS	105		50 - 200	01/15/26 05:57	01/15/26 21:10	1
13C3 PFHxS	110		50 - 200	01/15/26 05:57	01/15/26 21:10	1
13C8 PFOS	109		50 - 200	01/15/26 05:57	01/15/26 21:10	1
13C2-4:2-FTS	111		50 - 200	01/15/26 05:57	01/15/26 21:10	1
13C2-6:2-FTS	116		50 - 200	01/15/26 05:57	01/15/26 21:10	1
13C2-8:2-FTS	111		50 - 200	01/15/26 05:57	01/15/26 21:10	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		01/15/26 02:55	01/15/26 16:52	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		01/15/26 02:55	01/15/26 16:52	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/15/26 02:55	01/15/26 16:52	1

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# Client Sample Results

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

Job ID: 380-192259-1  
SDG: PFAS: Aiea Wells Units 1&2 P2

**Client Sample ID: FB AIEA WELLS PUMPS 1&2**

**Lab Sample ID: 380-192259-2**

Date Collected: 01/12/26 09:10

Matrix: Water

Date Received: 01/14/26 09:38

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		01/15/26 02:55	01/15/26 16:52	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		01/15/26 02:55	01/15/26 16:52	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/15/26 02:55	01/15/26 16:52	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/15/26 02:55	01/15/26 16:52	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/15/26 02:55	01/15/26 16:52	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/15/26 02:55	01/15/26 16:52	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		01/15/26 02:55	01/15/26 16:52	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/15/26 02:55	01/15/26 16:52	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/15/26 02:55	01/15/26 16:52	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/15/26 02:55	01/15/26 16:52	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		01/15/26 02:55	01/15/26 16:52	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		01/15/26 02:55	01/15/26 16:52	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<2.0		2.0	ng/L		01/15/26 02:55	01/15/26 16:52	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		01/15/26 02:55	01/15/26 16:52	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/15/26 02:55	01/15/26 16:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	104		70 - 130	01/15/26 02:55	01/15/26 16:52	1
13C2 PFHxA	109		70 - 130	01/15/26 02:55	01/15/26 16:52	1
13C2 PFDA	115		70 - 130	01/15/26 02:55	01/15/26 16:52	1
13C3-GenX	107		70 - 130	01/15/26 02:55	01/15/26 16:52	1

# Action Limit Summary

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

Job ID: 380-192259-1  
SDG: PFAS: Aiea Wells Units 1&2 P2

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

**Lab Sample ID: 380-192259-1**

**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)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorononanoic acid (PFNA)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	<2.0		ng/L	4	2.0	533	Total/NA
Perfluorooctanoic acid (PFOA)	<2.0		ng/L	4	2.0	533	Total/NA
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		ng/L	10	2.0	537.1	Total/NA
Perfluorooctanesulfonic acid (PFOS)	<2.0		ng/L	4	2.0	537.1	Total/NA
Perfluorooctanoic acid (PFOA)	<2.0		ng/L	4	2.0	537.1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	<2.0		ng/L	10	2.0	537.1	Total/NA
Perfluorononanoic acid (PFNA)	<2.0		ng/L	10	2.0	537.1	Total/NA

**Client Sample ID: FB AIEA WELLS PUMPS 1&2**

**Lab Sample ID: 380-192259-2**

**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	537.1	Total/NA
Perfluorooctanesulfonic acid (PFOS)	<2.0		ng/L	4	2.0	537.1	Total/NA
Perfluorooctanoic acid (PFOA)	<2.0		ng/L	4	2.0	537.1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	<2.0		ng/L	10	2.0	537.1	Total/NA
Perfluorononanoic acid (PFNA)	<2.0		ng/L	10	2.0	537.1	Total/NA

# Surrogate Summary

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

Job ID: 380-192259-1  
 SDG: PFAS: Aiea Wells Units 1&2 P2

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

Matrix: Drinking Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		d5NEFOS (70-130)	PFHxA (70-130)	PFDA (70-130)	GenX (70-130)
380-192259-1	AIEA WELLS PUMPS 1&2 (260) P2	111	108	115	111
380-192259-1 MS	AIEA WELLS PUMPS 1&2 (260) P2	103	113	112	107
380-192259-1 MSD	AIEA WELLS PUMPS 1&2 (260) P2	102	105	111	106

**Surrogate Legend**

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

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

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)
380-192259-2	FB AIEA WELLS PUMPS 1&2	104	109	115	107
LCS 380-198081/21-A	Lab Control Sample	104	106	110	98
MBL 380-198081/19-A	Method Blank	114	116	119	108
MRL 380-198081/20-A	Lab Control Sample	113	107	106	107

**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: 380-192259-1  
SDG: PFAS: Aiea Wells Units 1&2 P2

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

Matrix: Drinking Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Isotope Dilution Recovery (Acceptance Limits)							
		HFPODA (50-200)	C6PFDA (50-200)	13C5PHA (50-200)	C4PFHA (50-200)	C8PFOA (50-200)	C9PFNA (50-200)	13C7PUA (50-200)	PFDoA (50-200)
380-192259-1	AIEA WELLS PUMPS 1&2 (260) P2	78	102	95	95	100	103	101	102

Lab Sample ID	Client Sample ID	Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFBA (50-200)	PFPeA (50-200)	C3PFBS (50-200)	C3PFHS (50-200)	C8PFOS (50-200)	42FTS (50-200)	62FTS (50-200)	82FTS (50-200)
380-192259-1	AIEA WELLS PUMPS 1&2 (260) P2	96	98	103	108	113	113	120	116

**Surrogate Legend**

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

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Isotope Dilution Recovery (Acceptance Limits)							
		HFPODA (50-200)	C6PFDA (50-200)	13C5PHA (50-200)	C4PFHA (50-200)	C8PFOA (50-200)	C9PFNA (50-200)	13C7PUA (50-200)	PFDoA (50-200)
380-192259-2	FB AIEA WELLS PUMPS 1&2	92	113	115	108	111	114	106	104
380-192325-B-2-A MS	Matrix Spike	113	122	118	119	120	122	118	118
380-192325-C-2-A MSD	Matrix Spike Duplicate	90	106	100	97	100	107	105	103
LCS 380-198086/22-A	Lab Control Sample	104	122	123	121	120	118	116	116
MBL 380-198086/20-A	Method Blank	91	110	111	113	109	112	103	103
MRL 380-198086/21-A	Lab Control Sample	88	113	111	112	111	113	109	108

Lab Sample ID	Client Sample ID	Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFBA (50-200)	PFPeA (50-200)	C3PFBS (50-200)	C3PFHS (50-200)	C8PFOS (50-200)	42FTS (50-200)	62FTS (50-200)	82FTS (50-200)
380-192259-2	FB AIEA WELLS PUMPS 1&2	110	107	105	110	109	111	116	111
380-192325-B-2-A MS	Matrix Spike	115	106	114	116	116	118	124	121
380-192325-C-2-A MSD	Matrix Spike Duplicate	102	99	104	106	107	113	111	108
LCS 380-198086/22-A	Lab Control Sample	116	115	114	120	116	115	126	117
MBL 380-198086/20-A	Method Blank	108	108	105	107	106	108	118	111
MRL 380-198086/21-A	Lab Control Sample	110	104	102	111	109	112	121	115

**Surrogate Legend**

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

# Isotope Dilution Summary

Client: City & County of Honolulu

Project/Site: RED-HILL

Job ID: 380-192259-1  
SDG: PFAS: Aiea Wells Units 1&2 P2

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

1

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# QC Sample Results

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

Job ID: 380-192259-1  
SDG: PFAS: Aiea Wells Units 1&2 P2

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

**Lab Sample ID: MBL 380-198086/20-A**  
**Matrix: Water**  
**Analysis Batch: 198275**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 198086**

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		01/15/26 05:57	01/15/26 18:08	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<0.30		2.0	ng/L		01/15/26 05:57	01/15/26 18:08	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0	ng/L		01/15/26 05:57	01/15/26 18:08	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<1.0		2.0	ng/L		01/15/26 05:57	01/15/26 18:08	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0	ng/L		01/15/26 05:57	01/15/26 18:08	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	ng/L		01/15/26 05:57	01/15/26 18:08	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	ng/L		01/15/26 05:57	01/15/26 18:08	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0	ng/L		01/15/26 05:57	01/15/26 18:08	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0	ng/L		01/15/26 05:57	01/15/26 18:08	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0	ng/L		01/15/26 05:57	01/15/26 18:08	1
Perfluorononanoic acid (PFNA)	<0.40		2.0	ng/L		01/15/26 05:57	01/15/26 18:08	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0	ng/L		01/15/26 05:57	01/15/26 18:08	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0	ng/L		01/15/26 05:57	01/15/26 18:08	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0	ng/L		01/15/26 05:57	01/15/26 18:08	1
Perfluorobutanoic acid (PFBA)	<0.69		2.0	ng/L		01/15/26 05:57	01/15/26 18:08	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.38		2.0	ng/L		01/15/26 05:57	01/15/26 18:08	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.37		2.0	ng/L		01/15/26 05:57	01/15/26 18:08	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<0.48		2.0	ng/L		01/15/26 05:57	01/15/26 18:08	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<0.47		2.0	ng/L		01/15/26 05:57	01/15/26 18:08	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<0.25		2.0	ng/L		01/15/26 05:57	01/15/26 18:08	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.46		2.0	ng/L		01/15/26 05:57	01/15/26 18:08	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.15		2.0	ng/L		01/15/26 05:57	01/15/26 18:08	1
Perfluoropentanoic acid (PFPeA)	<0.38		2.0	ng/L		01/15/26 05:57	01/15/26 18:08	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.36		2.0	ng/L		01/15/26 05:57	01/15/26 18:08	1
Perfluoropentanesulfonic acid (PFPeS)	<0.39		2.0	ng/L		01/15/26 05:57	01/15/26 18:08	1

Isotope Dilution	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	91		50 - 200	01/15/26 05:57	01/15/26 18:08	1
13C6 PFDA	110		50 - 200	01/15/26 05:57	01/15/26 18:08	1
13C5 PFHxA	111		50 - 200	01/15/26 05:57	01/15/26 18:08	1
13C4 PFHpA	113		50 - 200	01/15/26 05:57	01/15/26 18:08	1
13C8 PFOA	109		50 - 200	01/15/26 05:57	01/15/26 18:08	1
13C9 PFNA	112		50 - 200	01/15/26 05:57	01/15/26 18:08	1
13C7 PFUnA	103		50 - 200	01/15/26 05:57	01/15/26 18:08	1
13C2 PFDoA	103		50 - 200	01/15/26 05:57	01/15/26 18:08	1
13C4 PFBA	108		50 - 200	01/15/26 05:57	01/15/26 18:08	1
13C5 PFPeA	108		50 - 200	01/15/26 05:57	01/15/26 18:08	1
13C3 PFBS	105		50 - 200	01/15/26 05:57	01/15/26 18:08	1
13C3 PFHxS	107		50 - 200	01/15/26 05:57	01/15/26 18:08	1

Eurofins Pomona

# QC Sample Results

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

Job ID: 380-192259-1  
SDG: PFAS: Aiea Wells Units 1&2 P2

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

**Lab Sample ID: MBL 380-198086/20-A**  
**Matrix: Water**  
**Analysis Batch: 198275**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 198086**

<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	106		50 - 200	01/15/26 05:57	01/15/26 18:08	1
13C2-4:2-FTS	108		50 - 200	01/15/26 05:57	01/15/26 18:08	1
13C2-6:2-FTS	118		50 - 200	01/15/26 05:57	01/15/26 18:08	1
13C2-8:2-FTS	111		50 - 200	01/15/26 05:57	01/15/26 18:08	1

**Lab Sample ID: LCS 380-198086/22-A**  
**Matrix: Water**  
**Analysis Batch: 198275**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 198086**

<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)	60.4	48.4		ng/L		80	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	60.4	53.7		ng/L		89	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	60.4	57.6		ng/L		95	70 - 130
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	60.4	49.2		ng/L		81	70 - 130
Perfluorobutanesulfonic acid (PFBS)	60.4	53.7		ng/L		89	70 - 130
Perfluorodecanoic acid (PFDA)	60.4	55.2		ng/L		91	70 - 130
Perfluorododecanoic acid (PFDoA)	60.4	52.9		ng/L		88	70 - 130
Perfluoroheptanoic acid (PFHpA)	60.4	54.4		ng/L		90	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	60.4	51.7		ng/L		86	70 - 130
Perfluorohexanoic acid (PFHxA)	60.4	52.3		ng/L		87	70 - 130
Perfluorononanoic acid (PFNA)	60.4	55.1		ng/L		91	70 - 130
Perfluorooctanesulfonic acid (PFOS)	60.4	55.3		ng/L		92	70 - 130
Perfluorooctanoic acid (PFOA)	60.4	52.3		ng/L		87	70 - 130
Perfluoroundecanoic acid (PFUnA)	60.4	58.5		ng/L		97	70 - 130
Perfluorobutanoic acid (PFBA)	60.4	54.3		ng/L		90	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	60.4	56.9		ng/L		94	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	60.4	56.5		ng/L		94	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	60.4	55.8		ng/L		92	70 - 130
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	60.4	46.8		ng/L		78	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	60.4	54.2		ng/L		90	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	60.4	50.8		ng/L		84	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	60.4	55.0		ng/L		91	70 - 130
Perfluoropentanoic acid (PFPeA)	60.4	55.2		ng/L		91	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	60.4	54.1		ng/L		90	70 - 130

# QC Sample Results

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

Job ID: 380-192259-1  
SDG: PFAS: Aiea Wells Units 1&2 P2

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

**Lab Sample ID: LCS 380-198086/22-A**  
**Matrix: Water**  
**Analysis Batch: 198275**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 198086**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Perfluoropentanesulfonic acid (PFPeS)	60.4	53.4		ng/L		88	70 - 130	
<b>LCS LCS</b>								
<b>Isotope Dilution</b>	<b>%Recovery</b>	<b>Qualifier</b>						<b>Limits</b>
13C3 HFPO-DA	104							50 - 200
13C6 PFDA	122							50 - 200
13C5 PFHxA	123							50 - 200
13C4 PFHpA	121							50 - 200
13C8 PFOA	120							50 - 200
13C9 PFNA	118							50 - 200
13C7 PFUnA	116							50 - 200
13C2 PFDoA	116							50 - 200
13C4 PFBA	116							50 - 200
13C5 PFPeA	115							50 - 200
13C3 PFBS	114							50 - 200
13C3 PFHxS	120							50 - 200
13C8 PFOS	116							50 - 200
13C2-4:2-FTS	115							50 - 200
13C2-6:2-FTS	126							50 - 200
13C2-8:2-FTS	117							50 - 200

**Lab Sample ID: MRL 380-198086/21-A**  
**Matrix: Water**  
**Analysis Batch: 198275**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 198086**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.01	1.71	J	ng/L		85	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	2.01	1.92	J	ng/L		96	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.01	2.00	J	ng/L		99	50 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.01	1.92	J	ng/L		95	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.01	2.06	J	ng/L		102	50 - 150
Perfluorodecanoic acid (PFDA)	2.01	1.99	J	ng/L		99	50 - 150
Perfluorododecanoic acid (PFDoA)	2.01	1.99	J	ng/L		99	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.01	2.11	J	ng/L		105	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.01	2.05	J	ng/L		102	50 - 150
Perfluorohexanoic acid (PFHxA)	2.01	1.90	J	ng/L		95	50 - 150
Perfluorononanoic acid (PFNA)	2.01	2.06	J	ng/L		102	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.01	2.03	J	ng/L		101	50 - 150
Perfluorooctanoic acid (PFOA)	2.01	1.99	J	ng/L		99	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.01	2.07	J	ng/L		103	50 - 150
Perfluorobutanoic acid (PFBA)	2.01	2.05	J	ng/L		102	50 - 150

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# QC Sample Results

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

Job ID: 380-192259-1  
SDG: PFAS: Aiea Wells Units 1&2 P2

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

**Lab Sample ID: MRL 380-198086/21-A**  
**Matrix: Water**  
**Analysis Batch: 198275**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 198086**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	2.01	2.09	J	ng/L		104	50 - 150
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	2.01	2.16	J	ng/L		108	50 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	2.01	2.18	J	ng/L		109	50 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2.01	2.01	J	ng/L		100	50 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	2.01	2.21	J	ng/L		110	50 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.01	1.90	J	ng/L		95	50 - 150
Perfluoro-4-methoxybutanoic acid (PFMBA)	2.01	2.07	J	ng/L		103	50 - 150
Perfluoropentanoic acid (PFPeA)	2.01	2.12	J	ng/L		106	50 - 150
Perfluoroheptanesulfonic acid (PFHpS)	2.01	1.84	J	ng/L		91	50 - 150
Perfluoropentanesulfonic acid (PFPeS)	2.01	1.91	J	ng/L		95	50 - 150

Isotope Dilution	MRL %Recovery	MRL Qualifier	MRL Limits
13C3 HFPO-DA	88		50 - 200
13C6 PFDA	113		50 - 200
13C5 PFHxA	111		50 - 200
13C4 PFHpA	112		50 - 200
13C8 PFOA	111		50 - 200
13C9 PFNA	113		50 - 200
13C7 PFUnA	109		50 - 200
13C2 PFDoA	108		50 - 200
13C4 PFBA	110		50 - 200
13C5 PFPeA	104		50 - 200
13C3 PFBS	102		50 - 200
13C3 PFHxS	111		50 - 200
13C8 PFOS	109		50 - 200
13C2-4:2-FTS	112		50 - 200
13C2-6:2-FTS	121		50 - 200
13C2-8:2-FTS	115		50 - 200

**Lab Sample ID: 380-192325-B-2-A MS**  
**Matrix: Water**  
**Analysis Batch: 198275**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 198086**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		60.4	49.8		ng/L		82	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		60.4	55.0		ng/L		91	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		60.4	56.3		ng/L		93	70 - 130

# QC Sample Results

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

Job ID: 380-192259-1  
SDG: PFAS: Aiea Wells Units 1&2 P2

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

**Lab Sample ID: 380-192325-B-2-A MS**

**Client Sample ID: Matrix Spike**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 198275**

**Prep Batch: 198086**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier	Added	Result	Qualifier				
Hexafluoropropylene Oxide	<2.0		60.4	53.0		ng/L		88	70 - 130
Dimer Acid (HFPO-DA/GenX)									
Perfluorobutanesulfonic acid (PFBS)	<2.0		60.4	55.7		ng/L		92	70 - 130
Perfluorodecanoic acid (PFDA)	<2.0		60.4	57.1		ng/L		95	70 - 130
Perfluorododecanoic acid (PFDoA)	<2.0		60.4	53.9		ng/L		89	70 - 130
Perfluoroheptanoic acid (PFHpA)	<2.0		60.4	57.2		ng/L		95	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	<2.0		60.4	54.7		ng/L		91	70 - 130
Perfluorohexanoic acid (PFHxA)	<2.0		60.4	56.2		ng/L		93	70 - 130
Perfluorononanoic acid (PFNA)	<2.0		60.4	55.4		ng/L		92	70 - 130
Perfluorooctanesulfonic acid (PFOS)	<2.0		60.4	55.3		ng/L		92	70 - 130
Perfluorooctanoic acid (PFOA)	<2.0		60.4	54.5		ng/L		90	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		60.4	59.0		ng/L		98	70 - 130
Perfluorobutanoic acid (PFBA)	<2.0		60.4	55.1		ng/L		91	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		60.4	57.1		ng/L		95	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		60.4	55.7		ng/L		92	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		60.4	55.3		ng/L		92	70 - 130
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		60.4	55.0		ng/L		91	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		60.4	58.1		ng/L		96	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		60.4	53.2		ng/L		88	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		60.4	59.8		ng/L		99	70 - 130
Perfluoropentanoic acid (PFPeA)	<2.0		60.4	57.9		ng/L		96	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		60.4	54.7		ng/L		91	70 - 130
Perfluoropentanesulfonic acid (PFPeS)	<2.0		60.4	55.6		ng/L		92	70 - 130

Isotope Dilution	MS MS		Limits
	%Recovery	Qualifier	
13C3 HFPO-DA	113		50 - 200
13C6 PFDA	122		50 - 200
13C5 PFHxA	118		50 - 200
13C4 PFHpA	119		50 - 200
13C8 PFOA	120		50 - 200
13C9 PFNA	122		50 - 200
13C7 PFUnA	118		50 - 200
13C2 PFDoA	118		50 - 200
13C4 PFBA	115		50 - 200
13C5 PFPeA	106		50 - 200
13C3 PFBS	114		50 - 200
13C3 PFHxS	116		50 - 200
13C8 PFOS	116		50 - 200

# QC Sample Results

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

Job ID: 380-192259-1  
SDG: PFAS: Aiea Wells Units 1&2 P2

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

**Lab Sample ID: 380-192325-B-2-A MS**

**Matrix: Water**

**Analysis Batch: 198275**

**Client Sample ID: Matrix Spike**

**Prep Type: Total/NA**

**Prep Batch: 198086**

Isotope Dilution	MS MS		Limits
	%Recovery	Qualifier	
13C2-4:2-FTS	118		50 - 200
13C2-6:2-FTS	124		50 - 200
13C2-8:2-FTS	121		50 - 200

**Lab Sample ID: 380-192325-C-2-A MSD**

**Matrix: Water**

**Analysis Batch: 198275**

**Client Sample ID: Matrix Spike Duplicate**

**Prep Type: Total/NA**

**Prep Batch: 198086**

Analyte	Sample	Sample	Spike	MSD MSD		Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier		Result	Qualifier				Limits		
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		60.5	52.3		ng/L		86	70 - 130	5	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		60.5	56.0		ng/L		93	70 - 130	2	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		60.5	61.3		ng/L		101	70 - 130	8	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		60.5	56.7		ng/L		94	70 - 130	7	30
Perfluorobutanesulfonic acid (PFBS)	<2.0		60.5	57.6		ng/L		95	70 - 130	3	30
Perfluorodecanoic acid (PFDA)	<2.0		60.5	60.8		ng/L		101	70 - 130	6	30
Perfluorododecanoic acid (PFDoA)	<2.0		60.5	57.7		ng/L		95	70 - 130	7	30
Perfluoroheptanoic acid (PFHpA)	<2.0		60.5	63.0		ng/L		104	70 - 130	10	30
Perfluorohexanesulfonic acid (PFHxS)	<2.0		60.5	57.4		ng/L		95	70 - 130	5	30
Perfluorohexanoic acid (PFHxA)	<2.0		60.5	57.1		ng/L		94	70 - 130	2	30
Perfluorononanoic acid (PFNA)	<2.0		60.5	59.5		ng/L		98	70 - 130	7	30
Perfluorooctanesulfonic acid (PFOS)	<2.0		60.5	58.3		ng/L		96	70 - 130	5	30
Perfluorooctanoic acid (PFOA)	<2.0		60.5	59.3		ng/L		98	70 - 130	8	30
Perfluoroundecanoic acid (PFUnA)	<2.0		60.5	62.2		ng/L		103	70 - 130	5	30
Perfluorobutanoic acid (PFBA)	<2.0		60.5	56.8		ng/L		94	70 - 130	3	30
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		60.5	61.0		ng/L		101	70 - 130	7	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		60.5	55.9		ng/L		92	70 - 130	0	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		60.5	59.3		ng/L		98	70 - 130	7	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		60.5	53.2		ng/L		88	70 - 130	3	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		60.5	59.3		ng/L		98	70 - 130	2	30
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		60.5	54.6		ng/L		90	70 - 130	3	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		60.5	58.6		ng/L		97	70 - 130	2	30
Perfluoropentanoic acid (PFPeA)	<2.0		60.5	59.2		ng/L		98	70 - 130	2	30
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		60.5	57.6		ng/L		95	70 - 130	5	30
Perfluoropentanesulfonic acid (PFPeS)	<2.0		60.5	58.0		ng/L		96	70 - 130	4	30

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# QC Sample Results

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

Job ID: 380-192259-1  
SDG: PFAS: Aiea Wells Units 1&2 P2

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

Isotope Dilution	MSD MSD		Limits
	%Recovery	Qualifier	
13C3 HFPO-DA	90		50 - 200
13C6 PFDA	106		50 - 200
13C5 PFHxA	100		50 - 200
13C4 PFHpA	97		50 - 200
13C8 PFOA	100		50 - 200
13C9 PFNA	107		50 - 200
13C7 PFUnA	105		50 - 200
13C2 PFDoA	103		50 - 200
13C4 PFBA	102		50 - 200
13C5 PFPeA	99		50 - 200
13C3 PFBS	104		50 - 200
13C3 PFHxS	106		50 - 200
13C8 PFOS	107		50 - 200
13C2-4:2-FTS	113		50 - 200
13C2-6:2-FTS	111		50 - 200
13C2-8:2-FTS	108		50 - 200

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

Lab Sample ID: MBL 380-198081/19-A  
Matrix: Water  
Analysis Batch: 198216

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 198081

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		01/15/26 02:55	01/15/26 15:43	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0	ng/L		01/15/26 02:55	01/15/26 15:43	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0	ng/L		01/15/26 02:55	01/15/26 15:43	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<0.58		2.0	ng/L		01/15/26 02:55	01/15/26 15:43	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<0.42		2.0	ng/L		01/15/26 02:55	01/15/26 15:43	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0	ng/L		01/15/26 02:55	01/15/26 15:43	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	ng/L		01/15/26 02:55	01/15/26 15:43	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0	ng/L		01/15/26 02:55	01/15/26 15:43	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	ng/L		01/15/26 02:55	01/15/26 15:43	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0	ng/L		01/15/26 02:55	01/15/26 15:43	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0	ng/L		01/15/26 02:55	01/15/26 15:43	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0	ng/L		01/15/26 02:55	01/15/26 15:43	1
Perfluorononanoic acid (PFNA)	<0.40		2.0	ng/L		01/15/26 02:55	01/15/26 15:43	1
Perfluorotetradecanoic acid (PFTA)	<0.54		2.0	ng/L		01/15/26 02:55	01/15/26 15:43	1
Perfluorotridecanoic acid (PFTTrDA)	<0.36		2.0	ng/L		01/15/26 02:55	01/15/26 15:43	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<0.30		2.0	ng/L		01/15/26 02:55	01/15/26 15:43	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.30		2.0	ng/L		01/15/26 02:55	01/15/26 15:43	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0	ng/L		01/15/26 02:55	01/15/26 15:43	1

  

Surrogate	MBL MBL		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
d5-NEtFOSAA	114		70 - 130	01/15/26 02:55	01/15/26 15:43	1
13C2 PFHxA	116		70 - 130	01/15/26 02:55	01/15/26 15:43	1
13C2 PFDA	119		70 - 130	01/15/26 02:55	01/15/26 15:43	1

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# QC Sample Results

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

Job ID: 380-192259-1  
SDG: PFAS: Aiea Wells Units 1&2 P2

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

**Lab Sample ID: MBL 380-198081/19-A**  
**Matrix: Water**  
**Analysis Batch: 198216**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 198081**

<i>Surrogate</i>	<i>MBL</i>	<i>MBL</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
13C3-GenX	108	Qualifier	70 - 130	01/15/26 02:55	01/15/26 15:43	1

**Lab Sample ID: LCS 380-198081/21-A**  
**Matrix: Water**  
**Analysis Batch: 198216**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 198081**

<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	50.1	46.4		ng/L		93	70 - 130
Dimer Acid (HFPO-DA/GenX)							
Perfluorooctanesulfonic acid (PFOS)	50.1	53.9		ng/L		108	70 - 130
Perfluoroundecanoic acid (PFUnA)	50.1	51.5		ng/L		103	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	50.1	50.0		ng/L		100	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	50.1	48.6		ng/L		97	70 - 130
Perfluorohexanoic acid (PFHxA)	50.1	50.1		ng/L		100	70 - 130
Perfluorododecanoic acid (PFDoA)	50.1	54.1		ng/L		108	70 - 130
Perfluorooctanoic acid (PFOA)	50.1	50.8		ng/L		101	70 - 130
Perfluorodecanoic acid (PFDA)	50.1	53.5		ng/L		107	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	50.1	54.5		ng/L		109	70 - 130
Perfluorobutanesulfonic acid (PFBS)	50.1	54.6		ng/L		109	70 - 130
Perfluoroheptanoic acid (PFHpA)	50.1	52.5		ng/L		105	70 - 130
Perfluorononanoic acid (PFNA)	50.1	53.8		ng/L		107	70 - 130
Perfluorotetradecanoic acid (PFTA)	50.1	46.0		ng/L		92	70 - 130
Perfluorotridecanoic acid (PFTrDA)	50.1	55.8		ng/L		111	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	50.1	54.8		ng/L		109	70 - 130
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	50.1	46.9		ng/L		94	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	50.1	49.8		ng/L		99	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	104		70 - 130
13C2 PFHxA	106		70 - 130
13C2 PFDA	110		70 - 130
13C3-GenX	98		70 - 130

# QC Sample Results

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

Job ID: 380-192259-1  
SDG: PFAS: Aiea Wells Units 1&2 P2

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

**Lab Sample ID: MRL 380-198081/20-A**  
**Matrix: Water**  
**Analysis Batch: 198216**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 198081**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.00	2.10	J	ng/L		105	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.00	2.24	J	ng/L		112	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.00	2.21	J	ng/L		110	50 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2.00	2.14	J	ng/L		107	50 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2.00	2.18	J	ng/L		109	50 - 150
Perfluorohexanoic acid (PFHxA)	2.00	1.96	J	ng/L		98	50 - 150
Perfluorododecanoic acid (PFDoA)	2.00	2.09	J	ng/L		104	50 - 150
Perfluorooctanoic acid (PFOA)	2.00	2.18	J	ng/L		109	50 - 150
Perfluorodecanoic acid (PFDA)	2.00	2.13	J	ng/L		106	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.00	2.05	J	ng/L		102	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.00	2.02	J	ng/L		101	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.00	2.13	J	ng/L		106	50 - 150
Perfluorononanoic acid (PFNA)	2.00	2.31	J	ng/L		115	50 - 150
Perfluorotetradecanoic acid (PFTA)	2.00	1.63	J	ng/L		81	50 - 150
Perfluorotridecanoic acid (PFTrDA)	2.00	2.28	J	ng/L		114	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	2.00	2.08	J	ng/L		104	50 - 150
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.00	1.89	J	ng/L		94	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.00	2.11	J	ng/L		106	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
d5-NEtFOSAA	113		70 - 130
13C2 PFHxA	107		70 - 130
13C2 PFDA	106		70 - 130
13C3-GenX	107		70 - 130

**Lab Sample ID: 380-192259-1 MS**  
**Matrix: Drinking Water**  
**Analysis Batch: 198216**

**Client Sample ID: AIEA WELLS PUMPS 1&2 (260) P2**  
**Prep Type: Total/NA**  
**Prep Batch: 198081**

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		50.3	49.9		ng/L		99	70 - 130
Perfluorooctanesulfonic acid (PFOS)	<2.0		50.3	54.7		ng/L		107	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		50.3	52.8		ng/L		105	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		50.3	51.5		ng/L		102	70 - 130

Eurofins Pomona





# QC Association Summary

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

Job ID: 380-192259-1  
 SDG: PFAS: Aiea Wells Units 1&2 P2

## LCMS

### Prep Batch: 198081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-192259-1	AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Drinking Water	537.1 DW	
380-192259-2	FB AIEA WELLS PUMPS 1&2	Total/NA	Water	537.1 DW	
MBL 380-198081/19-A	Method Blank	Total/NA	Water	537.1 DW	
LCS 380-198081/21-A	Lab Control Sample	Total/NA	Water	537.1 DW	
MRL 380-198081/20-A	Lab Control Sample	Total/NA	Water	537.1 DW	
380-192259-1 MS	AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Drinking Water	537.1 DW	
380-192259-1 MSD	AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Drinking Water	537.1 DW	

### Prep Batch: 198086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-192259-1	AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Drinking Water	533	
380-192259-2	FB AIEA WELLS PUMPS 1&2	Total/NA	Water	533	
MBL 380-198086/20-A	Method Blank	Total/NA	Water	533	
LCS 380-198086/22-A	Lab Control Sample	Total/NA	Water	533	
MRL 380-198086/21-A	Lab Control Sample	Total/NA	Water	533	
380-192325-B-2-A MS	Matrix Spike	Total/NA	Water	533	
380-192325-C-2-A MSD	Matrix Spike Duplicate	Total/NA	Water	533	

### Analysis Batch: 198216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-192259-1	AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Drinking Water	537.1	198081
380-192259-2	FB AIEA WELLS PUMPS 1&2	Total/NA	Water	537.1	198081
MBL 380-198081/19-A	Method Blank	Total/NA	Water	537.1	198081
LCS 380-198081/21-A	Lab Control Sample	Total/NA	Water	537.1	198081
MRL 380-198081/20-A	Lab Control Sample	Total/NA	Water	537.1	198081
380-192259-1 MS	AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Drinking Water	537.1	198081
380-192259-1 MSD	AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Drinking Water	537.1	198081

### Analysis Batch: 198275

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-192259-1	AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Drinking Water	533	198086
380-192259-2	FB AIEA WELLS PUMPS 1&2	Total/NA	Water	533	198086
MBL 380-198086/20-A	Method Blank	Total/NA	Water	533	198086
LCS 380-198086/22-A	Lab Control Sample	Total/NA	Water	533	198086
MRL 380-198086/21-A	Lab Control Sample	Total/NA	Water	533	198086
380-192325-B-2-A MS	Matrix Spike	Total/NA	Water	533	198086
380-192325-C-2-A MSD	Matrix Spike Duplicate	Total/NA	Water	533	198086

## Lab Chronicle

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

Job ID: 380-192259-1  
 SDG: PFAS: Aiea Wells Units 1&2 P2

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

### Lab Sample ID: 380-192259-1

Date Collected: 01/12/26 09:10

Matrix: Drinking Water

Date Received: 01/14/26 09:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			198086	XTD8	EA POM	01/15/26 05:57
Total/NA	Analysis	533		1	198275	SZ9R	EA POM	01/15/26 21:00
Total/NA	Prep	537.1 DW			198081	G9MN	EA POM	01/15/26 02:55
Total/NA	Analysis	537.1		1	198216	SZ9R	EA POM	01/15/26 16:13

### Client Sample ID: FB AIEA WELLS PUMPS 1&2

### Lab Sample ID: 380-192259-2

Date Collected: 01/12/26 09:10

Matrix: Water

Date Received: 01/14/26 09:38

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			198086	XTD8	EA POM	01/15/26 05:57
Total/NA	Analysis	533		1	198275	SZ9R	EA POM	01/15/26 21:10
Total/NA	Prep	537.1 DW			198081	G9MN	EA POM	01/15/26 02:55
Total/NA	Analysis	537.1		1	198216	SZ9R	EA POM	01/15/26 16:52

**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: 380-192259-1  
SDG: PFAS: Aiea Wells Units 1&2 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

- 1
- 2
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- 4
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# Method Summary

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

Job ID: 380-192259-1  
SDG: PFAS: Aiea Wells Units 1&2 P2

Method	Method Description	Protocol	Laboratory
533	Perfluorinated and Polyfluorinated Alkyl Substances in Drinking Water	EPA	EA POM
537.1	Perfluorinated Alkyl Acids (LC/MS)	EPA	EA POM
533	Extraction of Perfluorinated and Polyfluorinated Alkyl Acids	EPA	EA POM
537.1 DW	Extraction of Perfluorinated Alkyl Acids	EPA	EA POM

**Protocol References:**

EPA = US Environmental Protection Agency

**Laboratory References:**

EA POM = Eurofins 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: 380-192259-1  
SDG: PFAS: Aiea Wells Units 1&2 P2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	PWSID Number
380-192259-1	AIEA WELLS PUMPS 1&2 (260) P2	Drinking Water	01/12/26 09:10	01/14/26 09:38	HI0000331
380-192259-2	FB AIEA WELLS PUMPS 1&2	Water	01/12/26 09:10	01/14/26 09:38	HI0000331

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- 14
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- 17



## Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-192259-1  
SDG Number: PFAS: Aiea Wells Units 1&2 P2

**Login Number: 192259**

**List Number: 1**

**Creator: Del Rosario, Michael**

**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).	True	
Samples do not require splitting or compositing.	True	
Container provided by EEA	True	

