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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

Generated 8/30/2023 3:16:34 PM

JOB DESCRIPTION

RED-HILL
RUSH Weekly Red Hill

JOB NUMBER

380-57979-1

Eurofins Eaton Analytical Pomona
941 Corporate Center Drive
Pomona CA 91768-2642

See page two for job notes and contact information.

Eurofins Eaton Analytical Pomona

Job Notes

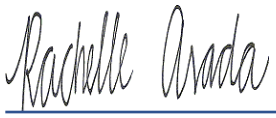
This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Eaton Analytical, LLC Project Manager.

Compliance Statement

1. Laboratory is accredited in accordance with TNI 2016 Standards and ISO/IEC 17025:2017.
2. Laboratory certifies that the test results meet all TNI 2016 and ISO/IEC 17025:2017 requirements unless noted under the individual analysis
3. Test results relate only to the sample(s) tested.
4. This report shall not be reproduced except in full, without the written approval of the laboratory.
5. Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below. (DW,Water matrices)

Authorization



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Authorized for release by
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Table of Contents

Definitions/Glossary

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

Job ID: 380-57979-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
^3+	Reporting Limit Check Standard is outside acceptance limits, high biased
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	Presumptive evidence of material.
T	Result is a tentatively identified compound (TIC) and an estimated value.

LCMS

Qualifier	Qualifier Description
*5-	Isotope dilution analyte is outside acceptance limits, low biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
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

Job ID: 380-57979-1

Laboratory: Eurofins Eaton Analytical Pomona

Narrative

Job Narrative
380-57979-1

Comments
No additional comments.

Receipt
The samples were received on 8/8/2023 10:00 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 was 4.9º C.

GC/MS Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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

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

Detection Summary

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

Job ID: 380-57979-1

Client Sample ID: HALAWA WELLS UNITS 1 & 2
PWSID Number: HI0000331

Lab Sample ID: 380-57979-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanesulfonic acid (PFHxS)	2.3		2.0		ng/L	1		533	Total/NA
Perfluorohexanoic acid (PFHxA)	2.1		2.0		ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.3		2.0		ng/L	1		533	Total/NA
Perfluorooctanoic acid (PFOA)	2.1		2.0		ng/L	1		533	Total/NA
Perfluoropentanoic acid (PFPeA)	2.7		2.0		ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.1		2.0		ng/L	1		537.1	Total/NA
Perfluorohexanoic acid (PFHxA)	2.4		2.0		ng/L	1		537.1	Total/NA
Perfluorooctanoic acid (PFOA)	2.4		2.0		ng/L	1		537.1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.5		2.0		ng/L	1		537.1	Total/NA

Client Sample ID: FB: HALAWA WELLS UNITS 1 & 2
PWSID Number: HI0000331

Lab Sample ID: 380-57979-3

No Detections.

This Detection Summary does not include radiochemical test results.

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

Job ID: 380-57979-1

Client Sample ID: HALAWA WELLS UNITS 1 & 2
Date Collected: 08/02/23 10:00
Date Received: 08/08/23 10:00

Lab Sample ID: 380-57979-1
Matrix: Drinking Water
PWSID Number: HI0000331

Method: EPA 525.2 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.098		0.098		ug/L		08/10/23 08:15	08/11/23 11:56	1
2,4'-DDD	<0.098		0.098		ug/L		08/10/23 08:15	08/11/23 11:56	1
2,4'-DDE	<0.098		0.098		ug/L		08/10/23 08:15	08/11/23 11:56	1
2,4'-DDT	<0.098		0.098		ug/L		08/10/23 08:15	08/11/23 11:56	1
2,4-Dinitrotoluene	<0.098		0.098		ug/L		08/10/23 08:15	08/11/23 11:56	1
2,6-Dinitrotoluene	<0.098		0.098		ug/L		08/10/23 08:15	08/11/23 11:56	1
2-Methylnaphthalene	<0.098		0.098		ug/L		08/10/23 08:15	08/11/23 11:56	1
4,4'-DDD	<0.098		0.098		ug/L		08/10/23 08:15	08/11/23 11:56	1
4,4'-DDE	<0.098		0.098		ug/L		08/10/23 08:15	08/11/23 11:56	1
4,4'-DDT	<0.098		0.098		ug/L		08/10/23 08:15	08/11/23 11:56	1
Acenaphthene	<0.098		0.098		ug/L		08/10/23 08:15	08/11/23 11:56	1
Acenaphthylene	<0.098		0.098		ug/L		08/10/23 08:15	08/11/23 11:56	1
Acetochlor	<0.098	*+	0.098		ug/L		08/10/23 08:15	08/11/23 11:56	1
Alachlor	<0.049		0.049		ug/L		08/10/23 08:15	08/11/23 11:56	1
alpha-BHC	<0.098		0.098		ug/L		08/10/23 08:15	08/11/23 11:56	1
alpha-Chlordane	<0.049		0.049		ug/L		08/10/23 08:15	08/11/23 11:56	1
Anthracene	<0.020		0.020		ug/L		08/10/23 08:15	08/11/23 11:56	1
Atrazine	<0.049		0.049		ug/L		08/10/23 08:15	08/11/23 11:56	1
Benz(a)anthracene	<0.049		0.049		ug/L		08/10/23 08:15	08/11/23 11:56	1
Benzo[a]pyrene	<0.020		0.020		ug/L		08/10/23 08:15	08/11/23 11:56	1
Benzo[b]fluoranthene	<0.020		0.020		ug/L		08/10/23 08:15	08/11/23 11:56	1
Benzo[g,h,i]perylene	<0.049		0.049		ug/L		08/10/23 08:15	08/11/23 11:56	1
Benzo[k]fluoranthene	<0.020		0.020		ug/L		08/10/23 08:15	08/11/23 11:56	1
beta-BHC	<0.098		0.098		ug/L		08/10/23 08:15	08/11/23 11:56	1
Bis(2-ethylhexyl) phthalate	<0.59	*1	0.59		ug/L		08/10/23 08:15	08/11/23 11:56	1
Bromacil	<0.098		0.098		ug/L		08/10/23 08:15	08/11/23 11:56	1
Butachlor	<0.049		0.049		ug/L		08/10/23 08:15	08/11/23 11:56	1
Butylbenzylphthalate	<0.49		0.49		ug/L		08/10/23 08:15	08/11/23 11:56	1
Chlorobenzilate	<0.098	^3+	0.098		ug/L		08/10/23 08:15	08/11/23 11:56	1
Chloroneb	<0.098		0.098		ug/L		08/10/23 08:15	08/11/23 11:56	1
Chlorothalonil (Draconil, Bravo)	<0.098		0.098		ug/L		08/10/23 08:15	08/11/23 11:56	1
Chlorpyrifos	<0.049		0.049		ug/L		08/10/23 08:15	08/11/23 11:56	1
Chrysene	<0.020		0.020		ug/L		08/10/23 08:15	08/11/23 11:56	1
delta-BHC	<0.098		0.098		ug/L		08/10/23 08:15	08/11/23 11:56	1
Di(2-ethylhexyl)adipate	<0.59		0.59		ug/L		08/10/23 08:15	08/11/23 11:56	1
Dibenz(a,h)anthracene	<0.049		0.049		ug/L		08/10/23 08:15	08/11/23 11:56	1
Diclorvos (DDVP)	<0.049	*+ ^3+	0.049		ug/L		08/10/23 08:15	08/11/23 11:56	1
Dieldrin	<0.20		0.20		ug/L		08/10/23 08:15	08/11/23 11:56	1
Diethylphthalate	<0.49		0.49		ug/L		08/10/23 08:15	08/11/23 11:56	1
Dimethylphthalate	<0.49		0.49		ug/L		08/10/23 08:15	08/11/23 11:56	1
Di-n-butyl phthalate	<0.98		0.98		ug/L		08/10/23 08:15	08/11/23 11:56	1
Di-n-octyl phthalate	<0.098	*1	0.098		ug/L		08/10/23 08:15	08/11/23 11:56	1
Endosulfan I (Alpha)	<0.098		0.098		ug/L		08/10/23 08:15	08/11/23 11:56	1
Endosulfan II (Beta)	<0.098		0.098		ug/L		08/10/23 08:15	08/11/23 11:56	1
Endosulfan sulfate	<0.098		0.098		ug/L		08/10/23 08:15	08/11/23 11:56	1
Endrin	<0.098		0.098		ug/L		08/10/23 08:15	08/11/23 11:56	1
Endrin aldehyde	<0.098		0.098		ug/L		08/10/23 08:15	08/11/23 11:56	1
EPTC	<0.098		0.098		ug/L		08/10/23 08:15	08/11/23 11:56	1
Fluoranthene	<0.098		0.098		ug/L		08/10/23 08:15	08/11/23 11:56	1

Client Sample ID: HALAWA WELLS UNITS 1 & 2
Date Collected: 08/02/23 10:00
Date Received: 08/08/23 10:00

Lab Sample ID: 380-57979-1
Matrix: Drinking Water
PWSID Number: HI0000331

Method: EPA 525.2 - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	<0.049		0.049		ug/L		08/10/23 08:15	08/11/23 11:56	1
gamma-Chlordane	<0.049		0.049		ug/L		08/10/23 08:15	08/11/23 11:56	1
Heptachlor	<0.039		0.039		ug/L		08/10/23 08:15	08/11/23 11:56	1
Heptachlor epoxide (isomer B)	<0.049		0.049		ug/L		08/10/23 08:15	08/11/23 11:56	1
Hexachlorobenzene	<0.049		0.049		ug/L		08/10/23 08:15	08/11/23 11:56	1
Hexachlorocyclopentadiene	<0.049		0.049		ug/L		08/10/23 08:15	08/11/23 11:56	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049		ug/L		08/10/23 08:15	08/11/23 11:56	1
Isophorone	<0.49		0.49		ug/L		08/10/23 08:15	08/11/23 11:56	1
Lindane	<0.039		0.039		ug/L		08/10/23 08:15	08/11/23 11:56	1
Malathion	<0.098		0.098		ug/L		08/10/23 08:15	08/11/23 11:56	1
Methoxychlor	<0.098		0.098		ug/L		08/10/23 08:15	08/11/23 11:56	1
Metolachlor	<0.049		0.049		ug/L		08/10/23 08:15	08/11/23 11:56	1
Molinate	<0.098		0.098		ug/L		08/10/23 08:15	08/11/23 11:56	1
Naphthalene	<0.29		0.29		ug/L		08/10/23 08:15	08/11/23 11:56	1
Parathion	<0.098	*+	0.098		ug/L		08/10/23 08:15	08/11/23 11:56	1
Pendimethalin (Penoxaline)	<0.098		0.098		ug/L		08/10/23 08:15	08/11/23 11:56	1
Phenanthrene	<0.039		0.039		ug/L		08/10/23 08:15	08/11/23 11:56	1
Propachlor	<0.049		0.049		ug/L		08/10/23 08:15	08/11/23 11:56	1
Pyrene	<0.049		0.049		ug/L		08/10/23 08:15	08/11/23 11:56	1
Simazine	<0.049		0.049		ug/L		08/10/23 08:15	08/11/23 11:56	1
Terbacil	<0.098		0.098		ug/L		08/10/23 08:15	08/11/23 11:56	1
Terbuthylazine	<0.098		0.098		ug/L		08/10/23 08:15	08/11/23 11:56	1
Thiobencarb	<0.20		0.20		ug/L		08/10/23 08:15	08/11/23 11:56	1
Total Permethrin (mixed isomers)	<0.20		0.20		ug/L		08/10/23 08:15	08/11/23 11:56	1
trans-Nonachlor	<0.049		0.049		ug/L		08/10/23 08:15	08/11/23 11:56	1
Trifluralin	<0.098		0.098		ug/L		08/10/23 08:15	08/11/23 11:56	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*	*08/10/23 08:15*	*08/11/23 11:56*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Nitro-m-xylene	*101*		*70 - 130*	*08/10/23 08:15*	*08/11/23 11:56*	*1*
Perylene-d12	*88*		*70 - 130*	*08/10/23 08:15*	*08/11/23 11:56*	*1*
Triphenylphosphate	*113*		*70 - 130*	*08/10/23 08:15*	*08/11/23 11:56*	*1*

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		08/24/23 16:20	08/27/23 06:48	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 06:48	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 06:48	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 06:48	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 06:48	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 06:48	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 06:48	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 06:48	1
Perfluorohexanesulfonic acid (PFHxS)	**2.3**		2.0		ng/L		08/24/23 16:20	08/27/23 06:48	1

Client Sample ID: HALAWA WELLS UNITS 1 & 2
Date Collected: 08/02/23 10:00
Date Received: 08/08/23 10:00

Lab Sample ID: 380-57979-1
Matrix: Drinking Water
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
Perfluorohexanoic acid (PFHxA)	**2.1**		2.0		ng/L		08/24/23 16:20	08/27/23 06:48	1
Perfluorononanoic acid (PFNA)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 06:48	1
Perfluorooctanesulfonic acid (PFOS)	**2.3**		2.0		ng/L		08/24/23 16:20	08/27/23 06:48	1
Perfluorooctanoic acid (PFOA)	**2.1**		2.0		ng/L		08/24/23 16:20	08/27/23 06:48	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 06:48	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 06:48	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 06:48	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 06:48	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 06:48	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 06:48	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 06:48	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 06:48	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 06:48	1
Perfluoropentanoic acid (PFPeA)	**2.7**		2.0		ng/L		08/24/23 16:20	08/27/23 06:48	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 06:48	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 06:48	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*75*		*50 - 200*	*08/24/23 16:20*	*08/27/23 06:48*	*1*
13C6 PFDA	*97*		*50 - 200*	*08/24/23 16:20*	*08/27/23 06:48*	*1*
13C5 PFHxA	*89*		*50 - 200*	*08/24/23 16:20*	*08/27/23 06:48*	*1*
13C4 PFHpA	*92*		*50 - 200*	*08/24/23 16:20*	*08/27/23 06:48*	*1*
13C8 PFOA	*94*		*50 - 200*	*08/24/23 16:20*	*08/27/23 06:48*	*1*
13C9 PFNA	*97*		*50 - 200*	*08/24/23 16:20*	*08/27/23 06:48*	*1*
13C7 PFUnA	*97*		*50 - 200*	*08/24/23 16:20*	*08/27/23 06:48*	*1*
13C2 PFDoA	*98*		*50 - 200*	*08/24/23 16:20*	*08/27/23 06:48*	*1*
13C4 PFBA	*89*		*50 - 200*	*08/24/23 16:20*	*08/27/23 06:48*	*1*
13C5 PFPeA	*91*		*50 - 200*	*08/24/23 16:20*	*08/27/23 06:48*	*1*
13C3 PFBS	*96*		*50 - 200*	*08/24/23 16:20*	*08/27/23 06:48*	*1*
13C3 PFHxS	*98*		*50 - 200*	*08/24/23 16:20*	*08/27/23 06:48*	*1*
13C8 PFOS	*98*		*50 - 200*	*08/24/23 16:20*	*08/27/23 06:48*	*1*
13C2-4:2-FTS	*117*		*50 - 200*	*08/24/23 16:20*	*08/27/23 06:48*	*1*
13C2-6:2-FTS	*101*		*50 - 200*	*08/24/23 16:20*	*08/27/23 06:48*	*1*
13C2-8:2-FTS	*97*		*50 - 200*	*08/24/23 16:20*	*08/27/23 06:48*	*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		08/10/23 05:33	08/12/23 11:03	1
Perfluorooctanesulfonic acid (PFOS)	**2.1**		2.0		ng/L		08/10/23 05:33	08/12/23 11:03	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0		ng/L		08/10/23 05:33	08/12/23 11:03	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0		ng/L		08/10/23 05:33	08/12/23 11:03	1

Client Sample ID: HALAWA WELLS UNITS 1 & 2

Date Collected: 08/02/23 10:00
Date Received: 08/08/23 10:00

Lab Sample ID: 380-57979-1
Matrix: Drinking Water
PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0		ng/L		08/10/23 05:33	08/12/23 11:03	1
Perfluorohexanoic acid (PFHxA)	**2.4**		2.0		ng/L		08/10/23 05:33	08/12/23 11:03	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0		ng/L		08/10/23 05:33	08/12/23 11:03	1
Perfluorooctanoic acid (PFOA)	**2.4**		2.0		ng/L		08/10/23 05:33	08/12/23 11:03	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0		ng/L		08/10/23 05:33	08/12/23 11:03	1
Perfluorohexanesulfonic acid (PFHxS)	**2.5**		2.0		ng/L		08/10/23 05:33	08/12/23 11:03	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0		ng/L		08/10/23 05:33	08/12/23 11:03	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0		ng/L		08/10/23 05:33	08/12/23 11:03	1
Perfluorononanoic acid (PFNA)	<2.0		2.0		ng/L		08/10/23 05:33	08/12/23 11:03	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0		ng/L		08/10/23 05:33	08/12/23 11:03	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0		ng/L		08/10/23 05:33	08/12/23 11:03	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0		ng/L		08/10/23 05:33	08/12/23 11:03	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0		ng/L		08/10/23 05:33	08/12/23 11:03	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0		ng/L		08/10/23 05:33	08/12/23 11:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d5-NEtFOSAA	*100*		*70 - 130*	*08/10/23 05:33*	*08/12/23 11:03*	*1*
13C2 PFHxA	*127*		*70 - 130*	*08/10/23 05:33*	*08/12/23 11:03*	*1*
13C2 PFDA	*121*		*70 - 130*	*08/10/23 05:33*	*08/12/23 11:03*	*1*
13C3-GenX	*129*		*70 - 130*	*08/10/23 05:33*	*08/12/23 11:03*	*1*

Client Sample ID: FB: HALAWA WELLS UNITS 1 & 2

Date Collected: 08/02/23 10:00
Date Received: 08/08/23 10:00

Lab Sample ID: 380-57979-3
Matrix: Water
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		08/24/23 16:20	08/27/23 07:07	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 07:07	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 07:07	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 07:07	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 07:07	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 07:07	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 07:07	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 07:07	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 07:07	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 07:07	1
Perfluorononanoic acid (PFNA)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 07:07	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 07:07	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 07:07	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 07:07	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 07:07	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 07:07	1

Client Sample ID: FB: HALAWA WELLS UNITS 1 & 2
Date Collected: 08/02/23 10:00
Date Received: 08/08/23 10:00

Lab Sample ID: 380-57979-3
Matrix: Water
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
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 07:07	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 07:07	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 07:07	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 07:07	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 07:07	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 07:07	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 07:07	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 07:07	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0		ng/L		08/24/23 16:20	08/27/23 07:07	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*63*		*50 - 200*	*08/24/23 16:20*	*08/27/23 07:07*	*1*
13C6 PFDA	*88*		*50 - 200*	*08/24/23 16:20*	*08/27/23 07:07*	*1*
13C5 PFHxA	*71*		*50 - 200*	*08/24/23 16:20*	*08/27/23 07:07*	*1*
13C4 PFHpA	*77*		*50 - 200*	*08/24/23 16:20*	*08/27/23 07:07*	*1*
13C8 PFOA	*83*		*50 - 200*	*08/24/23 16:20*	*08/27/23 07:07*	*1*
13C9 PFNA	*88*		*50 - 200*	*08/24/23 16:20*	*08/27/23 07:07*	*1*
13C7 PFUnA	*93*		*50 - 200*	*08/24/23 16:20*	*08/27/23 07:07*	*1*
13C2 PFDoA	*89*		*50 - 200*	*08/24/23 16:20*	*08/27/23 07:07*	*1*
13C4 PFBA	*68*		*50 - 200*	*08/24/23 16:20*	*08/27/23 07:07*	*1*
13C5 PFPeA	*70*		*50 - 200*	*08/24/23 16:20*	*08/27/23 07:07*	*1*
13C3 PFBS	*92*		*50 - 200*	*08/24/23 16:20*	*08/27/23 07:07*	*1*
13C3 PFHxS	*89*		*50 - 200*	*08/24/23 16:20*	*08/27/23 07:07*	*1*
13C8 PFOS	*92*		*50 - 200*	*08/24/23 16:20*	*08/27/23 07:07*	*1*
13C2-4:2-FTS	*97*		*50 - 200*	*08/24/23 16:20*	*08/27/23 07:07*	*1*
13C2-6:2-FTS	*90*		*50 - 200*	*08/24/23 16:20*	*08/27/23 07:07*	*1*
13C2-8:2-FTS	*87*		*50 - 200*	*08/24/23 16:20*	*08/27/23 07:07*	*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		08/10/23 05:33	08/11/23 12:14	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0		ng/L		08/10/23 05:33	08/11/23 12:14	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0		ng/L		08/10/23 05:33	08/11/23 12:14	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0		ng/L		08/10/23 05:33	08/11/23 12:14	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0		ng/L		08/10/23 05:33	08/11/23 12:14	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0		ng/L		08/10/23 05:33	08/11/23 12:14	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0		ng/L		08/10/23 05:33	08/11/23 12:14	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0		ng/L		08/10/23 05:33	08/11/23 12:14	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0		ng/L		08/10/23 05:33	08/11/23 12:14	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0		ng/L		08/10/23 05:33	08/11/23 12:14	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0		ng/L		08/10/23 05:33	08/11/23 12:14	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0		ng/L		08/10/23 05:33	08/11/23 12:14	1

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

Job ID: 380-57979-1

Client Sample ID: FB: HALAWA WELLS UNITS 1 & 2
Date Collected: 08/02/23 10:00
Date Received: 08/08/23 10:00

Lab Sample ID: 380-57979-3
Matrix: Water
PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorononanoic acid (PFNA)	<2.0		2.0		ng/L		08/10/23 05:33	08/11/23 12:14	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0		ng/L		08/10/23 05:33	08/11/23 12:14	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0		ng/L		08/10/23 05:33	08/11/23 12:14	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0		ng/L		08/10/23 05:33	08/11/23 12:14	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0		ng/L		08/10/23 05:33	08/11/23 12:14	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0		ng/L		08/10/23 05:33	08/11/23 12:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d5-NEtFOSAA	*116*		*70 - 130*	*08/10/23 05:33*	*08/11/23 12:14*	*1*
13C2 PFHxA	*124*		*70 - 130*	*08/10/23 05:33*	*08/11/23 12:14*	*1*
13C2 PFDA	*110*		*70 - 130*	*08/10/23 05:33*	*08/11/23 12:14*	*1*
13C3-GenX	*112*		*70 - 130*	*08/10/23 05:33*	*08/11/23 12:14*	*1*

Action Limit Summary

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

Job ID: 380-57979-1

Client Sample ID: HALAWA WELLS UNITS 1 & 2

Lab Sample ID: 380-57979-1

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 Limit	RL	Method	Prep Type
Alachlor	<0.049		ug/L	2	0.049	525.2	Total/NA
Atrazine	<0.049		ug/L	3	0.049	525.2	Total/NA
Benzo[a]pyrene	<0.020		ug/L	0.2	0.020	525.2	Total/NA
Bis(2-ethylhexyl) phthalate	<0.59	*1	ug/L	6	0.59	525.2	Total/NA
Di(2-ethylhexyl)adipate	<0.59		ug/L	400	0.59	525.2	Total/NA
Endrin	<0.098		ug/L	2	0.098	525.2	Total/NA
Heptachlor	<0.039		ug/L	0.4	0.039	525.2	Total/NA
Heptachlor epoxide (isomer B)	<0.049		ug/L	0.2	0.049	525.2	Total/NA
Hexachlorobenzene	<0.049		ug/L	1	0.049	525.2	Total/NA
Hexachlorocyclopentadiene	<0.049		ug/L	50	0.049	525.2	Total/NA
Lindane	<0.039		ug/L	0.2	0.039	525.2	Total/NA
Methoxychlor	<0.098		ug/L	40	0.098	525.2	Total/NA
Simazine	<0.049		ug/L	4	0.049	525.2	Total/NA

Surrogate Summary

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

Job ID: 380-57979-1

Method: 525.2 - Semivolatile Organic Compounds (GC/MS)

Matrix: Drinking Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		2NMX	PRY	TPP
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)
380-57979-1	HALAWA WELLS UNITS 1 & 2	101	88	113

Surrogate Legend

2NMX = 2-Nitro-m-xylene
PRY = Perylene-d12
TPP = Triphenylphosphate

Method: 525.2 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		2NMX	PRY	TPP
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)
380-57897-P-1-A MS	Matrix Spike	98	92	115
380-57909-AR-1-A DU	Duplicate	97	92	110
LCS 380-51109/3-A	Lab Control Sample	102	96	113
LCSD 380-51109/4-A	Lab Control Sample Dup	103	95	104
MB 380-51109/1-A	Method Blank	101	92	115
MRL 380-51109/2-A	Lab Control Sample	106	97	108

Surrogate Legend

2NMX = 2-Nitro-m-xylene
PRY = Perylene-d12
TPP = Triphenylphosphate

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

Matrix: Drinking Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		d5NEFOS	PFHxA	PFDA	GenX
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
380-57979-1	HALAWA WELLS UNITS 1 & 2	100	127	121	129

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**

		Percent Surrogate Recovery (Acceptance Limits)			
		d5NEFOS	PFHxA	PFDA	GenX
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
380-57979-3	FB: HALAWA WELLS UNITS 1 &	116	124	110	112
380-58087-B-1-C LMS	Matrix Spike	117	129	119	119
380-58087-C-1-C LMSD	Matrix Spike Duplicate	114	117	108	107
LCS 380-51108/25-A	Lab Control Sample	108	120	112	110
LCSD 380-51108/26-A	Lab Control Sample Dup	110	128	113	130
MBL 380-51108/23-A	Method Blank	109	115	121	106
MRL 380-51108/24-A	Lab Control Sample	97	122	110	113

Surrogate Summary

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

Job ID: 380-57979-1

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: 380-57979-1

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

Matrix: Drinking Water

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	HFPODA (50-200)	C6PFDA (50-200)	13C5PHA (50-200)	C4PFHA (50-200)	C8PFOA (50-200)	C9PFNA (50-200)	13C7PUA (50-200)	PFDoA (50-200)
380-57979-1	HALAWA WELLS UNITS 1 & 2	75	97	89	92	94	97	97	98

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFBA (50-200)	PFPeA (50-200)	C3PFBS (50-200)	C3PFHS (50-200)	C8PFOS (50-200)	42FTS (50-200)	62FTS (50-200)	82FTS (50-200)
380-57979-1	HALAWA WELLS UNITS 1 & 2	89	91	96	98	98	117	101	97

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

		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)	PFDoA (50-200)
380-57432-O-1-D LMS	Matrix Spike	48 *5-	77	58	61	69	72	77	87
380-57432-P-1-C LMSD	Matrix Spike Duplicate	68	84	78	78	85	85	85	90
380-57979-3	FB: HALAWA WELLS UNITS 1 & 2	63	88	71	77	83	88	93	89
LCS 380-53035/23-A	Lab Control Sample	91	95	94	96	97	99	96	98
LCSD 380-53035/24-A	Lab Control Sample Dup	86	98	85	93	96	97	96	97
MBL 380-53035/21-A	Method Blank	79	95	88	88	93	91	88	91
MRL 380-53035/22-A	Lab Control Sample	82	93	90	90	95	93	91	93

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFBA (50-200)	PFPeA (50-200)	C3PFBS (50-200)	C3PFHS (50-200)	C8PFOS (50-200)	42FTS (50-200)	62FTS (50-200)	82FTS (50-200)
380-57432-O-1-D LMS	Matrix Spike	63	57	92	95	93	103	96	94
380-57432-P-1-C LMSD	Matrix Spike Duplicate	83	78	88	98	97	112	97	99
380-57979-3	FB: HALAWA WELLS UNITS 1 & 2	68	70	92	89	92	97	90	87
LCS 380-53035/23-A	Lab Control Sample	93	94	92	96	95	95	93	90
LCSD 380-53035/24-A	Lab Control Sample Dup	84	86	95	97	96	106	94	94
MBL 380-53035/21-A	Method Blank	92	90	90	90	91	101	98	109
MRL 380-53035/22-A	Lab Control Sample	94	94	87	88	89	94	87	88

Surrogate Legend

Isotope Dilution Summary

Client: City & County of Honolulu
Job ID: 380-57979-1
Project/Site: RED-HILL

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: 525.2 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 380-51109/1-A
Matrix: Water
Analysis Batch: 51305

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 51109

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.099		0.099		ug/L		08/10/23 07:00	08/11/23 09:16	1
2,4'-DDD	<0.099		0.099		ug/L		08/10/23 07:00	08/11/23 09:16	1
2,4'-DDE	<0.099		0.099		ug/L		08/10/23 07:00	08/11/23 09:16	1
2,4'-DDT	<0.099		0.099		ug/L		08/10/23 07:00	08/11/23 09:16	1
2,4-Dinitrotoluene	<0.099		0.099		ug/L		08/10/23 07:00	08/11/23 09:16	1
2,6-Dinitrotoluene	<0.099		0.099		ug/L		08/10/23 07:00	08/11/23 09:16	1
2-Methylnaphthalene	<0.099		0.099		ug/L		08/10/23 07:00	08/11/23 09:16	1
4,4'-DDD	<0.099		0.099		ug/L		08/10/23 07:00	08/11/23 09:16	1
4,4'-DDE	<0.099		0.099		ug/L		08/10/23 07:00	08/11/23 09:16	1
4,4'-DDT	<0.099		0.099		ug/L		08/10/23 07:00	08/11/23 09:16	1
Acenaphthene	<0.099		0.099		ug/L		08/10/23 07:00	08/11/23 09:16	1
Acenaphthylene	<0.099		0.099		ug/L		08/10/23 07:00	08/11/23 09:16	1
Acetochlor	<0.099		0.099		ug/L		08/10/23 07:00	08/11/23 09:16	1
Alachlor	<0.050		0.050		ug/L		08/10/23 07:00	08/11/23 09:16	1
alpha-BHC	<0.099		0.099		ug/L		08/10/23 07:00	08/11/23 09:16	1
alpha-Chlordane	<0.050		0.050		ug/L		08/10/23 07:00	08/11/23 09:16	1
Anthracene	<0.020		0.020		ug/L		08/10/23 07:00	08/11/23 09:16	1
Atrazine	<0.050		0.050		ug/L		08/10/23 07:00	08/11/23 09:16	1
Benz(a)anthracene	<0.050		0.050		ug/L		08/10/23 07:00	08/11/23 09:16	1
Benzo[a]pyrene	<0.020		0.020		ug/L		08/10/23 07:00	08/11/23 09:16	1
Benzo[b]fluoranthene	<0.020		0.020		ug/L		08/10/23 07:00	08/11/23 09:16	1
Benzo[g,h,i]perylene	<0.050		0.050		ug/L		08/10/23 07:00	08/11/23 09:16	1
Benzo[k]fluoranthene	<0.020		0.020		ug/L		08/10/23 07:00	08/11/23 09:16	1
beta-BHC	<0.099		0.099		ug/L		08/10/23 07:00	08/11/23 09:16	1
Bis(2-ethylhexyl) phthalate	<0.60		0.60		ug/L		08/10/23 07:00	08/11/23 09:16	1
Bromacil	<0.099		0.099		ug/L		08/10/23 07:00	08/11/23 09:16	1
Butachlor	<0.050		0.050		ug/L		08/10/23 07:00	08/11/23 09:16	1
Butylbenzylphthalate	<0.50		0.50		ug/L		08/10/23 07:00	08/11/23 09:16	1
Chlorobenzilate	<0.099		0.099		ug/L		08/10/23 07:00	08/11/23 09:16	1
Chloroneb	<0.099		0.099		ug/L		08/10/23 07:00	08/11/23 09:16	1
Chlorothalonil (Draconil, Bravo)	<0.099		0.099		ug/L		08/10/23 07:00	08/11/23 09:16	1
Chlorpyrifos	<0.050		0.050		ug/L		08/10/23 07:00	08/11/23 09:16	1
Chrysene	<0.020		0.020		ug/L		08/10/23 07:00	08/11/23 09:16	1
delta-BHC	<0.099		0.099		ug/L		08/10/23 07:00	08/11/23 09:16	1
Di(2-ethylhexyl)adipate	<0.60		0.60		ug/L		08/10/23 07:00	08/11/23 09:16	1
Dibenz(a,h)anthracene	<0.050		0.050		ug/L		08/10/23 07:00	08/11/23 09:16	1
Diclorvos (DDVP)	<0.050		0.050		ug/L		08/10/23 07:00	08/11/23 09:16	1
Dieldrin	<0.20		0.20		ug/L		08/10/23 07:00	08/11/23 09:16	1
Diethylphthalate	<0.50		0.50		ug/L		08/10/23 07:00	08/11/23 09:16	1
Dimethylphthalate	<0.50		0.50		ug/L		08/10/23 07:00	08/11/23 09:16	1
Di-n-butyl phthalate	<0.99		0.99		ug/L		08/10/23 07:00	08/11/23 09:16	1
Di-n-octyl phthalate	<0.099		0.099		ug/L		08/10/23 07:00	08/11/23 09:16	1
Endosulfan I (Alpha)	<0.099		0.099		ug/L		08/10/23 07:00	08/11/23 09:16	1
Endosulfan II (Beta)	<0.099		0.099		ug/L		08/10/23 07:00	08/11/23 09:16	1
Endosulfan sulfate	<0.099		0.099		ug/L		08/10/23 07:00	08/11/23 09:16	1
Endrin	<0.099		0.099		ug/L		08/10/23 07:00	08/11/23 09:16	1
Endrin aldehyde	<0.099		0.099		ug/L		08/10/23 07:00	08/11/23 09:16	1
EPTC	<0.099		0.099		ug/L		08/10/23 07:00	08/11/23 09:16	1

Method: 525.2 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 380-51109/1-A
Matrix: Water
Analysis Batch: 51305

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 51109

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<0.099		0.099		ug/L		08/10/23 07:00	08/11/23 09:16	1
Fluorene	<0.050		0.050		ug/L		08/10/23 07:00	08/11/23 09:16	1
gamma-Chlordane	<0.050		0.050		ug/L		08/10/23 07:00	08/11/23 09:16	1
Heptachlor	<0.040		0.040		ug/L		08/10/23 07:00	08/11/23 09:16	1
Heptachlor epoxide (isomer B)	<0.050		0.050		ug/L		08/10/23 07:00	08/11/23 09:16	1
Hexachlorobenzene	<0.050		0.050		ug/L		08/10/23 07:00	08/11/23 09:16	1
Hexachlorocyclopentadiene	<0.050		0.050		ug/L		08/10/23 07:00	08/11/23 09:16	1
Indeno[1,2,3-cd]pyrene	<0.050		0.050		ug/L		08/10/23 07:00	08/11/23 09:16	1
Isophorone	<0.50		0.50		ug/L		08/10/23 07:00	08/11/23 09:16	1
Lindane	<0.040		0.040		ug/L		08/10/23 07:00	08/11/23 09:16	1
Malathion	<0.099		0.099		ug/L		08/10/23 07:00	08/11/23 09:16	1
Methoxychlor	<0.099		0.099		ug/L		08/10/23 07:00	08/11/23 09:16	1
Metolachlor	<0.050		0.050		ug/L		08/10/23 07:00	08/11/23 09:16	1
Molinate	<0.099		0.099		ug/L		08/10/23 07:00	08/11/23 09:16	1
Naphthalene	<0.30		0.30		ug/L		08/10/23 07:00	08/11/23 09:16	1
Parathion	<0.099		0.099		ug/L		08/10/23 07:00	08/11/23 09:16	1
Pendimethalin (Penoxaline)	<0.099		0.099		ug/L		08/10/23 07:00	08/11/23 09:16	1
Phenanthrene	<0.040		0.040		ug/L		08/10/23 07:00	08/11/23 09:16	1
Propachlor	<0.050		0.050		ug/L		08/10/23 07:00	08/11/23 09:16	1
Pyrene	<0.050		0.050		ug/L		08/10/23 07:00	08/11/23 09:16	1
Simazine	<0.050		0.050		ug/L		08/10/23 07:00	08/11/23 09:16	1
Terbacil	<0.099		0.099		ug/L		08/10/23 07:00	08/11/23 09:16	1
Terbuthylazine	<0.099		0.099		ug/L		08/10/23 07:00	08/11/23 09:16	1
Thiobencarb	<0.20		0.20		ug/L		08/10/23 07:00	08/11/23 09:16	1
Total Permethrin (mixed isomers)	<0.20		0.20		ug/L		08/10/23 07:00	08/11/23 09:16	1
trans-Nonachlor	<0.050		0.050		ug/L		08/10/23 07:00	08/11/23 09:16	1
Trifluralin	<0.099		0.099		ug/L		08/10/23 07:00	08/11/23 09:16	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Phenol, 4-(1,1-dimethylpropyl)-	*1.30*	*T J N*	*ug/L*		*3.87*	*80-46-6*	*08/10/23 07:00*	*08/11/23 09:16*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Nitro-m-xylene	*101*		*70 - 130*	*08/10/23 07:00*	*08/11/23 09:16*	*1*
Perylene-d12	*92*		*70 - 130*	*08/10/23 07:00*	*08/11/23 09:16*	*1*
Triphenylphosphate	*115*		*70 - 130*	*08/10/23 07:00*	*08/11/23 09:16*	*1*

Lab Sample ID: LCS 380-51109/3-A
Matrix: Water
Analysis Batch: 51305

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 51109

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	1.99	1.99		ug/L		100	70 - 130
2,4'-DDD	1.99	2.13		ug/L		107	70 - 130
2,4'-DDE	1.99	1.99		ug/L		100	70 - 130
2,4'-DDT	1.99	2.18		ug/L		110	70 - 130
2,4-Dinitrotoluene	1.99	2.16		ug/L		109	70 - 130
2,6-Dinitrotoluene	1.99	2.09		ug/L		105	70 - 130
2-Methylnaphthalene	1.99	1.99		ug/L		100	70 - 130

Method: 525.2 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 380-51109/3-A
Matrix: Water
Analysis Batch: 51305

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 51109

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4,4'-DDD	1.99	2.08		ug/L		105	70 - 130
4,4'-DDE	1.99	2.01		ug/L		101	70 - 130
4,4'-DDT	1.99	2.24		ug/L		113	70 - 130
Acenaphthene	1.99	1.87		ug/L		94	70 - 130
Acenaphthylene	1.99	2.05		ug/L		103	70 - 130
Acetochlor	1.99	2.63	*+	ug/L		132	70 - 130
Alachlor	1.99	2.34		ug/L		118	70 - 130
alpha-BHC	1.99	2.09		ug/L		105	70 - 130
alpha-Chlordane	1.99	2.03		ug/L		102	70 - 130
Anthracene	1.99	1.93		ug/L		97	70 - 130
Atrazine	1.99	2.16		ug/L		109	70 - 130
Benz(a)anthracene	1.99	2.13		ug/L		107	70 - 130
Benzo[a]pyrene	1.99	2.06		ug/L		104	70 - 130
Benzo[b]fluoranthene	1.99	2.10		ug/L		105	70 - 130
Benzo[g,h,i]perylene	1.99	2.25		ug/L		113	70 - 130
Benzo[k]fluoranthene	1.99	2.20		ug/L		111	70 - 130
beta-BHC	1.99	2.14		ug/L		108	70 - 130
Bis(2-ethylhexyl) phthalate	1.99	2.19		ug/L		110	70 - 130
Bromacil	1.99	2.34		ug/L		118	70 - 130
Butachlor	1.99	2.56		ug/L		129	70 - 130
Butylbenzylphthalate	1.99	2.18		ug/L		110	70 - 130
Chlorobenzilate	1.99	2.53		ug/L		128	70 - 130
Chloroneb	1.99	2.06		ug/L		104	70 - 130
Chlorothalonil (Draconil, Bravo)	1.99	2.01		ug/L		101	70 - 130
Chlorpyrifos	1.99	2.27		ug/L		114	70 - 130
Chrysene	1.99	2.05		ug/L		103	70 - 130
delta-BHC	1.99	2.03		ug/L		102	70 - 130
Di(2-ethylhexyl)adipate	1.99	2.18		ug/L		110	70 - 130
Dibenz(a,h)anthracene	1.99	2.23		ug/L		112	70 - 130
Diclorvos (DDVP)	1.99	2.70	*+	ug/L		136	70 - 130
Dieldrin	1.99	2.02		ug/L		102	70 - 130
Diethylphthalate	1.99	2.32		ug/L		117	70 - 130
Dimethylphthalate	1.99	2.17		ug/L		109	70 - 130
Di-n-butyl phthalate	3.97	4.36		ug/L		110	70 - 130
Di-n-octyl phthalate	1.99	2.14		ug/L		107	70 - 130
Endosulfan I (Alpha)	1.99	1.90		ug/L		95	70 - 130
Endosulfan II (Beta)	1.99	2.17		ug/L		109	70 - 130
Endosulfan sulfate	1.99	2.03		ug/L		102	70 - 130
Endrin	1.99	2.38		ug/L		120	70 - 130
Endrin aldehyde	1.99	2.15		ug/L		108	70 - 130
EPTC	1.99	2.29		ug/L		115	70 - 130
Fluoranthene	1.99	2.23		ug/L		112	70 - 130
Fluorene	1.99	2.15		ug/L		108	70 - 130
gamma-Chlordane	1.99	2.07		ug/L		104	70 - 130
Heptachlor	1.99	2.14		ug/L		108	70 - 130
Heptachlor epoxide (isomer B)	1.99	2.17		ug/L		109	70 - 130
Hexachlorobenzene	1.99	1.91		ug/L		96	70 - 130
Hexachlorocyclopentadiene	1.99	1.91		ug/L		96	70 - 130
Indeno[1,2,3-cd]pyrene	1.99	2.19		ug/L		110	70 - 130

Method: 525.2 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 380-51109/3-A
Matrix: Water
Analysis Batch: 51305

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 51109

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Isophorone			1.99	2.16		ug/L		109	70 - 130		
Lindane			1.99	2.12		ug/L		107	70 - 130		
Malathion			1.99	2.35		ug/L		119	70 - 130		
Methoxychlor			1.99	2.26		ug/L		114	70 - 130		
Metolachlor			1.99	2.45		ug/L		124	70 - 130		
Molinate			1.99	2.27		ug/L		114	70 - 130		
Naphthalene			1.99	1.88		ug/L		95	70 - 130		
Parathion			1.99	2.60	*+	ug/L		131	70 - 130		
Pendimethalin (Penoxaline)			1.99	2.21		ug/L		111	70 - 130		
Phenanthrene			1.99	1.92		ug/L		97	70 - 130		
Propachlor			1.99	2.28		ug/L		115	70 - 130		
Pyrene			1.99	2.20		ug/L		111	70 - 130		
Simazine			1.99	2.27		ug/L		114	70 - 130		
Terbacil			1.99	2.31		ug/L		116	70 - 130		
Terbuthylazine			1.99	2.31		ug/L		116	70 - 130		
Thiobencarb			1.99	2.22		ug/L		112	70 - 130		
trans-Nonachlor			1.99	1.94		ug/L		97	70 - 130		
Trifluralin			1.99	2.08		ug/L		105	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Nitro-m-xylene	*102*		*70 - 130*
Perylene-d12	*96*		*70 - 130*
Triphenylphosphate	*113*		*70 - 130*

Lab Sample ID: LCSD 380-51109/4-A
Matrix: Water
Analysis Batch: 51305

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 51109

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene			1.98	1.99		ug/L		100	70 - 130	0	20
2,4'-DDD			1.98	2.04		ug/L		103	70 - 130	4	20
2,4'-DDE			1.98	1.93		ug/L		97	70 - 130	3	20
2,4'-DDT			1.98	2.08		ug/L		105	70 - 130	5	20
2,4-Dinitrotoluene			1.98	2.22		ug/L		112	70 - 130	3	20
2,6-Dinitrotoluene			1.98	2.18		ug/L		110	70 - 130	4	20
2-Methylnaphthalene			1.98	2.01		ug/L		101	70 - 130	1	20
4,4'-DDD			1.98	2.02		ug/L		102	70 - 130	3	20
4,4'-DDE			1.98	1.93		ug/L		98	70 - 130	4	20
4,4'-DDT			1.98	2.03		ug/L		103	70 - 130	10	20
Acenaphthene			1.98	1.91		ug/L		96	70 - 130	2	20
Acenaphthylene			1.98	2.05		ug/L		103	70 - 130	0	20
Acetochlor			1.98	2.53		ug/L		128	70 - 130	4	20
Alachlor			1.98	2.32		ug/L		117	70 - 130	1	20
alpha-BHC			1.98	2.10		ug/L		106	70 - 130	0	20
alpha-Chlordane			1.98	2.02		ug/L		102	70 - 130	1	20
Anthracene			1.98	1.95		ug/L		98	70 - 130	1	20
Atrazine			1.98	2.12		ug/L		107	70 - 130	2	20
Benz(a)anthracene			1.98	2.01		ug/L		101	70 - 130	6	20

Method: 525.2 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 380-51109/4-A
Matrix: Water
Analysis Batch: 51305

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 51109

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzo[a]pyrene			1.98	2.15		ug/L		109	70 - 130	4	20
Benzo[b]fluoranthene			1.98	2.17		ug/L		110	70 - 130	4	20
Benzo[g,h,i]perylene			1.98	2.09		ug/L		105	70 - 130	7	20
Benzo[k]fluoranthene			1.98	2.27		ug/L		115	70 - 130	3	20
beta-BHC			1.98	2.05		ug/L		104	70 - 130	4	20
Bis(2-ethylhexyl) phthalate			1.98	1.62	*1	ug/L		82	70 - 130	30	20
Bromacil			1.98	2.27		ug/L		114	70 - 130	3	20
Butachlor			1.98	2.47		ug/L		125	70 - 130	3	20
Butylbenzylphthalate			1.98	2.07		ug/L		105	70 - 130	5	20
Chlorobenzilate			1.98	2.44		ug/L		123	70 - 130	4	20
Chloroneb			1.98	2.02		ug/L		102	70 - 130	2	20
Chlorothalonil (Draconil, Bravo)			1.98	1.98		ug/L		100	70 - 130	2	20
Chlorpyrifos			1.98	2.24		ug/L		113	70 - 130	1	20
Chrysene			1.98	1.97		ug/L		99	70 - 130	4	20
delta-BHC			1.98	1.97		ug/L		100	70 - 130	3	20
Di(2-ethylhexyl)adipate			1.98	1.89		ug/L		96	70 - 130	14	20
Dibenz(a,h)anthracene			1.98	2.05		ug/L		104	70 - 130	9	20
Diclorvos (DDVP)			1.98	2.73	*+	ug/L		138	70 - 130	1	20
Dieldrin			1.98	1.97		ug/L		100	70 - 130	3	20
Diethylphthalate			1.98	2.26		ug/L		114	70 - 130	2	20
Dimethylphthalate			1.98	2.21		ug/L		111	70 - 130	2	20
Di-n-butyl phthalate			3.96	4.10		ug/L		103	70 - 130	6	20
Di-n-octyl phthalate			1.98	1.49	*1	ug/L		75	70 - 130	35	20
Endosulfan I (Alpha)			1.98	1.90		ug/L		96	70 - 130	0	20
Endosulfan II (Beta)			1.98	2.07		ug/L		104	70 - 130	5	20
Endosulfan sulfate			1.98	2.13		ug/L		108	70 - 130	5	20
Endrin			1.98	2.35		ug/L		119	70 - 130	1	20
Endrin aldehyde			1.98	1.86		ug/L		94	70 - 130	15	20
EPTC			1.98	2.27		ug/L		115	70 - 130	1	20
Fluoranthene			1.98	2.18		ug/L		110	70 - 130	2	20
Fluorene			1.98	2.17		ug/L		109	70 - 130	1	20
gamma-Chlordane			1.98	2.09		ug/L		106	70 - 130	1	20
Heptachlor			1.98	2.21		ug/L		112	70 - 130	3	20
Heptachlor epoxide (isomer B)			1.98	2.17		ug/L		109	70 - 130	0	20
Hexachlorobenzene			1.98	1.99		ug/L		101	70 - 130	4	20
Hexachlorocyclopentadiene			1.98	2.17		ug/L		110	70 - 130	13	20
Indeno[1,2,3-cd]pyrene			1.98	2.03		ug/L		103	70 - 130	7	20
Isophorone			1.98	2.16		ug/L		109	70 - 130	0	20
Lindane			1.98	2.11		ug/L		107	70 - 130	0	20
Malathion			1.98	2.32		ug/L		117	70 - 130	1	20
Methoxychlor			1.98	2.13		ug/L		108	70 - 130	6	20
Metolachlor			1.98	2.43		ug/L		123	70 - 130	1	20
Molinate			1.98	2.34		ug/L		118	70 - 130	3	20
Naphthalene			1.98	1.91		ug/L		96	70 - 130	1	20
Parathion			1.98	2.54		ug/L		128	70 - 130	2	20
Pendimethalin (Penoxaline)			1.98	2.17		ug/L		109	70 - 130	2	20
Phenanthrene			1.98	1.91		ug/L		97	70 - 130	0	20
Propachlor			1.98	2.32		ug/L		117	70 - 130	2	20
Pyrene			1.98	2.14		ug/L		108	70 - 130	3	20

Method: 525.2 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 380-51109/4-A
Matrix: Water
Analysis Batch: 51305

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 51109

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Simazine			1.98	2.25		ug/L		114	70 - 130	1	20
Terbacil			1.98	2.25		ug/L		114	70 - 130	2	20
Terbuthylazine			1.98	2.27		ug/L		115	70 - 130	2	20
Thiobencarb			1.98	2.22		ug/L		112	70 - 130	0	20
trans-Nonachlor			1.98	1.90		ug/L		96	70 - 130	2	20
Trifluralin			1.98	2.13		ug/L		107	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Nitro-m-xylene	*103*		*70 - 130*
Perylene-d12	*95*		*70 - 130*
Triphenylphosphate	*104*		*70 - 130*

Lab Sample ID: MRL 380-51109/2-A
Matrix: Water
Analysis Batch: 51305

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 51109

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene			0.0993	0.119		ug/L		120	50 - 150
2,4'-DDD			0.0993	0.118		ug/L		119	50 - 150
2,4'-DDE			0.0993	0.103		ug/L		103	50 - 150
2,4'-DDT			0.0993	0.115		ug/L		116	50 - 150
2,4-Dinitrotoluene			0.0993	0.119		ug/L		119	50 - 150
2,6-Dinitrotoluene			0.0993	0.116		ug/L		116	50 - 150
2-Methylnaphthalene			0.0993	0.109		ug/L		110	50 - 150
4,4'-DDD			0.0993	0.111		ug/L		112	50 - 150
4,4'-DDE			0.0993	0.0916	J	ug/L		92	50 - 150
4,4'-DDT			0.0993	0.127		ug/L		128	50 - 150
Acenaphthene			0.0993	0.100		ug/L		101	50 - 150
Acenaphthylene			0.0993	0.0947	J	ug/L		95	50 - 150
Acetochlor			0.0496	0.0503	J	ug/L		101	50 - 150
Alachlor			0.0496	0.0532		ug/L		107	50 - 150
alpha-BHC			0.0993	0.102		ug/L		103	50 - 150
alpha-Chlordane			0.0248	<0.029		ug/L		94	50 - 150
Anthracene			0.0199	0.0196	J	ug/L		99	50 - 150
Atrazine			0.0496	0.0683		ug/L		138	50 - 150
Benz(a)anthracene			0.0496	0.0501		ug/L		101	50 - 150
Benzo[a]pyrene			0.0199	0.0166	J	ug/L		84	50 - 150
Benzo[b]fluoranthene			0.0199	0.0200		ug/L		101	50 - 150
Benzo[g,h,i]perylene			0.0496	0.0512		ug/L		103	50 - 150
Benzo[k]fluoranthene			0.0199	0.0188	J	ug/L		95	50 - 150
beta-BHC			0.0993	0.0953	J	ug/L		96	50 - 150
Bis(2-ethylhexyl) phthalate			0.596	0.799		ug/L		134	50 - 150
Bromacil			0.0993	0.136		ug/L		137	50 - 150
Butachlor			0.0496	0.0642		ug/L		129	50 - 150
Butylbenzylphthalate			0.149	0.202	J	ug/L		136	50 - 150
Chlorobenzilate			0.0993	0.152	^3+	ug/L		153	50 - 150
Chloroneb			0.0993	0.106		ug/L		107	50 - 150
Chlorothalonil (Draconil, Bravo)			0.0993	0.121		ug/L		122	50 - 150

Method: 525.2 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MRL 380-51109/2-A
Matrix: Water
Analysis Batch: 51305

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 51109

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chlorpyrifos	0.0496	0.0505		ug/L		102	50 - 150
Chrysene	0.0199	0.0205		ug/L		103	50 - 150
delta-BHC	0.0993	0.110		ug/L		111	50 - 150
Di(2-ethylhexyl)adipate	0.298	0.395	J	ug/L		133	50 - 150
Dibenz(a,h)anthracene	0.0496	0.0513		ug/L		103	50 - 150
Diclorvos (DDVP)	0.0496	0.0921	^3+	ug/L		186	50 - 150
Dieldrin	0.0993	0.100	J	ug/L		101	50 - 150
Diethylphthalate	0.149	0.215	J	ug/L		144	50 - 150
Dimethylphthalate	0.298	0.337	J	ug/L		113	50 - 150
Di-n-butyl phthalate	0.298	0.369	J	ug/L		124	49 - 243
Di-n-octyl phthalate	0.0993	0.120		ug/L		121	50 - 150
Endosulfan I (Alpha)	0.0993	0.0815	J	ug/L		82	50 - 150
Endosulfan II (Beta)	0.0993	0.122		ug/L		123	50 - 150
Endosulfan sulfate	0.0993	0.112		ug/L		113	50 - 150
Endrin	0.0993	0.118		ug/L		118	50 - 150
Endrin aldehyde	0.0993	0.136		ug/L		137	50 - 150
EPTC	0.0993	0.126		ug/L		127	50 - 150
Fluoranthene	0.0496	0.0519	J	ug/L		105	50 - 150
Fluorene	0.0496	0.0600		ug/L		121	50 - 150
gamma-Chlordane	0.0248	0.0235	J	ug/L		95	50 - 150
Heptachlor	0.0397	0.0455		ug/L		115	50 - 150
Heptachlor epoxide (isomer B)	0.0496	0.0476	J	ug/L		96	50 - 150
Hexachlorobenzene	0.0496	0.0434	J	ug/L		87	50 - 150
Hexachlorocyclopentadiene	0.0496	0.0440	J	ug/L		89	50 - 150
Indeno[1,2,3-cd]pyrene	0.0496	0.0524		ug/L		106	50 - 150
Isophorone	0.0993	0.113	J	ug/L		114	50 - 150
Lindane	0.0397	0.0414		ug/L		104	50 - 150
Malathion	0.0993	0.123		ug/L		123	50 - 150
Methoxychlor	0.0993	0.135		ug/L		136	50 - 150
Metolachlor	0.0496	0.0611		ug/L		123	50 - 150
Molinate	0.0993	0.113		ug/L		113	50 - 150
Naphthalene	0.0993	0.112	J	ug/L		113	50 - 150
Parathion	0.0993	0.122		ug/L		123	50 - 150
Pendimethalin (Penoxaline)	0.0993	0.113		ug/L		114	50 - 150
Phenanthrene	0.0199	0.0239	J	ug/L		121	50 - 150
Propachlor	0.0496	0.0580		ug/L		117	50 - 150
Pyrene	0.0496	0.0501		ug/L		101	50 - 150
Simazine	0.0496	0.0569		ug/L		115	50 - 150
Terbacil	0.0993	0.124		ug/L		125	50 - 150
Terbuthylazine	0.0993	0.106		ug/L		106	50 - 150
Thiobencarb	0.0993	0.121	J	ug/L		122	50 - 150
trans-Nonachlor	0.0248	<0.026		ug/L		95	50 - 150
Trifluralin	0.0993	0.108		ug/L		109	50 - 150

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
2-Nitro-m-xylene	*106*		*70 - 130*
Perylene-d12	*97*		*70 - 130*
Triphenylphosphate	*108*		*70 - 130*

Method: 525.2 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 380-57897-P-1-A MS
Matrix: Water
Analysis Batch: 51305

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 51109

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	<0.098		1.96	1.95		ug/L		99	70 - 130
2,4'-DDD	<0.098		1.96	2.09		ug/L		107	70 - 130
2,4'-DDE	<0.098		1.96	1.99		ug/L		102	70 - 130
2,4'-DDT	<0.098		1.96	2.19		ug/L		112	70 - 130
2,4-Dinitrotoluene	<0.098		1.96	2.33		ug/L		119	70 - 130
2,6-Dinitrotoluene	<0.098		1.96	2.24		ug/L		114	70 - 130
2-Methylnaphthalene	<0.098		1.96	1.97		ug/L		101	70 - 130
4,4'-DDD	<0.098		1.96	2.11		ug/L		108	70 - 130
4,4'-DDE	<0.098		1.96	1.90		ug/L		97	70 - 130
4,4'-DDT	<0.098		1.96	2.20		ug/L		113	70 - 130
Acenaphthene	<0.098		1.96	1.83		ug/L		93	70 - 130
Acenaphthylene	<0.098		1.96	2.03		ug/L		104	70 - 130
Acetochlor	<0.098	*+	1.96	2.27		ug/L		116	70 - 130
Alachlor	<0.049		1.96	2.07		ug/L		106	70 - 130
alpha-BHC	<0.098		1.96	1.92		ug/L		98	70 - 130
alpha-Chlordane	<0.049		1.96	1.99		ug/L		102	70 - 130
Anthracene	<0.020	F1	1.96	1.17	F1	ug/L		60	70 - 130
Atrazine	<0.049		1.96	2.18		ug/L		112	70 - 130
Benz(a)anthracene	<0.049		1.96	2.03		ug/L		104	70 - 130
Benzo[a]pyrene	<0.020		1.96	1.71		ug/L		88	70 - 130
Benzo[b]fluoranthene	<0.020		1.96	2.12		ug/L		109	70 - 130
Benzo[g,h,i]perylene	<0.049		1.96	1.93		ug/L		99	70 - 130
Benzo[k]fluoranthene	<0.020		1.96	2.19		ug/L		112	70 - 130
beta-BHC	<0.098		1.96	1.93		ug/L		99	70 - 130
Bis(2-ethylhexyl) phthalate	<0.59	*1	1.96	1.58		ug/L		81	70 - 130
Bromacil	<0.098		1.96	2.34		ug/L		119	70 - 130
Butachlor	<0.049		1.96	2.21		ug/L		113	70 - 130
Butylbenzylphthalate	<0.49		1.96	1.99		ug/L		102	70 - 130
Chlorobenzilate	<0.098	^3+	1.96	2.23		ug/L		114	70 - 130
Chloroneb	<0.098		1.96	1.94		ug/L		99	70 - 130
Chlorothalonil (Draconil, Bravo)	<0.098		1.96	2.13		ug/L		109	70 - 130
Chlorpyrifos	<0.049		1.96	2.19		ug/L		112	70 - 130
Chrysene	<0.020		1.96	1.93		ug/L		99	70 - 130
delta-BHC	<0.098		1.96	1.79		ug/L		92	70 - 130
Di(2-ethylhexyl)adipate	<0.59		1.96	1.94		ug/L		95	70 - 130
Dibenz(a,h)anthracene	<0.049		1.96	1.98		ug/L		101	70 - 130
Diclorvos (DDVP)	<0.049	*+ ^3+ F1	1.96	2.77	F1	ug/L		142	70 - 130
Dieldrin	<0.20		1.96	2.06		ug/L		105	70 - 130
Diethylphthalate	<0.49		1.96	2.13		ug/L		109	70 - 130
Dimethylphthalate	<0.49		1.96	2.14		ug/L		109	70 - 130
Di-n-butyl phthalate	<0.98		3.91	4.01		ug/L		102	70 - 130
Di-n-octyl phthalate	<0.098	*1	1.96	1.49		ug/L		76	70 - 130
Endosulfan I (Alpha)	<0.098		1.96	1.69		ug/L		86	70 - 130
Endosulfan II (Beta)	<0.098		1.96	2.01		ug/L		103	70 - 130
Endosulfan sulfate	<0.098		1.96	2.23		ug/L		114	70 - 130
Endrin	<0.098		1.96	1.94		ug/L		99	70 - 130
Endrin aldehyde	<0.098		1.96	1.40		ug/L		71	70 - 130
EPTC	<0.098		1.96	2.20		ug/L		112	70 - 130

Method: 525.2 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 380-57897-P-1-A MS
Matrix: Water
Analysis Batch: 51305

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 51109

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoranthene	<0.098		1.96	2.14		ug/L		109	70 - 130
Fluorene	<0.049		1.96	2.10		ug/L		107	70 - 130
gamma-Chlordane	<0.049		1.96	1.98		ug/L		101	70 - 130
Heptachlor	<0.039		1.96	2.11		ug/L		108	70 - 130
Heptachlor epoxide (isomer B)	<0.049		1.96	2.06		ug/L		105	70 - 130
Hexachlorobenzene	<0.049		1.96	2.04		ug/L		104	70 - 130
Hexachlorocyclopentadiene	<0.049		1.96	2.34		ug/L		120	70 - 130
Indeno[1,2,3-cd]pyrene	<0.049		1.96	1.99		ug/L		102	70 - 130
Isophorone	<0.49		1.96	2.14		ug/L		109	70 - 130
Lindane	<0.039		1.96	1.95		ug/L		100	70 - 130
Malathion	<0.098		1.96	2.18		ug/L		112	70 - 130
Methoxychlor	<0.098		1.96	2.20		ug/L		112	70 - 130
Metolachlor	<0.049		1.96	2.24		ug/L		115	70 - 130
Molinate	<0.098		1.96	2.26		ug/L		116	70 - 130
Naphthalene	<0.29		1.96	1.87		ug/L		96	70 - 130
Parathion	<0.098	*+	1.96	2.53		ug/L		129	70 - 130
Pendimethalin (Penoxaline)	<0.098		1.96	2.43		ug/L		124	70 - 130
Phenanthrene	<0.039		1.96	1.84		ug/L		94	70 - 130
Propachlor	<0.049		1.96	2.27		ug/L		116	70 - 130
Pyrene	<0.049		1.96	2.16		ug/L		111	70 - 130
Simazine	<0.049		1.96	2.21		ug/L		113	70 - 130
Terbacil	<0.098		1.96	2.15		ug/L		110	70 - 130
Terbuthylazine	<0.098		1.96	2.24		ug/L		115	70 - 130
Thiobencarb	<0.20		1.96	2.11		ug/L		108	70 - 130
trans-Nonachlor	<0.049		1.96	2.10		ug/L		107	70 - 130
Trifluralin	<0.098		1.96	2.32		ug/L		119	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Nitro-m-xylene	*98*		*70 - 130*
Perylene-d12	*92*		*70 - 130*
Triphenylphosphate	*115*		*70 - 130*

Lab Sample ID: 380-57909-AR-1-A DU
Matrix: Water
Analysis Batch: 51305

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 51109

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
1-Methylnaphthalene	<0.099		<0.098		ug/L		NC	20
2,4'-DDD	<0.099		<0.098		ug/L		NC	20
2,4'-DDE	<0.099		<0.098		ug/L		NC	20
2,4'-DDT	<0.099		<0.098		ug/L		NC	20
2,4-Dinitrotoluene	<0.099		<0.098		ug/L		NC	20
2,6-Dinitrotoluene	<0.099		<0.098		ug/L		NC	20
2-Methylnaphthalene	<0.099		<0.098		ug/L		NC	20
4,4'-DDD	<0.099		<0.098		ug/L		NC	20
4,4'-DDE	<0.099		<0.098		ug/L		NC	20
4,4'-DDT	<0.099		<0.098		ug/L		NC	20
Acenaphthene	<0.099		<0.098		ug/L		NC	20

Method: 525.2 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 380-57909-AR-1-A DU
Matrix: Water
Analysis Batch: 51305

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 51109

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Acenaphthylene	<0.099			<0.098		ug/L				NC	20
Acetochlor	<0.099	*+		<0.098	*+	ug/L				NC	20
Alachlor	<0.049			<0.049		ug/L				NC	20
alpha-BHC	<0.099			<0.098		ug/L				NC	20
alpha-Chlordane	<0.049			<0.049		ug/L				NC	20
Anthracene	<0.020			<0.020		ug/L				NC	20
Atrazine	<0.049			<0.049		ug/L				NC	20
Benz(a)anthracene	<0.049			<0.049		ug/L				NC	20
Benzo[a]pyrene	<0.020			<0.020		ug/L				NC	20
Benzo[b]fluoranthene	<0.020			<0.020		ug/L				NC	20
Benzo[g,h,i]perylene	<0.049			<0.049		ug/L				NC	20
Benzo[k]fluoranthene	<0.020			<0.020		ug/L				NC	20
beta-BHC	<0.099			<0.098		ug/L				NC	20
Bis(2-ethylhexyl) phthalate	<0.59	*1		<0.59	*1	ug/L				NC	20
Bromacil	<0.099			<0.098		ug/L				NC	20
Butachlor	<0.049			<0.049		ug/L				NC	20
Butylbenzylphthalate	<0.49			<0.49		ug/L				NC	20
Chlorobenzilate	<0.099	^3+		<0.098		ug/L				NC	20
Chloroneb	<0.099			<0.098		ug/L				NC	20
Chlorothalonil (Draconil, Bravo)	<0.099			<0.098		ug/L				NC	20
Chlorpyrifos	<0.049			<0.049		ug/L				NC	20
Chrysene	<0.020			<0.020		ug/L				NC	20
delta-BHC	<0.099			<0.098		ug/L				NC	20
Di(2-ethylhexyl)adipate	<0.59			<0.59		ug/L				NC	20
Dibenz(a,h)anthracene	<0.049			<0.049		ug/L				NC	20
Diclorvos (DDVP)	<0.049	*+ ^3+		<0.049	*+	ug/L				NC	20
Dieldrin	<0.20			<0.20		ug/L				NC	20
Diethylphthalate	<0.49			<0.49		ug/L				NC	20
Dimethylphthalate	<0.49			<0.49		ug/L				NC	20
Di-n-butyl phthalate	<0.99			<0.98		ug/L				NC	20
Di-n-octyl phthalate	<0.099	*1		<0.098	*1	ug/L				NC	20
Endosulfan I (Alpha)	<0.099			<0.098		ug/L				NC	20
Endosulfan II (Beta)	<0.099			<0.098		ug/L				NC	20
Endosulfan sulfate	<0.099			<0.098		ug/L				NC	20
Endrin	<0.099			<0.098		ug/L				NC	20
Endrin aldehyde	<0.099			<0.098		ug/L				NC	20
EPTC	<0.099			<0.098		ug/L				NC	20
Fluoranthene	<0.099			<0.098		ug/L				NC	20
Fluorene	<0.049			<0.049		ug/L				NC	20
gamma-Chlordane	<0.049			<0.049		ug/L				NC	20
Heptachlor	<0.040			<0.039		ug/L				NC	20
Heptachlor epoxide (isomer B)	<0.049			<0.049		ug/L				NC	20
Hexachlorobenzene	<0.049			<0.049		ug/L				NC	20
Hexachlorocyclopentadiene	<0.049			<0.049		ug/L				NC	20
Indeno[1,2,3-cd]pyrene	<0.049			<0.049		ug/L				NC	20
Isophorone	<0.49			<0.49		ug/L				NC	20
Lindane	<0.040			<0.039		ug/L				NC	20
Malathion	<0.099			<0.098		ug/L				NC	20
Methoxychlor	<0.099			<0.098		ug/L				NC	20

Method: 525.2 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 380-57909-AR-1-A DU
Matrix: Water
Analysis Batch: 51305

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 51109

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Metolachlor	<0.049			<0.049		ug/L				NC	20
Molinate	<0.099			<0.098		ug/L				NC	20
Naphthalene	<0.30			<0.29		ug/L				NC	20
Parathion	<0.099	*+		<0.098	*+	ug/L				NC	20
Pendimethalin (Penoxaline)	<0.099			<0.098		ug/L				NC	20
Phenanthrene	<0.040			<0.039		ug/L				NC	20
Propachlor	<0.049			<0.049		ug/L				NC	20
Pyrene	<0.049			<0.049		ug/L				NC	20
Simazine	<0.049			<0.049		ug/L				NC	20
Terbacil	<0.099			<0.098		ug/L				NC	20
Terbuthylazine	<0.099			<0.098		ug/L				NC	20
Thiobencarb	<0.20			<0.20		ug/L				NC	20
Total Permethrin (mixed isomers)	<0.20			<0.20		ug/L				NC	20
trans-Nonachlor	<0.049			<0.049		ug/L				NC	20
Trifluralin	<0.099			<0.098		ug/L				NC	20

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
2-Nitro-m-xylene	*97*		*70 - 130*
Perylene-d12	*92*		*70 - 130*
Triphenylphosphate	*110*		*70 - 130*

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

Lab Sample ID: MBL 380-53035/21-A
Matrix: Water
Analysis Batch: 53385

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 53035

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		08/24/23 16:20	08/27/23 03:42	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<0.30		2.0		ng/L		08/24/23 16:20	08/27/23 03:42	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0		ng/L		08/24/23 16:20	08/27/23 03:42	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<1.0		2.0		ng/L		08/24/23 16:20	08/27/23 03:42	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0		ng/L		08/24/23 16:20	08/27/23 03:42	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0		ng/L		08/24/23 16:20	08/27/23 03:42	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0		ng/L		08/24/23 16:20	08/27/23 03:42	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0		ng/L		08/24/23 16:20	08/27/23 03:42	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0		ng/L		08/24/23 16:20	08/27/23 03:42	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0		ng/L		08/24/23 16:20	08/27/23 03:42	1
Perfluorononanoic acid (PFNA)	<0.40		2.0		ng/L		08/24/23 16:20	08/27/23 03:42	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0		ng/L		08/24/23 16:20	08/27/23 03:42	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0		ng/L		08/24/23 16:20	08/27/23 03:42	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0		ng/L		08/24/23 16:20	08/27/23 03:42	1
Perfluorobutanoic acid (PFBA)	<0.69		2.0		ng/L		08/24/23 16:20	08/27/23 03:42	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.38		2.0		ng/L		08/24/23 16:20	08/27/23 03:42	1

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

Lab Sample ID: MBL 380-53035/21-A
Matrix: Water
Analysis Batch: 53385

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 53035

Analyte	MBL Result	MBL Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.37		2.0		ng/L		08/24/23 16:20	08/27/23 03:42	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<0.48		2.0		ng/L		08/24/23 16:20	08/27/23 03:42	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<0.47		2.0		ng/L		08/24/23 16:20	08/27/23 03:42	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<0.25		2.0		ng/L		08/24/23 16:20	08/27/23 03:42	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.46		2.0		ng/L		08/24/23 16:20	08/27/23 03:42	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.15		2.0		ng/L		08/24/23 16:20	08/27/23 03:42	1
Perfluoropentanoic acid (PFPeA)	<0.38		2.0		ng/L		08/24/23 16:20	08/27/23 03:42	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.36		2.0		ng/L		08/24/23 16:20	08/27/23 03:42	1
Perfluoropentanesulfonic acid (PFPeS)	<0.39		2.0		ng/L		08/24/23 16:20	08/27/23 03:42	1

Isotope Dilution	*MBL %Recovery*	*MBL Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*79*		*50 - 200*	*08/24/23 16:20*	*08/27/23 03:42*	*1*
13C6 PFDA	*95*		*50 - 200*	*08/24/23 16:20*	*08/27/23 03:42*	*1*
13C5 PFHxA	*88*		*50 - 200*	*08/24/23 16:20*	*08/27/23 03:42*	*1*
13C4 PFHpA	*88*		*50 - 200*	*08/24/23 16:20*	*08/27/23 03:42*	*1*
13C8 PFOA	*93*		*50 - 200*	*08/24/23 16:20*	*08/27/23 03:42*	*1*
13C9 PFNA	*91*		*50 - 200*	*08/24/23 16:20*	*08/27/23 03:42*	*1*
13C7 PFUnA	*88*		*50 - 200*	*08/24/23 16:20*	*08/27/23 03:42*	*1*
13C2 PFDoA	*91*		*50 - 200*	*08/24/23 16:20*	*08/27/23 03:42*	*1*
13C4 PFBA	*92*		*50 - 200*	*08/24/23 16:20*	*08/27/23 03:42*	*1*
13C5 PFPeA	*90*		*50 - 200*	*08/24/23 16:20*	*08/27/23 03:42*	*1*
13C3 PFBS	*90*		*50 - 200*	*08/24/23 16:20*	*08/27/23 03:42*	*1*
13C3 PFHxS	*90*		*50 - 200*	*08/24/23 16:20*	*08/27/23 03:42*	*1*
13C8 PFOS	*91*		*50 - 200*	*08/24/23 16:20*	*08/27/23 03:42*	*1*
13C2-4:2-FTS	*101*		*50 - 200*	*08/24/23 16:20*	*08/27/23 03:42*	*1*
13C2-6:2-FTS	*98*		*50 - 200*	*08/24/23 16:20*	*08/27/23 03:42*	*1*
13C2-8:2-FTS	*109*		*50 - 200*	*08/24/23 16:20*	*08/27/23 03:42*	*1*

Lab Sample ID: LCS 380-53035/23-A
Matrix: Water
Analysis Batch: 53385

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 53035

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)			60.2	50.3		ng/L		84	70 - 130		
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)			60.2	52.4		ng/L		87	70 - 130		
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)			60.2	56.2		ng/L		93	70 - 130		
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)			60.2	50.5		ng/L		84	70 - 130		

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

Lab Sample ID: LCS 380-53035/23-A
Matrix: Water
Analysis Batch: 53385

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 53035

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanesulfonic acid (PFBS)	60.2	57.4		ng/L		95	70 - 130
Perfluorodecanoic acid (PFDA)	60.2	55.1		ng/L		92	70 - 130
Perfluorododecanoic acid (PFDoA)	60.2	54.4		ng/L		90	70 - 130
Perfluoroheptanoic acid (PFHpA)	60.2	54.2		ng/L		90	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	60.2	53.4		ng/L		89	70 - 130
Perfluorohexanoic acid (PFHxA)	60.2	56.1		ng/L		93	70 - 130
Perfluorononanoic acid (PFNA)	60.2	54.9		ng/L		91	70 - 130
Perfluorooctanesulfonic acid (PFOS)	60.2	53.3		ng/L		88	70 - 130
Perfluorooctanoic acid (PFOA)	60.2	54.5		ng/L		91	70 - 130
Perfluoroundecanoic acid (PFUnA)	60.2	56.7		ng/L		94	70 - 130
Perfluorobutanoic acid (PFBA)	60.2	57.2		ng/L		95	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	60.2	56.6		ng/L		94	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	60.2	55.0		ng/L		91	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	60.2	54.3		ng/L		90	70 - 130
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	60.2	51.3		ng/L		85	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	60.2	56.1		ng/L		93	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	60.2	54.9		ng/L		91	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	60.2	49.9		ng/L		83	70 - 130
Perfluoropentanoic acid (PFPeA)	60.2	57.9		ng/L		96	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	60.2	53.7		ng/L		89	70 - 130
Perfluoropentanesulfonic acid (PFPeS)	60.2	53.4		ng/L		89	70 - 130

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C3 HFPO-DA	*91*		*50 - 200*
13C6 PFDA	*95*		*50 - 200*
13C5 PFHxA	*94*		*50 - 200*
13C4 PFHpA	*96*		*50 - 200*
13C8 PFOA	*97*		*50 - 200*
13C9 PFNA	*99*		*50 - 200*
13C7 PFUnA	*96*		*50 - 200*
13C2 PFDoA	*98*		*50 - 200*
13C4 PFBA	*93*		*50 - 200*
13C5 PFPeA	*94*		*50 - 200*
13C3 PFBS	*92*		*50 - 200*
13C3 PFHxS	*96*		*50 - 200*
13C8 PFOS	*95*		*50 - 200*
13C2-4:2-FTS	*95*		*50 - 200*
13C2-6:2-FTS	*93*		*50 - 200*

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

Lab Sample ID: LCS 380-53035/23-A
Matrix: Water
Analysis Batch: 53385

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 53035

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C2-8:2-FTS	90		50 - 200

Lab Sample ID: LCSD 380-53035/24-A
Matrix: Water
Analysis Batch: 53385

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 53035

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)			60.2	55.1		ng/L		92	70 - 130	9	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)			60.2	56.2		ng/L		93	70 - 130	7	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)			60.2	55.4		ng/L		92	70 - 130	1	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)			60.2	50.6		ng/L		84	70 - 130	0	30
Perfluorobutanesulfonic acid (PFBS)			60.2	57.4		ng/L		95	70 - 130	0	30
Perfluorodecanoic acid (PFDA)			60.2	56.5		ng/L		94	70 - 130	2	30
Perfluorododecanoic acid (PFDoA)			60.2	55.9		ng/L		93	70 - 130	3	30
Perfluoroheptanoic acid (PFHpA)			60.2	56.4		ng/L		94	70 130	4	30
Perfluorohexanesulfonic acid (PFHxS)			60.2	55.0		ng/L		91	70 - 130	3	30
Perfluorohexanoic acid (PFHxA)			60.2	64.0		ng/L		106	70 - 130	13	30
Perfluorononanoic acid (PFNA)			60.2	59.0		ng/L		98	70 - 130	7	30
Perfluorooctanesulfonic acid (PFOS)			60.2	57.2		ng/L		95	70 - 130	7	30
Perfluorooctanoic acid (PFOA)			60.2	57.6		ng/L		96	70 - 130	5	30
Perfluoroundecanoic acid (PFUnA)			60.2	59.2		ng/L		98	70 - 130	4	30
Perfluorobutanoic acid (PFBA)			60.2	58.2		ng/L		97	70 - 130	2	30
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)			60.2	61.1		ng/L		101	70 - 130	8	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)			60.2	55.9		ng/L		93	70 - 130	2	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)			60.2	60.3		ng/L		100	70 - 130	10	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)			60.2	52.3		ng/L		87	70 - 130	2	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)			60.2	60.1		ng/L		100	70 - 130	7	30
Perfluoro-3-methoxypropanoic acid (PFMPA)			60.2	57.1		ng/L		95	70 - 130	4	30
Perfluoro-4-methoxybutanoic acid (PFMBA)			60.2	58.4		ng/L		97	70 - 130	16	30
Perfluoropentanoic acid (PFPeA)			60.2	61.6		ng/L		102	70 - 130	6	30
Perfluoroheptanesulfonic acid (PFHpS)			60.2	58.3		ng/L		97	70 - 130	8	30
Perfluoropentanesulfonic acid (PFPeS)			60.2	56.2		ng/L		93	70 - 130	5	30

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

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
13C3 HFPO-DA	86		50 - 200
13C6 PFDA	98		50 - 200
13C5 PFHxA	85		50 - 200
13C4 PFHpA	93		50 - 200
13C8 PFOA	96		50 - 200
13C9 PFNA	97		50 - 200
13C7 PFUnA	96		50 - 200
13C2 PFDoA	97		50 - 200
13C4 PFBA	84		50 - 200
13C5 PFPeA	86		50 - 200
13C3 PFBS	95		50 - 200
13C3 PFHxS	97		50 - 200
13C8 PFOS	96		50 - 200
13C2-4:2-FTS	106		50 - 200
13C2-6:2-FTS	94		50 - 200
13C2-8:2-FTS	94		50 - 200

Lab Sample ID: MRL 380-53035/22-A
Matrix: Water
Analysis Batch: 53385

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 53035

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.01	1.85	J	ng/L		92	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	2.01	1.92	J	ng/L		95	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.01	2.18	J	ng/L		108	50 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.01	1.73	J	ng/L		86	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.01	2.08	J	ng/L		104	50 - 150
Perfluorodecanoic acid (PFDA)	2.01	1.98	J	ng/L		99	50 - 150
Perfluorododecanoic acid (PFDoA)	2.01	1.96	J	ng/L		98	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.01	2.04	J	ng/L		102	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.01	2.08	J	ng/L		104	50 - 150
Perfluorohexanoic acid (PFHxA)	2.01	2.32	J	ng/L		115	50 - 150
Perfluorononanoic acid (PFNA)	2.01	2.16	J	ng/L		108	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.01	2.04	J	ng/L		102	50 - 150
Perfluorooctanoic acid (PFOA)	2.01	2.14	J	ng/L		107	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.01	1.99	J	ng/L		99	50 - 150
Perfluorobutanoic acid (PFBA)	2.01	2.13	J	ng/L		106	50 - 150
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	2.01	2.21	J	ng/L		110	50 - 150
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	2.01	2.06	J	ng/L		103	50 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	2.01	2.16	J	ng/L		108	50 - 150

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

Lab Sample ID: MRL 380-53035/22-A
Matrix: Water
Analysis Batch: 53385

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 53035

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)			2.01	2.15	J	ng/L		107	50 - 150		
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)			2.01	1.99	J	ng/L		99	50 - 150		
Perfluoro-3-methoxypropanoic acid (PFMPA)			2.01	2.02	J	ng/L		101	50 - 150		
Perfluoro-4-methoxybutanoic acid (PFMBA)			2.01	2.07	J	ng/L		103	50 - 150		
Perfluoropentanoic acid (PFPeA)			2.01	2.13	J	ng/L		106	50 - 150		
Perfluoroheptanesulfonic acid (PFHpS)			2.01	2.15	J	ng/L		107	50 - 150		
Perfluoropentanesulfonic acid (PFPeS)			2.01	1.90	J	ng/L		95	50 - 150		

Isotope Dilution	*MRL %Recovery*	*MRL Qualifier*	*Limits*
13C3 HFPO-DA	*82*		*50 - 200*
13C6 PFDA	*93*		*50 - 200*
13C5 PFHxA	*90*		*50 - 200*
13C4 PFHpA	*90*		*50 - 200*
13C8 PFOA	*95*		*50 - 200*
13C9 PFNA	*93*		*50 - 200*
13C7 PFUnA	*91*		*50 - 200*
13C2 PFDoA	*93*		*50 - 200*
13C4 PFBA	*94*		*50 - 200*
13C5 PFPeA	*94*		*50 - 200*
13C3 PFBS	*87*		*50 - 200*
13C3 PFHxS	*88*		*50 - 200*
13C8 PFOS	*89*		*50 - 200*
13C2-4:2-FTS	*94*		*50 - 200*
13C2-6:2-FTS	*87*		*50 - 200*
13C2-8:2-FTS	*88*		*50 - 200*

Lab Sample ID: 380-57432-O-1-D LMS
Matrix: Water
Analysis Batch: 53385

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 53035

Analyte	Sample Result	Sample Qualifier	Spike Added	LMS Result	LMS Qualifier	Unit	D	%Rec	%Rec Limits		
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.01	1.90	J	ng/L		94	50 - 150		
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.01	1.91	J	ng/L		95	50 - 150		
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.01	1.90	J	ng/L		95	50 - 150		
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0	*5-	2.01	1.85	J *5-	ng/L		92	50 - 150		
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.01	2.73		ng/L		109	50 - 150		
Perfluorodecanoic acid (PFDA)	<2.0		2.01	2.13		ng/L		106	50 - 150		
Perfluorododecanoic acid (PFDoA)	<2.0		2.01	1.99	J	ng/L		99	50 - 150		

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

Lab Sample ID: 380-57432-O-1-D LMS
Matrix: Water
Analysis Batch: 53385

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 53035

Analyte	Sample Result	Sample Qualifier	Spike Added	LMS Result	LMS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoroheptanoic acid (PFHpA)	<2.0		2.01	2.72		ng/L		107	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.01	3.16		ng/L		94	50 - 150
Perfluorohexanoic acid (PFHxA)	<2.0		2.01	3.38		ng/L		110	50 - 150
Perfluorononanoic acid (PFNA)	<2.0		2.01	2.28		ng/L		114	50 - 150
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.01	3.66		ng/L		95	50 - 150
Perfluorooctanoic acid (PFOA)	<2.0		2.01	2.74		ng/L		94	50 - 150
Perfluoroundecanoic acid (PFUnA)	<2.0		2.01	2.17		ng/L		108	50 - 150
Perfluorobutanoic acid (PFBA)	2.2		2.01	4.19		ng/L		101	50 - 150
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.01	2.07		ng/L		103	50 - 150
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.01	2.10		ng/L		104	50 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.01	2.06		ng/L		103	50 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.01	1.86	J	ng/L		93	50 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		2.01	2.08		ng/L		104	50 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.01	1.80	J	ng/L		90	50 - 150
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.01	2.23		ng/L		111	50 - 150
Perfluoropentanoic acid (PFPeA)	<2.0		2.01	3.35		ng/L		118	50 - 150
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.01	2.27		ng/L		113	50 - 150
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.01	2.28		ng/L		113	50 - 150

Isotope Dilution	*LMS %Recovery*	*LMS Qualifier*	*Limits*
13C3 HFPO-DA	*48*	**5-*	*50 - 200*
13C6 PFDA	*77*		*50 - 200*
13C5 PFHxA	*58*		*50 - 200*
13C4 PFHpA	*61*		*50 - 200*
13C8 PFOA	*69*		*50 - 200*
13C9 PFNA	*72*		*50 - 200*
13C7 PFUnA	*77*		*50 - 200*
13C2 PFDoA	*87*		*50 - 200*
13C4 PFBA	*63*		*50 - 200*
13C5 PFPeA	*57*		*50 - 200*
13C3 PFBS	*92*		*50 - 200*
13C3 PFHxS	*95*		*50 - 200*
13C8 PFOS	*93*		*50 - 200*
13C2-4:2-FTS	*103*		*50 - 200*
13C2-6:2-FTS	*96*		*50 - 200*
13C2-8:2-FTS	*94*		*50 - 200*

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

Lab Sample ID: 380-57432-P-1-C LMSD
Matrix: Water
Analysis Batch: 53385

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 53035

Analyte	Sample Result	Sample Qualifier	Spike Added	LMSD Result	LMSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.00	1.85	J	ng/L		93	50 - 150	2	50
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.00	1.96	J	ng/L		98	50 - 150	3	50
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.00	2.20		ng/L		110	50 - 150	14	50
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0	*5-	2.00	1.78	J	ng/L		89	50 - 150	4	50
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.00	2.82		ng/L		114	50 - 150	3	50
Perfluorodecanoic acid (PFDA)	<2.0		2.00	2.13		ng/L		106	50 - 150	0	50
Perfluorododecanoic acid (PFDoA)	<2.0		2.00	2.07		ng/L		103	50 - 150	4	50
Perfluoroheptanoic acid (PFHpA)	<2.0		2.00	2.87		ng/L		115	50 - 150	5	50
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.00	3.19		ng/L		96	50 - 150	1	50
Perfluorohexanoic acid (PFHxA)	<2.0		2.00	3.47		ng/L		114	50 - 150	2	50
Perfluorononanoic acid (PFNA)	<2.0		2.00	2.40		ng/L		120	50 - 150	5	50
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.00	3.63		ng/L		94	50 - 150	1	50
Perfluorooctanoic acid (PFOA)	<2.0		2.00	2.88		ng/L		101	50 - 150	5	50
Perfluoroundecanoic acid (PFUnA)	<2.0		2.00	2.08		ng/L		104	50 - 150	4	50
Perfluorobutanoic acid (PFBA)	2.2		2.00	4.33		ng/L		108	50 - 150	3	50
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.00	2.17		ng/L		108	50 - 150	4	50
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.00	2.01		ng/L		100	50 - 150	4	50
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.00	2.37		ng/L		118	50 - 150	14	50
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.00	1.96	J	ng/L		98	50 - 150	5	50
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		2.00	2.22		ng/L		111	50 - 150	6	50
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.00	1.80	J	ng/L		90	50 - 150	0	50
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.00	2.31		ng/L		115	50 - 150	3	50
Perfluoropentanoic acid (PFPeA)	<2.0		2.00	3.53		ng/L		127	50 - 150	5	50
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.00	2.23		ng/L		111	50 - 150	2	50
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.00	2.29		ng/L		114	50 - 150	0	50

Isotope Dilution	*LMSD %Recovery*	*LMSD Qualifier*	*Limits*
13C3 HFPO-DA	*68*		*50 - 200*
13C6 PFDA	*84*		*50 - 200*
13C5 PFHxA	*78*		*50 - 200*
13C4 PFHpA	*78*		*50 - 200*
13C8 PFOA	*85*		*50 - 200*
13C9 PFNA	*85*		*50 - 200*

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

Lab Sample ID: 380-57432-P-1-C LMSD
Matrix: Water
Analysis Batch: 53385

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 53035

Isotope Dilution	LMSD %Recovery	LMSD Qualifier	Limits
13C7 PFUnA	85		50 - 200
13C2 PFDoA	90		50 - 200
13C4 PFBA	83		50 - 200
13C5 PFPeA	78		50 - 200
13C3 PFBS	88		50 - 200
13C3 PFHxS	98		50 - 200
13C8 PFOS	97		50 - 200
13C2-4:2-FTS	112		50 - 200
13C2-6:2-FTS	97		50 - 200
13C2-8:2-FTS	99		50 - 200

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

Lab Sample ID: MBL 380-51108/23-A
Matrix: Water
Analysis Batch: 51333

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 51108

Analyte	MBL Result	MBL Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<1.0		2.0		ng/L		08/10/23 05:33	08/11/23 10:57	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0		ng/L		08/10/23 05:33	08/11/23 10:57	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0		ng/L		08/10/23 05:33	08/11/23 10:57	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<0.58		2.0		ng/L		08/10/23 05:33	08/11/23 10:57	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<0.42		2.0		ng/L		08/10/23 05:33	08/11/23 10:57	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0		ng/L		08/10/23 05:33	08/11/23 10:57	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0		ng/L		08/10/23 05:33	08/11/23 10:57	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0		ng/L		08/10/23 05:33	08/11/23 10:57	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0		ng/L		08/10/23 05:33	08/11/23 10:57	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0		ng/L		08/10/23 05:33	08/11/23 10:57	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0		ng/L		08/10/23 05:33	08/11/23 10:57	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0		ng/L		08/10/23 05:33	08/11/23 10:57	1
Perfluorononanoic acid (PFNA)	<0.40		2.0		ng/L		08/10/23 05:33	08/11/23 10:57	1
Perfluorotetradecanoic acid (PFTA)	<0.54		2.0		ng/L		08/10/23 05:33	08/11/23 10:57	1
Perfluorotridecanoic acid (PFTrDA)	<0.36		2.0		ng/L		08/10/23 05:33	08/11/23 10:57	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<0.30		2.0		ng/L		08/10/23 05:33	08/11/23 10:57	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.30		2.0		ng/L		08/10/23 05:33	08/11/23 10:57	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0		ng/L		08/10/23 05:33	08/11/23 10:57	1

Surrogate	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	109		70 - 130	08/10/23 05:33	08/11/23 10:57	1
13C2 PFHxA	115		70 - 130	08/10/23 05:33	08/11/23 10:57	1
13C2 PFDA	121		70 - 130	08/10/23 05:33	08/11/23 10:57	1
13C3-GenX	106		70 - 130	08/10/23 05:33	08/11/23 10:57	1

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

Lab Sample ID: LCS 380-51108/25-A
Matrix: Water
Analysis Batch: 51333

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 51108

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	25.1	25.8		ng/L		103	70 - 130
Perfluorooctanesulfonic acid (PFOS)	23.2	24.4		ng/L		105	70 - 130
Perfluoroundecanoic acid (PFUnA)	25.1	25.2		ng/L		101	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	25.1	26.2		ng/L		104	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	25.1	25.0		ng/L		100	70 - 130
Perfluorohexanoic acid (PFHxA)	25.1	28.2		ng/L		113	70 - 130
Perfluorododecanoic acid (PFDoA)	25.1	25.0		ng/L		100	70 - 130
Perfluorooctanoic acid (PFOA)	25.1	27.0		ng/L		108	70 - 130
Perfluorodecanoic acid (PFDA)	25.1	26.8		ng/L		107	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	22.9	23.9		ng/L		105	70 - 130
Perfluorobutanesulfonic acid (PFBS)	22.2	24.2		ng/L		109	70 - 130
Perfluoroheptanoic acid (PFHpA)	25.1	25.0		ng/L		100	70 - 130
Perfluorononanoic acid (PFNA)	25.1	29.5		ng/L		118	70 - 130
Perfluorotetradecanoic acid (PFTA)	25.1	21.6		ng/L		86	70 - 130
Perfluorotridecanoic acid (PFTrDA)	25.1	27.9		ng/L		111	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	23.4	26.3		ng/L		112	70 - 130
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	23.7	24.5		ng/L		103	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	23.7	26.1		ng/L		110	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
d5-NEtFOSAA	*108*		*70 - 130*
13C2 PFHxA	*120*		*70 - 130*
13C2 PFDA	*112*		*70 - 130*
13C3-GenX	*110*		*70 - 130*

Lab Sample ID: LCSD 380-51108/26-A
Matrix: Water
Analysis Batch: 51333

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 51108

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	25.1	25.8		ng/L		103	70 - 130	0	30
Perfluorooctanesulfonic acid (PFOS)	23.2	26.0		ng/L		112	70 - 130	6	30
Perfluoroundecanoic acid (PFUnA)	25.1	26.8		ng/L		107	70 - 130	6	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	25.1	27.7		ng/L		110	70 - 130	6	30

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

Lab Sample ID: LCSD 380-51108/26-A
Matrix: Water
Analysis Batch: 51333

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 51108

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	25.1	25.7		ng/L		102	70 - 130	3	30
Perfluorohexanoic acid (PFHxA)	25.1	30.6		ng/L		122	70 - 130	8	30
Perfluorododecanoic acid (PFDoA)	25.1	26.8		ng/L		107	70 - 130	7	30
Perfluorooctanoic acid (PFOA)	25.1	28.2		ng/L		112	70 - 130	4	30
Perfluorodecanoic acid (PFDA)	25.1	27.3		ng/L		109	70 - 130	2	30
Perfluorohexanesulfonic acid (PFHxS)	22.9	25.2		ng/L		110	70 - 130	5	30
Perfluorobutanesulfonic acid (PFBS)	22.2	26.4		ng/L		119	70 - 130	9	30
Perfluoroheptanoic acid (PFHpA)	25.1	26.0		ng/L		104	70 - 130	4	30
Perfluorononanoic acid (PFNA)	25.1	31.4		ng/L		125	70 - 130	6	30
Perfluorotetradecanoic acid (PFTA)	25.1	23.5		ng/L		94	70 - 130	8	30
Perfluorotridecanoic acid (PFTrDA)	25.1	29.5		ng/L		117	70 - 130	6	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	23.5	27.7		ng/L		118	70 - 130	5	30
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	23.7	26.7		ng/L		112	70 - 130	9	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	23.7	26.8		ng/L		113	70 - 130	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
d5-NEtFOSAA	*110*		*70 - 130*
13C2 PFHxA	*128*		*70 - 130*
13C2 PFDA	*113*		*70 - 130*
13C3-GenX	*130*		*70 - 130*

Lab Sample ID: MRL 380-51108/24-A
Matrix: Water
Analysis Batch: 51440

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 51108

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.00	1.94	J	ng/L		97	50 - 150
Perfluorooctanesulfonic acid (PFOS)	1.86	1.93	J	ng/L		104	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.00	2.09	J	ng/L		104	50 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2.00	2.01	J	ng/L		100	50 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2.00	1.77	J	ng/L		88	50 - 150
Perfluorohexanoic acid (PFHxA)	2.00	2.34	J	ng/L		117	50 - 150
Perfluorododecanoic acid (PFDoA)	2.00	2.10	J	ng/L		105	50 - 150
Perfluorooctanoic acid (PFOA)	2.00	2.40	J	ng/L		120	50 - 150
Perfluorodecanoic acid (PFDA)	2.00	2.13	J	ng/L		106	50 - 150

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

Lab Sample ID: MRL 380-51108/24-A
Matrix: Water
Analysis Batch: 51440

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 51108

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorohexanesulfonic acid (PFHxS)	1.83	1.77	J	ng/L		97	50 - 150
Perfluorobutanesulfonic acid (PFBS)	1.77	2.00	J	ng/L		113	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.00	1.98	J	ng/L		99	50 - 150
Perfluorononanoic acid (PFNA)	2.00	2.57	J	ng/L		128	50 - 150
Perfluorotetradecanoic acid (PFTA)	2.00	2.01	J	ng/L		100	50 - 150
Perfluorotridecanoic acid (PFTrDA)	2.00	2.15	J	ng/L		107	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	1.87	2.01	J	ng/L		107	50 - 150
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	1.89	1.77	J	ng/L		94	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	1.89	2.07	J	ng/L		109	50 - 150

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
d5-NEtFOSAA	*97*		*70 - 130*
13C2 PFHxA	*122*		*70 - 130*
13C2 PFDA	*110*		*70 - 130*
13C3-GenX	*113*		*70 - 130*

Lab Sample ID: 380-58087-B-1-C LMS
Matrix: Water
Analysis Batch: 51333

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 51108

Analyte	Sample Result	Sample Qualifier	Spike Added	LMS Result	LMS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.02	2.29		ng/L		113	50 - 150
Perfluorooctanesulfonic acid (PFOS)	<2.0		1.87	2.06		ng/L		110	50 - 150
Perfluoroundecanoic acid (PFUnA)	<2.0		2.02	2.31		ng/L		115	50 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.02	2.30		ng/L		114	50 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.02	2.22		ng/L		110	50 - 150
Perfluorohexanoic acid (PFHxA)	12		2.02	15.7	4	ng/L		203	50 - 150
Perfluorododecanoic acid (PFDoA)	<2.0		2.02	2.46		ng/L		122	50 - 150
Perfluorooctanoic acid (PFOA)	3.2		2.02	5.73		ng/L		127	50 - 150
Perfluorodecanoic acid (PFDA)	<2.0		2.02	2.35		ng/L		116	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	<2.0		1.84	2.36		ng/L		104	50 - 150
Perfluorobutanesulfonic acid (PFBS)	8.2		1.78	10.5	4	ng/L		128	50 - 150
Perfluoroheptanoic acid (PFHpA)	3.4		2.02	6.00		ng/L		127	50 - 150
Perfluorononanoic acid (PFNA)	<2.0		2.02	2.98		ng/L		148	50 - 150
Perfluorotetradecanoic acid (PFTA)	<2.0		2.02	2.38		ng/L		118	50 - 150

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

Lab Sample ID: 380-58087-B-1-C LMS
Matrix: Water
Analysis Batch: 51333

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 51108

Analyte	Sample Result	Sample Qualifier	Spike Added	LMS Result	LMS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.02	2.64		ng/L		131	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		1.89	2.15		ng/L		114	50 - 150
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		1.91	1.94	J	ng/L		102	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		1.91	2.39		ng/L		126	50 - 150

Surrogate	*LMS %Recovery*	*LMS Qualifier*	*Limits*
d5-NEtFOSAA	*117*		*70 - 130*
13C2 PFHxA	*129*		*70 - 130*
13C2 PFDA	*119*		*70 - 130*
13C3-GenX	*119*		*70 - 130*

Lab Sample ID: 380-58087-C-1-C LMSD
Matrix: Water
Analysis Batch: 51333

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 51108

Analyte	Sample Result	Sample Qualifier	Spike Added	LMSD Result	LMSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.01	1.84	J	ng/L		92	50 - 150	22	50
Perfluorooctanesulfonic acid (PFOS)	<2.0		1.86	1.97	J	ng/L		106	50 - 150	5	50
Perfluoroundecanoic acid (PFUnA)	<2.0		2.01	2.07		ng/L		103	50 - 150	11	50
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.01	2.10		ng/L		105	50 - 150	9	50
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.01	2.12		ng/L		106	50 - 150	4	50
Perfluorohexanoic acid (PFHxA)	12		2.01	14.0	4	ng/L		121	50 - 150	11	50
Perfluorododecanoic acid (PFDoA)	<2.0		2.01	2.20		ng/L		110	50 - 150	11	50
Perfluorooctanoic acid (PFOA)	3.2		2.01	5.22		ng/L		102	50 - 150	9	50
Perfluorodecanoic acid (PFDA)	<2.0		2.01	2.15		ng/L		107	50 - 150	9	50
Perfluorohexanesulfonic acid (PFHxS)	<2.0		1.83	2.28		ng/L		100	50 - 150	3	50
Perfluorobutanesulfonic acid (PFBS)	8.2		1.78	10.2	4	ng/L		113	50 - 150	3	50
Perfluoroheptanoic acid (PFHpA)	3.4		2.01	5.45		ng/L		100	50 - 150	10	50
Perfluorononanoic acid (PFNA)	<2.0		2.01	2.60		ng/L		129	50 - 150	14	50
Perfluorotetradecanoic acid (PFTA)	<2.0		2.01	2.19		ng/L		109	50 - 150	8	50
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.01	2.46		ng/L		122	50 - 150	7	50
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		1.88	2.15		ng/L		114	50 - 150	0	50
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		1.90	1.90	J	ng/L		100	50 - 150	2	50

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

Lab Sample ID: 380-58087-C-1-C LMSD
Matrix: Water
Analysis Batch: 51333

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 51108

Analyte	Sample Result	Sample Qualifier	Spike Added	LMSD Result	LMSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		1.90	2.17		ng/L		114	50 - 150	10	50

Surrogate	*LMSD %Recovery*	*LMSD Qualifier*	*Limits*
d5-NEtFOSAA	*114*		*70 - 130*
13C2 PFHxA	*117*		*70 - 130*
13C2 PFDA	*108*		*70 - 130*
13C3-GenX	*107*		*70 - 130*

GC/MS Semi VOA

Prep Batch: 51109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-57979-1	HALAWA WELLS UNITS 1 & 2	Total/NA	Drinking Water	525.2	
MB 380-51109/1-A	Method Blank	Total/NA	Water	525.2	
LCS 380-51109/3-A	Lab Control Sample	Total/NA	Water	525.2	
LCSD 380-51109/4-A	Lab Control Sample Dup	Total/NA	Water	525.2	
MRL 380-51109/2-A	Lab Control Sample	Total/NA	Water	525.2	
380-57897-P-1-A MS	Matrix Spike	Total/NA	Water	525.2	
380-57909-AR-1-A DU	Duplicate	Total/NA	Water	525.2	

Analysis Batch: 51305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-57979-1	HALAWA WELLS UNITS 1 & 2	Total/NA	Drinking Water	525.2	51109
MB 380-51109/1-A	Method Blank	Total/NA	Water	525.2	51109
LCS 380-51109/3-A	Lab Control Sample	Total/NA	Water	525.2	51109
LCSD 380-51109/4-A	Lab Control Sample Dup	Total/NA	Water	525.2	51109
MRL 380-51109/2-A	Lab Control Sample	Total/NA	Water	525.2	51109
380-57897-P-1-A MS	Matrix Spike	Total/NA	Water	525.2	51109
380-57909-AR-1-A DU	Duplicate	Total/NA	Water	525.2	51109

LCMS

Prep Batch: 51108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-57979-1	HALAWA WELLS UNITS 1 & 2	Total/NA	Drinking Water	537.1 DW	
380-57979-3	FB: HALAWA WELLS UNITS 1 & 2	Total/NA	Water	537.1 DW	
MBL 380-51108/23-A	Method Blank	Total/NA	Water	537.1 DW	
LCS 380-51108/25-A	Lab Control Sample	Total/NA	Water	537.1 DW	
LCSD 380-51108/26-A	Lab Control Sample Dup	Total/NA	Water	537.1 DW	
MRL 380-51108/24-A	Lab Control Sample	Total/NA	Water	537.1 DW	
380-58087-B-1-C LMS	Matrix Spike	Total/NA	Water	537.1 DW	
380-58087-C-1-C LMSD	Matrix Spike Duplicate	Total/NA	Water	537.1 DW	

Analysis Batch: 51333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-57979-3	FB: HALAWA WELLS UNITS 1 & 2	Total/NA	Water	537.1	51108
MBL 380-51108/23-A	Method Blank	Total/NA	Water	537.1	51108
LCS 380-51108/25-A	Lab Control Sample	Total/NA	Water	537.1	51108
LCSD 380-51108/26-A	Lab Control Sample Dup	Total/NA	Water	537.1	51108
380-58087-B-1-C LMS	Matrix Spike	Total/NA	Water	537.1	51108
380-58087-C-1-C LMSD	Matrix Spike Duplicate	Total/NA	Water	537.1	51108

Analysis Batch: 51440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-57979-1	HALAWA WELLS UNITS 1 & 2	Total/NA	Drinking Water	537.1	51108
MRL 380-51108/24-A	Lab Control Sample	Total/NA	Water	537.1	51108

Prep Batch: 53035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-57979-1	HALAWA WELLS UNITS 1 & 2	Total/NA	Drinking Water	533	
380-57979-3	FB: HALAWA WELLS UNITS 1 & 2	Total/NA	Water	533	
MBL 380-53035/21-A	Method Blank	Total/NA	Water	533	
LCS 380-53035/23-A	Lab Control Sample	Total/NA	Water	533	

LCMS (Continued)

Prep Batch: 53035 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 380-53035/24-A	Lab Control Sample Dup	Total/NA	Water	533	
MRL 380-53035/22-A	Lab Control Sample	Total/NA	Water	533	
380-57432-O-1-D LMS	Matrix Spike	Total/NA	Water	533	
380-57432-P-1-C LMSD	Matrix Spike Duplicate	Total/NA	Water	533	

Analysis Batch: 53385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-57979-1	HALAWA WELLS UNITS 1 & 2	Total/NA	Drinking Water	533	53035
380-57979-3	FB: HALAWA WELLS UNITS 1 & 2	Total/NA	Water	533	53035
MBL 380-53035/21-A	Method Blank	Total/NA	Water	533	53035
LCS 380-53035/23-A	Lab Control Sample	Total/NA	Water	533	53035
LCSD 380-53035/24-A	Lab Control Sample Dup	Total/NA	Water	533	53035
MRL 380-53035/22-A	Lab Control Sample	Total/NA	Water	533	53035
380-57432-O-1-D LMS	Matrix Spike	Total/NA	Water	533	53035
380-57432-P-1-C LMSD	Matrix Spike Duplicate	Total/NA	Water	533	53035

Lab Chronicle

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

Job ID: 380-57979-1

Client Sample ID: HALAWA WELLS UNITS 1 & 2

Lab Sample ID: 380-57979-1

Date Collected: 08/02/23 10:00

Matrix: Drinking Water

Date Received: 08/08/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			51109	OTM3	EA POM	08/10/23 08:15
Total/NA	Analysis	525.2		1	51305	Q8LA	EA POM	08/11/23 11:56
Total/NA	Prep	533			53035	UMV1	EA POM	08/24/23 16:20
Total/NA	Analysis	533		1	53385	UKYM	EA POM	08/27/23 06:48
Total/NA	Prep	537.1 DW			51108	US1B	EA POM	08/10/23 05:33
Total/NA	Analysis	537.1		1	51440	Y7BM	EA POM	08/12/23 11:03

Client Sample ID: FB: HALAWA WELLS UNITS 1 & 2

Lab Sample ID: 380-57979-3

Date Collected: 08/02/23 10:00

Matrix: Water

Date Received: 08/08/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			53035	UMV1	EA POM	08/24/23 16:20
Total/NA	Analysis	533		1	53385	UKYM	EA POM	08/27/23 07:07
Total/NA	Prep	537.1 DW			51108	US1B	EA POM	08/10/23 05:33
Total/NA	Analysis	537.1		1	51333	Y7BM	EA POM	08/11/23 12:14

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 380-57979-1

Laboratory: Eurofins Eaton Analytical Pomona

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

Authority	Program	Identification Number	Expiration Date
Hawaii	State	CA00006	01-31-24

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

Analysis Method	Prep Method	Matrix	Analyte
525.2	525.2	Drinking Water	1-Methylnaphthalene
525.2	525.2	Drinking Water	2,4'-DDD
525.2	525.2	Drinking Water	2,4'-DDE
525.2	525.2	Drinking Water	2,4'-DDT
525.2	525.2	Drinking Water	2,4-Dinitrotoluene
525.2	525.2	Drinking Water	2,6-Dinitrotoluene
525.2	525.2	Drinking Water	2-Methylnaphthalene
525.2	525.2	Drinking Water	4,4'-DDD
525.2	525.2	Drinking Water	4,4'-DDE
525.2	525.2	Drinking Water	4,4'-DDT
525.2	525.2	Drinking Water	Acenaphthene
525.2	525.2	Drinking Water	Acenaphthylene
525.2	525.2	Drinking Water	Acetochlor
525.2	525.2	Drinking Water	alpha-BHC
525.2	525.2	Drinking Water	alpha-Chlordane
525.2	525.2	Drinking Water	Anthracene
525.2	525.2	Drinking Water	Benz(a)anthracene
525.2	525.2	Drinking Water	Benzo[b]fluoranthene
525.2	525.2	Drinking Water	Benzo[g,h,i]perylene
525.2	525.2	Drinking Water	Benzo[k]fluoranthene
525.2	525.2	Drinking Water	beta-BHC
525.2	525.2	Drinking Water	Bromacil
525.2	525.2	Drinking Water	Butylbenzylphthalate
525.2	525.2	Drinking Water	Chlorobenzilate
525.2	525.2	Drinking Water	Chloroneb
525.2	525.2	Drinking Water	Chlorothalonil (Draconil, Bravo)
525.2	525.2	Drinking Water	Chlorpyrifos
525.2	525.2	Drinking Water	Chrysene
525.2	525.2	Drinking Water	delta-BHC
525.2	525.2	Drinking Water	Dibenz(a,h)anthracene
525.2	525.2	Drinking Water	Diclorvos (DDVP)
525.2	525.2	Drinking Water	Diethylphthalate
525.2	525.2	Drinking Water	Dimethylphthalate
525.2	525.2	Drinking Water	Di-n-butyl phthalate
525.2	525.2	Drinking Water	Di-n-octyl phthalate
525.2	525.2	Drinking Water	Endosulfan I (Alpha)
525.2	525.2	Drinking Water	Endosulfan II (Beta)
525.2	525.2	Drinking Water	Endosulfan sulfate
525.2	525.2	Drinking Water	Endrin aldehyde
525.2	525.2	Drinking Water	EPTC
525.2	525.2	Drinking Water	Fluoranthene
525.2	525.2	Drinking Water	Fluorene
525.2	525.2	Drinking Water	gamma-Chlordane
525.2	525.2	Drinking Water	Indeno[1,2,3-cd]pyrene
525.2	525.2	Drinking Water	Isophorone

Laboratory: Eurofins Eaton Analytical Pomona (Continued)

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

Authority	Program	Identification Number	Expiration Date

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

Analysis Method	Prep Method	Matrix	Analyte
525.2	525.2	Drinking Water	Malathion
525.2	525.2	Drinking Water	Molinate
525.2	525.2	Drinking Water	Naphthalene
525.2	525.2	Drinking Water	Parathion
525.2	525.2	Drinking Water	Pendimethalin (Penoxaline)
525.2	525.2	Drinking Water	Phenanthrene
525.2	525.2	Drinking Water	Pyrene
525.2	525.2	Drinking Water	Terbacil
525.2	525.2	Drinking Water	Terbuthylazine
525.2	525.2	Drinking Water	Thiobencarb
525.2	525.2	Drinking Water	Total Permethrin (mixed isomers)
525.2	525.2	Drinking Water	trans-Nonachlor
525.2	525.2	Drinking Water	Trifluralin
533	533	Drinking Water	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)
533	533	Drinking Water	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)
533	533	Drinking Water	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)
533	533	Drinking Water	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)
533	533	Drinking Water	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)
533	533	Drinking Water	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)
533	533	Drinking Water	Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)
533	533	Drinking Water	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)
533	533	Drinking Water	Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)
533	533	Drinking Water	Perfluoro-3-methoxypropanoic acid (PFMPA)
533	533	Drinking Water	Perfluoro-4-methoxybutanoic acid (PFMBA)
533	533	Drinking Water	Perfluorobutanoic acid (PFBA)
533	533	Drinking Water	Perfluoroheptanesulfonic acid (PFHpS)
533	533	Drinking Water	Perfluoropentanesulfonic acid (PFPeS)
533	533	Drinking Water	Perfluoropentanoic acid (PFPeA)
533	533	Water	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)
533	533	Water	1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)
533	533	Water	1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)
533	533	Water	1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)
533	533	Water	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)
533	533	Water	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)

Laboratory: Eurofins Eaton Analytical Pomona (Continued)

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

Authority	Program	Identification Number	Expiration Date

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

Analysis Method	Prep Method	Matrix	Analyte
533	533	Water	Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)
533	533	Water	Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)
533	533	Water	Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)
533	533	Water	Perfluoro-3-methoxypropanoic acid (PFMPA)
533	533	Water	Perfluoro-4-methoxybutanoic acid (PFMBA)
533	533	Water	Perfluorobutanoic acid (PFBA)
533	533	Water	Perfluoroheptanesulfonic acid (PFHpS)
533	533	Water	Perfluoropentanesulfonic acid (PFPeS)
533	533	Water	Perfluoropentanoic acid (PFPeA)
537.1	537.1 DW	Drinking Water	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)
537.1	537.1 DW	Drinking Water	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)
537.1	537.1 DW	Drinking Water	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)
537.1	537.1 DW	Drinking Water	Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)
537.1	537.1 DW	Water	11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)
537.1	537.1 DW	Water	4,8-Dioxa-3H-perfluorononanoic acid (ADONA)
537.1	537.1 DW	Water	9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)
537.1	537.1 DW	Water	Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)

Method Summary

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

Job ID: 380-57979-1

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

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

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

Sample Summary

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

Job ID: 380-57979-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	PWSID Number
380-57979-1	HALAWA WELLS UNITS 1 & 2	Drinking Water	08/02/23 10:00	08/08/23 10:00	HI0000331
380-57979-3	FB: HALAWA WELLS UNITS 1 & 2	Water	08/02/23 10:00	08/08/23 10:00	HI0000331

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Bryson Nakamoto	Lab PM: Arada, Rachelle	Carrier Tracking No(s):	COC No.: 380-27941-2757.2
Client Contact: Dr. Ron Fenstermacher	Phone: 808-748-5840	E-Mail: Rachelle.Arada@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: City & County of Honolulu	PWSID:			Job #:
Address: 630 South Beretania Street; Chemistry Lab	Due Date Requested:			
City: Honolulu	TAT Requested (days):			
State, Zip: HI, 96843	Compliance Project: Δ No			
Phone: 808-748-5091 (tel)	PO #: C20525101 exp 05312023			
Email: rfenstemacher@hbws.org	WO #:			
Project Name: RED-HILL/HBWS sites Event Desc: RUSH Weekly Red Hill	Project #: 38001111			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUBCONTRACT - 825 PAH Physis LL (EAL) + TICs	SUBCONTRACT - 8015 Gas (Purgable) LL (EAL)	SUBCONTRACT - 8015 Diesel LL (EAL) and Motor Oil	525.2_PREC - (MOD) 525plus PLUS TICs	SUBCONTRACT - 8015 Gas (Purgeable) LL (EAL)	537.1_DW_PREC - 537.1 Full List	533 - All Analytes	Total Number of containers	Special Instructions/Note:
			Preservation Code:				R	R	RA		RA	Y	N		
MOANALUA WELLS				Water											
~~AIEA GULCH WELLS PUMP2~~	~~8/2/2023~~	~~1100~~	~~G~~	~~Water~~			2	4	2	2					Pump 2 bt
~~AIEA WELLS PUMPS 1&2 (260)~~	~~8/2/2023~~	~~1130~~	~~G~~	~~Water~~			2	4	2	2					~~Pump 2~~ 8/4/23
HALAWA WELLS UNITS 1&2	8/2/2023	1000	G	Water			2	4	2	2					Pump 1
FB MOANALUA WELLS				Water											
~~FB AIEA GULCH WELLS PUMP2~~	~~8/2/2023~~			~~Water~~				~~2~~	bt		8/4/23				
~~FB AIEA WELLS PUMPS 1&2 (260)~~	~~8/2/2023~~			~~Water~~				~~2~~							
FB HALAWA WELLS UNITS 1&2	8/2/2023			Water				2							

380-57979 COC

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: FED EX 7729 7646 7156
Relinquished by: [redacted]	Date/Time: 8/2/23 1245	Company: HBWS	Received by: G REITMEIER Date/Time: 08/08/2023 10:00 Company: EGAP
Relinquished by:	Date/Time:	Company	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.:

Cooler Temperature(s) °C and Other Remarks: (752A) 5.1°-0.2°-4.9° GEL-FROZEN

Ver: 01/16/2019

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

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: Bryson Nakamoto	Lab PM: Arada, Rachelle	Carrier Tracking No(s):	COC No: 380-27941-2757.2
Client Contact: Dr. Ron Fenstermacher	Phone: 808-748-5840	E-Mail: Rachelle.Arada@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: City & County of Honolulu	PWSID:			Job #:
Address: 630 South Beretania Street; Chemistry Lab	Due Date Requested:			
City: Honolulu	TAT Requested (days):			
State, Zip: HI, 96843	Compliance Project: Δ No			
Phone: 808-748-5091 (tel)	PO #: C20525101 exp 05312023			
Email: rfenstemacher@hbws.org	WO #:			
Project Name: RED-HILL/HBWS sites Event Desc: RUSH Weekly Red Hill	Project #: 38001111			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUBCONTRACT - 625 PAH Physis LL (EAL) + TICs	SUBCONTRACT - 8015 Gas (Purgable) LL (EAL)	SUBCONTRACT - 8015 Diesel LL (EAL) and Motor Oil	525.2_PREC - (MOD) 525plus PLUS TICs	SUBCONTRACT - 8015 Gas (Purgeable) LL (EAL)	537.1_DW_PREC - 537.1 Full List	533 - All Analytes							Total Number of containers	Special Instructions/Note:
			Preservation Code:				R	R	RA		RA	Y	N								
MOANALUA WELLS				Water																	
~~AIEA GULCH WELLS PUMP2~~	~~8/2/2023~~	~~1160~~	~~G~~	~~Water~~								3	3								Pump 2 on 8/4/23
~~AIEA WELLS PUMPS 1&2 (260)~~	~~8/2/2023~~	~~1130~~	~~G~~	~~Water~~								3	3								Pump 2
HALAWA WELLS UNITS 1&2	8/2/2023	1000	G	Water								3	3								Pump 1
FB MOANALUA WELLS				Water																	
~~FB AIEA GULCH WELLS PUMP2~~	~~8/2/2023~~			~~Water~~								1	1								
~~FB AIEA WELLS PUMPS 1&2 (260)~~	~~8/2/2023~~			~~Water~~								1	1								
FB HALAWA WELLS UNITS 1&2	8/2/2023			Water								1	1								

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Bryson Nakamoto	8/2/2023 1245	HBWS	G REITNER	08/08/2023 1000	EEAP
Relinquished by:	Date/Time:	Company	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.:

Cooler Temperature(s) °C and Other Remarks: (752A) 5.1°-02°-49° GEL-FROZEN

Ver: 01 16 2019

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Bryson Nakamoto	Lab PM: Arada, Rachelle	Carrier Tracking No(s):	COC No.: 380-27941-2757.2
Client Contact: Dr. Ron Fenstermacher	Phone: 808-748-5840	E-Mail: Rachelle.Arada@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: City & County of Honolulu	PWSID:			Job #:
Address: 630 South Beretania Street; Chemistry Lab	Due Date Requested:			
City: Honolulu	TAT Requested (days):			
State, Zip: HI, 96843	Compliance Project: Δ No			
Phone: 808-748-5091 (tel)	PO #: C20525101 exp 05312023			
Email: rfenstemacher@hbws.org	WO #:			
Project Name: RED-HILL/HBWS sites Event Desc: RUSH Weekly Red Hill	Project #: 38001111			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
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MOANALUA WELLS				Water											
~~AIEA GULCH WELLS PUMP2~~	~~8/2/2023~~	~~1100~~	~~G~~	~~Water~~			~~2~~	~~4~~	~~2~~	~~2~~					~~Pump 2~~ bt
~~AIEA WELLS PUMPS 1&2 (260)~~	~~8/2/2023~~	~~1130~~	~~G~~	~~Water~~			~~2~~	~~4~~	~~2~~	~~2~~					~~Pump 2~~ 8/4/23
HALAWA WELLS UNITS 1&2	8/2/2023	1000	G	Water			2	4	2	2					Pump 1
FB MOANALUA WELLS				Water											
~~FB AIEA GULCH WELLS PUMP2~~	~~8/2/2023~~			~~Water~~				~~2~~	bt		8/4/23				
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380-57979 COC

Possible Hazard Identification
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Relinquished by:	Date/Time:	Company	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.:

Cooler Temperature(s) °C and Other Remarks: (752A) 5.1°-0.2°-4.9° GEL-FROZEN

Ver: 01/16/2019

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Email: rfenstemacher@hbws.org	WO #:			
Project Name: RED-HILL/HBWS sites Event Desc: RUSH Weekly Red Hill	Project #: 38001111			
Site:	SSOW#:			

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HALAWA WELLS UNITS 1&2	8/2/2023	1000	G	Water								3	3								Pump 1
FB MOANALUA WELLS				Water																	
~~FB AIEA GULCH WELLS PUMP2~~	~~8/2/2023~~			~~Water~~								1	1			on ice					
~~FB AIEA WELLS PUMPS 1&2 (260)~~	~~8/2/2023~~			~~Water~~								1	1			8/4/23					
FB HALAWA WELLS UNITS 1&2	8/2/2023			Water								1	1								

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Relinquished by:	Date/Time:	Company	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.:

Cooler Temperature(s) °C and Other Remarks: (752A) 5.1°-02°-49° GEL-FROZEN

Ver: 01 16 2019

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-57979-1

Login Number: 57979
List Number: 1
Creator: Elyas, Matthew

List Source: Eurofins Eaton Analytical Pomona

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