

ANALYTICAL REPORT

PREPARED FOR

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

Generated 2/3/2026 3:48:00 PM

JOB DESCRIPTION

RED-HILL
PFAS: Halawa Wells Units 1&2 P1
RUSH Weekly Red Hill

JOB NUMBER

380-195078-1

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

Generated
2/3/2026 3:48:00 PM

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Detection Summary	6
Client Sample Results	7
Action Limit Summary	11
Surrogate Summary	12
Isotope Dilution Summary	13
QC Sample Results	14
QC Association Summary	25
Lab Chronicle	26
Certification Summary	27
Method Summary	28
Sample Summary	29
Chain of Custody	30
Receipt Checklists	31



Definitions/Glossary

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

Job ID: 380-195078-1
SDG: PFAS: Halawa Wells Units 1&2 P1

Qualifiers

LCMS

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

Glossary

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

Case Narrative

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

Job ID: 380-195078-1

Job ID: 380-195078-1

Eurofins Pomona

Job Narrative 380-195078-1

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 1/29/2026 9:52 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.6°C.

PFAS

Method 537.1: PFAS results by 537.1 for HALAWA WELLS UNITS 1 & 2 (380-195078-1) and FB HALAWA WELLS UNITS 1 & 2 (380-195078-2) collected on 01/26/26 is a resample for Halawa Wells Unit 1 & 2 P1 job # 380-193815-1 collected on 01/20/2026. (XWB4)

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

Eurofins Pomona

Detection Summary

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

Job ID: 380-195078-1
SDG: PFAS: Halawa Wells Units 1&2 P1

Client Sample ID: HALAWA WELLS UNITS 1 & 2

Lab Sample ID: 380-195078-1

PWSID Number: HI0000331

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanesulfonic acid (PFHxS)	2.6		2.0	ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.3		2.0	ng/L	1		533	Total/NA
Perfluoropentanoic acid (PFPeA)	2.0		2.0	ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.6		2.0	ng/L	1		537.1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.6		2.0	ng/L	1		537.1	Total/NA

Client Sample ID: FB HALAWA WELLS UNITS 1 & 2

Lab Sample ID: 380-195078-2

PWSID Number: HI0000331

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: 380-195078-1
SDG: PFAS: Halawa Wells Units 1&2 P1

Client Sample ID: HALAWA WELLS UNITS 1 & 2

Lab Sample ID: 380-195078-1

Date Collected: 01/26/26 10:39

Matrix: Water

Date Received: 01/29/26 09:52

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		02/02/26 16:13	02/03/26 10:59	1
9-Chlorohexadecafluoro-3-oxanonan e-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 10:59	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 10:59	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 10:59	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 10:59	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 10:59	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 10:59	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 10:59	1
Perfluorohexanesulfonic acid (PFHxS)	2.6		2.0	ng/L		02/02/26 16:13	02/03/26 10:59	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 10:59	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 10:59	1
Perfluorooctanesulfonic acid (PFOS)	2.3		2.0	ng/L		02/02/26 16:13	02/03/26 10:59	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 10:59	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 10:59	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 10:59	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 10:59	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 10:59	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 10:59	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 10:59	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 10:59	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 10:59	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 10:59	1
Perfluoropentanoic acid (PFPeA)	2.0		2.0	ng/L		02/02/26 16:13	02/03/26 10:59	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 10:59	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 10:59	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	108		50 - 200			02/02/26 16:13	02/03/26 10:59	1
13C6 PFDA	107		50 - 200			02/02/26 16:13	02/03/26 10:59	1
13C5 PFHxA	113		50 - 200			02/02/26 16:13	02/03/26 10:59	1
13C4 PFHpA	114		50 - 200			02/02/26 16:13	02/03/26 10:59	1
13C8 PFOA	111		50 - 200			02/02/26 16:13	02/03/26 10:59	1
13C9 PFNA	111		50 - 200			02/02/26 16:13	02/03/26 10:59	1
13C7 PFUnA	103		50 - 200			02/02/26 16:13	02/03/26 10:59	1
13C2 PFDoA	101		50 - 200			02/02/26 16:13	02/03/26 10:59	1
13C4 PFBA	116		50 - 200			02/02/26 16:13	02/03/26 10:59	1
13C5 PFPeA	114		50 - 200			02/02/26 16:13	02/03/26 10:59	1
13C3 PFBS	116		50 - 200			02/02/26 16:13	02/03/26 10:59	1
13C3 PFHxS	109		50 - 200			02/02/26 16:13	02/03/26 10:59	1

Eurofins Pomona

Client Sample Results

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

Job ID: 380-195078-1
SDG: PFAS: Halawa Wells Units 1&2 P1

Client Sample ID: HALAWA WELLS UNITS 1 & 2

Lab Sample ID: 380-195078-1

Date Collected: 01/26/26 10:39

Matrix: Water

Date Received: 01/29/26 09:52

PWSID Number: HI0000331

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

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 PFOS	115		50 - 200	02/02/26 16:13	02/03/26 10:59	1
13C2-4:2-FTS	111		50 - 200	02/02/26 16:13	02/03/26 10:59	1
13C2-6:2-FTS	104		50 - 200	02/02/26 16:13	02/03/26 10:59	1
13C2-8:2-FTS	100		50 - 200	02/02/26 16:13	02/03/26 10:59	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		01/30/26 18:03	01/31/26 18:14	1
Perfluorooctanesulfonic acid (PFOS)	2.6		2.0	ng/L		01/30/26 18:03	01/31/26 18:14	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/30/26 18:03	01/31/26 18:14	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		01/30/26 18:03	01/31/26 18:14	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		01/30/26 18:03	01/31/26 18:14	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/30/26 18:03	01/31/26 18:14	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/30/26 18:03	01/31/26 18:14	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/30/26 18:03	01/31/26 18:14	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/30/26 18:03	01/31/26 18:14	1
Perfluorohexanesulfonic acid (PFHxS)	2.6		2.0	ng/L		01/30/26 18:03	01/31/26 18:14	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/30/26 18:03	01/31/26 18:14	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/30/26 18:03	01/31/26 18:14	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/30/26 18:03	01/31/26 18:14	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		01/30/26 18:03	01/31/26 18:14	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		01/30/26 18:03	01/31/26 18:14	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<2.0		2.0	ng/L		01/30/26 18:03	01/31/26 18:14	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		01/30/26 18:03	01/31/26 18:14	1
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/30/26 18:03	01/31/26 18:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	107		70 - 130	01/30/26 18:03	01/31/26 18:14	1
13C2 PFHxA	107		70 - 130	01/30/26 18:03	01/31/26 18:14	1
13C2 PFDA	117		70 - 130	01/30/26 18:03	01/31/26 18:14	1
13C3-GenX	104		70 - 130	01/30/26 18:03	01/31/26 18:14	1

Client Sample ID: FB HALAWA WELLS UNITS 1 & 2

Lab Sample ID: 380-195078-2

Date Collected: 01/26/26 10:39

Matrix: Water

Date Received: 01/29/26 09:52

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 11:08	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 11:08	1
4,8-Dioxo-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 11:08	1

Eurofins Pomona

Client Sample Results

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

Job ID: 380-195078-1
SDG: PFAS: Halawa Wells Units 1&2 P1

Client Sample ID: FB HALAWA WELLS UNITS 1 & 2

Lab Sample ID: 380-195078-2

Date Collected: 01/26/26 10:39

Matrix: Water

Date Received: 01/29/26 09:52

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
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 11:08	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 11:08	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 11:08	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 11:08	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 11:08	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 11:08	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 11:08	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 11:08	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 11:08	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 11:08	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 11:08	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 11:08	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 11:08	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 11:08	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 11:08	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 11:08	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 11:08	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 11:08	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 11:08	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 11:08	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 11:08	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0	ng/L		02/02/26 16:13	02/03/26 11:08	1
Isotope Dilution	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	99		50 - 200			02/02/26 16:13	02/03/26 11:08	1
13C6 PFDA	101		50 - 200			02/02/26 16:13	02/03/26 11:08	1
13C5 PFHxA	107		50 - 200			02/02/26 16:13	02/03/26 11:08	1
13C4 PFHpA	108		50 - 200			02/02/26 16:13	02/03/26 11:08	1
13C8 PFOA	105		50 - 200			02/02/26 16:13	02/03/26 11:08	1
13C9 PFNA	108		50 - 200			02/02/26 16:13	02/03/26 11:08	1
13C7 PFUnA	100		50 - 200			02/02/26 16:13	02/03/26 11:08	1
13C2 PFDoA	94		50 - 200			02/02/26 16:13	02/03/26 11:08	1
13C4 PFBA	108		50 - 200			02/02/26 16:13	02/03/26 11:08	1
13C5 PFPeA	103		50 - 200			02/02/26 16:13	02/03/26 11:08	1
13C3 PFBS	112		50 - 200			02/02/26 16:13	02/03/26 11:08	1
13C3 PFHxS	107		50 - 200			02/02/26 16:13	02/03/26 11:08	1
13C8 PFOS	112		50 - 200			02/02/26 16:13	02/03/26 11:08	1
13C2-4:2-FTS	104		50 - 200			02/02/26 16:13	02/03/26 11:08	1
13C2-6:2-FTS	100		50 - 200			02/02/26 16:13	02/03/26 11:08	1
13C2-8:2-FTS	99		50 - 200			02/02/26 16:13	02/03/26 11:08	1

Eurofins Pomona

Client Sample Results

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

Job ID: 380-195078-1
SDG: PFAS: Halawa Wells Units 1&2 P1

Client Sample ID: FB HALAWA WELLS UNITS 1 & 2

Lab Sample ID: 380-195078-2

Date Collected: 01/26/26 10:39

Matrix: Water

Date Received: 01/29/26 09:52

PWSID Number: HI0000331

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		01/30/26 18:03	01/31/26 18:24	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		01/30/26 18:03	01/31/26 18:24	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		01/30/26 18:03	01/31/26 18:24	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		01/30/26 18:03	01/31/26 18:24	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		01/30/26 18:03	01/31/26 18:24	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		01/30/26 18:03	01/31/26 18:24	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		01/30/26 18:03	01/31/26 18:24	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		01/30/26 18:03	01/31/26 18:24	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		01/30/26 18:03	01/31/26 18:24	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		01/30/26 18:03	01/31/26 18:24	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		01/30/26 18:03	01/31/26 18:24	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		01/30/26 18:03	01/31/26 18:24	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		01/30/26 18:03	01/31/26 18:24	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		01/30/26 18:03	01/31/26 18:24	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		01/30/26 18:03	01/31/26 18:24	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<2.0		2.0	ng/L		01/30/26 18:03	01/31/26 18:24	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		01/30/26 18:03	01/31/26 18:24	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		01/30/26 18:03	01/31/26 18:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	105		70 - 130			01/30/26 18:03	01/31/26 18:24	1
13C2 PFHxA	94		70 - 130			01/30/26 18:03	01/31/26 18:24	1
13C2 PFDA	106		70 - 130			01/30/26 18:03	01/31/26 18:24	1
13C3-GenX	85		70 - 130			01/30/26 18:03	01/31/26 18:24	1

Action Limit Summary

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

Job ID: 380-195078-1
SDG: PFAS: Halawa Wells Units 1&2 P1

Client Sample ID: HALAWA WELLS UNITS 1 & 2

Lab Sample ID: 380-195078-1

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)	2.6		ng/L	10	2.0	533	Total/NA
Perfluorononanoic acid (PFNA)	<2.0		ng/L	10	2.0	533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.3		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)	2.6		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)	2.6		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 HALAWA WELLS UNITS 1 & 2

Lab Sample ID: 380-195078-2

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: 380-195078-1
SDG: PFAS: Halawa Wells Units 1&2 P1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	d5NEFOS (70-130)	PFHxA (70-130)	PFDA (70-130)	GenX (70-130)
380-195078-1	HALAWA WELLS UNITS 1 & 2	107	107	117	104
380-195078-2	FB HALAWA WELLS UNITS 1 & 2	105	94	106	85
380-195105-B-1-A MS	Matrix Spike	108	102	111	97
380-195105-C-1-A MSD	Matrix Spike Duplicate	110	102	106	97
LCS 380-202356/21-A	Lab Control Sample	103	96	113	87
MBL 380-202356/19-A	Method Blank	110	108	114	100
MRL 380-202356/20-A	Lab Control Sample	112	109	115	103
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: 380-195078-1
SDG: PFAS: Halawa Wells Units 1&2 P1

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

Matrix: Water

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	HFPODA (50-200)	C6PFDA (50-200)	13C5PHA (50-200)	C4PFHA (50-200)	C8PFOA (50-200)	C9PFNA (50-200)	13C7PUA (50-200)	PFD _o A (50-200)
380-195037-E-1-A MS	Matrix Spike	123	103	109	104	106	103	98	100
380-195037-F-1-A MSD	Matrix Spike Duplicate	127	108	107	99	105	108	103	99
380-195078-1	HALAWA WELLS UNITS 1 & 2	108	107	113	114	111	111	103	101
380-195078-2	FB HALAWA WELLS UNITS 1 & 2	99	101	107	108	105	108	100	94
LCS 380-202800/22-A	Lab Control Sample	102	95	97	96	99	98	92	90
MBL 380-202800/20-A	Method Blank	104	103	106	108	108	106	101	99
MRL 380-202800/21-A	Lab Control Sample	95	93	101	98	99	98	95	89
		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFBA (50-200)	PFP _e A (50-200)	C3PFBS (50-200)	C3PFHS (50-200)	C8PFOS (50-200)	42FTS (50-200)	62FTS (50-200)	82FTS (50-200)
380-195037-E-1-A MS	Matrix Spike	111	102	115	111	113	91	96	86
380-195037-F-1-A MSD	Matrix Spike Duplicate	119	110	113	108	117	90	89	86
380-195078-1	HALAWA WELLS UNITS 1 & 2	116	114	116	109	115	111	104	100
380-195078-2	FB HALAWA WELLS UNITS 1 & 2	108	103	112	107	112	104	100	99
LCS 380-202800/22-A	Lab Control Sample	106	100	110	104	110	94	91	92
MBL 380-202800/20-A	Method Blank	114	104	112	109	116	95	94	99
MRL 380-202800/21-A	Lab Control Sample	105	104	109	105	116	99	99	90
Surrogate Legend									
HFPODA = 13C3 HFPO-DA									
C6PFDA = 13C6 PFDA									
13C5PHA = 13C5 PFHxA									
C4PFHA = 13C4 PFHpA									
C8PFOA = 13C8 PFOA									
C9PFNA = 13C9 PFNA									
13C7PUA = 13C7 PFUnA									
PFD _o A = 13C2 PFD _o A									
PFBA = 13C4 PFBA									
PFP _e A = 13C5 PFP _e A									
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: 380-195078-1
SDG: PFAS: Halawa Wells Units 1&2 P1

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

Lab Sample ID: MBL 380-202800/20-A

Matrix: Water

Analysis Batch: 202997

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 202800

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CI-PF3OUdS)	<0.30		2.0	ng/L		02/02/26 16:13	02/03/26 08:07	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9CI-PF3ONS)	<0.30		2.0	ng/L		02/02/26 16:13	02/03/26 08:07	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0	ng/L		02/02/26 16:13	02/03/26 08:07	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<1.0		2.0	ng/L		02/02/26 16:13	02/03/26 08:07	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0	ng/L		02/02/26 16:13	02/03/26 08:07	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	ng/L		02/02/26 16:13	02/03/26 08:07	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	ng/L		02/02/26 16:13	02/03/26 08:07	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0	ng/L		02/02/26 16:13	02/03/26 08:07	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0	ng/L		02/02/26 16:13	02/03/26 08:07	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0	ng/L		02/02/26 16:13	02/03/26 08:07	1
Perfluorononanoic acid (PFNA)	<0.40		2.0	ng/L		02/02/26 16:13	02/03/26 08:07	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0	ng/L		02/02/26 16:13	02/03/26 08:07	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0	ng/L		02/02/26 16:13	02/03/26 08:07	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0	ng/L		02/02/26 16:13	02/03/26 08:07	1
Perfluorobutanoic acid (PFBA)	<0.69		2.0	ng/L		02/02/26 16:13	02/03/26 08:07	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.38		2.0	ng/L		02/02/26 16:13	02/03/26 08:07	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.37		2.0	ng/L		02/02/26 16:13	02/03/26 08:07	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<0.48		2.0	ng/L		02/02/26 16:13	02/03/26 08:07	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<0.47		2.0	ng/L		02/02/26 16:13	02/03/26 08:07	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<0.25		2.0	ng/L		02/02/26 16:13	02/03/26 08:07	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.46		2.0	ng/L		02/02/26 16:13	02/03/26 08:07	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.15		2.0	ng/L		02/02/26 16:13	02/03/26 08:07	1
Perfluoropentanoic acid (PFPeA)	<0.38		2.0	ng/L		02/02/26 16:13	02/03/26 08:07	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.36		2.0	ng/L		02/02/26 16:13	02/03/26 08:07	1
Perfluoropentanesulfonic acid (PFPeS)	<0.39		2.0	ng/L		02/02/26 16:13	02/03/26 08:07	1

Isotope Dilution	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3 HFPO-DA	104		50 - 200	02/02/26 16:13	02/03/26 08:07	1
13C6 PFDA	103		50 - 200	02/02/26 16:13	02/03/26 08:07	1
13C5 PFHxA	106		50 - 200	02/02/26 16:13	02/03/26 08:07	1
13C4 PFHpA	108		50 - 200	02/02/26 16:13	02/03/26 08:07	1
13C8 PFOA	108		50 - 200	02/02/26 16:13	02/03/26 08:07	1
13C9 PFNA	106		50 - 200	02/02/26 16:13	02/03/26 08:07	1
13C7 PFUnA	101		50 - 200	02/02/26 16:13	02/03/26 08:07	1
13C2 PFDoA	99		50 - 200	02/02/26 16:13	02/03/26 08:07	1
13C4 PFBA	114		50 - 200	02/02/26 16:13	02/03/26 08:07	1
13C5 PFPeA	104		50 - 200	02/02/26 16:13	02/03/26 08:07	1
13C3 PFBS	112		50 - 200	02/02/26 16:13	02/03/26 08:07	1
13C3 PFHxS	109		50 - 200	02/02/26 16:13	02/03/26 08:07	1

Eurofins Pomona

QC Sample Results

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

Job ID: 380-195078-1
SDG: PFAS: Halawa Wells Units 1&2 P1

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

Lab Sample ID: MBL 380-202800/20-A

Matrix: Water

Analysis Batch: 202997

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 202800

Isotope Dilution	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 PFOS	116		50 - 200	02/02/26 16:13	02/03/26 08:07	1
13C2-4:2-FTS	95		50 - 200	02/02/26 16:13	02/03/26 08:07	1
13C2-6:2-FTS	94		50 - 200	02/02/26 16:13	02/03/26 08:07	1
13C2-8:2-FTS	99		50 - 200	02/02/26 16:13	02/03/26 08:07	1

Lab Sample ID: LCS 380-202800/22-A

Matrix: Water

Analysis Batch: 202997

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 202800

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	60.1	56.7		ng/L		94	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	60.1	60.5		ng/L		101	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	60.1	60.4		ng/L		100	70 - 130
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	60.1	54.5		ng/L		91	70 - 130
Perfluorobutanesulfonic acid (PFBS)	60.1	58.2		ng/L		97	70 - 130
Perfluorodecanoic acid (PFDA)	60.1	59.7		ng/L		99	70 - 130
Perfluorododecanoic acid (PFDoA)	60.1	59.7		ng/L		99	70 - 130
Perfluoroheptanoic acid (PFHpA)	60.1	59.8		ng/L		100	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	60.1	62.1		ng/L		103	70 - 130
Perfluorohexanoic acid (PFHxA)	60.1	63.5		ng/L		106	70 - 130
Perfluorononanoic acid (PFNA)	60.1	59.1		ng/L		98	70 - 130
Perfluorooctanesulfonic acid (PFOS)	60.1	57.9		ng/L		96	70 - 130
Perfluorooctanoic acid (PFOA)	60.1	56.6		ng/L		94	70 - 130
Perfluoroundecanoic acid (PFUnA)	60.1	58.4		ng/L		97	70 - 130
Perfluorobutanoic acid (PFBA)	60.1	60.7		ng/L		101	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	60.1	58.5		ng/L		97	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	60.1	63.3		ng/L		105	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	60.1	60.7		ng/L		101	70 - 130
Nonfluoro-3,6-dioxahexanoic acid (NFDHA)	60.1	61.5		ng/L		102	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	60.1	65.0		ng/L		108	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	60.1	57.4		ng/L		96	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	60.1	63.9		ng/L		106	70 - 130
Perfluoropentanoic acid (PFPeA)	60.1	58.4		ng/L		97	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	60.1	60.1		ng/L		100	70 - 130

Eurofins Pomona

QC Sample Results

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

Job ID: 380-195078-1
SDG: PFAS: Halawa Wells Units 1&2 P1

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

Lab Sample ID: LCS 380-202800/22-A

Matrix: Water

Analysis Batch: 202997

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 202800

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoropentanesulfonic acid (PFPeS)	60.1	61.3		ng/L		102	70 - 130
	LCS	LCS					
Isotope Dilution	%Recovery	Qualifier	Limits				
13C3 HFPO-DA	102		50 - 200				
13C6 PFDA	95		50 - 200				
13C5 PFHxA	97		50 - 200				
13C4 PFHpA	96		50 - 200				
13C8 PFOA	99		50 - 200				
13C9 PFNA	98		50 - 200				
13C7 PFUnA	92		50 - 200				
13C2 PFDoA	90		50 - 200				
13C4 PFBA	106		50 - 200				
13C5 PFPeA	100		50 - 200				
13C3 PFBS	110		50 - 200				
13C3 PFHxS	104		50 - 200				
13C8 PFOS	110		50 - 200				
13C2-4:2-FTS	94		50 - 200				
13C2-6:2-FTS	91		50 - 200				
13C2-8:2-FTS	92		50 - 200				

Lab Sample ID: MRL 380-202800/21-A

Matrix: Water

Analysis Batch: 202997

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 202800

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.00	2.04	J	ng/L		102	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	2.00	2.00	J	ng/L		100	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.00	1.95	J	ng/L		97	50 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.00	1.95	J	ng/L		98	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.00	2.05	J	ng/L		102	50 - 150
Perfluorodecanoic acid (PFDA)	2.00	2.06	J	ng/L		103	50 - 150
Perfluorododecanoic acid (PFDoA)	2.00	2.22	J	ng/L		111	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.00	2.09	J	ng/L		104	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.00	2.03	J	ng/L		102	50 - 150
Perfluorohexanoic acid (PFHxA)	2.00	1.99	J	ng/L		99	50 - 150
Perfluorononanoic acid (PFNA)	2.00	2.05	J	ng/L		102	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.00	2.01	J	ng/L		100	50 - 150
Perfluorooctanoic acid (PFOA)	2.00	1.95	J	ng/L		97	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.00	2.01	J	ng/L		100	50 - 150
Perfluorobutanoic acid (PFBA)	2.00	2.06	J	ng/L		103	50 - 150

Eurofins Pomona

QC Sample Results

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

Job ID: 380-195078-1
SDG: PFAS: Halawa Wells Units 1&2 P1

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

Lab Sample ID: MRL 380-202800/21-A

Matrix: Water

Analysis Batch: 202997

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 202800

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	2.00	2.08	J	ng/L		104	50 - 150
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	2.00	2.26	J	ng/L		113	50 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	2.00	2.50	J	ng/L		125	50 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2.00	2.16	J	ng/L		108	50 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEA)	2.00	2.45	J	ng/L		122	50 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.00	1.84	J	ng/L		92	50 - 150
Perfluoro-4-methoxybutanoic acid (PFMBA)	2.00	2.10	J	ng/L		105	50 - 150
Perfluoropentanoic acid (PFPeA)	2.00	2.00	J	ng/L		100	50 - 150
Perfluoroheptanesulfonic acid (PFHpS)	2.00	2.00	J	ng/L		100	50 - 150
Perfluoropentanesulfonic acid (PFPeS)	2.00	2.13	J	ng/L		106	50 - 150

Isotope Dilution	%Recovery	MRL Qualifier	MRL Limits
13C3 HFPO-DA	95		50 - 200
13C6 PFDA	93		50 - 200
13C5 PFHxA	101		50 - 200
13C4 PFHpA	98		50 - 200
13C8 PFOA	99		50 - 200
13C9 PFNA	98		50 - 200
13C7 PFUnA	95		50 - 200
13C2 PFDoA	89		50 - 200
13C4 PFBA	105		50 - 200
13C5 PFPeA	104		50 - 200
13C3 PFBS	109		50 - 200
13C3 PFHxS	105		50 - 200
13C8 PFOS	116		50 - 200
13C2-4:2-FTS	99		50 - 200
13C2-6:2-FTS	99		50 - 200
13C2-8:2-FTS	90		50 - 200

Lab Sample ID: 380-195037-E-1-A MS

Matrix: Water

Analysis Batch: 202997

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 202800

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		120	108		ng/L		90	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		120	110		ng/L		91	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		120	117		ng/L		97	70 - 130

Eurofins Pomona

QC Sample Results

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

Job ID: 380-195078-1
SDG: PFAS: Halawa Wells Units 1&2 P1

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

Lab Sample ID: 380-195037-E-1-A MS

Matrix: Water

Analysis Batch: 202997

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 202800

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide	<2.0		120	105		ng/L		87	70 - 130
Dimer Acid (HFPO-DA/GenX)									
Perfluorobutanesulfonic acid (PFBS)	<2.0		120	109		ng/L		90	70 - 130
Perfluorodecanoic acid (PFDA)	<2.0		120	115		ng/L		95	70 - 130
Perfluorododecanoic acid (PFDoA)	<2.0		120	117		ng/L		97	70 - 130
Perfluoroheptanoic acid (PFHpA)	<2.0		120	122		ng/L		101	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	<2.0		120	118		ng/L		98	70 - 130
Perfluorohexanoic acid (PFHxA)	<2.0		120	120		ng/L		99	70 - 130
Perfluorononanoic acid (PFNA)	<2.0		120	119		ng/L		99	70 - 130
Perfluorooctanesulfonic acid (PFOS)	<2.0		120	116		ng/L		96	70 - 130
Perfluorooctanoic acid (PFOA)	<2.0		120	119		ng/L		98	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		120	119		ng/L		99	70 - 130
Perfluorobutanoic acid (PFBA)	<2.0		120	115		ng/L		95	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		120	117		ng/L		97	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		120	114		ng/L		95	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		120	111		ng/L		92	70 - 130
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		120	96.6		ng/L		80	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEA)	<2.0		120	108		ng/L		90	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		120	113		ng/L		94	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		120	128		ng/L		107	70 - 130
Perfluoropentanoic acid (PFPeA)	<2.0		120	113		ng/L		93	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		120	118		ng/L		98	70 - 130
Perfluoropentanesulfonic acid (PFPeS)	<2.0		120	119		ng/L		99	70 - 130

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
13C3 HFPO-DA	123		50 - 200
13C6 PFDA	103		50 - 200
13C5 PFHxA	109		50 - 200
13C4 PFHpA	104		50 - 200
13C8 PFOA	106		50 - 200
13C9 PFNA	103		50 - 200
13C7 PFUnA	98		50 - 200
13C2 PFDoA	100		50 - 200
13C4 PFBA	111		50 - 200
13C5 PFPeA	102		50 - 200
13C3 PFBS	115		50 - 200
13C3 PFHxS	111		50 - 200
13C8 PFOS	113		50 - 200

Eurofins Pomona

QC Sample Results

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

Job ID: 380-195078-1
SDG: PFAS: Halawa Wells Units 1&2 P1

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

Lab Sample ID: 380-195037-E-1-A MS

Matrix: Water

Analysis Batch: 202997

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 202800

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
13C2-4:2-FTS	91		50 - 200
13C2-6:2-FTS	96		50 - 200
13C2-8:2-FTS	86		50 - 200

Lab Sample ID: 380-195037-F-1-A MSD

Matrix: Water

Analysis Batch: 202997

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 202800

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		120	111		ng/L		92	70 - 130	2	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<2.0		120	111		ng/L		92	70 - 130	1	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		120	125		ng/L		104	70 - 130	7	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		120	99.4		ng/L		83	70 - 130	5	30
Perfluorobutanesulfonic acid (PFBS)	<2.0		120	113		ng/L		94	70 - 130	4	30
Perfluorodecanoic acid (PFDA)	<2.0		120	114		ng/L		95	70 - 130	1	30
Perfluorododecanoic acid (PFDoA)	<2.0		120	122		ng/L		102	70 - 130	4	30
Perfluorooheptanoic acid (PFHpA)	<2.0		120	127		ng/L		106	70 - 130	4	30
Perfluorohexanesulfonic acid (PFHxS)	<2.0		120	119		ng/L		98	70 - 130	1	30
Perfluorohexanoic acid (PFHxA)	<2.0		120	120		ng/L		99	70 - 130	0	30
Perfluorononanoic acid (PFNA)	<2.0		120	115		ng/L		96	70 - 130	3	30
Perfluorooctanesulfonic acid (PFOS)	<2.0		120	111		ng/L		92	70 - 130	4	30
Perfluorooctanoic acid (PFOA)	<2.0		120	117		ng/L		97	70 - 130	2	30
Perfluoroundecanoic acid (PFUnA)	<2.0		120	116		ng/L		96	70 - 130	3	30
Perfluorobutanoic acid (PFBA)	<2.0		120	112		ng/L		93	70 - 130	2	30
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		120	123		ng/L		102	70 - 130	5	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		120	119		ng/L		98	70 - 130	4	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		120	121		ng/L		100	70 - 130	8	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		120	108		ng/L		90	70 - 130	11	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEEESA)	<2.0		120	117		ng/L		97	70 - 130	8	30
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		120	111		ng/L		92	70 - 130	2	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		120	132		ng/L		109	70 - 130	2	30
Perfluoropentanoic acid (PFPeA)	<2.0		120	117		ng/L		97	70 - 130	3	30
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		120	112		ng/L		93	70 - 130	5	30
Perfluoropentanesulfonic acid (PFPeS)	<2.0		120	125		ng/L		104	70 - 130	5	30

Eurofins Pomona

QC Sample Results

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

Job ID: 380-195078-1
SDG: PFAS: Halawa Wells Units 1&2 P1

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

Isotope Dilution	MSD MSD		Limits
	%Recovery	Qualifier	
13C3 HFPO-DA	127		50 - 200
13C6 PFDA	108		50 - 200
13C5 PFHxA	107		50 - 200
13C4 PFHpA	99		50 - 200
13C8 PFOA	105		50 - 200
13C9 PFNA	108		50 - 200
13C7 PFUnA	103		50 - 200
13C2 PFDoA	99		50 - 200
13C4 PFBA	119		50 - 200
13C5 PFPeA	110		50 - 200
13C3 PFBS	113		50 - 200
13C3 PFHxS	108		50 - 200
13C8 PFOS	117		50 - 200
13C2-4:2-FTS	90		50 - 200
13C2-6:2-FTS	89		50 - 200
13C2-8:2-FTS	86		50 - 200

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

Lab Sample ID: MBL 380-202356/19-A
Matrix: Water
Analysis Batch: 202502

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 202356

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		01/30/26 18:03	01/31/26 16:58	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0	ng/L		01/30/26 18:03	01/31/26 16:58	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0	ng/L		01/30/26 18:03	01/31/26 16:58	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<0.58		2.0	ng/L		01/30/26 18:03	01/31/26 16:58	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<0.42		2.0	ng/L		01/30/26 18:03	01/31/26 16:58	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0	ng/L		01/30/26 18:03	01/31/26 16:58	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0	ng/L		01/30/26 18:03	01/31/26 16:58	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0	ng/L		01/30/26 18:03	01/31/26 16:58	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0	ng/L		01/30/26 18:03	01/31/26 16:58	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0	ng/L		01/30/26 18:03	01/31/26 16:58	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0	ng/L		01/30/26 18:03	01/31/26 16:58	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0	ng/L		01/30/26 18:03	01/31/26 16:58	1
Perfluorononanoic acid (PFNA)	<0.40		2.0	ng/L		01/30/26 18:03	01/31/26 16:58	1
Perfluorotetradecanoic acid (PFTA)	<0.54		2.0	ng/L		01/30/26 18:03	01/31/26 16:58	1
Perfluorotridecanoic acid (PFTTrDA)	<0.36		2.0	ng/L		01/30/26 18:03	01/31/26 16:58	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	<0.30		2.0	ng/L		01/30/26 18:03	01/31/26 16:58	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.30		2.0	ng/L		01/30/26 18:03	01/31/26 16:58	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0	ng/L		01/30/26 18:03	01/31/26 16:58	1
Surrogate	MBL MBL		Limits			Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier						
d5-NEtFOSAA	110		70 - 130			01/30/26 18:03	01/31/26 16:58	1
13C2 PFHxA	108		70 - 130			01/30/26 18:03	01/31/26 16:58	1
13C2 PFDA	114		70 - 130			01/30/26 18:03	01/31/26 16:58	1

Eurofins Pomona

QC Sample Results

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

Job ID: 380-195078-1
SDG: PFAS: Halawa Wells Units 1&2 P1

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

Lab Sample ID: MBL 380-202356/19-A

Matrix: Water

Analysis Batch: 202502

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 202356

Surrogate	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-GenX	100		70 - 130	01/30/26 18:03	01/31/26 16:58	1

Lab Sample ID: LCS 380-202356/21-A

Matrix: Water

Analysis Batch: 202502

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 202356

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide	25.1	22.3		ng/L		89	70 - 130
Dimer Acid (HFPO-DA/GenX)							
Perfluorooctanesulfonic acid (PFOS)	25.1	26.8		ng/L		107	70 - 130
Perfluoroundecanoic acid (PFUnA)	25.1	27.2		ng/L		109	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	25.1	24.7		ng/L		99	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	25.1	26.4		ng/L		105	70 - 130
Perfluorohexanoic acid (PFHxA)	25.1	24.6		ng/L		98	70 - 130
Perfluorododecanoic acid (PFDoA)	25.1	25.6		ng/L		102	70 - 130
Perfluorooctanoic acid (PFOA)	25.1	26.9		ng/L		108	70 - 130
Perfluorodecanoic acid (PFDA)	25.1	26.5		ng/L		106	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	25.1	25.8		ng/L		103	70 - 130
Perfluorobutanesulfonic acid (PFBS)	25.1	29.3		ng/L		117	70 - 130
Perfluoroheptanoic acid (PFHpA)	25.1	26.4		ng/L		105	70 - 130
Perfluorononanoic acid (PFNA)	25.1	28.1		ng/L		112	70 - 130
Perfluorotetradecanoic acid (PFTA)	25.1	25.3		ng/L		101	70 - 130
Perfluorotridecanoic acid (PFTrDA)	25.1	27.6		ng/L		110	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	25.1	28.9		ng/L		115	70 - 130
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	25.1	28.2		ng/L		113	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	25.1	22.4		ng/L		89	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
d5-NEtFOSAA	103		70 - 130
13C2 PFHxA	96		70 - 130
13C2 PFDA	113		70 - 130
13C3-GenX	87		70 - 130

QC Sample Results

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

Job ID: 380-195078-1
SDG: PFAS: Halawa Wells Units 1&2 P1

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

Lab Sample ID: MRL 380-202356/20-A

Matrix: Water

Analysis Batch: 202502

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 202356

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide	2.00	1.93	J	ng/L		96	50 - 150
Dimer Acid (HFPO-DA/GenX)							
Perfluorooctanesulfonic acid (PFOS)	2.00	2.15	J	ng/L		108	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.00	2.22	J	ng/L		111	50 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2.00	2.11	J	ng/L		105	50 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2.00	2.37	J	ng/L		119	50 - 150
Perfluorohexanoic acid (PFHxA)	2.00	2.20	J	ng/L		110	50 - 150
Perfluorododecanoic acid (PFDoA)	2.00	2.04	J	ng/L		102	50 - 150
Perfluorooctanoic acid (PFOA)	2.00	2.27	J	ng/L		114	50 - 150
Perfluorodecanoic acid (PFDA)	2.00	2.31	J	ng/L		115	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.00	2.01	J	ng/L		100	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.00	2.34	J	ng/L		117	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.00	2.22	J	ng/L		111	50 - 150
Perfluorononanoic acid (PFNA)	2.00	2.29	J	ng/L		114	50 - 150
Perfluorotetradecanoic acid (PFTA)	2.00	1.85	J	ng/L		93	50 - 150
Perfluorotridecanoic acid (PFTrDA)	2.00	2.21	J	ng/L		111	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	2.00	2.30	J	ng/L		115	50 - 150
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.00	2.22	J	ng/L		111	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.00	1.96	J	ng/L		98	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
d5-NEtFOSAA	112		70 - 130
13C2 PFHxA	109		70 - 130
13C2 PFDA	115		70 - 130
13C3-GenX	103		70 - 130

Lab Sample ID: 380-195105-B-1-A MS

Matrix: Water

Analysis Batch: 202502

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 202356

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide	<2.0		50.2	48.7		ng/L		97	70 - 130
Dimer Acid (HFPO-DA/GenX)									
Perfluorooctanesulfonic acid (PFOS)	<2.0		50.2	52.9		ng/L		105	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		50.2	50.2		ng/L		100	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		50.2	54.1		ng/L		108	70 - 130

Eurofins Pomona

QC Sample Results

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

Job ID: 380-195078-1
SDG: PFAS: Halawa Wells Units 1&2 P1

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

Lab Sample ID: 380-195105-B-1-A MS

Matrix: Water

Analysis Batch: 202502

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 202356

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec		
	Result	Qualifier	Added	Result	Qualifier			Limits	Limits		
N-ethylperfluorooctanesulfonami doacetic acid (NEtFOSAA)	<2.0		50.2	55.8		ng/L		111	70 - 130		
Perfluorohexanoic acid (PFHxA)	<2.0		50.2	53.8		ng/L		106	70 - 130		
Perfluorododecanoic acid (PFDoA)	<2.0		50.2	48.3		ng/L		96	70 - 130		
Perfluorooctanoic acid (PFOA)	<2.0		50.2	54.0		ng/L		108	70 - 130		
Perfluorodecanoic acid (PFDA)	<2.0		50.2	53.2		ng/L		106	70 - 130		
Perfluorohexanesulfonic acid (PFHxS)	<2.0		50.2	52.6		ng/L		104	70 - 130		
Perfluorobutanesulfonic acid (PFBS)	<2.0		50.2	59.4		ng/L		118	70 - 130		
Perfluoroheptanoic acid (PFHpA)	<2.0		50.2	51.7		ng/L		103	70 - 130		
Perfluorononanoic acid (PFNA)	<2.0		50.2	53.6		ng/L		107	70 - 130		
Perfluorotetradecanoic acid (PFTA)	<2.0		50.2	44.3		ng/L		88	70 - 130		
Perfluorotridecanoic acid (PFTrDA)	<2.0		50.2	53.7		ng/L		107	70 - 130		
9-Chlorohexadecafluoro-3-oxan onane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		50.2	56.3		ng/L		112	70 - 130		
11-Chloroeicosafluoro-3-oxaund ecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		50.2	56.2		ng/L		112	70 - 130		
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		50.2	50.2		ng/L		100	70 - 130		
		MS			MS						
Surrogate	%Recovery	Qualifier	Limits								
d5-NEtFOSAA	108		70 - 130								
13C2 PFHxA	102		70 - 130								
13C2 PFDA	111		70 - 130								
13C3-GenX	97		70 - 130								

Lab Sample ID: 380-195105-C-1-A MSD

Matrix: Water

Analysis Batch: 202502

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 202356

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		50.1	45.9		ng/L		92	70 - 130	6	30
Perfluorooctanesulfonic acid (PFOS)	<2.0		50.1	52.5		ng/L		105	70 - 130	1	30
Perfluoroundecanoic acid (PFUnA)	<2.0		50.1	49.5		ng/L		99	70 - 130	1	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		50.1	52.0		ng/L		104	70 - 130	4	30
N-ethylperfluorooctanesulfonamidoacetic acid (NETFOSAA)	<2.0		50.1	52.6		ng/L		105	70 - 130	6	30
Perfluorohexanoic acid (PFHxA)	<2.0		50.1	49.3		ng/L		97	70 - 130	9	30
Perfluorododecanoic acid (PFDoA)	<2.0		50.1	48.0		ng/L		96	70 - 130	1	30
Perfluorooctanoic acid (PFOA)	<2.0		50.1	52.7		ng/L		105	70 - 130	2	30
Perfluorodecanoic acid (PFDA)	<2.0		50.1	54.1		ng/L		108	70 - 130	2	30

Eurofins Pomona

QC Sample Results

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

Job ID: 380-195078-1
SDG: PFAS: Halawa Wells Units 1&2 P1

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

Lab Sample ID: 380-195105-C-1-A MSD

Matrix: Water

Analysis Batch: 202502

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 202356

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorohexanesulfonic acid (PFHxS)	<2.0		50.1	52.9		ng/L		105	70 - 130	1	30
Perfluorobutanesulfonic acid (PFBS)	<2.0		50.1	57.6		ng/L		115	70 - 130	3	30
Perfluoroheptanoic acid (PFHpA)	<2.0		50.1	49.7		ng/L		99	70 - 130	4	30
Perfluorononanoic acid (PFNA)	<2.0		50.1	51.8		ng/L		103	70 - 130	4	30
Perfluorotetradecanoic acid (PFTA)	<2.0		50.1	44.8		ng/L		89	70 - 130	1	30
Perfluorotridecanoic acid (PFTrDA)	<2.0		50.1	52.3		ng/L		104	70 - 130	3	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		50.1	55.2		ng/L		110	70 - 130	2	30
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		50.1	53.1		ng/L		106	70 - 130	6	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		50.1	47.6		ng/L		95	70 - 130	5	30
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
d5-NEtFOSAA	110		70 - 130								
13C2 PFHxA	102		70 - 130								
13C2 PFDA	106		70 - 130								
13C3-GenX	97		70 - 130								

QC Association Summary

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

Job ID: 380-195078-1
SDG: PFAS: Halawa Wells Units 1&2 P1

LCMS

Prep Batch: 202356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-195078-1	HALAWA WELLS UNITS 1 & 2	Total/NA	Water	537.1 DW	
380-195078-2	FB HALAWA WELLS UNITS 1 & 2	Total/NA	Water	537.1 DW	
MBL 380-202356/19-A	Method Blank	Total/NA	Water	537.1 DW	
LCS 380-202356/21-A	Lab Control Sample	Total/NA	Water	537.1 DW	
MRL 380-202356/20-A	Lab Control Sample	Total/NA	Water	537.1 DW	
380-195105-B-1-A MS	Matrix Spike	Total/NA	Water	537.1 DW	
380-195105-C-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	537.1 DW	

Analysis Batch: 202502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-195078-1	HALAWA WELLS UNITS 1 & 2	Total/NA	Water	537.1	202356
380-195078-2	FB HALAWA WELLS UNITS 1 & 2	Total/NA	Water	537.1	202356
MBL 380-202356/19-A	Method Blank	Total/NA	Water	537.1	202356
LCS 380-202356/21-A	Lab Control Sample	Total/NA	Water	537.1	202356
MRL 380-202356/20-A	Lab Control Sample	Total/NA	Water	537.1	202356
380-195105-B-1-A MS	Matrix Spike	Total/NA	Water	537.1	202356
380-195105-C-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	537.1	202356

Prep Batch: 202800

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-195078-1	HALAWA WELLS UNITS 1 & 2	Total/NA	Water	533	
380-195078-2	FB HALAWA WELLS UNITS 1 & 2	Total/NA	Water	533	
MBL 380-202800/20-A	Method Blank	Total/NA	Water	533	
LCS 380-202800/22-A	Lab Control Sample	Total/NA	Water	533	
MRL 380-202800/21-A	Lab Control Sample	Total/NA	Water	533	
380-195037-E-1-A MS	Matrix Spike	Total/NA	Water	533	
380-195037-F-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	533	

Analysis Batch: 202997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-195078-1	HALAWA WELLS UNITS 1 & 2	Total/NA	Water	533	202800
380-195078-2	FB HALAWA WELLS UNITS 1 & 2	Total/NA	Water	533	202800
MBL 380-202800/20-A	Method Blank	Total/NA	Water	533	202800
LCS 380-202800/22-A	Lab Control Sample	Total/NA	Water	533	202800
MRL 380-202800/21-A	Lab Control Sample	Total/NA	Water	533	202800
380-195037-E-1-A MS	Matrix Spike	Total/NA	Water	533	202800
380-195037-F-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	533	202800

Lab Chronicle

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

Job ID: 380-195078-1
SDG: PFAS: Halawa Wells Units 1&2 P1

Client Sample ID: HALAWA WELLS UNITS 1 & 2

Lab Sample ID: 380-195078-1

Date Collected: 01/26/26 10:39

Matrix: Water

Date Received: 01/29/26 09:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			202800	N8NE	EA POM	02/02/26 16:13
Total/NA	Analysis	533		1	202997	SZ9R	EA POM	02/03/26 10:59
Total/NA	Prep	537.1 DW			202356	N8NE	EA POM	01/30/26 18:03
Total/NA	Analysis	537.1		1	202502	M7ML	EA POM	01/31/26 18:14

Client Sample ID: FB HALAWA WELLS UNITS 1 & 2

Lab Sample ID: 380-195078-2

Date Collected: 01/26/26 10:39

Matrix: Water

Date Received: 01/29/26 09:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			202800	N8NE	EA POM	02/02/26 16:13
Total/NA	Analysis	533		1	202997	SZ9R	EA POM	02/03/26 11:08
Total/NA	Prep	537.1 DW			202356	N8NE	EA POM	01/30/26 18:03
Total/NA	Analysis	537.1		1	202502	M7ML	EA POM	01/31/26 18:24

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: 380-195078-1
SDG: PFAS: Halawa Wells Units 1&2 P1

Laboratory: Eurofins Pomona

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

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

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

Method Summary

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

Job ID: 380-195078-1
SDG: PFAS: Halawa Wells Units 1&2 P1

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: 380-195078-1
SDG: PFAS: Halawa Wells Units 1&2 P1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	PWSID Number
380-195078-1	HALAWA WELLS UNITS 1 & 2	Water	01/26/26 10:39	01/29/26 09:52	HI0000331
380-195078-2	FB HALAWA WELLS UNITS 1 & 2	Water	01/26/26 10:39	01/29/26 09:52	HI0000331

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

Chain of Custody Record



380-195078 COC

Client Information		Lab PM: Lopez, Maria		Carrier Tracking No(s):		COC No:																											
Client Contact: kirk iwamoto		Phone: +1 808 748 5840		State of Origin:		Page: Page 1 of 1																											
Company: City & County of Honolulu		PWSID:		E-Mail: Maria Lopez@et.eurofins.com		Job #:																											
Address: 630 South Beretania Street, Chemistry Lab		Due Date Requested:		Analysis Requested																													
City: Honolulu		TAT Requested (days):																															
State, Zip: HI, 96843		Compliance Project: Δ No																															
Phone: 808-748-5840 (tel)		PO #: C20525101 exp 05312023																															
Email: kiwamoto@hbws.org		WO #: 38001111																															
Project Name: RED-HILL/HBWS sites Event Desc: RUSH Weekly Red Hill		Project #: 38001111		Preservation Codes:																													
Site:		SSOW#:		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Anchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:																													
Sample Identification		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (Water, Swab, Other)		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		SUBCONTRACT - 826 PAH Physia LL (EAL) + TICs		8015B_GRO_LL - (MOD) GRO		C18		8015B_DRO_LL_C8 - HNL Ranges: C10-C24/C24-C38/C38-C8		537.1_DW_PREC - (MOD) 526plus PLUS TICs		537.1_DW_PREC - 537.1 Full List		533 - All Analytes		Total Number of Containers		Special Instructions/Note:			
Halawa Wells Units 1&2 PI		26-Jan-2026		1039		G		Water		X		X		R		A		Q		QA		Y		I		3		3		X		Special Instructions/Note:	
FB Halawa Wells Units 1&2		26-Jan-2026		1039																												Special Instructions/Note:	
Possible Hazard Identification		☐ Non-Hazard		☐ Flammable		☐ Sun Irritant		☐ Poison B		☐ Unknown		☐ Radiological		☐ Return To Client		☐ Disposal By Lab		☐ Archive For		☐ Months		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)											
Deliverable Requested: I, II, III, IV, Other (specify)																																	
Empty Kit Relinquished by:		Date:		Time:		Company		HBWS		Received by:		Date/Time:		1/29/26 952		Company:		EPA															
Relinquished by:		Date/Time:		27 January 2026		1400		Company:		HBWS		Received by:		Date/Time:		Company:																	
Relinquished by:		Date/Time:						Company:				Received by:		Date/Time:		Company:																	
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:																															

Ver-01/16/2019

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-195078-1

SDG Number: PFAS: Halawa Wells Units 1&2 P1

Login Number: 195078

List Source: Eurofins Pomona

List Number: 1

Creator: Gross, Drake

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	