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ANALYTICAL REPORT

PREPARED FOR

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City & County of Honolulu
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Honolulu, Hawaii 96843

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JOB DESCRIPTION

RED-HILL
RUSH Weekly Red Hill

JOB NUMBER

380-67495-1

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

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

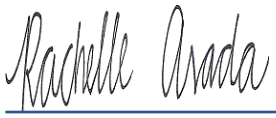

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Table of Contents

Definitions/Glossary

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

Job ID: 380-67495-1

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
B	Analyte was found in the associated method blank.
F1	MS and/or MSD recovery exceeds control limits.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
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.
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.

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)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 380-67495-1

Laboratory: Eurofins Eaton Analytical Pomona

Narrative

Job Narrative
380-67495-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 10/18/2023 10:20 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 0.7°C, 2.5°C and 5.4°C

GC/MS Semi VOA
Method 525.2_PREC: The continuing calibration verification (CCV) associated with batch 380-60590 recovered above the upper control limit for Heptachlor epoxide (isomer B). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: AIEA GULCH WELLS PUMP 2 (380-67495-2), AIEA WELLS PUMPS 1&2 (260) P2 (380-67495-3) and HALAWA WELLS UNITS 1 & 2 P1 (380-67495-4).

Method 525.2_PREC: The method blank for preparation batch 380-60329 contained Bis(2-ethylhexyl) phthalate above the reporting limit (RL). MRL and LCS/LCSD recovered above acceptance limits for Bis(2-ethylhexyl) phthalate . Affected samples have hit above RL.There was insufficient sample to perform a re-extraction; therefore, the data have been reported.Sample results are not acceptable for compliance reporting. Data excluded due to this QC failure. Affected sample is MOANALUA WELLS (380-67495-1).

Method 525.2_PREC: The following sample was provided to the laboratory with a different initial volume than that required by the reference method: AIEA WELLS PUMPS 1&2 (260) P2 (380-67495-3). The method requires 1000mL. The amount provided below this range. The sample was extracted as low volume with a correction factor.

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

PFAS
Method 533: IDA recoveries for analytes 13C3 HFPO-DA, 13C6 PFDA, 13C5 PFHxA, 13C4 PFHpA, 13C8 PFOA, 13C9 PFNA, 13C7 PFUnA, 13C2 PFDoA, 13C4 PFBA and 13C5 PFPeA in sample AIEA WELLS PUMPS 1&2 (260) P2 (380-67495-3) were below method acceptance criteria. Affected sample has no additional volume for re-extraction and re-analysis. Results not acceptable per method. 533 Data excluded due to this QC failure, 537.1 data was reported as there were no noted QC issues.

Method 533: The following QC issues in Prep Batch 380-62640 OR Analytical Batch 380-63336 were observed: Re-extraction / re-analysis of AIEA GULCH WELLS PUMP 2 (380-67495-2) confirmed low recoveries of IDA's 13C3 HFPO-DA, 13C6 PFDA, 13C5 PFHxA, 13C8 PFOA, 13C9 PFNA, 13C7 PFUnA, 13C2 PFDoA, 13C4 PFBA and 13C5 PFPeA. Results not acceptable per method. 533 Data excluded due to this QC failure, 537.1 data was reported as there were no noted QC issues.

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

Detection Summary

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

Job ID: 380-67495-1

Client Sample ID: MOANALUA WELLS
PWSID Number: HI0000331

Lab Sample ID: 380-67495-1

No Detections.

Client Sample ID: AIEA GULCH WELLS PUMP 2
PWSID Number: HI0000331

Lab Sample ID: 380-67495-2

No Detections.

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

Lab Sample ID: 380-67495-3

No Detections.

Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1
PWSID Number: HI0000331

Lab Sample ID: 380-67495-4

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Perfluorohexanesulfonic acid (PFHxS)	2.6		2.0		ng/L	1		533	Total/NA
Perfluorohexanoic acid (PFHxA)	2.2		2.0		ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.3		2.0		ng/L	1		533	Total/NA
Perfluorooctanoic acid (PFOA)	2.4		2.0		ng/L	1		533	Total/NA
Perfluoropentanoic acid (PFPeA)	2.8		2.0		ng/L	1		533	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.4		2.0		ng/L	1		537.1	Total/NA
Perfluorohexanoic acid (PFHxA)	2.3		2.0		ng/L	1		537.1	Total/NA
Perfluorooctanoic acid (PFOA)	2.1		2.0		ng/L	1		537.1	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	2.9		2.0		ng/L	1		537.1	Total/NA

Client Sample ID: FB MOANALUA WELLS

Lab Sample ID: 380-67495-9

No Detections.

Client Sample ID: FB AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-67495-10

No Detections.

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

Lab Sample ID: 380-67495-11

No Detections.

Client Sample ID: FB HALAWA WELLS UNITS 1 & 2 P1

Lab Sample ID: 380-67495-12

No Detections.

This Detection Summary does not include radiochemical test results.

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

Job ID: 380-67495-1

Client Sample ID: MOANALUA WELLS
Date Collected: 10/16/23 09:39
Date Received: 10/18/23 10:20

Lab Sample ID: 380-67495-1
Matrix: Drinking 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		11/06/23 12:43	11/10/23 09:32	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:32	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:32	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:32	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:32	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:32	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:32	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:32	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:32	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:32	1
Perfluorononanoic acid (PFNA)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:32	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:32	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:32	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:32	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:32	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:32	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:32	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:32	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:32	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:32	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:32	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:32	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:32	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:32	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:32	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*80*		*50 - 200*	*11/06/23 12:43*	*11/10/23 09:32*	*1*
13C6 PFDA	*91*		*50 - 200*	*11/06/23 12:43*	*11/10/23 09:32*	*1*
13C5 PFHxA	*90*		*50 - 200*	*11/06/23 12:43*	*11/10/23 09:32*	*1*
13C4 PFHpA	*93*		*50 - 200*	*11/06/23 12:43*	*11/10/23 09:32*	*1*
13C8 PFOA	*92*		*50 - 200*	*11/06/23 12:43*	*11/10/23 09:32*	*1*
13C9 PFNA	*94*		*50 - 200*	*11/06/23 12:43*	*11/10/23 09:32*	*1*
13C7 PFUnA	*97*		*50 - 200*	*11/06/23 12:43*	*11/10/23 09:32*	*1*
13C2 PFDoA	*95*		*50 - 200*	*11/06/23 12:43*	*11/10/23 09:32*	*1*
13C4 PFBA	*91*		*50 - 200*	*11/06/23 12:43*	*11/10/23 09:32*	*1*
13C5 PFPeA	*91*		*50 - 200*	*11/06/23 12:43*	*11/10/23 09:32*	*1*
13C3 PFBS	*101*		*50 - 200*	*11/06/23 12:43*	*11/10/23 09:32*	*1*
13C3 PFHxS	*102*		*50 - 200*	*11/06/23 12:43*	*11/10/23 09:32*	*1*
13C8 PFOS	*106*		*50 - 200*	*11/06/23 12:43*	*11/10/23 09:32*	*1*

Client Sample ID: MOANALUA WELLS

Lab Sample ID: 380-67495-1
Date Collected: 10/16/23 09:39
Matrix: Drinking Water
Date Received: 10/18/23 10:20
PWSID Number: HI0000331

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

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C2-4:2-FTS	*126*		*50 - 200*	*11/06/23 12:43*	*11/10/23 09:32*	*1*
13C2-6:2-FTS	*118*		*50 - 200*	*11/06/23 12:43*	*11/10/23 09:32*	*1*
13C2-8:2-FTS	*113*		*50 - 200*	*11/06/23 12:43*	*11/10/23 09:32*	*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		10/20/23 04:52	10/22/23 11:31	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0	ng/L		10/20/23 04:52	10/22/23 11:31	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0	ng/L		10/20/23 04:52	10/22/23 11:31	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0	ng/L		10/20/23 04:52	10/22/23 11:31	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0	ng/L		10/20/23 04:52	10/22/23 11:31	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0	ng/L		10/20/23 04:52	10/22/23 11:31	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0	ng/L		10/20/23 04:52	10/22/23 11:31	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0	ng/L		10/20/23 04:52	10/22/23 11:31	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0	ng/L		10/20/23 04:52	10/22/23 11:31	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0	ng/L		10/20/23 04:52	10/22/23 11:31	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0	ng/L		10/20/23 04:52	10/22/23 11:31	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0	ng/L		10/20/23 04:52	10/22/23 11:31	1
Perfluorononanoic acid (PFNA)	<2.0		2.0	ng/L		10/20/23 04:52	10/22/23 11:31	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0	ng/L		10/20/23 04:52	10/22/23 11:31	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0	ng/L		10/20/23 04:52	10/22/23 11:31	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0	ng/L		10/20/23 04:52	10/22/23 11:31	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0	ng/L		10/20/23 04:52	10/22/23 11:31	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0	ng/L		10/20/23 04:52	10/22/23 11:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d5-NEtFOSAA	*105*		*70 - 130*	*10/20/23 04:52*	*10/22/23 11:31*	*1*
13C2 PFHxA	*113*		*70 - 130*	*10/20/23 04:52*	*10/22/23 11:31*	*1*
13C2 PFDA	*109*		*70 - 130*	*10/20/23 04:52*	*10/22/23 11:31*	*1*
13C3-GenX	*108*		*70 - 130*	*10/20/23 04:52*	*10/22/23 11:31*	*1*

Client Sample ID: AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-67495-2
Date Collected: 10/16/23 10:36
Matrix: Drinking Water
Date Received: 10/18/23 10:20
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		10/20/23 13:28	10/22/23 20:55	1
2,4'-DDD	<0.098		0.098	ug/L		10/20/23 13:28	10/22/23 20:55	1
2,4'-DDE	<0.098		0.098	ug/L		10/20/23 13:28	10/22/23 20:55	1
2,4'-DDT	<0.098		0.098	ug/L		10/20/23 13:28	10/22/23 20:55	1
2,4-Dinitrotoluene	<0.098		0.098	ug/L		10/20/23 13:28	10/22/23 20:55	1
2,6-Dinitrotoluene	<0.098		0.098	ug/L		10/20/23 13:28	10/22/23 20:55	1
2-Methylnaphthalene	<0.098		0.098	ug/L		10/20/23 13:28	10/22/23 20:55	1
4,4'-DDD	<0.098		0.098	ug/L		10/20/23 13:28	10/22/23 20:55	1
4,4'-DDE	<0.098		0.098	ug/L		10/20/23 13:28	10/22/23 20:55	1

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

Job ID: 380-67495-1

Client Sample ID: AIEA GULCH WELLS PUMP 2
Date Collected: 10/16/23 10:36
Date Received: 10/18/23 10:20

Lab Sample ID: 380-67495-2
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
4,4'-DDT	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 20:55	1
Acenaphthene	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 20:55	1
Acenaphthylene	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 20:55	1
Acetochlor	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 20:55	1
Alachlor	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 20:55	1
alpha-BHC	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 20:55	1
alpha-Chlordane	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 20:55	1
Anthracene	<0.020		0.020		ug/L		10/20/23 13:28	10/22/23 20:55	1
Atrazine	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 20:55	1
Benz(a)anthracene	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 20:55	1
Benzo[a]pyrene	<0.020		0.020		ug/L		10/20/23 13:28	10/22/23 20:55	1
Benzo[b]fluoranthene	<0.020		0.020		ug/L		10/20/23 13:28	10/22/23 20:55	1
Benzo[g,h,i]perylene	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 20:55	1
Benzo[k]fluoranthene	<0.020		0.020		ug/L		10/20/23 13:28	10/22/23 20:55	1
beta-BHC	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 20:55	1
Bis(2-ethylhexyl) phthalate	<0.60		0.60		ug/L		10/26/23 22:01	10/27/23 11:32	1
Bromacil	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 20:55	1
Butachlor	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 20:55	1
Butylbenzylphthalate	<0.49		0.49		ug/L		10/20/23 13:28	10/22/23 20:55	1
Chlorobenzilate	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 20:55	1
Chloroneb	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 20:55	1
Chlorothalonil (Draconil, Bravo)	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 20:55	1
Chlorpyrifos	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 20:55	1
Chrysene	<0.020		0.020		ug/L		10/20/23 13:28	10/22/23 20:55	1
delta-BHC	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 20:55	1
Di(2-ethylhexyl)adipate	<0.59		0.59		ug/L		10/20/23 13:28	10/22/23 20:55	1
Dibenz(a,h)anthracene	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 20:55	1
Diclorvos (DDVP)	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 20:55	1
Dieldrin	<0.20		0.20		ug/L		10/20/23 13:28	10/22/23 20:55	1
Diethylphthalate	<0.49		0.49		ug/L		10/20/23 13:28	10/22/23 20:55	1
Dimethylphthalate	<0.49		0.49		ug/L		10/20/23 13:28	10/22/23 20:55	1
Di-n-butyl phthalate	<0.98		0.98		ug/L		10/20/23 13:28	10/22/23 20:55	1
Di-n-octyl phthalate	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 20:55	1
Endosulfan I (Alpha)	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 20:55	1
Endosulfan II (Beta)	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 20:55	1
Endosulfan sulfate	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 20:55	1
Endrin	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 20:55	1
Endrin aldehyde	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 20:55	1
EPTC	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 20:55	1
Fluoranthene	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 20:55	1
Fluorene	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 20:55	1
gamma-Chlordane	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 20:55	1
Heptachlor	<0.039		0.039		ug/L		10/20/23 13:28	10/22/23 20:55	1
Heptachlor epoxide (isomer B)	<0.049	*+	0.049		ug/L		10/20/23 13:28	10/22/23 20:55	1
Hexachlorobenzene	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 20:55	1
Hexachlorocyclopentadiene	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 20:55	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 20:55	1
Isophorone	<0.49		0.49		ug/L		10/20/23 13:28	10/22/23 20:55	1
Lindane	<0.039		0.039		ug/L		10/20/23 13:28	10/22/23 20:55	1

Client Sample ID: AIEA GULCH WELLS PUMP 2
Date Collected: 10/16/23 10:36
Date Received: 10/18/23 10:20

Lab Sample ID: 380-67495-2
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
Malathion	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 20:55	1
Methoxychlor	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 20:55	1
Metolachlor	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 20:55	1
Molinate	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 20:55	1
Naphthalene	<0.30		0.30		ug/L		10/20/23 13:28	10/22/23 20:55	1
Parathion	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 20:55	1
Pendimethalin (Penoxaline)	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 20:55	1
Phenanthrene	<0.039		0.039		ug/L		10/20/23 13:28	10/22/23 20:55	1
Propachlor	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 20:55	1
Pyrene	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 20:55	1
Simazine	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 20:55	1
Terbacil	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 20:55	1
Terbuthylazine	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 20:55	1
Thiobencarb	<0.20		0.20		ug/L		10/20/23 13:28	10/22/23 20:55	1
Total Permethrin (mixed isomers)	<0.20		0.20		ug/L		10/20/23 13:28	10/22/23 20:55	1
trans-Nonachlor	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 20:55	1
Trifluralin	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 20:55	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Cyclohexane, 1,1-dimethyl-	*0.74*	*T J N*	*ug/L*		*2.30*	*590-66-9*	*10/26/23 22:01*	*10/27/23 11:32*	*1*
Decane	*2.4*	*T J N*	*ug/L*		*2.43*	*124-18-5*	*10/26/23 22:01*	*10/27/23 11:32*	*1*
Decane, 2-methyl-	*0.77*	*T J N*	*ug/L*		*2.61*	*6975-98-0*	*10/26/23 22:01*	*10/27/23 11:32*	*1*
Unknown	*0.61*	*T J*	*ug/L*		*2.70*	*N/A*	*10/26/23 22:01*	*10/27/23 11:32*	*1*
1,3-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	*0.68*	*T J N*	*ug/L*		*10.00*	*137-89-3*	*10/26/23 22:01*	*10/27/23 11:32*	*1*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*	*10/20/23 13:28*	*10/22/23 20:55*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Nitro-m-xylene	*93*		*70 - 130*	*10/20/23 13:28*	*10/22/23 20:55*	*1*
2-Nitro-m-xylene	*100*		*70 - 130*	*10/26/23 22:01*	*10/27/23 11:32*	*1*
Perylene-d12	*99*		*70 - 130*	*10/20/23 13:28*	*10/22/23 20:55*	*1*
Perylene-d12	*103*		*70 - 130*	*10/26/23 22:01*	*10/27/23 11:32*	*1*
Triphenylphosphate	*123*		*70 - 130*	*10/20/23 13:28*	*10/22/23 20:55*	*1*
Triphenylphosphate	*111*		*70 - 130*	*10/26/23 22:01*	*10/27/23 11:32*	*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		10/20/23 04:52	10/22/23 13:07	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0		ng/L		10/20/23 04:52	10/22/23 13:07	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0		ng/L		10/20/23 04:52	10/22/23 13:07	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0		ng/L		10/20/23 04:52	10/22/23 13:07	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0		ng/L		10/20/23 04:52	10/22/23 13:07	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0		ng/L		10/20/23 04:52	10/22/23 13:07	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0		ng/L		10/20/23 04:52	10/22/23 13:07	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0		ng/L		10/20/23 04:52	10/22/23 13:07	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0		ng/L		10/20/23 04:52	10/22/23 13:07	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0		ng/L		10/20/23 04:52	10/22/23 13:07	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0		ng/L		10/20/23 04:52	10/22/23 13:07	1

Client Sample ID: AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-67495-2
Date Collected: 10/16/23 10:36
Matrix: Drinking Water
Date Received: 10/18/23 10:20
PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0		ng/L		10/20/23 04:52	10/22/23 13:07	1
Perfluorononanoic acid (PFNA)	<2.0		2.0		ng/L		10/20/23 04:52	10/22/23 13:07	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0		ng/L		10/20/23 04:52	10/22/23 13:07	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0		ng/L		10/20/23 04:52	10/22/23 13:07	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0		ng/L		10/20/23 04:52	10/22/23 13:07	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0		ng/L		10/20/23 04:52	10/22/23 13:07	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0		ng/L		10/20/23 04:52	10/22/23 13:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d5-NEtFOSAA	*98*		*70 - 130*	*10/20/23 04:52*	*10/22/23 13:07*	*1*
13C2 PFHxA	*109*		*70 - 130*	*10/20/23 04:52*	*10/22/23 13:07*	*1*
13C2 PFDA	*106*		*70 - 130*	*10/20/23 04:52*	*10/22/23 13:07*	*1*
13C3-GenX	*104*		*70 - 130*	*10/20/23 04:52*	*10/22/23 13:07*	*1*

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

Lab Sample ID: 380-67495-3
Date Collected: 10/16/23 11:05
Matrix: Drinking Water
Date Received: 10/18/23 10:20
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		10/20/23 13:28	10/22/23 21:15	1
2,4'-DDD	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 21:15	1
2,4'-DDE	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 21:15	1
2,4'-DDT	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 21:15	1
2,4-Dinitrotoluene	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 21:15	1
2,6-Dinitrotoluene	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 21:15	1
2-Methylnaphthalene	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 21:15	1
4,4'-DDD	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 21:15	1
4,4'-DDE	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 21:15	1
4,4'-DDT	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 21:15	1
Acenaphthene	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 21:15	1
Acenaphthylene	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 21:15	1
Acetochlor	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 21:15	1
Alachlor	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:15	1
alpha-BHC	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 21:15	1
alpha-Chlordane	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:15	1
Anthracene	<0.020		0.020		ug/L		10/20/23 13:28	10/22/23 21:15	1
Atrazine	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:15	1
Benz(a)anthracene	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:15	1
Benzo[a]pyrene	<0.020		0.020		ug/L		10/20/23 13:28	10/22/23 21:15	1
Benzo[b]fluoranthene	<0.020		0.020		ug/L		10/20/23 13:28	10/22/23 21:15	1
Benzo[g,h,i]perylene	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:15	1
Benzo[k]fluoranthene	<0.020		0.020		ug/L		10/20/23 13:28	10/22/23 21:15	1
beta-BHC	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 21:15	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59		ug/L		10/26/23 22:01	10/27/23 11:52	1
Bromacil	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 21:15	1
Butachlor	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:15	1
Butylbenzylphthalate	<0.49		0.49		ug/L		10/20/23 13:28	10/22/23 21:15	1

Client Sample ID: AIEA WELLS PUMPS 1&2 (260) P2
Date Collected: 10/16/23 11:05
Date Received: 10/18/23 10:20

Lab Sample ID: 380-67495-3
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
Chlorobenzilate	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 21:15	1
Chloroneb	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 21:15	1
Chlorothalonil (Draconil, Bravo)	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 21:15	1
Chlorpyrifos	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:15	1
Chrysene	<0.020		0.020		ug/L		10/20/23 13:28	10/22/23 21:15	1
delta-BHC	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 21:15	1
Di(2-ethylhexyl)adipate	<0.59		0.59		ug/L		10/20/23 13:28	10/22/23 21:15	1
Dibenz(a,h)anthracene	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:15	1
Diclorvos (DDVP)	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:15	1
Dieldrin	<0.20		0.20		ug/L		10/20/23 13:28	10/22/23 21:15	1
Diethylphthalate	<0.49		0.49		ug/L		10/20/23 13:28	10/22/23 21:15	1
Dimethylphthalate	<0.49		0.49		ug/L		10/20/23 13:28	10/22/23 21:15	1
Di-n-butyl phthalate	<0.98		0.98		ug/L		10/20/23 13:28	10/22/23 21:15	1
Di-n-octyl phthalate	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 21:15	1
Endosulfan I (Alpha)	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 21:15	1
Endosulfan II (Beta)	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 21:15	1
Endosulfan sulfate	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 21:15	1
Endrin	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 21:15	1
Endrin aldehyde	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 21:15	1
EPTC	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 21:15	1
Fluoranthene	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 21:15	1
Fluorene	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:15	1
gamma-Chlordane	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:15	1
Heptachlor	<0.039		0.039		ug/L		10/20/23 13:28	10/22/23 21:15	1
Heptachlor epoxide (isomer B)	<0.049	*+	0.049		ug/L		10/20/23 13:28	10/22/23 21:15	1
Hexachlorobenzene	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:15	1
Hexachlorocyclopentadiene	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:15	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:15	1
Isophorone	<0.49		0.49		ug/L		10/20/23 13:28	10/22/23 21:15	1
Lindane	<0.039		0.039		ug/L		10/20/23 13:28	10/22/23 21:15	1
Malathion	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 21:15	1
Methoxychlor	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 21:15	1
Metolachlor	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:15	1
Molinate	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 21:15	1
Naphthalene	<0.30		0.30		ug/L		10/20/23 13:28	10/22/23 21:15	1
Parathion	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 21:15	1
Pendimethalin (Penoxaline)	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 21:15	1
Phenanthrene	<0.039		0.039		ug/L		10/20/23 13:28	10/22/23 21:15	1
Propachlor	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:15	1
Pyrene	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:15	1
Simazine	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:15	1
Terbacil	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 21:15	1
Terbuthylazine	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 21:15	1
Thiobencarb	<0.20		0.20		ug/L		10/20/23 13:28	10/22/23 21:15	1
Total Permethrin (mixed isomers)	<0.20		0.20		ug/L		10/20/23 13:28	10/22/23 21:15	1
trans-Nonachlor	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:15	1
Trifluralin	<0.098		0.098		ug/L		10/20/23 13:28	10/22/23 21:15	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*	*10/20/23 13:28*	*10/22/23 21:15*	*1*

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

Lab Sample ID: 380-67495-3
Date Collected: 10/16/23 11:05
Matrix: Drinking Water
Date Received: 10/18/23 10:20
PWSID Number: HI0000331

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

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	10/26/23 22:01	10/27/23 11:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	94		70 - 130	10/20/23 13:28	10/22/23 21:15	1
2-Nitro-m-xylene	100		70 - 130	10/26/23 22:01	10/27/23 11:52	1
Perylene-d12	101		70 - 130	10/20/23 13:28	10/22/23 21:15	1
Perylene-d12	106		70 - 130	10/26/23 22:01	10/27/23 11:52	1
Triphenylphosphate	122		70 - 130	10/20/23 13:28	10/22/23 21:15	1
Triphenylphosphate	112		70 - 130	10/26/23 22:01	10/27/23 11:52	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		10/23/23 04:54	10/23/23 21:52	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 21:52	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 21:52	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 21:52	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 21:52	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 21:52	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 21:52	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 21:52	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 21:52	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 21:52	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 21:52	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 21:52	1
Perfluorononanoic acid (PFNA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 21:52	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 21:52	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 21:52	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 21:52	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 21:52	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 21:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	101		70 - 130	10/23/23 04:54	10/23/23 21:52	1
13C2 PFHxA	107		70 - 130	10/23/23 04:54	10/23/23 21:52	1
13C2 PFDA	109		70 - 130	10/23/23 04:54	10/23/23 21:52	1
13C3-GenX	107		70 - 130	10/23/23 04:54	10/23/23 21:52	1

Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1

Lab Sample ID: 380-67495-4
Date Collected: 10/16/23 10:07
Matrix: Drinking Water
Date Received: 10/18/23 10:20
PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.097		0.097		ug/L		10/20/23 13:28	10/22/23 21:35	1
2,4'-DDD	<0.097		0.097		ug/L		10/20/23 13:28	10/22/23 21:35	1
2,4'-DDE	<0.097		0.097		ug/L		10/20/23 13:28	10/22/23 21:35	1

Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1
Date Collected: 10/16/23 10:07
Date Received: 10/18/23 10:20

Lab Sample ID: 380-67495-4
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
2,4'-DDT	<0.097		0.097		ug/L		10/20/23 13:28	10/22/23 21:35	1
2,4-Dinitrotoluene	<0.097		0.097		ug/L		10/20/23 13:28	10/22/23 21:35	1
2,6-Dinitrotoluene	<0.097		0.097		ug/L		10/20/23 13:28	10/22/23 21:35	1
2-Methylnaphthalene	<0.097		0.097		ug/L		10/20/23 13:28	10/22/23 21:35	1
4,4'-DDD	<0.097		0.097		ug/L		10/20/23 13:28	10/22/23 21:35	1
4,4'-DDE	<0.097		0.097		ug/L		10/20/23 13:28	10/22/23 21:35	1
4,4'-DDT	<0.097		0.097		ug/L		10/20/23 13:28	10/22/23 21:35	1
Acenaphthene	<0.097		0.097		ug/L		10/20/23 13:28	10/22/23 21:35	1
Acenaphthylene	<0.097		0.097		ug/L		10/20/23 13:28	10/22/23 21:35	1
Acetochlor	<0.097		0.097		ug/L		10/20/23 13:28	10/22/23 21:35	1
Alachlor	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:35	1
alpha-BHC	<0.097		0.097		ug/L		10/20/23 13:28	10/22/23 21:35	1
alpha-Chlordane	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:35	1
Anthracene	<0.019		0.019		ug/L		10/20/23 13:28	10/22/23 21:35	1
Atrazine	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:35	1
Benz(a)anthracene	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:35	1
Benzo[a]pyrene	<0.019		0.019		ug/L		10/20/23 13:28	10/22/23 21:35	1
Benzo[b]fluoranthene	<0.019		0.019		ug/L		10/20/23 13:28	10/22/23 21:35	1
Benzo[g,h,i]perylene	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:35	1
Benzo[k]fluoranthene	<0.019		0.019		ug/L		10/20/23 13:28	10/22/23 21:35	1
beta-BHC	<0.097		0.097		ug/L		10/20/23 13:28	10/22/23 21:35	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59		ug/L		10/26/23 22:01	10/27/23 12:12	1
Bromacil	<0.097		0.097		ug/L		10/20/23 13:28	10/22/23 21:35	1
Butachlor	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:35	1
Butylbenzylphthalate	<0.49		0.49		ug/L		10/20/23 13:28	10/22/23 21:35	1
Chlorobenzilate	<0.097		0.097		ug/L		10/20/23 13:28	10/22/23 21:35	1
Chloroneb	<0.097		0.097		ug/L		10/20/23 13:28	10/22/23 21:35	1
Chlorothalonil (Draconil, Bravo)	<0.097		0.097		ug/L		10/20/23 13:28	10/22/23 21:35	1
Chlorpyrifos	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:35	1
Chrysene	<0.019		0.019		ug/L		10/20/23 13:28	10/22/23 21:35	1
delta-BHC	<0.097		0.097		ug/L		10/20/23 13:28	10/22/23 21:35	1
Di(2-ethylhexyl)adipate	<0.58		0.58		ug/L		10/20/23 13:28	10/22/23 21:35	1
Dibenz(a,h)anthracene	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:35	1
Diclorvos (DDVP)	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:35	1
Dieldrin	<0.19		0.19		ug/L		10/20/23 13:28	10/22/23 21:35	1
Diethylphthalate	<0.49		0.49		ug/L		10/20/23 13:28	10/22/23 21:35	1
Dimethylphthalate	<0.49		0.49		ug/L		10/20/23 13:28	10/22/23 21:35	1
Di-n-butyl phthalate	<0.97		0.97		ug/L		10/20/23 13:28	10/22/23 21:35	1
Di-n-octyl phthalate	<0.097		0.097		ug/L		10/20/23 13:28	10/22/23 21:35	1
Endosulfan I (Alpha)	<0.097		0.097		ug/L		10/20/23 13:28	10/22/23 21:35	1
Endosulfan II (Beta)	<0.097		0.097		ug/L		10/20/23 13:28	10/22/23 21:35	1
Endosulfan sulfate	<0.097		0.097		ug/L		10/20/23 13:28	10/22/23 21:35	1
Endrin	<0.097		0.097		ug/L		10/20/23 13:28	10/22/23 21:35	1
Endrin aldehyde	<0.097		0.097		ug/L		10/20/23 13:28	10/22/23 21:35	1
EPTC	<0.097		0.097		ug/L		10/20/23 13:28	10/22/23 21:35	1
Fluoranthene	<0.097		0.097		ug/L		10/20/23 13:28	10/22/23 21:35	1
Fluorene	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:35	1
gamma-Chlordane	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:35	1
Heptachlor	<0.039		0.039		ug/L		10/20/23 13:28	10/22/23 21:35	1

Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1
Date Collected: 10/16/23 10:07
Date Received: 10/18/23 10:20

Lab Sample ID: 380-67495-4
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
Heptachlor epoxide (isomer B)	<0.049	*+	0.049		ug/L		10/20/23 13:28	10/22/23 21:35	1
Hexachlorobenzene	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:35	1
Hexachlorocyclopentadiene	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:35	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:35	1
Isophorone	<0.49		0.49		ug/L		10/20/23 13:28	10/22/23 21:35	1
Lindane	<0.039		0.039		ug/L		10/20/23 13:28	10/22/23 21:35	1
Malathion	<0.097		0.097		ug/L		10/20/23 13:28	10/22/23 21:35	1
Methoxychlor	<0.097		0.097		ug/L		10/20/23 13:28	10/22/23 21:35	1
Metolachlor	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:35	1
Molinate	<0.097		0.097		ug/L		10/20/23 13:28	10/22/23 21:35	1
Naphthalene	<0.29		0.29		ug/L		10/20/23 13:28	10/22/23 21:35	1
Parathion	<0.097		0.097		ug/L		10/20/23 13:28	10/22/23 21:35	1
Pendimethalin (Penoxaline)	<0.097		0.097		ug/L		10/20/23 13:28	10/22/23 21:35	1
Phenanthrene	<0.039		0.039		ug/L		10/20/23 13:28	10/22/23 21:35	1
Propachlor	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:35	1
Pyrene	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:35	1
Simazine	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:35	1
Terbacil	<0.097		0.097		ug/L		10/20/23 13:28	10/22/23 21:35	1
Terbuthylazine	<0.097		0.097		ug/L		10/20/23 13:28	10/22/23 21:35	1
Thiobencarb	<0.19		0.19		ug/L		10/20/23 13:28	10/22/23 21:35	1
Total Permethrin (mixed isomers)	<0.19		0.19		ug/L		10/20/23 13:28	10/22/23 21:35	1
trans-Nonachlor	<0.049		0.049		ug/L		10/20/23 13:28	10/22/23 21:35	1
Trifluralin	<0.097		0.097		ug/L		10/20/23 13:28	10/22/23 21:35	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*	*10/20/23 13:28*	*10/22/23 21:35*	*1*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*	*10/26/23 22:01*	*10/27/23 12:12*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Nitro-m-xylene	*96*		*70 - 130*	*10/20/23 13:28*	*10/22/23 21:35*	*1*
2-Nitro-m-xylene	*100*		*70 - 130*	*10/26/23 22:01*	*10/27/23 12:12*	*1*
Perylene-d12	*99*		*70 - 130*	*10/20/23 13:28*	*10/22/23 21:35*	*1*
Perylene-d12	*108*		*70 - 130*	*10/26/23 22:01*	*10/27/23 12:12*	*1*
Triphenylphosphate	*118*		*70 - 130*	*10/20/23 13:28*	*10/22/23 21:35*	*1*
Triphenylphosphate	*111*		*70 - 130*	*10/26/23 22:01*	*10/27/23 12:12*	*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		11/06/23 12:43	11/10/23 09:51	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:51	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:51	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:51	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:51	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:51	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:51	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:51	1

Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1
Date Collected: 10/16/23 10:07
Date Received: 10/18/23 10:20

Lab Sample ID: 380-67495-4
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
Perfluorohexanesulfonic acid (PFHxS)	**2.6**		2.0		ng/L		11/06/23 12:43	11/10/23 09:51	1
Perfluorohexanoic acid (PFHxA)	**2.2**		2.0		ng/L		11/06/23 12:43	11/10/23 09:51	1
Perfluorononanoic acid (PFNA)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:51	1
Perfluorooctanesulfonic acid (PFOS)	**2.3**		2.0		ng/L		11/06/23 12:43	11/10/23 09:51	1
Perfluorooctanoic acid (PFOA)	**2.4**		2.0		ng/L		11/06/23 12:43	11/10/23 09:51	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:51	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:51	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:51	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:51	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:51	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:51	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:51	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:51	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:51	1
Perfluoropentanoic acid (PFPeA)	**2.8**		2.0		ng/L		11/06/23 12:43	11/10/23 09:51	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:51	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0		ng/L		11/06/23 12:43	11/10/23 09:51	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*80*		*50 - 200*	*11/06/23 12:43*	*11/10/23 09:51*	*1*
13C6 PFDA	*82*		*50 - 200*	*11/06/23 12:43*	*11/10/23 09:51*	*1*
13C5 PFHxA	*88*		*50 - 200*	*11/06/23 12:43*	*11/10/23 09:51*	*1*
13C4 PFHpA	*89*		*50 - 200*	*11/06/23 12:43*	*11/10/23 09:51*	*1*
13C8 PFOA	*82*		*50 - 200*	*11/06/23 12:43*	*11/10/23 09:51*	*1*
13C9 PFNA	*82*		*50 - 200*	*11/06/23 12:43*	*11/10/23 09:51*	*1*
13C7 PFUnA	*89*		*50 - 200*	*11/06/23 12:43*	*11/10/23 09:51*	*1*
13C2 PFDoA	*91*		*50 - 200*	*11/06/23 12:43*	*11/10/23 09:51*	*1*
13C4 PFBA	*92*		*50 - 200*	*11/06/23 12:43*	*11/10/23 09:51*	*1*
13C5 PFPeA	*93*		*50 - 200*	*11/06/23 12:43*	*11/10/23 09:51*	*1*
13C3 PFBS	*99*		*50 - 200*	*11/06/23 12:43*	*11/10/23 09:51*	*1*
13C3 PFHxS	*100*		*50 - 200*	*11/06/23 12:43*	*11/10/23 09:51*	*1*
13C8 PFOS	*102*		*50 - 200*	*11/06/23 12:43*	*11/10/23 09:51*	*1*
13C2-4:2-FTS	*126*		*50 - 200*	*11/06/23 12:43*	*11/10/23 09:51*	*1*
13C2-6:2-FTS	*120*		*50 - 200*	*11/06/23 12:43*	*11/10/23 09:51*	*1*
13C2-8:2-FTS	*109*		*50 - 200*	*11/06/23 12:43*	*11/10/23 09:51*	*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		10/23/23 04:54	10/23/23 22:02	1
Perfluorooctanesulfonic acid (PFOS)	**2.4**		2.0		ng/L		10/23/23 04:54	10/23/23 22:02	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:02	1

Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1

Date Collected: 10/16/23 10:07
Date Received: 10/18/23 10:20

Lab Sample ID: 380-67495-4
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-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:02	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:02	1
Perfluorohexanoic acid (PFHxA)	**2.3**		2.0		ng/L		10/23/23 04:54	10/23/23 22:02	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:02	1
Perfluorooctanoic acid (PFOA)	**2.1**		2.0		ng/L		10/23/23 04:54	10/23/23 22:02	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:02	1
Perfluorohexanesulfonic acid (PFHxS)	**2.9**		2.0		ng/L		10/23/23 04:54	10/23/23 22:02	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:02	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:02	1
Perfluorononanoic acid (PFNA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:02	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:02	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:02	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:02	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:02	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d5-NEtFOSAA	*98*		*70 - 130*	*10/23/23 04:54*	*10/23/23 22:02*	*1*
13C2 PFHxA	*97*		*70 - 130*	*10/23/23 04:54*	*10/23/23 22:02*	*1*
13C2 PFDA	*115*		*70 - 130*	*10/23/23 04:54*	*10/23/23 22:02*	*1*
13C3-GenX	*111*		*70 - 130*	*10/23/23 04:54*	*10/23/23 22:02*	*1*

Client Sample ID: FB MOANALUA WELLS

Date Collected: 10/16/23 09:39
Date Received: 10/18/23 10:20

Lab Sample ID: 380-67495-9
Matrix: Water

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		11/01/23 12:00	11/02/23 19:57	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 19:57	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 19:57	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 19:57	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 19:57	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 19:57	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 19:57	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 19:57	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 19:57	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 19:57	1
Perfluorononanoic acid (PFNA)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 19:57	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 19:57	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 19:57	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 19:57	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 19:57	1

Client Sample ID: FB MOANALUA WELLS
Date Collected: 10/16/23 09:39
Date Received: 10/18/23 10:20

Lab Sample ID: 380-67495-9
Matrix: Water

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-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 19:57	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 19:57	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 19:57	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 19:57	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 19:57	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 19:57	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 19:57	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 19:57	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 19:57	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 19:57	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*87*		*50 - 200*	*11/01/23 12:00*	*11/02/23 19:57*	*1*
13C6 PFDA	*108*		*50 - 200*	*11/01/23 12:00*	*11/02/23 19:57*	*1*
13C5 PFHxA	*100*		*50 - 200*	*11/01/23 12:00*	*11/02/23 19:57*	*1*
13C4 PFHpA	*104*		*50 - 200*	*11/01/23 12:00*	*11/02/23 19:57*	*1*
13C8 PFOA	*112*		*50 - 200*	*11/01/23 12:00*	*11/02/23 19:57*	*1*
13C9 PFNA	*118*		*50 - 200*	*11/01/23 12:00*	*11/02/23 19:57*	*1*
13C7 PFUnA	*100*		*50 - 200*	*11/01/23 12:00*	*11/02/23 19:57*	*1*
13C2 PFDoA	*100*		*50 - 200*	*11/01/23 12:00*	*11/02/23 19:57*	*1*
13C4 PFBA	*112*		*50 - 200*	*11/01/23 12:00*	*11/02/23 19:57*	*1*
13C5 PFPeA	*118*		*50 - 200*	*11/01/23 12:00*	*11/02/23 19:57*	*1*
13C3 PFBS	*108*		*50 - 200*	*11/01/23 12:00*	*11/02/23 19:57*	*1*
13C3 PFHxS	*111*		*50 - 200*	*11/01/23 12:00*	*11/02/23 19:57*	*1*
13C8 PFOS	*114*		*50 - 200*	*11/01/23 12:00*	*11/02/23 19:57*	*1*
13C2-4:2-FTS	*113*		*50 - 200*	*11/01/23 12:00*	*11/02/23 19:57*	*1*
13C2-6:2-FTS	*153*		*50 - 200*	*11/01/23 12:00*	*11/02/23 19:57*	*1*
13C2-8:2-FTS	*124*		*50 - 200*	*11/01/23 12:00*	*11/02/23 19:57*	*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		10/23/23 04:54	10/23/23 22:12	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:12	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:12	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:12	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:12	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:12	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:12	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:12	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:12	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:12	1

Client Sample ID: FB MOANALUA WELLS

Lab Sample ID: 380-67495-9

Date Collected: 10/16/23 09:39

Matrix: Water

Date Received: 10/18/23 10:20

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:12	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:12	1
Perfluorononanoic acid (PFNA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:12	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:12	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:12	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:12	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:12	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d5-NEtFOSAA	*101*		*70 - 130*	*10/23/23 04:54*	*10/23/23 22:12*	*1*
13C2 PFHxA	*103*		*70 - 130*	*10/23/23 04:54*	*10/23/23 22:12*	*1*
13C2 PFDA	*107*		*70 - 130*	*10/23/23 04:54*	*10/23/23 22:12*	*1*
13C3-GenX	*98*		*70 - 130*	*10/23/23 04:54*	*10/23/23 22:12*	*1*

Client Sample ID: FB AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-67495-10

Date Collected: 10/16/23 10:36

Matrix: Water

Date Received: 10/18/23 10:20

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		10/23/23 04:54	10/23/23 22:21	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:21	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:21	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:21	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:21	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:21	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:21	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:21	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:21	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:21	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:21	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:21	1
Perfluorononanoic acid (PFNA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:21	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:21	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:21	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:21	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:21	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d5-NEtFOSAA	*99*		*70 - 130*	*10/23/23 04:54*	*10/23/23 22:21*	*1*
13C2 PFHxA	*104*		*70 - 130*	*10/23/23 04:54*	*10/23/23 22:21*	*1*
13C2 PFDA	*105*		*70 - 130*	*10/23/23 04:54*	*10/23/23 22:21*	*1*

Client Sample ID: FB AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-67495-10

Date Collected: 10/16/23 10:36

Matrix: Water

Date Received: 10/18/23 10:20

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-GenX	99		70 - 130	10/23/23 04:54	10/23/23 22:21	1

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

Lab Sample ID: 380-67495-11

Date Collected: 10/16/23 11:05

Matrix: Water

Date Received: 10/18/23 10:20

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		10/23/23 04:54	10/23/23 22:42	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:42	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:42	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:42	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:42	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:42	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:42	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:42	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:42	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:42	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:42	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:42	1
Perfluorononanoic acid (PFNA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:42	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:42	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:42	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:42	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:42	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
d5-NEtFOSAA	102		70 - 130	10/23/23 04:54	10/23/23 22:42	1
13C2 PFHxA	100		70 - 130	10/23/23 04:54	10/23/23 22:42	1
13C2 PFDA	104		70 - 130	10/23/23 04:54	10/23/23 22:42	1
13C3-GenX	98		70 - 130	10/23/23 04:54	10/23/23 22:42	1

Client Sample ID: FB HALAWA WELLS UNITS 1 & 2 P1

Lab Sample ID: 380-67495-12

Date Collected: 10/16/23 10:07

Matrix: Water

Date Received: 10/18/23 10:20

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		11/01/23 12:00	11/02/23 20:26	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 20:26	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 20:26	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 20:26	1

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

Job ID: 380-67495-1

Client Sample ID: FB HALAWA WELLS UNITS 1 & 2 P1
Date Collected: 10/16/23 10:07
Date Received: 10/18/23 10:20

Lab Sample ID: 380-67495-12
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 20:26	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 20:26	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 20:26	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 20:26	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 20:26	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 20:26	1
Perfluorononanoic acid (PFNA)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 20:26	1
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 20:26	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 20:26	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 20:26	1
Perfluorobutanoic acid (PFBA)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 20:26	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 20:26	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 20:26	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 20:26	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 20:26	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 20:26	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 20:26	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 20:26	1
Perfluoropentanoic acid (PFPeA)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 20:26	1
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 20:26	1
Perfluoropentanesulfonic acid (PFPeS)	<2.0		2.0		ng/L		11/01/23 12:00	11/02/23 20:26	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*86*		*50 - 200*	*11/01/23 12:00*	*11/02/23 20:26*	*1*
13C6 PFDA	*108*		*50 - 200*	*11/01/23 12:00*	*11/02/23 20:26*	*1*
13C5 PFHxA	*93*		*50 - 200*	*11/01/23 12:00*	*11/02/23 20:26*	*1*
13C4 PFHpA	*102*		*50 - 200*	*11/01/23 12:00*	*11/02/23 20:26*	*1*
13C8 PFOA	*107*		*50 - 200*	*11/01/23 12:00*	*11/02/23 20:26*	*1*
13C9 PFNA	*114*		*50 - 200*	*11/01/23 12:00*	*11/02/23 20:26*	*1*
13C7 PFUnA	*104*		*50 - 200*	*11/01/23 12:00*	*11/02/23 20:26*	*1*
13C2 PFDoA	*104*		*50 - 200*	*11/01/23 12:00*	*11/02/23 20:26*	*1*
13C4 PFBA	*98*		*50 - 200*	*11/01/23 12:00*	*11/02/23 20:26*	*1*
13C5 PFPeA	*101*		*50 - 200*	*11/01/23 12:00*	*11/02/23 20:26*	*1*
13C3 PFBS	*107*		*50 - 200*	*11/01/23 12:00*	*11/02/23 20:26*	*1*
13C3 PFHxS	*107*		*50 - 200*	*11/01/23 12:00*	*11/02/23 20:26*	*1*
13C8 PFOS	*108*		*50 - 200*	*11/01/23 12:00*	*11/02/23 20:26*	*1*
13C2-4:2-FTS	*108*		*50 - 200*	*11/01/23 12:00*	*11/02/23 20:26*	*1*
13C2-6:2-FTS	*124*		*50 - 200*	*11/01/23 12:00*	*11/02/23 20:26*	*1*
13C2-8:2-FTS	*122*		*50 - 200*	*11/01/23 12:00*	*11/02/23 20:26*	*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		10/23/23 04:54	10/23/23 22:53	1

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

Job ID: 380-67495-1

Client Sample ID: FB HALAWA WELLS UNITS 1 & 2 P1
Date Collected: 10/16/23 10:07
Date Received: 10/18/23 10:20

Lab Sample ID: 380-67495-12
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanesulfonic acid (PFOS)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:53	1
Perfluoroundecanoic acid (PFUnA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:53	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:53	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:53	1
Perfluorohexanoic acid (PFHxA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:53	1
Perfluorododecanoic acid (PFDoA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:53	1
Perfluorooctanoic acid (PFOA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:53	1
Perfluorodecanoic acid (PFDA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:53	1
Perfluorohexanesulfonic acid (PFHxS)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:53	1
Perfluorobutanesulfonic acid (PFBS)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:53	1
Perfluoroheptanoic acid (PFHpA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:53	1
Perfluorononanoic acid (PFNA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:53	1
Perfluorotetradecanoic acid (PFTA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:53	1
Perfluorotridecanoic acid (PFTrDA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:53	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:53	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:53	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		2.0		ng/L		10/23/23 04:54	10/23/23 22:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d5-NEtFOSAA	*105*		*70 - 130*	*10/23/23 04:54*	*10/23/23 22:53*	*1*
13C2 PFHxA	*113*		*70 - 130*	*10/23/23 04:54*	*10/23/23 22:53*	*1*
13C2 PFDA	*113*		*70 - 130*	*10/23/23 04:54*	*10/23/23 22:53*	*1*
13C3-GenX	*108*		*70 - 130*	*10/23/23 04:54*	*10/23/23 22:53*	*1*

Action Limit Summary

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

Job ID: 380-67495-1

Client Sample ID: AIEA GULCH WELLS PUMP 2 — Lab Sample ID: 380-67495-2

PWSID Number: HI0000331

Compliance Check

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

Analyte	Result	Qualifier	Unit	EPAMCL 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	<0.60		ug/L	6	0.60	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

Client Sample ID: AIEA WELLS PUMPS 1&2 (260) P2 — Lab Sample ID: 380-67495-3

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		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

Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1 — Lab Sample ID: 380-67495-4

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

Action Limit Summary

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

Job ID: 380-67495-1

Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1 (Continued)

Lab Sample ID: 380-67495-4

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
Benzo[a]pyrene	<0.019		ug/L	0.2	0.019	525.2	Total/NA
Bis(2-ethylhexyl) phthalate	<0.59		ug/L	6	0.59	525.2	Total/NA
Di(2-ethylhexyl)adipate	<0.58		ug/L	400	0.58	525.2	Total/NA
Endrin	<0.097		ug/L	2	0.097	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	<0.097		ug/L	40	0.097	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: 380-67495-1

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)
380-67495-2	AIEA GULCH WELLS PUMP 2	93	99	123
380-67495-2	AIEA GULCH WELLS PUMP 2	100	103	111
380-67495-3	AIEA WELLS PUMPS 1&2 (260) P2	94	101	122
380-67495-3	AIEA WELLS PUMPS 1&2 (260) P2	100	106	112
380-67495-4	HALAWA WELLS UNITS 1 & 2 P1	96	99	118
380-67495-4	HALAWA WELLS UNITS 1 & 2 P1	100	108	111
380-67495-J-1-A MS	380-67495-J-1-A MS	96	104	119

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)
380-67591-T-1-A DU	Duplicate	98	96	126
380-67970-R-1-A MS	Matrix Spike	98	103	116
380-67970-R-2-A DU	Duplicate	101	107	112
LCS 380-60329/23-A	Lab Control Sample	97	105	115
LCS 380-61104/23-A	Lab Control Sample	97	104	112
LCSD 380-60329/24-A	Lab Control Sample Dup	96	102	119
LCSD 380-61104/24-A	Lab Control Sample Dup	97	103	112
MB 380-60329/21-A	Method Blank	96	94	125
MB 380-61104/21-A	Method Blank	98	99	108
MRL 380-60329/22-A	Lab Control Sample	96	98	116
MRL 380-61104/22-A	Lab Control Sample	99	94	107

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)
380-67495-1	MOANALUA WELLS	105	113	109	108
380-67495-1 MS	MOANALUA WELLS	110	114	112	109
380-67495-1 MSD	MOANALUA WELLS	102	110	104	105
380-67495-2	AIEA GULCH WELLS PUMP 2	98	109	106	104
380-67495-3	AIEA WELLS PUMPS 1&2 (260) P2	101	107	109	107

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	d5NEFOS (70-130)	PFHxA (70-130)	PFDA (70-130)	GenX (70-130)
380-67495-4	HALAWA WELLS UNITS 1 & 2 F	98	97	115	111

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)			
Lab Sample ID	Client Sample ID	d5NEFOS (70-130)	PFHxA (70-130)	PFDA (70-130)	GenX (70-130)
380-67495-9	FB MOANALUA WELLS	101	103	107	98
380-67495-10	FB AIEA GULCH WELLS PUMP 2	99	104	105	99
380-67495-11	FB AIEA WELLS PUMPS 1&2 (260) P2	102	100	104	98
380-67495-12	FB HALAWA WELLS UNITS 1 & 2 P1	105	113	113	108
380-67520-C-1-A MS	Matrix Spike	108	108	112	114
380-67520-D-1-A MSD	Matrix Spike Duplicate	99	118	115	112
LCS 380-60385/25-A	Lab Control Sample	99	109	114	104
LCS 380-60637/25-A	Lab Control Sample	97	114	119	114
LCSD 380-60385/26-A	Lab Control Sample Dup	91	107	112	106
LCSD 380-60637/26-A	Lab Control Sample Dup	102	109	112	116
MBL 380-60385/23-A	Method Blank	112	112	122	110
MBL 380-60637/23-A	Method Blank	117	114	119	112
MRL 380-60385/24-A	Lab Control Sample	112	106	115	105
MRL 380-60637/24-A	Lab Control Sample	103	100	111	100

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: 380-67495-1

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)
380-67495-1	MOANALUA WELLS	80	91	90	93	92	94	97	95
380-67495-4	HALAWA WELLS UNITS 1 & 2 P1	80	82	88	89	82	82	89	91
380-67495-N-3-B MS	380-67495-N-3-B MS	23 *5-	34 *5-	26 *5-	24 *5-	23 *5-	25 *5-	48 *5-	63
380-67495-O-3-B MSD	380-67495-O-3-B MSD	47 *5-	90	57	61	74	87	91	95

		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)
380-67495-1	MOANALUA WELLS	91	91	101	102	106	126	118	113
380-67495-4	HALAWA WELLS UNITS 1 & 2 P1	92	93	99	100	102	126	120	109
380-67495-N-3-B MS	380-67495-N-3-B MS	35 *5-	36 *5-	105	104	109	106	118	135
380-67495-O-3-B MSD	380-67495-O-3-B MSD	67	69	108	103	108	105	113	122

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)
380-67495-9	FB MOANALUA WELLS	87	108	100	104	112	118	100	100
380-67495-12	FB HALAWA WELLS UNITS 1 & 2 P1	86	108	93	102	107	114	104	104
380-67949-B-2-A MS	Matrix Spike	79	81	69	62	79	85	84	77
380-67949-B-3-B MS	Matrix Spike	104	98	92	98	96	101	100	99
LCS 380-61859/23-A	Lab Control Sample	88	103	90	96	99	103	102	111
LCS 380-62640/23-A	Lab Control Sample	80	98	95	98	95	100	100	101
LCSD 380-61859/24-A	Lab Control Sample Dup	97	107	101	106	107	116	106	112
LCSD 380-62640/24-A	Lab Control Sample Dup	90	101	97	97	94	98	100	101
MBL 380-61859/21-A	Method Blank	67	100	79	86	93	99	91	93
MBL 380-62640/21-A	Method Blank	90	103	104	109	106	104	104	101
MRL 380-61859/22-A	Lab Control Sample	77	108	94	100	104	111	106	106
MRL 380-62640/22-A	Lab Control Sample	89	105	106	111	105	105	106	101

Isotope Dilution Summary

Client: City & County of Honolulu
Job ID: 380-67495-1
Project/Site: RED-HILL

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

Matrix: Water
Prep Type: Total/NA

		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)
380-67495-9	FB MOANALUA WELLS	112	118	108	111	114	113	153	124
380-67495-12	FB HALAWA WELLS UNITS 1 & 2 P1	98	101	107	107	108	108	124	122
380-67949-B-2-A MS	Matrix Spike	75	85	94	89	102	135	139	167
380-67949-B-3-B MS	Matrix Spike	94	113	92	94	97	123	119	115
LCS 380-61859/23-A	Lab Control Sample	96	97	107	107	107	103	110	118
LCS 380-62640/23-A	Lab Control Sample	99	98	98	99	100	114	112	105
LCSD 380-61859/24-A	Lab Control Sample Dup	107	111	103	103	106	99	107	111
LCSD 380-62640/24-A	Lab Control Sample Dup	96	94	98	99	101	113	113	109
MBL 380-61859/21-A	Method Blank	89	92	102	102	102	103	132	144
MBL 380-62640/21-A	Method Blank	104	108	102	104	105	124	121	113
MRL 380-61859/22-A	Lab Control Sample	98	100	107	106	106	114	135	133
MRL 380-62640/22-A	Lab Control Sample	102	105	97	100	103	115	115	108

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: 525.2 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 380-60329/21-A
Matrix: Water
Analysis Batch: 60590

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 60329

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.098		0.098		ug/L		10/20/23 11:49	10/22/23 14:57	1
2,4'-DDD	<0.098		0.098		ug/L		10/20/23 11:49	10/22/23 14:57	1
2,4'-DDE	<0.098		0.098		ug/L		10/20/23 11:49	10/22/23 14:57	1
2,4'-DDT	<0.098		0.098		ug/L		10/20/23 11:49	10/22/23 14:57	1
2,4-Dinitrotoluene	<0.098		0.098		ug/L		10/20/23 11:49	10/22/23 14:57	1
2,6-Dinitrotoluene	<0.098		0.098		ug/L		10/20/23 11:49	10/22/23 14:57	1
2-Methylnaphthalene	<0.098		0.098		ug/L		10/20/23 11:49	10/22/23 14:57	1
4,4'-DDD	<0.098		0.098		ug/L		10/20/23 11:49	10/22/23 14:57	1
4,4'-DDE	<0.098		0.098		ug/L		10/20/23 11:49	10/22/23 14:57	1
4,4'-DDT	<0.098		0.098		ug/L		10/20/23 11:49	10/22/23 14:57	1
Acenaphthene	<0.098		0.098		ug/L		10/20/23 11:49	10/22/23 14:57	1
Acenaphthylene	<0.098		0.098		ug/L		10/20/23 11:49	10/22/23 14:57	1
Acetochlor	<0.098		0.098		ug/L		10/20/23 11:49	10/22/23 14:57	1
Alachlor	<0.049		0.049		ug/L		10/20/23 11:49	10/22/23 14:57	1
alpha-BHC	<0.098		0.098		ug/L		10/20/23 11:49	10/22/23 14:57	1
alpha-Chlordane	<0.049		0.049		ug/L		10/20/23 11:49	10/22/23 14:57	1
Anthracene	<0.020		0.020		ug/L		10/20/23 11:49	10/22/23 14:57	1
Atrazine	<0.049		0.049		ug/L		10/20/23 11:49	10/22/23 14:57	1
Benz(a)anthracene	<0.049		0.049		ug/L		10/20/23 11:49	10/22/23 14:57	1
Benzo[a]pyrene	<0.020		0.020		ug/L		10/20/23 11:49	10/22/23 14:57	1
Benzo[b]fluoranthene	<0.020		0.020		ug/L		10/20/23 11:49	10/22/23 14:57	1
Benzo[g,h,i]perylene	<0.049		0.049		ug/L		10/20/23 11:49	10/22/23 14:57	1
Benzo[k]fluoranthene	<0.020		0.020		ug/L		10/20/23 11:49	10/22/23 14:57	1
beta-BHC	<0.098		0.098		ug/L		10/20/23 11:49	10/22/23 14:57	1
Bis(2-ethylhexyl) phthalate	2.49	B	0.59		ug/L		10/20/23 11:49	10/22/23 14:57	1
Bromacil	<0.098		0.098		ug/L		10/20/23 11:49	10/22/23 14:57	1
Butachlor	<0.049		0.049		ug/L		10/20/23 11:49	10/22/23 14:57	1
Butylbenzylphthalate	<0.49		0.49		ug/L		10/20/23 11:49	10/22/23 14:57	1
Chlorobenzilate	<0.098		0.098		ug/L		10/20/23 11:49	10/22/23 14:57	1
Chloroneb	<0.098		0.098		ug/L		10/20/23 11:49	10/22/23 14:57	1
Chlorothalonil (Draconil, Bravo)	<0.098		0.098		ug/L		10/20/23 11:49	10/22/23 14:57	1
Chlorpyrifos	<0.049		0.049		ug/L		10/20/23 11:49	10/22/23 14:57	1
Chrysene	<0.020		0.020		ug/L		10/20/23 11:49	10/22/23 14:57	1
delta-BHC	<0.098		0.098		ug/L		10/20/23 11:49	10/22/23 14:57	1
Di(2-ethylhexyl)adipate	<0.59		0.59		ug/L		10/20/23 11:49	10/22/23 14:57	1
Dibenz(a,h)anthracene	<0.049		0.049		ug/L		10/20/23 11:49	10/22/23 14:57	1
Diclorvos (DDVP)	<0.049		0.049		ug/L		10/20/23 11:49	10/22/23 14:57	1
Dieldrin	<0.20		0.20		ug/L		10/20/23 11:49	10/22/23 14:57	1
Diethylphthalate	<0.49		0.49		ug/L		10/20/23 11:49	10/22/23 14:57	1
Dimethylphthalate	<0.49		0.49		ug/L		10/20/23 11:49	10/22/23 14:57	1
Di-n-butyl phthalate	<0.98		0.98		ug/L		10/20/23 11:49	10/22/23 14:57	1
Di-n-octyl phthalate	<0.098		0.098		ug/L		10/20/23 11:49	10/22/23 14:57	1
Endosulfan I (Alpha)	<0.098		0.098		ug/L		10/20/23 11:49	10/22/23 14:57	1
Endosulfan II (Beta)	<0.098		0.098		ug/L		10/20/23 11:49	10/22/23 14:57	1
Endosulfan sulfate	<0.098		0.098		ug/L		10/20/23 11:49	10/22/23 14:57	1
Endrin	<0.098		0.098		ug/L		10/20/23 11:49	10/22/23 14:57	1
Endrin aldehyde	<0.098		0.098		ug/L		10/20/23 11:49	10/22/23 14:57	1
EPTC	<0.098		0.098		ug/L		10/20/23 11:49	10/22/23 14:57	1

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

Lab Sample ID: MB 380-60329/21-A
Matrix: Water
Analysis Batch: 60590

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 60329

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<0.098		0.098		ug/L		10/20/23 11:49	10/22/23 14:57	1
Fluorene	<0.049		0.049		ug/L		10/20/23 11:49	10/22/23 14:57	1
gamma-Chlordane	<0.049		0.049		ug/L		10/20/23 11:49	10/22/23 14:57	1
Heptachlor	<0.039		0.039		ug/L		10/20/23 11:49	10/22/23 14:57	1
Heptachlor epoxide (isomer B)	<0.049		0.049		ug/L		10/20/23 11:49	10/22/23 14:57	1
Hexachlorobenzene	<0.049		0.049		ug/L		10/20/23 11:49	10/22/23 14:57	1
Hexachlorocyclopentadiene	<0.049		0.049		ug/L		10/20/23 11:49	10/22/23 14:57	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049		ug/L		10/20/23 11:49	10/22/23 14:57	1
Isophorone	<0.49		0.49		ug/L		10/20/23 11:49	10/22/23 14:57	1
Lindane	<0.039		0.039		ug/L		10/20/23 11:49	10/22/23 14:57	1
Malathion	<0.098		0.098		ug/L		10/20/23 11:49	10/22/23 14:57	1
Methoxychlor	<0.098		0.098		ug/L		10/20/23 11:49	10/22/23 14:57	1
Metolachlor	<0.049		0.049		ug/L		10/20/23 11:49	10/22/23 14:57	1
Molinate	<0.098		0.098		ug/L		10/20/23 11:49	10/22/23 14:57	1
Naphthalene	<0.29		0.29		ug/L		10/20/23 11:49	10/22/23 14:57	1
Parathion	<0.098		0.098		ug/L		10/20/23 11:49	10/22/23 14:57	1
Pendimethalin (Penoxaline)	<0.098		0.098		ug/L		10/20/23 11:49	10/22/23 14:57	1
Phenanthrene	<0.039		0.039		ug/L		10/20/23 11:49	10/22/23 14:57	1
Propachlor	<0.049		0.049		ug/L		10/20/23 11:49	10/22/23 14:57	1
Pyrene	<0.049		0.049		ug/L		10/20/23 11:49	10/22/23 14:57	1
Simazine	<0.049		0.049		ug/L		10/20/23 11:49	10/22/23 14:57	1
Terbacil	<0.098		0.098		ug/L		10/20/23 11:49	10/22/23 14:57	1
Terbuthylazine	<0.098		0.098		ug/L		10/20/23 11:49	10/22/23 14:57	1
Thiobencarb	<0.20		0.20		ug/L		10/20/23 11:49	10/22/23 14:57	1
Total Permethrin (mixed isomers)	<0.20		0.20		ug/L		10/20/23 11:49	10/22/23 14:57	1
trans-Nonachlor	<0.049		0.049		ug/L		10/20/23 11:49	10/22/23 14:57	1
Trifluralin	<0.098		0.098		ug/L		10/20/23 11:49	10/22/23 14:57	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Sulfurous acid, cyclohexylmethyl nonyl ester	*0.845*	*T J N*	*ug/L*		*2.32*	*1000309-21-8*	*10/20/23 11:49*	*10/22/23 14:57*	*1*
Decane	*2.25*	*T J N*	*ug/L*		*2.44*	*124-18-5*	*10/20/23 11:49*	*10/22/23 14:57*	*1*
n-Hexadecanoic acid	*0.744*	*T J N*	*ug/L*		*5.88*	*57-10-3*	*10/20/23 11:49*	*10/22/23 14:57*	*1*
9-Octadecenamide, (Z)-	*1.16*	*T J N*	*ug/L*		*7.61*	*301-02-0*	*10/20/23 11:49*	*10/22/23 14:57*	*1*
1,3-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	*1.08*	*T J N*	*ug/L*		*10.02*	*137-89-3*	*10/20/23 11:49*	*10/22/23 14:57*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Nitro-m-xylene	*96*		*70 - 130*	*10/20/23 11:49*	*10/22/23 14:57*	*1*
Perylene-d12	*94*		*70 - 130*	*10/20/23 11:49*	*10/22/23 14:57*	*1*
Triphenylphosphate	*125*		*70 - 130*	*10/20/23 11:49*	*10/22/23 14:57*	*1*

Lab Sample ID: LCS 380-60329/23-A
Matrix: Water
Analysis Batch: 60590

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 60329

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1-Methylnaphthalene			1.97	1.99		ug/L		101	70 - 130		

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

Lab Sample ID: LCS 380-60329/23-A
Matrix: Water
Analysis Batch: 60590

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 60329

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4'-DDD	1.97	2.15		ug/L		109	70 - 130
2,4'-DDE	1.97	2.05		ug/L		104	70 - 130
2,4'-DDT	1.97	2.09		ug/L		106	70 - 130
2,4-Dinitrotoluene	1.97	2.14		ug/L		109	70 - 130
2,6-Dinitrotoluene	1.97	2.03		ug/L		103	70 - 130
2-Methylnaphthalene	1.97	2.10		ug/L		107	70 - 130
4,4'-DDD	1.97	2.08		ug/L		106	70 - 130
4,4'-DDE	1.97	2.17		ug/L		111	70 - 130
4,4'-DDT	1.97	1.91		ug/L		97	70 - 130
Acenaphthene	1.97	1.88		ug/L		96	70 - 130
Acenaphthylene	1.97	1.85		ug/L		94	70 - 130
Acetochlor	1.97	2.09		ug/L		106	70 - 130
Alachlor	1.97	2.24		ug/L		114	70 - 130
alpha-BHC	1.97	2.04		ug/L		104	70 - 130
alpha-Chlordane	1.97	2.55		ug/L		130	70 - 130
Anthracene	1.97	2.07		ug/L		105	70 - 130
Atrazine	1.97	2.28		ug/L		116	70 - 130
Benz(a)anthracene	1.97	2.01		ug/L		102	70 - 130
Benzo[a]pyrene	1.97	2.12		ug/L		108	70 - 130
Benzo[b]fluoranthene	1.97	2.12		ug/L		108	70 - 130
Benzo[g,h,i]perylene	1.97	2.37		ug/L		120	70 - 130
Benzo[k]fluoranthene	1.97	2.10		ug/L		107	70 - 130
beta-BHC	1.97	2.07		ug/L		105	70 - 130
Bis(2-ethylhexyl) phthalate	1.97	4.38	*+	ug/L		223	70 - 130
Bromacil	1.97	2.47		ug/L		126	70 - 130
Butachlor	1.97	2.45		ug/L		125	70 - 130
Butylbenzylphthalate	1.97	2.25		ug/L		115	70 - 130
Chlorobenzilate	1.97	2.40		ug/L		122	70 - 130
Chloroneb	1.97	2.12		ug/L		108	70 - 130
Chlorothalonil (Draconil, Bravo)	1.97	2.17		ug/L		110	70 - 130
Chlorpyrifos	1.97	2.22		ug/L		113	70 - 130
Chrysene	1.97	2.04		ug/L		104	70 - 130
delta-BHC	1.97	2.02		ug/L		103	70 - 130
Di(2-ethylhexyl)adipate	1.97	2.42		ug/L		123	70 - 130
Dibenz(a,h)anthracene	1.97	2.37		ug/L		121	70 - 130
Diclorvos (DDVP)	1.97	2.17		ug/L		110	70 - 130
Dieldrin	1.97	2.07		ug/L		105	70 - 130
Diethylphthalate	1.97	2.07		ug/L		106	70 - 130
Dimethylphthalate	1.97	2.06		ug/L		105	70 - 130
Di-n-butyl phthalate	3.93	4.42		ug/L		112	70 - 130
Di-n-octyl phthalate	1.97	1.82		ug/L		93	70 - 130
Endosulfan I (Alpha)	1.97	2.08		ug/L		106	70 - 130
Endosulfan II (Beta)	1.97	2.26		ug/L		115	70 - 130
Endosulfan sulfate	1.97	2.21		ug/L		113	70 - 130
Endrin	1.97	2.13		ug/L		108	70 - 130
Endrin aldehyde	1.97	2.20		ug/L		112	70 - 130
EPTC	1.97	2.25		ug/L		115	70 - 130
Fluoranthene	1.97	2.15		ug/L		110	70 - 130
Fluorene	1.97	2.10		ug/L		107	70 - 130

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

Lab Sample ID: LCS 380-60329/23-A
Matrix: Water
Analysis Batch: 60590

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 60329

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
gamma-Chlordane	1.97	2.47		ug/L		126	70 - 130
Heptachlor	1.97	2.23		ug/L		114	70 - 130
Heptachlor epoxide (isomer B)	1.97	2.71	*+	ug/L		138	70 - 130
Hexachlorobenzene	1.97	2.25		ug/L		114	70 - 130
Hexachlorocyclopentadiene	1.97	1.97		ug/L		100	70 - 130
Indeno[1,2,3-cd]pyrene	1.97	2.37		ug/L		121	70 - 130
Isophorone	1.97	1.84		ug/L		94	70 - 130
Lindane	1.97	2.12		ug/L		108	70 - 130
Malathion	1.97	2.53		ug/L		129	70 - 130
Methoxychlor	1.97	2.05		ug/L		104	70 - 130
Metolachlor	1.97	2.20		ug/L		112	70 - 130
Molinate	1.97	2.15		ug/L		110	70 - 130
Naphthalene	1.97	1.88		ug/L		96	70 - 130
Parathion	1.97	2.12		ug/L		108	70 - 130
Pendimethalin (Penoxaline)	1.97	2.15		ug/L		109	70 - 130
Phenanthrene	1.97	2.04		ug/L		104	70 - 130
Propachlor	1.97	2.18		ug/L		111	70 - 130
Pyrene	1.97	2.13		ug/L		108	70 - 130
Simazine	1.97	2.30		ug/L		117	70 - 130
Terbacil	1.97	2.17		ug/L		110	70 - 130
Terbuthylazine	1.97	2.16		ug/L		110	70 - 130
Thiobencarb	1.97	2.12		ug/L		108	70 - 130
trans-Nonachlor	1.97	2.17		ug/L		110	70 - 130
Trifluralin	1.97	2.42		ug/L		123	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Nitro-m-xylene	*97*		*70 - 130*
Perylene-d12	*105*		*70 - 130*
Triphenylphosphate	*115*		*70 - 130*

Lab Sample ID: LCSD 380-60329/24-A
Matrix: Water
Analysis Batch: 60590

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 60329

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	1.97	1.97		ug/L		100	70 - 130	1	20
2,4'-DDD	1.97	2.16		ug/L		110	70 - 130	1	20
2,4'-DDE	1.97	2.04		ug/L		104	70 - 130	0	20
2,4'-DDT	1.97	2.06		ug/L		105	70 - 130	1	20
2,4-Dinitrotoluene	1.97	1.92		ug/L		98	70 - 130	11	20
2,6-Dinitrotoluene	1.97	1.83		ug/L		93	70 - 130	11	20
2-Methylnaphthalene	1.97	2.07		ug/L		105	70 - 130	1	20
4,4'-DDD	1.97	2.10		ug/L		107	70 - 130	1	20
4,4'-DDE	1.97	2.20		ug/L		112	70 - 130	1	20
4,4'-DDT	1.97	1.95		ug/L		99	70 - 130	2	20
Acenaphthene	1.97	1.85		ug/L		94	70 - 130	1	20
Acenaphthylene	1.97	1.85		ug/L		94	70 - 130	0	20
Acetochlor	1.97	2.08		ug/L		106	70 - 130	0	20

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

Lab Sample ID: LCSD 380-60329/24-A
Matrix: Water
Analysis Batch: 60590

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 60329

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Alachlor			1.97	2.23		ug/L		114	70 - 130	0	20
alpha-BHC			1.97	2.02		ug/L		103	70 - 130	1	20
alpha-Chlordane			1.97	2.50		ug/L		127	70 - 130	2	20
Anthracene			1.97	2.03		ug/L		103	70 - 130	2	20
Atrazine			1.97	2.28		ug/L		116	70 - 130	0	20
Benz(a)anthracene			1.97	2.06		ug/L		105	70 - 130	3	20
Benzo[a]pyrene			1.97	2.05		ug/L		104	70 - 130	4	20
Benzo[b]fluoranthene			1.97	2.07		ug/L		105	70 - 130	2	20
Benzo[g,h,i]perylene			1.97	2.24		ug/L		114	70 - 130	5	20
Benzo[k]fluoranthene			1.97	2.09		ug/L		106	70 - 130	0	20
beta-BHC			1.97	2.03		ug/L		103	70 - 130	2	20
Bis(2-ethylhexyl) phthalate			1.97	2.97	*+ *1	ug/L		151	70 - 130	38	20
Bromacil			1.97	2.48		ug/L		126	70 - 130	0	20
Butachlor			1.97	2.40		ug/L		122	70 - 130	2	20
Butylbenzylphthalate			1.97	2.33		ug/L		119	70 - 130	3	20
Chlorobenzilate			1.97	2.40		ug/L		122	70 - 130	0	20
Chloroneb			1.97	2.10		ug/L		107	70 - 130	1	20
Chlorothalonil (Draconil, Bravo)			1.97	2.17		ug/L		110	70 - 130	0	20
Chlorpyrifos			1.97	2.23		ug/L		114	70 - 130	0	20
Chrysene			1.97	2.01		ug/L		102	70 - 130	2	20
delta-BHC			1.97	2.02		ug/L		103	70 - 130	0	20
Di(2-ethylhexyl)adipate			1.97	2.42		ug/L		123	70 - 130	0	20
Dibenz(a,h)anthracene			1.97	2.22		ug/L		113	70 - 130	6	20
Diclorvos (DDVP)			1.97	2.15		ug/L		109	70 - 130	1	20
Dieldrin			1.97	2.07		ug/L		105	70 - 130	0	20
Diethylphthalate			1.97	2.03		ug/L		103	70 - 130	2	20
Dimethylphthalate			1.97	2.03		ug/L		103	70 - 130	1	20
Di-n-butyl phthalate			3.93	4.40		ug/L		112	70 - 130	0	20
Di-n-octyl phthalate			1.97	1.75		ug/L		89	70 - 130	4	20
Endosulfan I (Alpha)			1.97	2.09		ug/L		107	70 - 130	1	20
Endosulfan II (Beta)			1.97	2.28		ug/L		116	70 - 130	1	20
Endosulfan sulfate			1.97	2.26		ug/L		115	70 - 130	2	20
Endrin			1.97	2.11		ug/L		107	70 - 130	1	20
Endrin aldehyde			1.97	2.25		ug/L		115	70 - 130	2	20
EPTC			1.97	2.17		ug/L		111	70 - 130	4	20
Fluoranthene			1.97	2.18		ug/L		111	70 - 130	1	20
Fluorene			1.97	2.10		ug/L		107	70 - 130	0	20
gamma-Chlordane			1.97	2.44		ug/L		124	70 - 130	1	20
Heptachlor			1.97	2.18		ug/L		111	70 - 130	2	20
Heptachlor epoxide (isomer B)			1.97	2.70	*+	ug/L		138	70 - 130	0	20
Hexachlorobenzene			1.97	2.22		ug/L		113	70 - 130	1	20
Hexachlorocyclopentadiene			1.97	1.92		ug/L		98	70 - 130	2	20
Indeno[1,2,3-cd]pyrene			1.97	2.22		ug/L		113	70 - 130	7	20
Isophorone			1.97	1.82		ug/L		92	70 - 130	1	20
Lindane			1.97	2.10		ug/L		107	70 - 130	1	20
Malathion			1.97	2.49		ug/L		127	70 - 130	1	20
Methoxychlor			1.97	2.00		ug/L		102	70 - 130	3	20
Metolachlor			1.97	2.14		ug/L		109	70 - 130	3	20
Molinate			1.97	2.07		ug/L		105	70 - 130	4	20

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

Lab Sample ID: LCSD 380-60329/24-A
Matrix: Water
Analysis Batch: 60590

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 60329

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Naphthalene	1.97	1.89		ug/L		96	70 - 130	0	20
Parathion	1.97	2.10		ug/L		107	70 - 130	1	20
Pendimethalin (Penoxaline)	1.97	2.11		ug/L		107	70 - 130	2	20
Phenanthrene	1.97	2.01		ug/L		102	70 - 130	1	20
Propachlor	1.97	2.15		ug/L		110	70 - 130	1	20
Pyrene	1.97	2.16		ug/L		110	70 - 130	1	20
Simazine	1.97	2.25		ug/L		115	70 - 130	2	20
Terbacil	1.97	2.20		ug/L		112	70 - 130	1	20
Terbuthylazine	1.97	2.19		ug/L		111	70 - 130	1	20
Thiobencarb	1.97	2.10		ug/L		107	70 - 130	1	20
trans-Nonachlor	1.97	2.15		ug/L		109	70 - 130	1	20
Trifluralin	1.97	2.34		ug/L		119	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Nitro-m-xylene	*96*		*70 - 130*
Perylene-d12	*102*		*70 - 130*
Triphenylphosphate	*119*		*70 - 130*

Lab Sample ID: MRL 380-60329/22-A
Matrix: Water
Analysis Batch: 60590

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 60329

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	0.0979	0.107		ug/L		110	50 - 150
2,4'-DDD	0.0979	0.134		ug/L		137	50 - 150
2,4'-DDE	0.0979	0.0983		ug/L		100	50 - 150
2,4'-DDT	0.0979	0.0878	J	ug/L		90	50 - 150
2,4-Dinitrotoluene	0.0979	0.0792	J	ug/L		81	50 - 150
2,6-Dinitrotoluene	0.0979	0.0790	J	ug/L		81	50 - 150
2-Methylnaphthalene	0.0979	0.106		ug/L		108	50 - 150
4,4'-DDD	0.0979	0.0991		ug/L		101	50 - 150
4,4'-DDE	0.0979	0.120		ug/L		123	50 - 150
4,4'-DDT	0.0979	0.114		ug/L		117	50 - 150
Acenaphthene	0.0979	0.0916	J	ug/L		94	50 - 150
Acenaphthylene	0.0979	0.0884	J	ug/L		90	50 - 150
Acetochlor	0.0490	0.0423	J	ug/L		86	50 - 150
Alachlor	0.0490	0.0497		ug/L		102	50 - 150
alpha-BHC	0.0979	0.0992		ug/L		101	50 - 150
alpha-Chlordane	0.0245	0.0294	J	ug/L		120	50 - 150
Anthracene	0.0196	<0.019		ug/L		94	50 - 150
Atrazine	0.0490	0.0503		ug/L		103	50 - 150
Benz(a)anthracene	0.0490	0.0440	J	ug/L		90	50 - 150
Benzo[a]pyrene	0.0196	0.0191	J	ug/L		97	50 - 150
Benzo[b]fluoranthene	0.0196	0.0194	J	ug/L		99	50 - 150
Benzo[g,h,i]perylene	0.0490	0.0462	J	ug/L		94	50 - 150
Benzo[k]fluoranthene	0.0196	0.0196	J	ug/L		100	50 - 150
beta-BHC	0.0979	0.0930	J	ug/L		95	50 - 150
Bis(2-ethylhexyl) phthalate	0.588	1.50	^3+	ug/L		255	50 - 150

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

Lab Sample ID: MRL 380-60329/22-A
Matrix: Water
Analysis Batch: 60590

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 60329

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Bromacil	0.0979	0.110		ug/L		113	50 - 150
Butachlor	0.0490	0.0567		ug/L		116	50 - 150
Butylbenzylphthalate	0.147	0.165	J	ug/L		112	50 - 150
Chlorobenzilate	0.0979	0.111		ug/L		114	50 - 150
Chloroneb	0.0979	0.118		ug/L		120	50 - 150
Chlorothalonil (Draconil, Bravo)	0.0979	0.147		ug/L		150	50 - 150
Chlorpyrifos	0.0490	0.0506		ug/L		103	50 - 150
Chrysene	0.0196	0.0203		ug/L		104	50 - 150
delta-BHC	0.0979	0.0993		ug/L		101	50 - 150
Di(2-ethylhexyl)adipate	0.294	0.410	J	ug/L		139	50 - 150
Dibenz(a,h)anthracene	0.0490	0.0470	J	ug/L		96	50 - 150
Diclorvos (DDVP)	0.0490	0.0594		ug/L		121	50 - 150
Dieldrin	0.0979	0.0892	J	ug/L		91	50 - 150
Diethylphthalate	0.147	0.169	J	ug/L		115	50 - 150
Dimethylphthalate	0.294	0.274	J	ug/L		93	50 - 150
Di-n-butyl phthalate	0.294	0.379	J	ug/L		129	49 - 243
Di-n-octyl phthalate	0.0979	0.123		ug/L		126	50 - 150
Endosulfan I (Alpha)	0.0979	0.0926	J	ug/L		95	50 - 150
Endosulfan II (Beta)	0.0979	0.123		ug/L		125	50 - 150
Endosulfan sulfate	0.0979	0.0969	J	ug/L		99	50 - 150
Endrin	0.0979	0.0979	J	ug/L		100	50 - 150
Endrin aldehyde	0.0979	0.144		ug/L		147	50 - 150
EPTC	0.0979	0.108		ug/L		110	50 - 150
Fluoranthene	0.0490	0.0509	J	ug/L		104	50 - 150
Fluorene	0.0490	<0.049		ug/L		95	50 - 150
gamma-Chlordane	0.0245	0.0325	J	ug/L		133	50 - 150
Heptachlor	0.0392	0.0408		ug/L		104	50 - 150
Heptachlor epoxide (isomer B)	0.0490	0.0564		ug/L		115	50 - 150
Hexachlorobenzene	0.0490	0.0413	J	ug/L		84	50 - 150
Hexachlorocyclopentadiene	0.0490	0.0439	J	ug/L		90	50 - 150
Indeno[1,2,3-cd]pyrene	0.0490	0.0441	J	ug/L		90	50 - 150
Isophorone	0.0979	0.0912	J	ug/L		93	50 - 150
Lindane	0.0392	0.0381	J	ug/L		97	50 - 150
Malathion	0.0979	0.0992		ug/L		101	50 - 150
Methoxychlor	0.0979	0.103		ug/L		106	50 - 150
Metolachlor	0.0490	0.0541		ug/L		110	50 - 150
Molinate	0.0979	0.0983		ug/L		100	50 - 150
Naphthalene	0.0979	0.112	J	ug/L		114	50 - 150
Parathion	0.0979	0.127		ug/L		130	50 - 150
Pendimethalin (Penoxaline)	0.0979	0.106		ug/L		108	50 - 150
Phenanthrene	0.0196	0.0216	J	ug/L		110	50 - 150
Propachlor	0.0490	0.0487	J	ug/L		99	50 - 150
Pyrene	0.0490	0.0498		ug/L		102	50 - 150
Simazine	0.0490	0.0523		ug/L		107	50 - 150
Terbacil	0.0979	0.111		ug/L		113	50 - 150
Terbuthylazine	0.0979	0.0970	J	ug/L		99	50 - 150
Thiobencarb	0.0979	0.108	J	ug/L		111	50 - 150
trans-Nonachlor	0.0245	0.0284	J	ug/L		116	50 - 150
Trifluralin	0.0979	0.0754	J	ug/L		77	50 - 150

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

Surrogate	MRL %Recovery	MRL Qualifier	Limits
2-Nitro-m-xylene	96		70 - 130
Perylene-d12	98		70 - 130
Triphenylphosphate	116		70 - 130

Lab Sample ID: 380-67495-J-1-A MS
Matrix: Drinking Water
Analysis Batch: 60590

Client Sample ID: 380-67495-J-1-A MS
Prep Type: Total/NA
Prep Batch: 60329

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	<0.099		1.97	1.99		ug/L		101	70 - 130
2,4'-DDD	<0.099		1.97	2.08		ug/L		106	70 - 130
2,4'-DDE	<0.099		1.97	1.98		ug/L		100	70 - 130
2,4'-DDT	<0.099		1.97	2.01		ug/L		102	70 - 130
2,4-Dinitrotoluene	<0.099		1.97	2.00		ug/L		102	70 - 130
2,6-Dinitrotoluene	<0.099		1.97	1.87		ug/L		95	70 - 130
2-Methylnaphthalene	<0.099		1.97	2.09		ug/L		106	70 - 130
4,4'-DDD	<0.099		1.97	2.04		ug/L		104	70 - 130
4,4'-DDE	<0.099		1.97	2.08		ug/L		106	70 - 130
4,4'-DDT	<0.099		1.97	1.86		ug/L		95	70 - 130
Acenaphthene	<0.099		1.97	1.85		ug/L		94	70 - 130
Acenaphthylene	<0.099		1.97	1.91		ug/L		97	70 - 130
Acetochlor	<0.099		1.97	2.11		ug/L		107	70 - 130
Alachlor	<0.049		1.97	2.19		ug/L		111	70 - 130
alpha-BHC	<0.099		1.97	2.03		ug/L		103	70 - 130
alpha-Chlordane	<0.049		1.97	2.48		ug/L		126	70 - 130
Anthracene	<0.020		1.97	2.03		ug/L		103	70 - 130
Atrazine	<0.049		1.97	2.32		ug/L		118	70 - 130
Benz(a)anthracene	<0.049		1.97	2.01		ug/L		102	70 - 130
Benzo[a]pyrene	<0.020		1.97	2.00		ug/L		102	70 - 130
Benzo[b]fluoranthene	<0.020		1.97	2.01		ug/L		102	70 - 130
Benzo[g,h,i]perylene	<0.049		1.97	2.09		ug/L		106	70 - 130
Benzo[k]fluoranthene	<0.020		1.97	2.02		ug/L		103	70 - 130
beta-BHC	<0.099		1.97	2.07		ug/L		105	70 - 130
Bis(2-ethylhexyl) phthalate	1.9	*+ B ^3+ *1	1.97	3.64		ug/L		86	70 - 130
Bromacil	<0.099		1.97	2.56		ug/L		130	70 - 130
Butachlor	<0.049		1.97	2.42		ug/L		123	70 - 130
Butylbenzylphthalate	<0.49		1.97	2.30		ug/L		117	70 - 130
Chlorobenzilate	<0.099		1.97	2.40		ug/L		122	70 - 130
Chloroneb	<0.099		1.97	2.04		ug/L		104	70 - 130
Chlorothalonil (Draconil, Bravo)	<0.099		1.97	2.17		ug/L		110	70 - 130
Chlorpyrifos	<0.049		1.97	2.24		ug/L		114	70 - 130
Chrysene	<0.020		1.97	1.98		ug/L		100	70 - 130
delta-BHC	<0.099		1.97	1.99		ug/L		101	70 - 130
Di(2-ethylhexyl)adipate	<0.59		1.97	2.30		ug/L		117	70 - 130
Dibenz(a,h)anthracene	<0.049		1.97	2.12		ug/L		107	70 - 130
Diclorvos (DDVP)	<0.049		1.97	2.16		ug/L		110	70 - 130
Dieldrin	<0.20		1.97	2.07		ug/L		105	70 - 130
Diethylphthalate	<0.49		1.97	2.05		ug/L		101	70 - 130
Dimethylphthalate	<0.49		1.97	2.05		ug/L		104	70 - 130
Di-n-butyl phthalate	<0.99		3.94	4.37		ug/L		108	70 - 130
Di-n-octyl phthalate	<0.099		1.97	1.76		ug/L		89	70 - 130

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

Lab Sample ID: 380-67495-J-1-A MS
Matrix: Drinking Water
Analysis Batch: 60590

Client Sample ID: 380-67495-J-1-A MS
Prep Type: Total/NA
Prep Batch: 60329

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Endosulfan I (Alpha)	<0.099		1.97	2.04		ug/L		104	70 - 130
Endosulfan II (Beta)	<0.099		1.97	2.24		ug/L		114	70 - 130
Endosulfan sulfate	<0.099		1.97	2.24		ug/L		114	70 - 130
Endrin	<0.099		1.97	2.10		ug/L		107	70 - 130
Endrin aldehyde	<0.099		1.97	2.10		ug/L		106	70 - 130
EPTC	<0.099		1.97	2.25		ug/L		114	70 - 130
Fluoranthene	<0.099		1.97	2.18		ug/L		111	70 - 130
Fluorene	<0.049		1.97	2.07		ug/L		105	70 - 130
gamma-Chlordane	<0.049		1.97	2.42		ug/L		123	70 - 130
Heptachlor	<0.040		1.97	2.13		ug/L		108	70 - 130
Heptachlor epoxide (isomer B)	<0.049	*+ F1	1.97	2.67	F1	ug/L		136	70 - 130
Hexachlorobenzene	<0.049		1.97	2.21		ug/L		112	70 - 130
Hexachlorocyclopentadiene	<0.049		1.97	1.94		ug/L		98	70 - 130
Indeno[1,2,3-cd]pyrene	<0.049		1.97	2.10		ug/L		106	70 - 130
Isophorone	<0.49		1.97	1.86		ug/L		94	70 - 130
Lindane	<0.040		1.97	2.09		ug/L		106	70 - 130
Malathion	<0.099		1.97	2.47		ug/L		125	70 - 130
Methoxychlor	<0.099		1.97	2.03		ug/L		103	70 - 130
Metolachlor	<0.049		1.97	2.15		ug/L		109	70 - 130
Molinate	<0.099		1.97	2.16		ug/L		110	70 - 130
Naphthalene	<0.30		1.97	1.90		ug/L		96	70 - 130
Parathion	<0.099		1.97	2.08		ug/L		106	70 - 130
Pendimethalin (Penoxaline)	<0.099		1.97	2.11		ug/L		107	70 - 130
Phenanthrene	<0.040		1.97	2.01		ug/L		102	70 - 130
Propachlor	<0.049		1.97	2.16		ug/L		110	70 - 130
Pyrene	<0.049		1.97	2.13		ug/L		108	70 - 130
Simazine	<0.049		1.97	2.34		ug/L		119	70 - 130
Terbacil	<0.099		1.97	2.23		ug/L		113	70 - 130
Terbuthylazine	<0.099		1.97	2.19		ug/L		111	70 - 130
Thiobencarb	<0.20		1.97	2.14		ug/L		108	70 - 130
trans-Nonachlor	<0.049		1.97	2.09		ug/L		106	70 - 130
Trifluralin	<0.099		1.97	2.35		ug/L		119	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Nitro-m-xylene	*96*		*70 - 130*
Perylene-d12	*104*		*70 - 130*
Triphenylphosphate	*119*		*70 - 130*

Lab Sample ID: 380-67591-T-1-A DU
Matrix: Water
Analysis Batch: 60590

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 60329

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

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

Lab Sample ID: 380-67591-T-1-A DU
Matrix: Water
Analysis Batch: 60590

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 60329

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
2,6-Dinitrotoluene	<0.098			<0.098		ug/L				NC	20
2-Methylnaphthalene	<0.098			<0.098		ug/L				NC	20
4,4'-DDD	<0.098			<0.098		ug/L				NC	20
4,4'-DDE	<0.098			<0.098		ug/L				NC	20
4,4'-DDT	<0.098			<0.098		ug/L				NC	20
Acenaphthene	<0.098			<0.098		ug/L				NC	20
Acenaphthylene	<0.098			<0.098		ug/L				NC	20
Acetochlor	<0.098			<0.098		ug/L				NC	20
Alachlor	<0.049			<0.049		ug/L				NC	20
alpha-BHC	<0.098			<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	<0.098			<0.098		ug/L				NC	20
Bis(2-ethylhexyl) phthalate	1.2	*+ B ^3+ *1		0.778	*+ F5 B *1	ug/L				46	20
Bromacil	<0.098			<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	<0.098			<0.098		ug/L				NC	20
Chloroneb	<0.098			<0.098		ug/L				NC	20
Chlorothalonil (Draconil, Bravo)	<0.098			<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	<0.098			<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			<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	<0.98			<0.98		ug/L				NC	20
Di-n-octyl phthalate	<0.098			<0.098		ug/L				NC	20
Endosulfan I (Alpha)	<0.098			<0.098		ug/L				NC	20
Endosulfan II (Beta)	<0.098			<0.098		ug/L				NC	20
Endosulfan sulfate	<0.098			<0.098		ug/L				NC	20
Endrin	<0.098			<0.098		ug/L				NC	20
Endrin aldehyde	<0.098			<0.098		ug/L				NC	20
EPTC	<0.098			<0.098		ug/L				NC	20
Fluoranthene	<0.098			<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	<0.039			<0.039		ug/L				NC	20
Heptachlor epoxide (isomer B)	<0.049	*+		<0.049	*+	ug/L				NC	20

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

Lab Sample ID: 380-67591-T-1-A DU
Matrix: Water
Analysis Batch: 60590

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 60329

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
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	<0.039			<0.039		ug/L				NC	20
Malathion	<0.098			<0.098		ug/L				NC	20
Methoxychlor	<0.098			<0.098		ug/L				NC	20
Metolachlor	<0.049			<0.049		ug/L				NC	20
Molinate	<0.098			<0.098		ug/L				NC	20
Naphthalene	<0.29			<0.29		ug/L				NC	20
Parathion	<0.098			<0.098		ug/L				NC	20
Pendimethalin (Penoxaline)	<0.098			<0.098		ug/L				NC	20
Phenanthrene	<0.039			<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	<0.098			<0.098		ug/L				NC	20
Terbuthylazine	<0.098			<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	<0.098			<0.098		ug/L				NC	20

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
2-Nitro-m-xylene	*98*		*70 - 130*
Perylene-d12	*96*		*70 - 130*
Triphenylphosphate	*126*		*70 - 130*

Lab Sample ID: MB 380-61104/21-A
Matrix: Water
Analysis Batch: 61305

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 61104

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.098		0.098		ug/L		10/25/23 20:38	10/27/23 09:33	1
2,4'-DDD	<0.098		0.098		ug/L		10/25/23 20:38	10/27/23 09:33	1
2,4'-DDE	<0.098		0.098		ug/L		10/25/23 20:38	10/27/23 09:33	1
2,4'-DDT	<0.098		0.098		ug/L		10/25/23 20:38	10/27/23 09:33	1
2,4-Dinitrotoluene	<0.098		0.098		ug/L		10/25/23 20:38	10/27/23 09:33	1
2,6-Dinitrotoluene	<0.098		0.098		ug/L		10/25/23 20:38	10/27/23 09:33	1
2-Methylnaphthalene	<0.098		0.098		ug/L		10/25/23 20:38	10/27/23 09:33	1
4,4'-DDD	<0.098		0.098		ug/L		10/25/23 20:38	10/27/23 09:33	1
4,4'-DDE	<0.098		0.098		ug/L		10/25/23 20:38	10/27/23 09:33	1
4,4'-DDT	<0.098		0.098		ug/L		10/25/23 20:38	10/27/23 09:33	1
Acenaphthene	<0.098		0.098		ug/L		10/25/23 20:38	10/27/23 09:33	1
Acenaphthylene	<0.098		0.098		ug/L		10/25/23 20:38	10/27/23 09:33	1
Acetochlor	<0.098		0.098		ug/L		10/25/23 20:38	10/27/23 09:33	1
Alachlor	<0.049		0.049		ug/L		10/25/23 20:38	10/27/23 09:33	1
alpha-BHC	<0.098		0.098		ug/L		10/25/23 20:38	10/27/23 09:33	1

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

Lab Sample ID: MB 380-61104/21-A
Matrix: Water
Analysis Batch: 61305

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 61104

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
alpha-Chlordane	<0.049		0.049		ug/L		10/25/23 20:38	10/27/23 09:33	1
Anthracene	<0.020		0.020		ug/L		10/25/23 20:38	10/27/23 09:33	1
Atrazine	<0.049		0.049		ug/L		10/25/23 20:38	10/27/23 09:33	1
Benz(a)anthracene	<0.049		0.049		ug/L		10/25/23 20:38	10/27/23 09:33	1
Benzo[a]pyrene	<0.020		0.020		ug/L		10/25/23 20:38	10/27/23 09:33	1
Benzo[b]fluoranthene	<0.020		0.020		ug/L		10/25/23 20:38	10/27/23 09:33	1
Benzo[g,h,i]perylene	<0.049		0.049		ug/L		10/25/23 20:38	10/27/23 09:33	1
Benzo[k]fluoranthene	<0.020		0.020		ug/L		10/25/23 20:38	10/27/23 09:33	1
beta-BHC	<0.098		0.098		ug/L		10/25/23 20:38	10/27/23 09:33	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59		ug/L		10/25/23 20:38	10/27/23 09:33	1
Bromacil	<0.098		0.098		ug/L		10/25/23 20:38	10/27/23 09:33	1
Butachlor	<0.049		0.049		ug/L		10/25/23 20:38	10/27/23 09:33	1
Butylbenzylphthalate	<0.49		0.49		ug/L		10/25/23 20:38	10/27/23 09:33	1
Chlorobenzilate	<0.098		0.098		ug/L		10/25/23 20:38	10/27/23 09:33	1
Chloroneb	<0.098		0.098		ug/L		10/25/23 20:38	10/27/23 09:33	1
Chlorothalonil (Draconil, Bravo)	<0.098		0.098		ug/L		10/25/23 20:38	10/27/23 09:33	1
Chlorpyrifos	<0.049		0.049		ug/L		10/25/23 20:38	10/27/23 09:33	1
Chrysene	<0.020		0.020		ug/L		10/25/23 20:38	10/27/23 09:33	1
delta-BHC	<0.098		0.098		ug/L		10/25/23 20:38	10/27/23 09:33	1
Di(2-ethylhexyl)adipate	<0.59		0.59		ug/L		10/25/23 20:38	10/27/23 09:33	1
Dibenz(a,h)anthracene	<0.049		0.049		ug/L		10/25/23 20:38	10/27/23 09:33	1
Diclorvos (DDVP)	<0.049		0.049		ug/L		10/25/23 20:38	10/27/23 09:33	1
Dieldrin	<0.20		0.20		ug/L		10/25/23 20:38	10/27/23 09:33	1
Diethylphthalate	<0.49		0.49		ug/L		10/25/23 20:38	10/27/23 09:33	1
Dimethylphthalate	<0.49		0.49		ug/L		10/25/23 20:38	10/27/23 09:33	1
Di-n-butyl phthalate	<0.98		0.98		ug/L		10/25/23 20:38	10/27/23 09:33	1
Di-n-octyl phthalate	<0.098		0.098		ug/L		10/25/23 20:38	10/27/23 09:33	1
Endosulfan I (Alpha)	<0.098		0.098		ug/L		10/25/23 20:38	10/27/23 09:33	1
Endosulfan II (Beta)	<0.098		0.098		ug/L		10/25/23 20:38	10/27/23 09:33	1
Endosulfan sulfate	<0.098		0.098		ug/L		10/25/23 20:38	10/27/23 09:33	1
Endrin	<0.098		0.098		ug/L		10/25/23 20:38	10/27/23 09:33	1
Endrin aldehyde	<0.098		0.098		ug/L		10/25/23 20:38	10/27/23 09:33	1
EPTC	<0.098		0.098		ug/L		10/25/23 20:38	10/27/23 09:33	1
Fluoranthene	<0.098		0.098		ug/L		10/25/23 20:38	10/27/23 09:33	1
Fluorene	<0.049		0.049		ug/L		10/25/23 20:38	10/27/23 09:33	1
gamma-Chlordane	<0.049		0.049		ug/L		10/25/23 20:38	10/27/23 09:33	1
Heptachlor	<0.039		0.039		ug/L		10/25/23 20:38	10/27/23 09:33	1
Heptachlor epoxide (isomer B)	<0.049		0.049		ug/L		10/25/23 20:38	10/27/23 09:33	1
Hexachlorobenzene	<0.049		0.049		ug/L		10/25/23 20:38	10/27/23 09:33	1
Hexachlorocyclopentadiene	<0.049		0.049		ug/L		10/25/23 20:38	10/27/23 09:33	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049		ug/L		10/25/23 20:38	10/27/23 09:33	1
Isophorone	<0.49		0.49		ug/L		10/25/23 20:38	10/27/23 09:33	1
Lindane	<0.039		0.039		ug/L		10/25/23 20:38	10/27/23 09:33	1
Malathion	<0.098		0.098		ug/L		10/25/23 20:38	10/27/23 09:33	1
Methoxychlor	<0.098		0.098		ug/L		10/25/23 20:38	10/27/23 09:33	1
Metolachlor	<0.049		0.049		ug/L		10/25/23 20:38	10/27/23 09:33	1
Molinate	<0.098		0.098		ug/L		10/25/23 20:38	10/27/23 09:33	1
Naphthalene	<0.29		0.29		ug/L		10/25/23 20:38	10/27/23 09:33	1
Parathion	<0.098		0.098		ug/L		10/25/23 20:38	10/27/23 09:33	1

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

Lab Sample ID: MB 380-61104/21-A
Matrix: Water
Analysis Batch: 61305

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 61104

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Pendimethalin (Penoxaline)	<0.098		0.098		ug/L		10/25/23 20:38	10/27/23 09:33	1
Phenanthrene	<0.039		0.039		ug/L		10/25/23 20:38	10/27/23 09:33	1
Propachlor	<0.049		0.049		ug/L		10/25/23 20:38	10/27/23 09:33	1
Pyrene	<0.049		0.049		ug/L		10/25/23 20:38	10/27/23 09:33	1
Simazine	<0.049		0.049		ug/L		10/25/23 20:38	10/27/23 09:33	1
Terbacil	<0.098		0.098		ug/L		10/25/23 20:38	10/27/23 09:33	1
Terbuthylazine	<0.098		0.098		ug/L		10/25/23 20:38	10/27/23 09:33	1
Thiobencarb	<0.20		0.20		ug/L		10/25/23 20:38	10/27/23 09:33	1
Total Permethrin (mixed isomers)	<0.20		0.20		ug/L		10/25/23 20:38	10/27/23 09:33	1
trans-Nonachlor	<0.049		0.049		ug/L		10/25/23 20:38	10/27/23 09:33	1
Trifluralin	<0.098		0.098		ug/L		10/25/23 20:38	10/27/23 09:33	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Cyclohexane, 1-methyl-2-propyl-	*0.673*	*T J N*	*ug/L*		*2.30*	*4291-79-6*	*10/25/23 20:38*	*10/27/23 09:33*	*1*
Undecane	*0.531*	*T J N*	*ug/L*		*2.73*	*1120-21-4*	*10/25/23 20:38*	*10/27/23 09:33*	*1*
n-Hexadecanoic acid	*0.646*	*T J N*	*ug/L*		*5.88*	*57-10-3*	*10/25/23 20:38*	*10/27/23 09:33*	*1*
1,3-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	*0.977*	*T J N*	*ug/L*		*10.01*	*137-89-3*	*10/25/23 20:38*	*10/27/23 09:33*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Nitro-m-xylene	*98*		*70 - 130*	*10/25/23 20:38*	*10/27/23 09:33*	*1*
Perylene-d12	*99*		*70 - 130*	*10/25/23 20:38*	*10/27/23 09:33*	*1*
Triphenylphosphate	*108*		*70 - 130*	*10/25/23 20:38*	*10/27/23 09:33*	*1*

Lab Sample ID: LCS 380-61104/23-A
Matrix: Water
Analysis Batch: 61305

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 61104

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	1.97	2.02		ug/L		103	70 - 130
2,4'-DDD	1.97	2.00		ug/L		101	70 - 130
2,4'-DDE	1.97	1.97		ug/L		100	70 - 130
2,4'-DDT	1.97	1.98		ug/L		100	70 - 130
2,4-Dinitrotoluene	1.97	1.99		ug/L		101	70 - 130
2,6-Dinitrotoluene	1.97	1.86		ug/L		94	70 - 130
2-Methylnaphthalene	1.97	2.11		ug/L		107	70 - 130
4,4'-DDD	1.97	1.97		ug/L		100	70 - 130
4,4'-DDE	1.97	2.06		ug/L		105	70 - 130
4,4'-DDT	1.97	1.86		ug/L		94	70 - 130
Acenaphthene	1.97	1.90		ug/L		96	70 - 130
Acenaphthylene	1.97	1.92		ug/L		97	70 - 130
Acetochlor	1.97	2.00		ug/L		101	70 - 130
Alachlor	1.97	2.14		ug/L		108	70 - 130
alpha-BHC	1.97	2.07		ug/L		105	70 - 130
alpha-Chlordane	1.97	2.37		ug/L		120	70 - 130
Anthracene	1.97	2.10		ug/L		106	70 - 130
Atrazine	1.97	2.31		ug/L		117	70 - 130
Benz(a)anthracene	1.97	1.94		ug/L		98	70 - 130

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

Lab Sample ID: LCS 380-61104/23-A
Matrix: Water
Analysis Batch: 61305

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 61104

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzo[a]pyrene	1.97	1.96		ug/L		99	70 - 130
Benzo[b]fluoranthene	1.97	1.95		ug/L		99	70 - 130
Benzo[g,h,i]perylene	1.97	2.16		ug/L		109	70 - 130
Benzo[k]fluoranthene	1.97	1.93		ug/L		98	70 - 130
beta-BHC	1.97	2.04		ug/L		103	70 - 130
Bis(2-ethylhexyl) phthalate	1.97	2.07		ug/L		105	70 - 130
Bromacil	1.97	2.34		ug/L		119	70 - 130
Butachlor	1.97	2.28		ug/L		116	70 - 130
Butylbenzylphthalate	1.97	2.16		ug/L		110	70 - 130
Chlorobenzilate	1.97	2.15		ug/L		109	70 - 130
Chloroneb	1.97	2.06		ug/L		104	70 - 130
Chlorothalonil (Draconil, Bravo)	1.97	2.24		ug/L		114	70 - 130
Chlorpyrifos	1.97	2.17		ug/L		110	70 - 130
Chrysene	1.97	2.04		ug/L		103	70 - 130
delta-BHC	1.97	2.02		ug/L		103	70 - 130
Di(2-ethylhexyl)adipate	1.97	2.12		ug/L		107	70 - 130
Dibenz(a,h)anthracene	1.97	2.14		ug/L		108	70 - 130
Diclorvos (DDVP)	1.97	2.17		ug/L		110	70 - 130
Dieldrin	1.97	1.99		ug/L		101	70 - 130
Diethylphthalate	1.97	2.04		ug/L		103	70 - 130
Dimethylphthalate	1.97	2.03		ug/L		103	70 - 130
Di-n-butyl phthalate	3.95	4.23		ug/L		107	70 - 130
Di-n-octyl phthalate	1.97	1.62		ug/L		82	70 - 130
Endosulfan I (Alpha)	1.97	1.99		ug/L		101	70 - 130
Endosulfan II (Beta)	1.97	2.09		ug/L		106	70 - 130
Endosulfan sulfate	1.97	2.07		ug/L		105	70 - 130
Endrin	1.97	2.04		ug/L		103	70 - 130
Endrin aldehyde	1.97	1.90		ug/L		96	70 - 130
EPTC	1.97	2.25		ug/L		114	70 - 130
Fluoranthene	1.97	2.17		ug/L		110	70 - 130
Fluorene	1.97	2.10		ug/L		106	70 - 130
gamma-Chlordane	1.97	2.31		ug/L		117	70 - 130
Heptachlor	1.97	2.11		ug/L		107	70 - 130
Heptachlor epoxide (isomer B)	1.97	2.55		ug/L		129	70 - 130
Hexachlorobenzene	1.97	2.24		ug/L		113	70 - 130
Hexachlorocyclopentadiene	1.97	2.12		ug/L		107	70 - 130
Indeno[1,2,3-cd]pyrene	1.97	2.13		ug/L		108	70 - 130
Isophorone	1.97	1.84		ug/L		93	70 - 130
Lindane	1.97	2.10		ug/L		106	70 - 130
Malathion	1.97	2.39		ug/L		121	70 - 130
Methoxychlor	1.97	2.05		ug/L		104	70 - 130
Metolachlor	1.97	2.10		ug/L		106	70 - 130
Molinate	1.97	2.16		ug/L		110	70 - 130
Naphthalene	1.97	1.96		ug/L		99	70 - 130
Parathion	1.97	2.01		ug/L		102	70 - 130
Pendimethalin (Penoxaline)	1.97	2.01		ug/L		102	70 - 130
Phenanthrene	1.97	2.05		ug/L		104	70 - 130
Propachlor	1.97	2.15		ug/L		109	70 - 130
Pyrene	1.97	2.13		ug/L		108	70 - 130

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

Lab Sample ID: LCS 380-61104/23-A
Matrix: Water
Analysis Batch: 61305

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 61104

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Simazine			1.97	2.32		ug/L		118	70 - 130		
Terbacil			1.97	2.10		ug/L		106	70 - 130		
Terbuthylazine			1.97	2.17		ug/L		110	70 - 130		
Thiobencarb			1.97	2.06		ug/L		104	70 - 130		
trans-Nonachlor			1.97	1.99		ug/L		101	70 - 130		
Trifluralin			1.97	2.37		ug/L		120	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Nitro-m-xylene	*97*		*70 - 130*
Perylene-d12	*104*		*70 - 130*
Triphenylphosphate	*112*		*70 - 130*

Lab Sample ID: LCSD 380-61104/24-A
Matrix: Water
Analysis Batch: 61305

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 61104

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene			1.97	2.02		ug/L		103	70 - 130	0	20
2,4'-DDD			1.97	2.02		ug/L		103	70 - 130	1	20
2,4'-DDE			1.97	2.01		ug/L		102	70 - 130	2	20
2,4'-DDT			1.97	2.00		ug/L		102	70 - 130	1	20
2,4-Dinitrotoluene			1.97	2.05		ug/L		104	70 - 130	3	20
2,6-Dinitrotoluene			1.97	1.92		ug/L		98	70 - 130	4	20
2-Methylnaphthalene			1.97	2.13		ug/L		108	70 - 130	1	20
4,4'-DDD			1.97	1.97		ug/L		100	70 - 130	0	20
4,4'-DDE			1.97	2.06		ug/L		105	70 - 130	0	20
4,4'-DDT			1.97	1.87		ug/L		95	70 - 130	1	20
Acenaphthene			1.97	1.86		ug/L		95	70 - 130	2	20
Acenaphthylene			1.97	1.89		ug/L		96	70 - 130	1	20
Acetochlor			1.97	2.08		ug/L		106	70 - 130	4	20
Alachlor			1.97	2.17		ug/L		110	70 - 130	1	20
alpha-BHC			1.97	2.03		ug/L		103	70 - 130	2	20
alpha-Chlordane			1.97	2.32		ug/L		118	70 - 130	2	20
Anthracene			1.97	2.08		ug/L		106	70 - 130	1	20
Atrazine			1.97	2.30		ug/L		117	70 - 130	1	20
Benz(a)anthracene			1.97	1.96		ug/L		100	70 - 130	1	20
Benzo[a]pyrene			1.97	2.01		ug/L		102	70 - 130	2	20
Benzo[b]fluoranthene			1.97	1.95		ug/L		99	70 - 130	0	20
Benzo[g,h,i]perylene			1.97	2.12		ug/L		108	70 - 130	2	20
Benzo[k]fluoranthene			1.97	2.00		ug/L		101	70 - 130	3	20
beta-BHC			1.97	2.01		ug/L		102	70 - 130	1	20
Bis(2-ethylhexyl) phthalate			1.97	2.09		ug/L		106	70 - 130	1	20
Bromacil			1.97	2.42		ug/L		123	70 - 130	3	20
Butachlor			1.97	2.27		ug/L		115	70 - 130	0	20
Butylbenzylphthalate			1.97	2.17		ug/L		110	70 - 130	0	20
Chlorobenzilate			1.97	2.13		ug/L		108	70 - 130	1	20
Chloroneb			1.97	2.03		ug/L		103	70 - 130	1	20
Chlorothalonil (Draconil, Bravo)			1.97	2.24		ug/L		114	70 - 130	0	20

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

Lab Sample ID: LCSD 380-61104/24-A
Matrix: Water
Analysis Batch: 61305

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 61104

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chlorpyrifos			1.97	2.17		ug/L		110	70 - 130	0	20
Chrysene			1.97	1.94		ug/L		98	70 - 130	5	20
delta-BHC			1.97	1.99		ug/L		101	70 - 130	2	20
Di(2-ethylhexyl)adipate			1.97	2.11		ug/L		107	70 - 130	0	20
Dibenz(a,h)anthracene			1.97	2.04		ug/L		104	70 - 130	5	20
Diclorvos (DDVP)			1.97	2.22		ug/L		113	70 - 130	3	20
Dieldrin			1.97	2.00		ug/L		102	70 - 130	1	20
Diethylphthalate			1.97	2.08		ug/L		106	70 - 130	2	20
Dimethylphthalate			1.97	2.01		ug/L		102	70 - 130	1	20
Di-n-butyl phthalate			3.94	4.22		ug/L		107	70 - 130	0	20
Di-n-octyl phthalate			1.97	1.60		ug/L		81	70 - 130	1	20
Endosulfan I (Alpha)			1.97	1.96		ug/L		100	70 - 130	2	20
Endosulfan II (Beta)			1.97	2.07		ug/L		105	70 - 130	1	20
Endosulfan sulfate			1.97	2.16		ug/L		110	70 - 130	4	20
Endrin			1.97	2.11		ug/L		107	70 - 130	3	20
Endrin aldehyde			1.97	2.06		ug/L		105	70 - 130	8	20
EPTC			1.97	2.22		ug/L		113	70 - 130	1	20
Fluoranthene			1.97	2.14		ug/L		109	70 - 130	1	20
Fluorene			1.97	2.10		ug/L		107	70 - 130	0	20
gamma-Chlordane			1.97	2.31		ug/L		117	70 - 130	0	20
Heptachlor			1.97	2.12		ug/L		108	70 - 130	1	20
Heptachlor epoxide (isomer B)			1.97	2.53		ug/L		129	70 - 130	0	20
Hexachlorobenzene			1.97	2.23		ug/L		113	70 - 130	0	20
Hexachlorocyclopentadiene			1.97	2.12		ug/L		108	70 - 130	0	20
Indeno[1,2,3-cd]pyrene			1.97	2.08		ug/L		106	70 - 130	2	20
Isophorone			1.97	1.84		ug/L		94	70 - 130	0	20
Lindane			1.97	2.07		ug/L		105	70 - 130	1	20
Malathion			1.97	2.39		ug/L		122	70 - 130	0	20
Methoxychlor			1.97	2.03		ug/L		103	70 - 130	1	20
Metolachlor			1.97	2.12		ug/L		108	70 - 130	1	20
Molinate			1.97	2.14		ug/L		109	70 - 130	1	20
Naphthalene			1.97	1.92		ug/L		97	70 - 130	2	20
Parathion			1.97	2.02		ug/L		103	70 - 130	0	20
Pendimethalin (Penoxaline)			1.97	2.09		ug/L		106	70 - 130	4	20
Phenanthrene			1.97	2.04		ug/L		104	70 - 130	0	20
Propachlor			1.97	2.17		ug/L		110	70 - 130	1	20
Pyrene			1.97	2.12		ug/L		108	70 - 130	1	20
Simazine			1.97	2.33		ug/L		119	70 - 130	0	20
Terbacil			1.97	2.16		ug/L		110	70 - 130	3	20
Terbuthylazine			1.97	2.18		ug/L		111	70 - 130	0	20
Thiobencarb			1.97	2.06		ug/L		105	70 - 130	0	20
trans-Nonachlor			1.97	2.06		ug/L		105	70 - 130	3	20
Trifluralin			1.97	2.44		ug/L		124	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Nitro-m-xylene	*97*		*70 - 130*
Perylene-d12	*103*		*70 - 130*
Triphenylphosphate	*112*		*70 - 130*

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

Lab Sample ID: MRL 380-61104/22-A
Matrix: Water
Analysis Batch: 61305

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 61104

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	0.0985	0.116		ug/L		118	50 - 150
2,4'-DDD	0.0985	0.130		ug/L		132	50 - 150
2,4'-DDE	0.0985	0.0935	J	ug/L		95	50 - 150
2,4'-DDT	0.0985	0.0848	J	ug/L		86	50 - 150
2,4-Dinitrotoluene	0.0985	0.0698	J	ug/L		71	50 - 150
2,6-Dinitrotoluene	0.0985	0.0754	J	ug/L		77	50 - 150
2-Methylnaphthalene	0.0985	0.114		ug/L		116	50 - 150
4,4'-DDD	0.0985	0.0923	J	ug/L		94	50 - 150
4,4'-DDE	0.0985	0.121		ug/L		123	50 - 150
4,4'-DDT	0.0985	0.112		ug/L		114	50 - 150
Acenaphthene	0.0985	0.0958	J	ug/L		97	50 - 150
Acenaphthylene	0.0985	0.0881	J	ug/L		89	50 - 150
Acetochlor	0.0492	0.0461	J	ug/L		94	50 - 150
Alachlor	0.0492	0.0465	J	ug/L		94	50 - 150
alpha-BHC	0.0985	0.0966	J	ug/L		98	50 - 150
alpha-Chlordane	0.0246	<0.029		ug/L		117	50 - 150
Anthracene	0.0197	0.0202		ug/L		103	50 - 150
Atrazine	0.0492	0.0525		ug/L		107	50 - 150
Benz(a)anthracene	0.0492	0.0408	J	ug/L		83	50 - 150
Benzo[a]pyrene	0.0197	0.0148	J	ug/L		75	50 - 150
Benzo[b]fluoranthene	0.0197	0.0189	J	ug/L		96	50 - 150
Benzo[g,h,i]perylene	0.0492	0.0381	J	ug/L		77	50 - 150
Benzo[k]fluoranthene	0.0197	<0.017		ug/L		84	50 - 150
beta-BHC	0.0985	0.0983		ug/L		100	50 - 150
Bis(2-ethylhexyl) phthalate	0.591	0.765		ug/L		130	50 - 150
Bromacil	0.0985	0.0966	J	ug/L		98	50 - 150
Butachlor	0.0492	0.0516		ug/L		105	50 - 150
Butylbenzylphthalate	0.148	0.152	J	ug/L		103	50 - 150
Chlorobenzilate	0.0985	0.0924	J	ug/L		94	50 - 150
Chloroneb	0.0985	0.0933	J	ug/L		95	50 - 150
Chlorothalonil (Draconil, Bravo)	0.0985	0.150	^3+	ug/L		152	50 - 150
Chlorpyrifos	0.0492	0.0513		ug/L		104	50 - 150
Chrysene	0.0197	0.0215		ug/L		109	50 - 150
delta-BHC	0.0985	0.0917	J	ug/L		93	50 - 150
Di(2-ethylhexyl)adipate	0.295	0.351	J	ug/L		119	50 - 150
Dibenz(a,h)anthracene	0.0492	0.0382	J	ug/L		78	50 - 150
Diclorvos (DDVP)	0.0492	0.0569		ug/L		115	50 - 150
Dieldrin	0.0985	0.0863	J	ug/L		88	50 - 150
Diethylphthalate	0.148	0.225	J ^3+	ug/L		152	50 - 150
Dimethylphthalate	0.295	0.281	J	ug/L		95	50 - 150
Di-n-butyl phthalate	0.295	0.351	J	ug/L		119	49 - 243
Di-n-octyl phthalate	0.0985	0.116		ug/L		118	50 - 150
Endosulfan I (Alpha)	0.0985	0.0925	J	ug/L		94	50 - 150
Endosulfan II (Beta)	0.0985	0.111		ug/L		112	50 - 150
Endosulfan sulfate	0.0985	0.0902	J	ug/L		92	50 - 150
Endrin	0.0985	0.0859	J	ug/L		87	50 - 150
Endrin aldehyde	0.0985	0.143		ug/L		145	50 - 150
EPTC	0.0985	0.113		ug/L		115	50 - 150

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

Lab Sample ID: MRL 380-61104/22-A
Matrix: Water
Analysis Batch: 61305

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 61104

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Fluoranthene	0.0492	0.0519	J	ug/L		105	50 - 150
Fluorene	0.0492	<0.049		ug/L		97	50 - 150
gamma-Chlordane	0.0246	0.0292	J	ug/L		119	50 - 150
Heptachlor	0.0394	0.0523		ug/L		133	50 - 150
Heptachlor epoxide (isomer B)	0.0492	0.0586		ug/L		119	50 - 150
Hexachlorobenzene	0.0492	0.0437	J	ug/L		89	50 - 150
Hexachlorocyclopentadiene	0.0492	0.0464	J	ug/L		94	50 - 150
Indeno[1,2,3-cd]pyrene	0.0492	0.0372	J	ug/L		76	50 - 150
Isophorone	0.0985	0.0934	J	ug/L		95	50 - 150
Lindane	0.0394	0.0398		ug/L		101	50 - 150
Malathion	0.0985	0.0924	J	ug/L		94	50 - 150
Methoxychlor	0.0985	0.104		ug/L		105	50 - 150
Metolachlor	0.0492	0.0498		ug/L		101	50 - 150
Molinate	0.0985	0.107		ug/L		109	50 - 150
Naphthalene	0.0985	0.119	J	ug/L		121	50 - 150
Parathion	0.0985	0.117		ug/L		119	50 - 150
Pendimethalin (Penoxaline)	0.0985	0.0935	J	ug/L		95	50 - 150
Phenanthrene	0.0197	0.0234	J	ug/L		119	50 - 150
Propachlor	0.0492	0.0511		ug/L		104	50 - 150
Pyrene	0.0492	0.0507		ug/L		103	50 - 150
Simazine	0.0492	0.0502		ug/L		102	50 - 150
Terbacil	0.0985	0.111		ug/L		112	50 - 150
Terbuthylazine	0.0985	0.104		ug/L		106	50 - 150
Thiobencarb	0.0985	0.105	J	ug/L		107	50 - 150
trans-Nonachlor	0.0246	0.0266	J	ug/L		108	50 - 150
Trifluralin	0.0985	0.0717	J	ug/L		73	50 - 150

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
2-Nitro-m-xylene	*99*		*70 - 130*
Perylene-d12	*94*		*70 - 130*
Triphenylphosphate	*107*		*70 - 130*

Lab Sample ID: 380-67970-R-1-A MS
Matrix: Water
Analysis Batch: 61305

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 61104

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	<0.099		1.98	2.02		ug/L		102	70 - 130
2,4'-DDD	<0.099		1.98	2.09		ug/L		106	70 - 130
2,4'-DDE	<0.099		1.98	2.05		ug/L		103	70 - 130
2,4'-DDT	<0.099		1.98	2.05		ug/L		104	70 - 130
2,4-Dinitrotoluene	<0.099		1.98	2.15		ug/L		108	70 - 130
2,6-Dinitrotoluene	<0.099		1.98	2.03		ug/L		103	70 - 130
2-Methylnaphthalene	<0.099		1.98	2.13		ug/L		108	70 - 130
4,4'-DDD	<0.099		1.98	2.03		ug/L		102	70 - 130
4,4'-DDE	<0.099		1.98	2.12		ug/L		107	70 - 130
4,4'-DDT	<0.099		1.98	1.93		ug/L		97	70 - 130
Acenaphthene	<0.099		1.98	1.90		ug/L		96	70 - 130

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

Lab Sample ID: 380-67970-R-1-A MS
Matrix: Water
Analysis Batch: 61305

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 61104

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthylene	<0.099		1.98	1.86		ug/L		94	70 - 130
Acetochlor	<0.099		1.98	2.11		ug/L		107	70 - 130
Alachlor	<0.050		1.98	2.19		ug/L		110	70 - 130
alpha-BHC	<0.099		1.98	2.06		ug/L		104	70 - 130
alpha-Chlordane	<0.050		1.98	2.44		ug/L		123	70 - 130
Anthracene	<0.020		1.98	2.08		ug/L		105	70 - 130
Atrazine	<0.050		1.98	2.39		ug/L		121	70 - 130
Benz(a)anthracene	<0.050		1.98	1.99		ug/L		101	70 - 130
Benzo[a]pyrene	<0.020		1.98	1.97		ug/L		100	70 - 130
Benzo[b]fluoranthene	<0.020		1.98	1.91		ug/L		96	70 - 130
Benzo[g,h,i]perylene	<0.050		1.98	2.09		ug/L		105	70 - 130
Benzo[k]fluoranthene	<0.020		1.98	2.08		ug/L		105	70 - 130
beta-BHC	<0.099		1.98	2.02		ug/L		102	70 - 130
Bis(2-ethylhexyl) phthalate	<0.60		1.98	2.13		ug/L		108	70 - 130
Bromacil	<0.099		1.98	2.56		ug/L		129	70 - 130
Butachlor	<0.050		1.98	2.38		ug/L		120	70 - 130
Butylbenzylphthalate	<0.50		1.98	2.24		ug/L		113	70 - 130
Chlorobenzilate	<0.099		1.98	2.24		ug/L		113	70 - 130
Chloroneb	<0.099		1.98	2.11		ug/L		107	70 - 130
Chlorothalonil (Draconil, Bravo)	<0.099	^3+	1.98	2.26		ug/L		114	70 - 130
Chlorpyrifos	<0.050		1.98	2.22		ug/L		112	70 - 130
Chrysene	<0.020		1.98	2.03		ug/L		102	70 - 130
delta-BHC	<0.099		1.98	2.02		ug/L		102	70 - 130
Di(2-ethylhexyl)adipate	<0.60		1.98	2.22		ug/L		112	70 - 130
Dibenz(a,h)anthracene	<0.050		1.98	2.03		ug/L		103	70 - 130
Diclorvos (DDVP)	<0.050		1.98	2.28		ug/L		115	70 - 130
Dieldrin	<0.20		1.98	2.13		ug/L		108	70 - 130
Diethylphthalate	<0.50	^3+	1.98	2.13		ug/L		104	70 - 130
Dimethylphthalate	<0.50		1.98	2.10		ug/L		106	70 - 130
Di-n-butyl phthalate	<0.99		3.96	4.46		ug/L		107	70 - 130
Di-n-octyl phthalate	<0.099		1.98	1.70		ug/L		86	70 - 130
Endosulfan I (Alpha)	<0.099		1.98	2.03		ug/L		103	70 - 130
Endosulfan II (Beta)	<0.099		1.98	2.20		ug/L		111	70 - 130
Endosulfan sulfate	<0.099		1.98	2.23		ug/L		113	70 - 130
Endrin	<0.099		1.98	2.14		ug/L		108	70 - 130
Endrin aldehyde	<0.099		1.98	1.95		ug/L		99	70 - 130
EPTC	<0.099		1.98	2.33		ug/L		118	70 - 130
Fluoranthene	<0.099		1.98	2.19		ug/L		111	70 - 130
Fluorene	<0.050		1.98	2.11		ug/L		106	70 - 130
gamma-Chlordane	<0.050		1.98	2.39		ug/L		121	70 - 130
Heptachlor	<0.040		1.98	2.13		ug/L		108	70 - 130
Heptachlor epoxide (isomer B)	<0.050	F1	1.98	2.62	F1	ug/L		132	70 - 130
Hexachlorobenzene	<0.050		1.98	2.23		ug/L		113	70 - 130
Hexachlorocyclopentadiene	<0.050		1.98	1.99		ug/L		101	70 - 130
Indeno[1,2,3-cd]pyrene	<0.050		1.98	2.11		ug/L		107	70 - 130
Isophorone	<0.50		1.98	1.90		ug/L		96	70 - 130
Lindane	<0.040		1.98	2.10		ug/L		106	70 - 130
Malathion	<0.099		1.98	2.47		ug/L		125	70 - 130
Methoxychlor	<0.099		1.98	2.06		ug/L		104	70 - 130

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

Lab Sample ID: 380-67970-R-1-A MS
Matrix: Water
Analysis Batch: 61305

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 61104

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Metolachlor	<0.050		1.98	2.18		ug/L		110	70 - 130
Molinate	<0.099		1.98	2.24		ug/L		113	70 - 130
Naphthalene	<0.30		1.98	1.94		ug/L		97	70 - 130
Parathion	<0.099		1.98	2.10		ug/L		106	70 - 130
Pendimethalin (Penoxaline)	<0.099		1.98	2.12		ug/L		107	70 - 130
Phenanthrene	<0.040		1.98	2.05		ug/L		103	70 - 130
Propachlor	<0.050		1.98	2.23		ug/L		113	70 - 130
Pyrene	<0.050		1.98	2.17		ug/L		110	70 - 130
Simazine	<0.050		1.98	2.40		ug/L		121	70 - 130
Terbacil	<0.099		1.98	2.25		ug/L		114	70 - 130
Terbuthylazine	<0.099		1.98	2.21		ug/L		112	70 - 130
Thiobencarb	<0.20		1.98	2.14		ug/L		108	70 - 130
trans-Nonachlor	<0.050		1.98	2.07		ug/L		105	70 - 130
Trifluralin	<0.099		1.98	2.49		ug/L		126	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Nitro-m-xylene	*98*		*70 - 130*
Perylene-d12	*103*		*70 - 130*
Triphenylphosphate	*116*		*70 - 130*

Lab Sample ID: 380-67970-R-2-A DU
Matrix: Water
Analysis Batch: 61305

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 61104

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
1-Methylnaphthalene	<0.099		<0.099		ug/L		NC	20
2,4'-DDD	<0.099		<0.099		ug/L		NC	20
2,4'-DDE	<0.099		<0.099		ug/L		NC	20
2,4'-DDT	<0.099		<0.099		ug/L		NC	20
2,4-Dinitrotoluene	<0.099		<0.099		ug/L		NC	20
2,6-Dinitrotoluene	<0.099		<0.099		ug/L		NC	20
2-Methylnaphthalene	<0.099		<0.099		ug/L		NC	20
4,4'-DDD	<0.099		<0.099		ug/L		NC	20
4,4'-DDE	<0.099		<0.099		ug/L		NC	20
4,4'-DDT	<0.099		<0.099		ug/L		NC	20
Acenaphthene	<0.099		<0.099		ug/L		NC	20
Acenaphthylene	<0.099		<0.099		ug/L		NC	20
Acetochlor	<0.099		<0.099		ug/L		NC	20
Alachlor	<0.050		<0.049		ug/L		NC	20
alpha-BHC	<0.099		<0.099		ug/L		NC	20
alpha-Chlordane	<0.050		<0.049		ug/L		NC	20
Anthracene	<0.020		<0.020		ug/L		NC	20
Atrazine	<0.050		<0.049		ug/L		NC	20
Benz(a)anthracene	<0.050		<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	<0.050		<0.049		ug/L		NC	20
Benzo[k]fluoranthene	<0.020		<0.020		ug/L		NC	20

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

Lab Sample ID: 380-67970-R-2-A DU
Matrix: Water
Analysis Batch: 61305

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 61104

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
beta-BHC	<0.099			<0.099		ug/L				NC	20
Bis(2-ethylhexyl) phthalate	<0.59			<0.59		ug/L				NC	20
Bromacil	<0.099			<0.099		ug/L				NC	20
Butachlor	<0.050			<0.049		ug/L				NC	20
Butylbenzylphthalate	<0.50			<0.49		ug/L				NC	20
Chlorobenzilate	<0.099			<0.099		ug/L				NC	20
Chloroneb	<0.099			<0.099		ug/L				NC	20
Chlorothalonil (Draconil, Bravo)	<0.099	^3+		<0.099		ug/L				NC	20
Chlorpyrifos	<0.050			<0.049		ug/L				NC	20
Chrysene	<0.020			<0.020		ug/L				NC	20
delta-BHC	<0.099			<0.099		ug/L				NC	20
Di(2-ethylhexyl)adipate	<0.59			<0.59		ug/L				NC	20
Dibenz(a,h)anthracene	<0.050			<0.049		ug/L				NC	20
Diclorvos (DDVP)	<0.050			<0.049		ug/L				NC	20
Dieldrin	<0.20			<0.20		ug/L				NC	20
Diethylphthalate	<0.50	^3+		<0.49		ug/L				NC	20
Dimethylphthalate	<0.50			<0.49		ug/L				NC	20
Di-n-butyl phthalate	<0.99			<0.99		ug/L				NC	20
Di-n-octyl phthalate	<0.099			<0.099		ug/L				NC	20
Endosulfan I (Alpha)	<0.099			<0.099		ug/L				NC	20
Endosulfan II (Beta)	<0.099			<0.099		ug/L				NC	20
Endosulfan sulfate	<0.099			<0.099		ug/L				NC	20
Endrin	<0.099			<0.099		ug/L				NC	20
Endrin aldehyde	<0.099			<0.099		ug/L				NC	20
EPTC	<0.099			<0.099		ug/L				NC	20
Fluoranthene	<0.099			<0.099		ug/L				NC	20
Fluorene	<0.050			<0.049		ug/L				NC	20
gamma-Chlordane	<0.050			<0.049		ug/L				NC	20
Heptachlor	<0.040			<0.039		ug/L				NC	20
Heptachlor epoxide (isomer B)	<0.050			<0.049		ug/L				NC	20
Hexachlorobenzene	<0.050			<0.049		ug/L				NC	20
Hexachlorocyclopentadiene	<0.050			<0.049		ug/L				NC	20
Indeno[1,2,3-cd]pyrene	<0.050			<0.049		ug/L				NC	20
Isophorone	<0.50			<0.49		ug/L				NC	20
Lindane	<0.040			<0.039		ug/L				NC	20
Malathion	<0.099			<0.099		ug/L				NC	20
Methoxychlor	<0.099			<0.099		ug/L				NC	20
Metolachlor	<0.050			<0.049		ug/L				NC	20
Molinate	<0.099			<0.099		ug/L				NC	20
Naphthalene	<0.30			<0.30		ug/L				NC	20
Parathion	<0.099			<0.099		ug/L				NC	20
Pendimethalin (Penoxaline)	<0.099			<0.099		ug/L				NC	20
Phenanthrene	<0.040			<0.039		ug/L				NC	20
Propachlor	<0.050			<0.049		ug/L				NC	20
Pyrene	<0.050			<0.049		ug/L				NC	20
Simazine	<0.050			<0.049		ug/L				NC	20
Terbacil	<0.099			<0.099		ug/L				NC	20
Terbuthylazine	<0.099			<0.099		ug/L				NC	20
Thiobencarb	<0.20			<0.20		ug/L				NC	20

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

Lab Sample ID: 380-67970-R-2-A DU
Matrix: Water
Analysis Batch: 61305

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 61104

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Permethrin (mixed isomers)	<0.20			<0.20		ug/L				NC	20
trans-Nonachlor	<0.050			<0.049		ug/L				NC	20
Trifluralin	<0.099			<0.099		ug/L				NC	20

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
2-Nitro-m-xylene	*101*		*70 - 130*
Perylene-d12	*107*		*70 - 130*
Triphenylphosphate	*112*		*70 - 130*

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

Lab Sample ID: MBL 380-61859/21-A
Matrix: Water
Analysis Batch: 62223

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 61859

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		11/01/23 12:00	11/02/23 16:49	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<0.30		2.0		ng/L		11/01/23 12:00	11/02/23 16:49	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0		ng/L		11/01/23 12:00	11/02/23 16:49	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<1.0		2.0		ng/L		11/01/23 12:00	11/02/23 16:49	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0		ng/L		11/01/23 12:00	11/02/23 16:49	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0		ng/L		11/01/23 12:00	11/02/23 16:49	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0		ng/L		11/01/23 12:00	11/02/23 16:49	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0		ng/L		11/01/23 12:00	11/02/23 16:49	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0		ng/L		11/01/23 12:00	11/02/23 16:49	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0		ng/L		11/01/23 12:00	11/02/23 16:49	1
Perfluorononanoic acid (PFNA)	<0.40		2.0		ng/L		11/01/23 12:00	11/02/23 16:49	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0		ng/L		11/01/23 12:00	11/02/23 16:49	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0		ng/L		11/01/23 12:00	11/02/23 16:49	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0		ng/L		11/01/23 12:00	11/02/23 16:49	1
Perfluorobutanoic acid (PFBA)	<0.69		2.0		ng/L		11/01/23 12:00	11/02/23 16:49	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.38		2.0		ng/L		11/01/23 12:00	11/02/23 16:49	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.37		2.0		ng/L		11/01/23 12:00	11/02/23 16:49	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<0.48		2.0		ng/L		11/01/23 12:00	11/02/23 16:49	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<0.47		2.0		ng/L		11/01/23 12:00	11/02/23 16:49	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<0.25		2.0		ng/L		11/01/23 12:00	11/02/23 16:49	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.46		2.0		ng/L		11/01/23 12:00	11/02/23 16:49	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.15		2.0		ng/L		11/01/23 12:00	11/02/23 16:49	1
Perfluoropentanoic acid (PFPeA)	<0.38		2.0		ng/L		11/01/23 12:00	11/02/23 16:49	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.36		2.0		ng/L		11/01/23 12:00	11/02/23 16:49	1

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

Lab Sample ID: MBL 380-61859/21-A
Matrix: Water
Analysis Batch: 62223

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 61859

Analyte	MBL Result	MBL Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluoropentanesulfonic acid (PFPeS)	<0.39		2.0		ng/L		11/01/23 12:00	11/02/23 16:49	1

Isotope Dilution	*MBL %Recovery*	*MBL Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*67*		*50 - 200*	*11/01/23 12:00*	*11/02/23 16:49*	*1*
13C6 PFDA	*100*		*50 - 200*	*11/01/23 12:00*	*11/02/23 16:49*	*1*
13C5 PFHxA	*79*		*50 - 200*	*11/01/23 12:00*	*11/02/23 16:49*	*1*
13C4 PFHpA	*86*		*50 - 200*	*11/01/23 12:00*	*11/02/23 16:49*	*1*
13C8 PFOA	*93*		*50 - 200*	*11/01/23 12:00*	*11/02/23 16:49*	*1*
13C9 PFNA	*99*		*50 - 200*	*11/01/23 12:00*	*11/02/23 16:49*	*1*
13C7 PFUnA	*91*		*50 - 200*	*11/01/23 12:00*	*11/02/23 16:49*	*1*
13C2 PFDoA	*93*		*50 - 200*	*11/01/23 12:00*	*11/02/23 16:49*	*1*
13C4 PFBA	*89*		*50 - 200*	*11/01/23 12:00*	*11/02/23 16:49*	*1*
13C5 PFPeA	*92*		*50 - 200*	*11/01/23 12:00*	*11/02/23 16:49*	*1*
13C3 PFBS	*102*		*50 - 200*	*11/01/23 12:00*	*11/02/23 16:49*	*1*
13C3 PFHxS	*102*		*50 - 200*	*11/01/23 12:00*	*11/02/23 16:49*	*1*
13C8 PFOS	*102*		*50 - 200*	*11/01/23 12:00*	*11/02/23 16:49*	*1*
13C2-4:2-FTS	*103*		*50 - 200*	*11/01/23 12:00*	*11/02/23 16:49*	*1*
13C2-6:2-FTS	*132*		*50 - 200*	*11/01/23 12:00*	*11/02/23 16:49*	*1*
13C2-8:2-FTS	*144*		*50 - 200*	*11/01/23 12:00*	*11/02/23 16:49*	*1*

Lab Sample ID: LCS 380-61859/23-A
Matrix: Water
Analysis Batch: 62223

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 61859

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	60.1	50.3		ng/L		84	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	60.1	55.0		ng/L		91	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	60.1	56.6		ng/L		94	70 - 130
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	60.1	50.7		ng/L		84	70 - 130
Perfluorobutanesulfonic acid (PFBS)	60.1	52.6		ng/L		87	70 - 130
Perfluorodecanoic acid (PFDA)	60.1	52.6		ng/L		87	70 - 130
Perfluorododecanoic acid (PFDoA)	60.1	61.0		ng/L		102	70 - 130
Perfluoroheptanoic acid (PFHpA)	60.1	56.5		ng/L		94	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	60.1	52.0		ng/L		86	70 - 130
Perfluorohexanoic acid (PFHxA)	60.1	53.8		ng/L		90	70 - 130
Perfluorononanoic acid (PFNA)	60.1	53.8		ng/L		89	70 - 130
Perfluorooctanesulfonic acid (PFOS)	60.1	56.7		ng/L		94	70 - 130
Perfluorooctanoic acid (PFOA)	60.1	57.4		ng/L		95	70 - 130
Perfluoroundecanoic acid (PFUnA)	60.1	58.2		ng/L		97	70 - 130
Perfluorobutanoic acid (PFBA)	60.1	60.8		ng/L		101	70 - 130

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

Lab Sample ID: LCS 380-61859/23-A
Matrix: Water
Analysis Batch: 62223

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 61859

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)			60.1	56.3		ng/L		94	70 - 130		
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)			60.1	57.4		ng/L		96	70 - 130		
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)			60.1	57.2		ng/L		95	70 - 130		
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)			60.1	54.4		ng/L		90	70 - 130		
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)			60.1	46.5		ng/L		77	70 - 130		
Perfluoro-3-methoxypropanoic acid (PFMPA)			60.1	57.3		ng/L		95	70 - 130		
Perfluoro-4-methoxybutanoic acid (PFMBA)			60.1	50.0		ng/L		83	70 - 130		
Perfluoropentanoic acid (PFPeA)			60.1	52.3		ng/L		87	70 - 130		
Perfluoroheptanesulfonic acid (PFHpS)			60.1	52.1		ng/L		87	70 - 130		
Perfluoropentanesulfonic acid (PFPeS)			60.1	50.7		ng/L		84	70 - 130		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C3 HFPO-DA	*88*		*50 - 200*
13C6 PFDA	*103*		*50 - 200*
13C5 PFHxA	*90*		*50 - 200*
13C4 PFHpA	*96*		*50 - 200*
13C8 PFOA	*99*		*50 - 200*
13C9 PFNA	*103*		*50 - 200*
13C7 PFUnA	*102*		*50 - 200*
13C2 PFDoA	*111*		*50 - 200*
13C4 PFBA	*96*		*50 - 200*
13C5 PFPeA	*97*		*50 - 200*
13C3 PFBS	*107*		*50 - 200*
13C3 PFHxS	*107*		*50 - 200*
13C8 PFOS	*107*		*50 - 200*
13C2-4:2-FTS	*103*		*50 - 200*
13C2-6:2-FTS	*110*		*50 - 200*
13C2-8:2-FTS	*118*		*50 - 200*

Lab Sample ID: LCSD 380-61859/24-A
Matrix: Water
Analysis Batch: 62223

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 61859

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)			60.1	53.2		ng/L		88	70 - 130	6	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)			60.1	56.0		ng/L		93	70 - 130	2	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)			60.1	60.1		ng/L		100	70 - 130	6	30

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

Lab Sample ID: LCSD 380-61859/24-A
Matrix: Water
Analysis Batch: 62223

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 61859

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)			60.1	54.6		ng/L		91	70 - 130	7	30
Perfluorobutanesulfonic acid (PFBS)			60.1	56.6		ng/L		94	70 - 130	7	30
Perfluorodecanoic acid (PFDA)			60.1	55.4		ng/L		92	70 - 130	5	30
Perfluorododecanoic acid (PFDoA)			60.1	61.5		ng/L		102	70 - 130	1	30
Perfluoroheptanoic acid (PFHpA)			60.1	57.7		ng/L		96	70 - 130	2	30
Perfluorohexanesulfonic acid (PFHxS)			60.1	55.4		ng/L		92	70 - 130	6	30
Perfluorohexanoic acid (PFHxA)			60.1	56.4		ng/L		94	70 - 130	5	30
Perfluorononanoic acid (PFNA)			60.1	53.8		ng/L		89	70 - 130	0	30
Perfluorooctanesulfonic acid (PFOS)			60.1	59.5		ng/L		99	70 - 130	5	30
Perfluorooctanoic acid (PFOA)			60.1	59.1		ng/L		98	70 - 130	3	30
Perfluoroundecanoic acid (PFUnA)			60.1	60.2		ng/L		100	70 - 130	3	30
Perfluorobutanoic acid (PFBA)			60.1	62.4		ng/L		104	70 - 130	3	30
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)			60.1	60.5		ng/L		101	70 - 130	7	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)			60.1	58.2		ng/L		97	70 - 130	1	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)			60.1	55.6		ng/L		92	70 - 130	3	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)			60.1	57.1		ng/L		95	70 - 130	5	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)			60.1	48.6		ng/L		81	70 - 130	4	30
Perfluoro-3-methoxypropanoic acid (PFMPA)			60.1	59.2		ng/L		98	70 - 130	3	30
Perfluoro-4-methoxybutanoic acid (PFMBA)			60.1	55.3		ng/L		92	70 - 130	10	30
Perfluoropentanoic acid (PFPeA)			60.1	54.6		ng/L		91	70 - 130	4	30
Perfluoroheptanesulfonic acid (PFHpS)			60.1	54.4		ng/L		91	70 - 130	4	30
Perfluoropentanesulfonic acid (PFPeS)			60.1	53.6		ng/L		89	70 - 130	6	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C3 HFPO-DA	*97*		*50 - 200*
13C6 PFDA	*107*		*50 - 200*
13C5 PFHxA	*101*		*50 - 200*
13C4 PFHpA	*106*		*50 - 200*
13C8 PFOA	*107*		*50 - 200*
13C9 PFNA	*116*		*50 - 200*
13C7 PFUnA	*106*		*50 - 200*
13C2 PFDoA	*112*		*50 - 200*
13C4 PFBA	*107*		*50 - 200*
13C5 PFPeA	*111*		*50 - 200*
13C3 PFBS	*103*		*50 - 200*
13C3 PFHxS	*103*		*50 - 200*
13C8 PFOS	*106*		*50 - 200*

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

Lab Sample ID: LCSD 380-61859/24-A
Matrix: Water
Analysis Batch: 62223

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 61859

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C2-4:2-FTS	*99*		*50 - 200*
13C2-6:2-FTS	*107*		*50 - 200*
13C2-8:2-FTS	*111*		*50 - 200*

Lab Sample ID: MRL 380-61859/22-A
Matrix: Water
Analysis Batch: 62223

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 61859

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2.00	1.65	J	ng/L		82	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	2.00	1.81	J	ng/L		90	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	2.00	1.76	J	ng/L		88	50 - 150
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.00	1.72	J	ng/L		86	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.00	1.69	J	ng/L		84	50 - 150
Perfluorodecanoic acid (PFDA)	2.00	1.65	J	ng/L		82	50 - 150
Perfluorododecanoic acid (PFDoA)	2.00	1.98	J	ng/L		99	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.00	1.97	J	ng/L		98	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.00	1.85	J	ng/L		92	50 - 150
Perfluorohexanoic acid (PFHxA)	2.00	1.81	J	ng/L		90	50 - 150
Perfluorononanoic acid (PFNA)	2.00	1.75	J	ng/L		87	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.00	1.81	J	ng/L		90	50 - 150
Perfluorooctanoic acid (PFOA)	2.00	1.93	J	ng/L		96	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.00	1.81	J	ng/L		90	50 - 150
Perfluorobutanoic acid (PFBA)	2.00	2.09	J	ng/L		104	50 - 150
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	2.00	1.85	J	ng/L		92	50 - 150
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	2.00	1.80	J	ng/L		90	50 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	2.00	1.79	J	ng/L		89	50 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2.00	1.90	J	ng/L		95	50 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	2.00	1.45	J	ng/L		72	50 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.00	1.81	J	ng/L		90	50 - 150
Perfluoro-4-methoxybutanoic acid (PFMBA)	2.00	1.59	J	ng/L		79	50 - 150
Perfluoropentanoic acid (PFPeA)	2.00	1.86	J	ng/L		93	50 - 150
Perfluoroheptanesulfonic acid (PFHpS)	2.00	1.64	J	ng/L		82	50 - 150
Perfluoropentanesulfonic acid (PFPeS)	2.00	1.67	J	ng/L		83	50 - 150

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

Isotope Dilution	MRL %Recovery	MRL Qualifier	Limits
13C3 HFPO-DA	77		50 - 200
13C6 PFDA	108		50 - 200
13C5 PFHxA	94		50 - 200
13C4 PFHpA	100		50 - 200
13C8 PFOA	104		50 - 200
13C9 PFNA	111		50 - 200
13C7 PFUnA	106		50 - 200
13C2 PFDoA	106		50 - 200
13C4 PFBA	98		50 - 200
13C5 PFPeA	100		50 - 200
13C3 PFBS	107		50 - 200
13C3 PFHxS	106		50 - 200
13C8 PFOS	106		50 - 200
13C2-4:2-FTS	114		50 - 200
13C2-6:2-FTS	135		50 - 200
13C2-8:2-FTS	133		50 - 200

Lab Sample ID: 380-67495-N-3-B MS
Matrix: Drinking Water
Analysis Batch: 62223

Client Sample ID: 380-67495-N-3-B MS
Prep Type: Total/NA
Prep Batch: 61859

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		60.2	51.5		ng/L		86	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		60.2	56.0		ng/L		93	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0	*5-	60.2	57.1	*5-	ng/L		95	70 - 130
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0	*5-	60.2	54.9	*5-	ng/L		91	70 - 130
Perfluorobutanesulfonic acid (PFBS)	<2.0		60.2	55.7		ng/L		92	70 - 130
Perfluorodecanoic acid (PFDA)	<2.0	*5-	60.2	54.2	*5-	ng/L		90	70 - 130
Perfluorododecanoic acid (PFDoA)	<2.0	*5-	60.2	68.8		ng/L		114	70 - 130
Perfluoroheptanoic acid (PFHpA)	<2.0	*5-	60.2	62.9	*5-	ng/L		103	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	<2.0		60.2	58.6		ng/L		96	70 - 130
Perfluorohexanoic acid (PFHxA)	<2.0	*5-	60.2	62.1	*5-	ng/L		101	70 - 130
Perfluorononanoic acid (PFNA)	<2.0	*5-	60.2	55.8	*5-	ng/L		93	70 - 130
Perfluorooctanesulfonic acid (PFOS)	<2.0		60.2	60.7		ng/L		101	70 - 130
Perfluorooctanoic acid (PFOA)	<2.0	*5-	60.2	60.8	*5-	ng/L		99	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0	*5-	60.2	59.7	*5-	ng/L		99	70 - 130
Perfluorobutanoic acid (PFBA)	<2.0	*5-	60.2	64.1	*5-	ng/L		106	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		60.2	62.9		ng/L		104	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		60.2	58.2		ng/L		97	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		60.2	58.5		ng/L		97	70 - 130

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

Lab Sample ID: 380-67495-N-3-B MS
Matrix: Drinking Water
Analysis Batch: 62223

Client Sample ID: 380-67495-N-3-B MS
Prep Type: Total/NA
Prep Batch: 61859

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0	*5- F1	60.2	52.8	*5-	ng/L		88	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		60.2	49.8		ng/L		83	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0	*5-	60.2	54.9	*5-	ng/L		91	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0	*5-	60.2	46.8	*5-	ng/L		78	70 - 130
Perfluoropentanoic acid (PFPeA)	<2.0	*5-	60.2	56.8	*5-	ng/L		93	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		60.2	53.3		ng/L		88	70 - 130
Perfluoropentanesulfonic acid (PFPeS)	<2.0		60.2	57.7		ng/L		96	70 - 130

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
13C3 HFPO-DA	*23*	*5-	*50 - 200*
13C6 PFDA	*34*	*5-	*50 - 200*
13C5 PFHxA	*26*	*5-	*50 - 200*
13C4 PFHpA	*24*	*5-	*50 - 200*
13C8 PFOA	*23*	*5-	*50 - 200*
13C9 PFNA	*25*	*5-	*50 - 200*
13C7 PFUnA	*48*	*5-	*50 - 200*
13C2 PFDoA	*63*		*50 - 200*
13C4 PFBA	*35*	*5-	*50 - 200*
13C5 PFPeA	*36*	*5-	*50 - 200*
13C3 PFBS	*105*		*50 - 200*
13C3 PFHxS	*104*		*50 - 200*
13C8 PFOS	*109*		*50 - 200*
13C2-4:2-FTS	*106*		*50 - 200*
13C2-6:2-FTS	*118*		*50 - 200*
13C2-8:2-FTS	*135*		*50 - 200*

Lab Sample ID: 380-67495-O-3-B MSD
Matrix: Drinking Water
Analysis Batch: 62223

Client Sample ID: 380-67495-O-3-B MSD
Prep Type: Total/NA
Prep Batch: 61859

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		60.1	51.3		ng/L		85	70 - 130	0	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		60.1	55.2		ng/L		92	70 - 130	2	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0	*5-	60.1	52.1		ng/L		87	70 - 130	9	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0	*5-	60.1	51.4	*5-	ng/L		85	70 - 130	7	30
Perfluorobutanesulfonic acid (PFBS)	<2.0		60.1	54.2		ng/L		90	70 - 130	3	30
Perfluorodecanoic acid (PFDA)	<2.0	*5-	60.1	49.6		ng/L		82	70 - 130	9	30
Perfluorododecanoic acid (PFDoA)	<2.0	*5-	60.1	66.4		ng/L		110	70 - 130	4	30

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

Lab Sample ID: 380-67495-O-3-B MSD
Matrix: Drinking Water
Analysis Batch: 62223

Client Sample ID: 380-67495-O-3-B MSD
Prep Type: Total/NA
Prep Batch: 61859

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluoroheptanoic acid (PFHpA)	<2.0	*5-	60.1	59.9		ng/L		98	70 - 130	5	30
Perfluorohexanesulfonic acid (PFHxS)	<2.0		60.1	58.2		ng/L		96	70 - 130	1	30
Perfluorohexanoic acid (PFHxA)	<2.0	*5-	60.1	56.9		ng/L		93	70 - 130	9	30
Perfluorononanoic acid (PFNA)	<2.0	*5-	60.1	53.1		ng/L		88	70 - 130	5	30
Perfluorooctanesulfonic acid (PFOS)	<2.0		60.1	57.4		ng/L		95	70 - 130	6	30
Perfluorooctanoic acid (PFOA)	<2.0	*5-	60.1	57.4		ng/L		94	70 - 130	6	30
Perfluoroundecanoic acid (PFUnA)	<2.0	*5-	60.1	61.3		ng/L		102	70 - 130	3	30
Perfluorobutanoic acid (PFBA)	<2.0	*5-	60.1	62.9		ng/L		105	70 - 130	2	30
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		60.1	63.7		ng/L		106	70 - 130	1	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		60.1	56.1		ng/L		93	70 - 130	4	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		60.1	55.6		ng/L		92	70 - 130	5	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0	*5- F1	60.1	41.7	F1	ng/L		69	70 - 130	24	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		60.1	47.7		ng/L		79	70 - 130	4	30
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0	*5-	60.1	54.5		ng/L		91	70 - 130	1	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0	*5-	60.1	46.2		ng/L		77	70 - 130	1	30
Perfluoropentanoic acid (PFPeA)	<2.0	*5-	60.1	53.9		ng/L		88	70 - 130	5	30
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		60.1	52.5		ng/L		87	70 - 130	1	30
Perfluoropentanesulfonic acid (PFPeS)	<2.0		60.1	55.9		ng/L		93	70 - 130	3	30

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
13C3 HFPO-DA	*47*	*5-*	*50 - 200*
13C6 PFDA	*90*		*50 - 200*
13C5 PFHxA	*57*		*50 - 200*
13C4 PFHpA	*61*		*50 - 200*
13C8 PFOA	*74*		*50 - 200*
13C9 PFNA	*87*		*50 - 200*
13C7 PFUnA	*91*		*50 - 200*
13C2 PFDoA	*95*		*50 - 200*
13C4 PFBA	*67*		*50 - 200*
13C5 PFPeA	*69*		*50 - 200*
13C3 PFBS	*108*		*50 - 200*
13C3 PFHxS	*103*		*50 - 200*
13C8 PFOS	*108*		*50 - 200*
13C2-4:2-FTS	*105*		*50 - 200*
13C2-6:2-FTS	*113*		*50 - 200*
13C2-8:2-FTS	*122*		*50 - 200*

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

Lab Sample ID: MBL 380-62640/21-A
Matrix: Water
Analysis Batch: 63336

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62640

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		11/06/23 12:43	11/10/23 07:57	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<0.30		2.0		ng/L		11/06/23 12:43	11/10/23 07:57	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0		ng/L		11/06/23 12:43	11/10/23 07:57	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<1.0		2.0		ng/L		11/06/23 12:43	11/10/23 07:57	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0		ng/L		11/06/23 12:43	11/10/23 07:57	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0		ng/L		11/06/23 12:43	11/10/23 07:57	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0		ng/L		11/06/23 12:43	11/10/23 07:57	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0		ng/L		11/06/23 12:43	11/10/23 07:57	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0		ng/L		11/06/23 12:43	11/10/23 07:57	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0		ng/L		11/06/23 12:43	11/10/23 07:57	1
Perfluorononanoic acid (PFNA)	<0.40		2.0		ng/L		11/06/23 12:43	11/10/23 07:57	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0		ng/L		11/06/23 12:43	11/10/23 07:57	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0		ng/L		11/06/23 12:43	11/10/23 07:57	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0		ng/L		11/06/23 12:43	11/10/23 07:57	1
Perfluorobutanoic acid (PFBA)	<0.69		2.0		ng/L		11/06/23 12:43	11/10/23 07:57	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<0.38		2.0		ng/L		11/06/23 12:43	11/10/23 07:57	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<0.37		2.0		ng/L		11/06/23 12:43	11/10/23 07:57	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<0.48		2.0		ng/L		11/06/23 12:43	11/10/23 07:57	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<0.47		2.0		ng/L		11/06/23 12:43	11/10/23 07:57	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<0.25		2.0		ng/L		11/06/23 12:43	11/10/23 07:57	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	<0.46		2.0		ng/L		11/06/23 12:43	11/10/23 07:57	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	<0.15		2.0		ng/L		11/06/23 12:43	11/10/23 07:57	1
Perfluoropentanoic acid (PFPeA)	<0.38		2.0		ng/L		11/06/23 12:43	11/10/23 07:57	1
Perfluoroheptanesulfonic acid (PFHpS)	<0.36		2.0		ng/L		11/06/23 12:43	11/10/23 07:57	1
Perfluoropentanesulfonic acid (PFPeS)	<0.39		2.0		ng/L		11/06/23 12:43	11/10/23 07:57	1

Isotope Dilution	*MBL %Recovery*	*MBL Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*90*		*50 - 200*	*11/06/23 12:43*	*11/10/23 07:57*	*1*
13C6 PFDA	*103*		*50 - 200*	*11/06/23 12:43*	*11/10/23 07:57*	*1*
13C5 PFHxA	*104*		*50 - 200*	*11/06/23 12:43*	*11/10/23 07:57*	*1*
13C4 PFHpA	*109*		*50 - 200*	*11/06/23 12:43*	*11/10/23 07:57*	*1*
13C8 PFOA	*106*		*50 - 200*	*11/06/23 12:43*	*11/10/23 07:57*	*1*
13C9 PFNA	*104*		*50 - 200*	*11/06/23 12:43*	*11/10/23 07:57*	*1*
13C7 PFUnA	*104*		*50 - 200*	*11/06/23 12:43*	*11/10/23 07:57*	*1*
13C2 PFDoA	*101*		*50 - 200*	*11/06/23 12:43*	*11/10/23 07:57*	*1*
13C4 PFBA	*104*		*50 - 200*	*11/06/23 12:43*	*11/10/23 07:57*	*1*
13C5 PFPeA	*108*		*50 - 200*	*11/06/23 12:43*	*11/10/23 07:57*	*1*
13C3 PFBS	*102*		*50 - 200*	*11/06/23 12:43*	*11/10/23 07:57*	*1*
13C3 PFHxS	*104*		*50 - 200*	*11/06/23 12:43*	*11/10/23 07:57*	*1*

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

Lab Sample ID: MBL 380-62640/21-A
Matrix: Water
Analysis Batch: 63336

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 62640

Isotope Dilution	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C8 PFOS	105		50 - 200	11/06/23 12:43	11/10/23 07:57	1
13C2-4:2-FTS	124		50 - 200	11/06/23 12:43	11/10/23 07:57	1
13C2-6:2-FTS	121		50 - 200	11/06/23 12:43	11/10/23 07:57	1
13C2-8:2-FTS	113		50 - 200	11/06/23 12:43	11/10/23 07:57	1

Lab Sample ID: LCS 380-62640/23-A
Matrix: Water
Analysis Batch: 63336

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62640

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	60.2	57.4		ng/L		95	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	60.2	60.7		ng/L		101	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	60.2	58.7		ng/L		97	70 - 130
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	60.2	60.7		ng/L		101	70 - 130
Perfluorobutanesulfonic acid (PFBS)	60.2	60.9		ng/L		101	70 - 130
Perfluorodecanoic acid (PFDA)	60.2	59.6		ng/L		99	70 - 130
Perfluorododecanoic acid (PFDoA)	60.2	58.8		ng/L		98	70 - 130
Perfluoroheptanoic acid (PFHpA)	60.2	60.1		ng/L		100	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	60.2	57.3		ng/L		95	70 - 130
Perfluorohexanoic acid (PFHxA)	60.2	58.2		ng/L		97	70 - 130
Perfluorononanoic acid (PFNA)	60.2	58.6		ng/L		97	70 - 130
Perfluorooctanesulfonic acid (PFOS)	60.2	59.3		ng/L		98	70 - 130
Perfluorooctanoic acid (PFOA)	60.2	61.1		ng/L		101	70 - 130
Perfluoroundecanoic acid (PFUnA)	60.2	60.1		ng/L		100	70 - 130
Perfluorobutanoic acid (PFBA)	60.2	58.7		ng/L		98	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	60.2	60.2		ng/L		100	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	60.2	58.9		ng/L		98	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	60.2	56.5		ng/L		94	70 - 130
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	60.2	53.6		ng/L		89	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	60.2	59.0		ng/L		98	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	60.2	57.3		ng/L		95	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	60.2	57.6		ng/L		96	70 - 130
Perfluoropentanoic acid (PFPeA)	60.2	61.3		ng/L		102	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	60.2	58.1		ng/L		96	70 - 130

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

Lab Sample ID: LCS 380-62640/23-A
Matrix: Water
Analysis Batch: 63336

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62640

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Perfluoropentanesulfonic acid (PFPeS)			60.2	59.3		ng/L		98	70 - 130		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C3 HFPO-DA	*80*		*50 - 200*
13C6 PFDA	*98*		*50 - 200*
13C5 PFHxA	*95*		*50 - 200*
13C4 PFHpA	*98*		*50 - 200*
13C8 PFOA	*95*		*50 - 200*
13C9 PFNA	*100*		*50 - 200*
13C7 PFUnA	*100*		*50 - 200*
13C2 PFDoA	*101*		*50 - 200*
13C4 PFBA	*99*		*50 - 200*
13C5 PFPeA	*98*		*50 - 200*
13C3 PFBS	*98*		*50 - 200*
13C3 PFHxS	*99*		*50 - 200*
13C8 PFOS	*100*		*50 - 200*
13C2-4:2-FTS	*114*		*50 - 200*
13C2-6:2-FTS	*112*		*50 - 200*
13C2-8:2-FTS	*105*		*50 - 200*

Lab Sample ID: LCSD 380-62640/24-A
Matrix: Water
Analysis Batch: 63336

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62640

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)			60.1	57.0		ng/L		95	70 - 130	1	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)			60.1	59.3		ng/L		99	70 - 130	2	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)			60.1	58.3		ng/L		97	70 - 130	1	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)			60.1	58.7		ng/L		98	70 - 130	3	30
Perfluorobutanesulfonic acid (PFBS)			60.1	59.8		ng/L		99	70 - 130	2	30
Perfluorodecanoic acid (PFDA)			60.1	57.8		ng/L		96	70 - 130	3	30
Perfluorododecanoic acid (PFDoA)			60.1	60.5		ng/L		101	70 - 130	3	30
Perfluoroheptanoic acid (PFHpA)			60.1	59.8		ng/L		99	70 - 130	0	30
Perfluorohexanesulfonic acid (PFHxS)			60.1	58.3		ng/L		97	70 - 130	2	30
Perfluorohexanoic acid (PFHxA)			60.1	57.3		ng/L		95	70 - 130	2	30
Perfluorononanoic acid (PFNA)			60.1	60.0		ng/L		100	70 - 130	2	30
Perfluorooctanesulfonic acid (PFOS)			60.1	57.9		ng/L		96	70 - 130	2	30
Perfluorooctanoic acid (PFOA)			60.1	61.8		ng/L		103	70 - 130	1	30
Perfluoroundecanoic acid (PFUnA)			60.1	59.8		ng/L		99	70 - 130	1	30
Perfluorobutanoic acid (PFBA)			60.1	56.9		ng/L		95	70 - 130	3	30

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

Lab Sample ID: LCSD 380-62640/24-A
Matrix: Water
Analysis Batch: 63336

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 62640

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)			60.1	59.9		ng/L		100	70 - 130	0	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)			60.1	63.5		ng/L		106	70 - 130	8	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)			60.1	55.6		ng/L		93	70 - 130	2	30
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)			60.1	56.8		ng/L		95	70 - 130	6	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)			60.1	57.1		ng/L		95	70 - 130	3	30
Perfluoro-3-methoxypropanoic acid (PFMPA)			60.1	58.9		ng/L		98	70 - 130	3	30
Perfluoro-4-methoxybutanoic acid (PFMBA)			60.1	56.5		ng/L		94	70 - 130	2	30
Perfluoropentanoic acid (PFPeA)			60.1	61.3		ng/L		102	70 - 130	0	30
Perfluoroheptanesulfonic acid (PFHpS)			60.1	58.0		ng/L		97	70 - 130	0	30
Perfluoropentanesulfonic acid (PFPeS)			60.1	59.4		ng/L		99	70 - 130	0	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C3 HFPO-DA	*90*		*50 - 200*
13C6 PFDA	*101*		*50 - 200*
13C5 PFHxA	*97*		*50 - 200*
13C4 PFHpA	*97*		*50 - 200*
13C8 PFOA	*94*		*50 - 200*
13C9 PFNA	*98*		*50 - 200*
13C7 PFUnA	*100*		*50 - 200*
13C2 PFDoA	*101*		*50 - 200*
13C4 PFBA	*96*		*50 - 200*
13C5 PFPeA	*94*		*50 - 200*
13C3 PFBS	*98*		*50 - 200*
13C3 PFHxS	*99*		*50 - 200*
13C8 PFOS	*101*		*50 - 200*
13C2-4:2-FTS	*113*		*50 - 200*
13C2-6:2-FTS	*113*		*50 - 200*
13C2-8:2-FTS	*109*		*50 - 200*

Lab Sample ID: MRL 380-62640/22-A
Matrix: Water
Analysis Batch: 63336

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62640

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)			2.00	2.05	J	ng/L		102	50 - 150		
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)			2.00	2.17	J	ng/L		108	50 - 150		
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)			2.00	2.13	J	ng/L		107	50 - 150		

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

Lab Sample ID: MRL 380-62640/22-A
Matrix: Water
Analysis Batch: 63336

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62640

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.00	2.40	J	ng/L		120	50 - 150
Perfluorobutanesulfonic acid (PFBS)	2.00	2.30	J	ng/L		115	50 - 150
Perfluorodecanoic acid (PFDA)	2.00	2.17	J	ng/L		109	50 - 150
Perfluorododecanoic acid (PFDoA)	2.00	2.22	J	ng/L		111	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.00	2.23	J	ng/L		111	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	2.00	2.16	J	ng/L		108	50 - 150
Perfluorohexanoic acid (PFHxA)	2.00	2.20	J	ng/L		110	50 - 150
Perfluorononanoic acid (PFNA)	2.00	2.23	J	ng/L		111	50 - 150
Perfluorooctanesulfonic acid (PFOS)	2.00	2.16	J	ng/L		108	50 - 150
Perfluorooctanoic acid (PFOA)	2.00	2.38	J	ng/L		119	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.00	2.10	J	ng/L		105	50 - 150
Perfluorobutanoic acid (PFBA)	2.00	2.46	J	ng/L		123	50 - 150
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	2.00	2.25	J	ng/L		113	50 - 150
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	2.00	2.38	J	ng/L		119	50 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	2.00	2.24	J	ng/L		112	50 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2.00	2.13	J	ng/L		106	50 - 150
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	2.00	2.01	J	ng/L		101	50 - 150
Perfluoro-3-methoxypropanoic acid (PFMPA)	2.00	2.26	J	ng/L		113	50 - 150
Perfluoro-4-methoxybutanoic acid (PFMBA)	2.00	2.08	J	ng/L		104	50 - 150
Perfluoropentanoic acid (PFPeA)	2.00	2.29	J	ng/L		115	50 - 150
Perfluoroheptanesulfonic acid (PFHpS)	2.00	2.12	J	ng/L		106	50 - 150
Perfluoropentanesulfonic acid (PFPeS)	2.00	2.09	J	ng/L		104	50 - 150

Isotope Dilution	*MRL %Recovery*	*MRL Qualifier*	*Limits*
13C3 HFPO-DA	*89*		*50 - 200*
13C6 PFDA	*105*		*50 - 200*
13C5 PFHxA	*106*		*50 - 200*
13C4 PFHpA	*111*		*50 - 200*
13C8 PFOA	*105*		*50 - 200*
13C9 PFNA	*105*		*50 - 200*
13C7 PFUnA	*106*		*50 - 200*
13C2 PFDoA	*101*		*50 - 200*
13C4 PFBA	*102*		*50 - 200*
13C5 PFPeA	*105*		*50 - 200*
13C3 PFBS	*97*		*50 - 200*
13C3 PFHxS	*100*		*50 - 200*
13C8 PFOS	*103*		*50 - 200*

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

Lab Sample ID: MRL 380-62640/22-A
Matrix: Water
Analysis Batch: 63336

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 62640

Isotope Dilution	MRL %Recovery	MRL Qualifier	Limits
13C2-4:2-FTS	115		50 - 200
13C2-6:2-FTS	115		50 - 200
13C2-8:2-FTS	108		50 - 200

Lab Sample ID: 380-67949-B-2-A MS
Matrix: Water
Analysis Batch: 63336

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 62640

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		60.4	55.8		ng/L		93	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		60.4	62.3		ng/L		103	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		60.4	70.7		ng/L		117	70 - 130
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		60.4	56.3		ng/L		93	70 - 130
Perfluorobutanesulfonic acid (PFBS)	7.4		60.4	70.6		ng/L		105	70 - 130
Perfluorodecanoic acid (PFDA)	<2.0		60.4	62.7		ng/L		104	70 - 130
Perfluorododecanoic acid (PFDoA)	<2.0		60.4	63.1		ng/L		105	70 - 130
Perfluoroheptanoic acid (PFHpA)	3.5		60.4	66.4		ng/L		104	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	30		60.4	93.3		ng/L		105	70 - 130
Perfluorohexanoic acid (PFHxA)	8.6		60.4	72.2		ng/L		105	70 - 130
Perfluorononanoic acid (PFNA)	2.2		60.4	62.6		ng/L		100	70 - 130
Perfluorooctanesulfonic acid (PFOS)	41		60.4	105		ng/L		107	70 - 130
Perfluorooctanoic acid (PFOA)	10		60.4	74.8		ng/L		107	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		60.4	63.9		ng/L		106	70 - 130
Perfluorobutanoic acid (PFBA)	7.2		60.4	69.0		ng/L		102	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		60.4	59.7		ng/L		99	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		60.4	63.7		ng/L		106	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		60.4	61.2		ng/L		101	70 - 130
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		60.4	57.9		ng/L		96	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		60.4	63.1		ng/L		104	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		60.4	61.8		ng/L		102	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		60.4	65.2		ng/L		108	70 - 130
Perfluoropentanoic acid (PFPeA)	5.0		60.4	61.1		ng/L		93	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		60.4	60.5		ng/L		98	70 - 130
Perfluoropentanesulfonic acid (PFPeS)	5.8		60.4	73.1		ng/L		111	70 - 130

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

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
13C3 HFPO-DA	79		50 - 200
13C6 PFDA	81		50 - 200
13C5 PFHxA	69		50 - 200
13C4 PFHpA	62		50 - 200
13C8 PFOA	79		50 - 200
13C9 PFNA	85		50 - 200
13C7 PFUnA	84		50 - 200
13C2 PFDoA	77		50 - 200
13C4 PFBA	75		50 - 200
13C5 PFPeA	85		50 - 200
13C3 PFBS	94		50 - 200
13C3 PFHxS	89		50 - 200
13C8 PFOS	102		50 - 200
13C2-4:2-FTS	135		50 - 200
13C2-6:2-FTS	139		50 - 200
13C2-8:2-FTS	167		50 - 200

Lab Sample ID: 380-67949-B-3-B MS
Matrix: Water
Analysis Batch: 63336

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 62640

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		60.2	59.6		ng/L		99	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		60.2	60.8		ng/L		101	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		60.2	59.6		ng/L		99	70 - 130
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		60.2	55.8		ng/L		93	70 - 130
Perfluorobutanesulfonic acid (PFBS)	6.3		60.2	68.4		ng/L		103	70 - 130
Perfluorodecanoic acid (PFDA)	<2.0		60.2	61.1		ng/L		101	70 - 130
Perfluorododecanoic acid (PFDoA)	<2.0		60.2	62.4		ng/L		104	70 - 130
Perfluoroheptanoic acid (PFHpA)	<2.0		60.2	60.4		ng/L		100	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	20		60.2	81.9		ng/L		103	70 - 130
Perfluorohexanoic acid (PFHxA)	<2.0		60.2	65.8		ng/L		108	70 - 130
Perfluorononanoic acid (PFNA)	<2.0		60.2	61.4		ng/L		101	70 - 130
Perfluorooctanesulfonic acid (PFOS)	28		60.2	88.1		ng/L		100	70 - 130
Perfluorooctanoic acid (PFOA)	3.4		60.2	66.8		ng/L		105	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		60.2	62.1		ng/L		103	70 - 130
Perfluorobutanoic acid (PFBA)	6.4		60.2	69.0		ng/L		104	70 - 130
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	<2.0		60.2	61.7		ng/L		103	70 - 130
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	<2.0		60.2	61.9		ng/L		103	70 - 130
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	<2.0		60.2	62.4		ng/L		104	70 - 130

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

Lab Sample ID: 380-67949-B-3-B MS
Matrix: Water
Analysis Batch: 63336

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 62640

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	<2.0		60.2	58.6		ng/L		97	70 - 130
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	<2.0		60.2	63.7		ng/L		106	70 - 130
Perfluoro-3-methoxypropanoic acid (PFMPA)	<2.0		60.2	67.8		ng/L		113	70 - 130
Perfluoro-4-methoxybutanoic acid (PFMBA)	<2.0		60.2	66.6		ng/L		111	70 - 130
Perfluoropentanoic acid (PFPeA)	<2.0		60.2	61.1		ng/L		100	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	<2.0		60.2	60.4		ng/L		99	70 - 130
Perfluoropentanesulfonic acid (PFPeS)	4.0		60.2	66.2		ng/L		103	70 - 130

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
13C3 HFPO-DA	*104*		*50 - 200*
13C6 PFDA	*98*		*50 - 200*
13C5 PFHxA	*92*		*50 - 200*
13C4 PFHpA	*98*		*50 - 200*
13C8 PFOA	*96*		*50 - 200*
13C9 PFNA	*101*		*50 - 200*
13C7 PFUnA	*100*		*50 - 200*
13C2 PFDoA	*99*		*50 - 200*
13C4 PFBA	*94*		*50 - 200*
13C5 PFPeA	*113*		*50 - 200*
13C3 PFBS	*92*		*50 - 200*
13C3 PFHxS	*94*		*50 - 200*
13C8 PFOS	*97*		*50 - 200*
13C2-4:2-FTS	*123*		*50 - 200*
13C2-6:2-FTS	*119*		*50 - 200*
13C2-8:2-FTS	*115*		*50 - 200*

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

Lab Sample ID: MBL 380-60385/23-A
Matrix: Water
Analysis Batch: 60498

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 60385

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		10/20/23 04:52	10/22/23 10:50	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0		ng/L		10/20/23 04:52	10/22/23 10:50	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0		ng/L		10/20/23 04:52	10/22/23 10:50	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<0.58		2.0		ng/L		10/20/23 04:52	10/22/23 10:50	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<0.42		2.0		ng/L		10/20/23 04:52	10/22/23 10:50	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0		ng/L		10/20/23 04:52	10/22/23 10:50	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0		ng/L		10/20/23 04:52	10/22/23 10:50	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0		ng/L		10/20/23 04:52	10/22/23 10:50	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0		ng/L		10/20/23 04:52	10/22/23 10:50	1

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

Lab Sample ID: MBL 380-60385/23-A
Matrix: Water
Analysis Batch: 60498

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 60385

Analyte	MBL Result	MBL Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0		ng/L		10/20/23 04:52	10/22/23 10:50	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0		ng/L		10/20/23 04:52	10/22/23 10:50	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0		ng/L		10/20/23 04:52	10/22/23 10:50	1
Perfluorononanoic acid (PFNA)	<0.40		2.0		ng/L		10/20/23 04:52	10/22/23 10:50	1
Perfluorotetradecanoic acid (PFTA)	<0.54		2.0		ng/L		10/20/23 04:52	10/22/23 10:50	1
Perfluorotridecanoic acid (PFTrDA)	<0.36		2.0		ng/L		10/20/23 04:52	10/22/23 10:50	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<0.30		2.0		ng/L		10/20/23 04:52	10/22/23 10:50	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.30		2.0		ng/L		10/20/23 04:52	10/22/23 10:50	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0		ng/L		10/20/23 04:52	10/22/23 10:50	1

Surrogate	*MBL %Recovery*	*MBL Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d5-NEtFOSAA	*112*		*70 - 130*	*10/20/23 04:52*	*10/22/23 10:50*	*1*
13C2 PFHxA	*112*		*70 - 130*	*10/20/23 04:52*	*10/22/23 10:50*	*1*
13C2 PFDA	*122*		*70 - 130*	*10/20/23 04:52*	*10/22/23 10:50*	*1*
13C3-GenX	*110*		*70 - 130*	*10/20/23 04:52*	*10/22/23 10:50*	*1*

Lab Sample ID: LCS 380-60385/25-A
Matrix: Water
Analysis Batch: 60498

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 60385

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	25.1	28.3		ng/L		113	70 - 130
Perfluorooctanesulfonic acid (PFOS)	23.2	26.3		ng/L		114	70 - 130
Perfluoroundecanoic acid (PFUnA)	25.1	28.3		ng/L		113	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	25.1	27.9		ng/L		112	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	25.1	26.5		ng/L		106	70 - 130
Perfluorohexanoic acid (PFHxA)	25.1	27.6		ng/L		110	70 - 130
Perfluorododecanoic acid (PFDoA)	25.1	28.8		ng/L		115	70 - 130
Perfluorooctanoic acid (PFOA)	25.1	28.5		ng/L		114	70 - 130
Perfluorodecanoic acid (PFDA)	25.1	29.2		ng/L		117	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	22.9	26.2		ng/L		115	70 - 130
Perfluorobutanesulfonic acid (PFBS)	22.2	21.8		ng/L		99	70 - 130
Perfluoroheptanoic acid (PFHpA)	25.1	28.4		ng/L		113	70 - 130
Perfluorononanoic acid (PFNA)	25.1	29.2		ng/L		116	70 - 130
Perfluorotetradecanoic acid (PFTA)	25.1	28.0		ng/L		112	70 - 130
Perfluorotridecanoic acid (PFTrDA)	25.1	28.5		ng/L		114	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	23.4	27.5		ng/L		117	70 - 130

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

Lab Sample ID: LCS 380-60385/25-A
Matrix: Water
Analysis Batch: 60498

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 60385

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)			23.7	25.7		ng/L		108	70 - 130		
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)			23.7	25.6		ng/L		108	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
d5-NEtFOSAA	*99*		*70 - 130*
13C2 PFHxA	*109*		*70 - 130*
13C2 PFDA	*114*		*70 - 130*
13C3-GenX	*104*		*70 - 130*

Lab Sample ID: LCSD 380-60385/26-A
Matrix: Water
Analysis Batch: 60498

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 60385

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)			25.1	27.8		ng/L		111	70 - 130	2	30
Perfluorooctanesulfonic acid (PFOS)			23.2	26.3		ng/L		113	70 - 130	0	30
Perfluoroundecanoic acid (PFUnA)			25.1	25.5		ng/L		102	70 - 130	11	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)			25.1	27.6		ng/L		110	70 - 130	1	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)			25.1	23.7		ng/L		95	70 - 130	11	30
Perfluorohexanoic acid (PFHxA)			25.1	27.2		ng/L		109	70 - 130	1	30
Perfluorododecanoic acid (PFDoA)			25.1	27.1		ng/L		108	70 - 130	6	30
Perfluorooctanoic acid (PFOA)			25.1	27.8		ng/L		111	70 - 130	2	30
Perfluorodecanoic acid (PFDA)			25.1	28.5		ng/L		114	70 - 130	3	30
Perfluorohexanesulfonic acid (PFHxS)			22.9	25.6		ng/L		112	70 - 130	2	30
Perfluorobutanesulfonic acid (PFBS)			22.2	22.0		ng/L		99	70 - 130	1	30
Perfluoroheptanoic acid (PFHpA)			25.1	27.3		ng/L		109	70 - 130	4	30
Perfluorononanoic acid (PFNA)			25.1	29.7		ng/L		118	70 - 130	2	30
Perfluorotetradecanoic acid (PFTA)			25.1	24.6		ng/L		98	70 - 130	13	30
Perfluorotridecanoic acid (PFTrDA)			25.1	26.9		ng/L		107	70 - 130	6	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)			23.4	26.6		ng/L		114	70 - 130	3	30
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)			23.7	23.9		ng/L		101	70 - 130	7	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)			23.7	25.7		ng/L		108	70 - 130	0	30

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

Lab Sample ID: LCSD 380-60385/26-A
Matrix: Water
Analysis Batch: 60498

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 60385

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
d5-NEtFOSAA	91		70 - 130
13C2 PFHxA	107		70 - 130
13C2 PFDA	112		70 - 130
13C3-GenX	106		70 - 130

Lab Sample ID: MRL 380-60385/24-A
Matrix: Water
Analysis Batch: 60498

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 60385

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.00	2.22	J	ng/L		111	50 - 150
Perfluorooctanesulfonic acid (PFOS)	1.86	2.00	J	ng/L		108	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.00	2.27	J	ng/L		113	50 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2.00	2.09	J	ng/L		104	50 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2.00	2.15	J	ng/L		107	50 - 150
Perfluorohexanoic acid (PFHxA)	2.00	2.20	J	ng/L		110	50 - 150
Perfluorododecanoic acid (PFDoA)	2.00	2.21	J	ng/L		110	50 - 150
Perfluorooctanoic acid (PFOA)	2.00	2.22	J	ng/L		111	50 - 150
Perfluorodecanoic acid (PFDA)	2.00	2.34	J	ng/L		117	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	1.83	2.07	J	ng/L		113	50 - 150
Perfluorobutanesulfonic acid (PFBS)	1.77	1.65	J	ng/L		93	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.00	2.26	J	ng/L		113	50 - 150
Perfluorononanoic acid (PFNA)	2.00	2.30	J	ng/L		115	50 - 150
Perfluorotetradecanoic acid (PFTA)	2.00	2.12	J	ng/L		106	50 - 150
Perfluorotridecanoic acid (PFTrDA)	2.00	2.16	J	ng/L		108	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	1.87	J	ng/L		99	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	1.89	2.09	J	ng/L		110	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
d5-NEtFOSAA	112		70 - 130
13C2 PFHxA	106		70 - 130
13C2 PFDA	115		70 - 130
13C3-GenX	105		70 - 130

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

Lab Sample ID: 380-67495-1 MS
Matrix: Drinking Water
Analysis Batch: 60498

Client Sample ID: MOANALUA WELLS
Prep Type: Total/NA
Prep Batch: 60385

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		25.2	29.3		ng/L		116	70 - 130
Perfluorooctanesulfonic acid (PFOS)	<2.0		23.3	27.2		ng/L		110	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		25.2	27.6		ng/L		110	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		25.2	28.0		ng/L		111	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		25.2	28.1		ng/L		112	70 - 130
Perfluorohexanoic acid (PFHxA)	<2.0		25.2	27.7		ng/L		106	70 - 130
Perfluorododecanoic acid (PFDoA)	<2.0		25.2	27.8		ng/L		110	70 - 130
Perfluorooctanoic acid (PFOA)	<2.0		25.2	28.6		ng/L		111	70 - 130
Perfluorodecanoic acid (PFDA)	<2.0		25.2	28.0		ng/L		111	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	<2.0		23.0	27.2		ng/L		113	70 - 130
Perfluorobutanesulfonic acid (PFBS)	<2.0		22.3	26.4		ng/L		116	70 - 130
Perfluoroheptanoic acid (PFHpA)	<2.0		25.2	27.5		ng/L		107	70 - 130
Perfluorononanoic acid (PFNA)	<2.0		25.2	28.5		ng/L		113	70 - 130
Perfluorotetradecanoic acid (PFTA)	<2.0		25.2	28.4		ng/L		113	70 - 130
Perfluorotridecanoic acid (PFTrDA)	<2.0		25.2	27.4		ng/L		109	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		23.6	26.1		ng/L		111	70 - 130
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		23.8	26.8		ng/L		112	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		23.8	25.9		ng/L		109	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
d5-NEtFOSAA	*110*		*70 - 130*
13C2 PFHxA	*114*		*70 - 130*
13C2 PFDA	*112*		*70 - 130*
13C3-GenX	*109*		*70 - 130*

Lab Sample ID: 380-67495-1 MSD
Matrix: Drinking Water
Analysis Batch: 60498

Client Sample ID: MOANALUA WELLS
Prep Type: Total/NA
Prep Batch: 60385

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		25.3	29.1		ng/L		115	70 - 130	1	30
Perfluorooctanesulfonic acid (PFOS)	<2.0		23.4	27.1		ng/L		109	70 - 130	1	30
Perfluoroundecanoic acid (PFUnA)	<2.0		25.3	27.2		ng/L		107	70 - 130	2	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		25.3	26.1		ng/L		103	70 - 130	7	30

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

Lab Sample ID: 380-67495-1 MSD
Matrix: Drinking Water
Analysis Batch: 60498

Client Sample ID: MOANALUA WELLS
Prep Type: Total/NA
Prep Batch: 60385

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		25.3	28.4		ng/L		112	70 - 130	1	30
Perfluorohexanoic acid (PFHxA)	<2.0		25.3	29.0		ng/L		111	70 - 130	5	30
Perfluorododecanoic acid (PFDoA)	<2.0		25.3	27.3		ng/L		108	70 - 130	2	30
Perfluorooctanoic acid (PFOA)	<2.0		25.3	27.7		ng/L		107	70 - 130	3	30
Perfluorodecanoic acid (PFDA)	<2.0		25.3	27.1		ng/L		107	70 - 130	3	30
Perfluorohexanesulfonic acid (PFHxS)	<2.0		23.1	26.6		ng/L		110	70 - 130	2	30
Perfluorobutanesulfonic acid (PFBS)	<2.0		22.4	25.7		ng/L		112	70 - 130	3	30
Perfluoroheptanoic acid (PFHpA)	<2.0		25.3	27.4		ng/L		106	70 - 130	1	30
Perfluorononanoic acid (PFNA)	<2.0		25.3	28.3		ng/L		112	70 - 130	1	30
Perfluorotetradecanoic acid (PFTA)	<2.0		25.3	26.7		ng/L		105	70 - 130	6	30
Perfluorotridecanoic acid (PFTrDA)	<2.0		25.3	27.1		ng/L		107	70 - 130	1	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		23.7	26.4		ng/L		112	70 - 130	1	30
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		23.9	25.3		ng/L		106	70 - 130	6	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		23.9	25.3		ng/L		106	70 - 130	2	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
d5-NEtFOSAA	*102*		*70 - 130*
13C2 PFHxA	*110*		*70 - 130*
13C2 PFDA	*104*		*70 - 130*
13C3-GenX	*105*		*70 - 130*

Lab Sample ID: MBL 380-60637/23-A
Matrix: Water
Analysis Batch: 60701

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 60637

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		10/23/23 04:54	10/23/23 19:55	1
Perfluorooctanesulfonic acid (PFOS)	<0.43		2.0		ng/L		10/23/23 04:54	10/23/23 19:55	1
Perfluoroundecanoic acid (PFUnA)	<0.42		2.0		ng/L		10/23/23 04:54	10/23/23 19:55	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<0.58		2.0		ng/L		10/23/23 04:54	10/23/23 19:55	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<0.42		2.0		ng/L		10/23/23 04:54	10/23/23 19:55	1
Perfluorohexanoic acid (PFHxA)	<0.46		2.0		ng/L		10/23/23 04:54	10/23/23 19:55	1
Perfluorododecanoic acid (PFDoA)	<0.54		2.0		ng/L		10/23/23 04:54	10/23/23 19:55	1
Perfluorooctanoic acid (PFOA)	<0.38		2.0		ng/L		10/23/23 04:54	10/23/23 19:55	1
Perfluorodecanoic acid (PFDA)	<0.31		2.0		ng/L		10/23/23 04:54	10/23/23 19:55	1
Perfluorohexanesulfonic acid (PFHxS)	<0.32		2.0		ng/L		10/23/23 04:54	10/23/23 19:55	1
Perfluorobutanesulfonic acid (PFBS)	<0.37		2.0		ng/L		10/23/23 04:54	10/23/23 19:55	1
Perfluoroheptanoic acid (PFHpA)	<0.39		2.0		ng/L		10/23/23 04:54	10/23/23 19:55	1

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

Lab Sample ID: MBL 380-60637/23-A
Matrix: Water
Analysis Batch: 60701

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 60637

Analyte	MBL Result	MBL Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Perfluorononanoic acid (PFNA)	<0.40		2.0		ng/L		10/23/23 04:54	10/23/23 19:55	1
Perfluorotetradecanoic acid (PFTA)	<0.54		2.0		ng/L		10/23/23 04:54	10/23/23 19:55	1
Perfluorotridecanoic acid (PFTrDA)	<0.36		2.0		ng/L		10/23/23 04:54	10/23/23 19:55	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<0.30		2.0		ng/L		10/23/23 04:54	10/23/23 19:55	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<0.30		2.0		ng/L		10/23/23 04:54	10/23/23 19:55	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<0.60		2.0		ng/L		10/23/23 04:54	10/23/23 19:55	1

Surrogate	*MBL %Recovery*	*MBL Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
d5-NEtFOSAA	*117*		*70 - 130*	*10/23/23 04:54*	*10/23/23 19:55*	*1*
13C2 PFHxA	*114*		*70 - 130*	*10/23/23 04:54*	*10/23/23 19:55*	*1*
13C2 PFDA	*119*		*70 - 130*	*10/23/23 04:54*	*10/23/23 19:55*	*1*
13C3-GenX	*112*		*70 - 130*	*10/23/23 04:54*	*10/23/23 19:55*	*1*

Lab Sample ID: LCS 380-60637/25-A
Matrix: Water
Analysis Batch: 60701

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 60637

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	50.2	59.8		ng/L		119	70 - 130
Perfluorooctanesulfonic acid (PFOS)	46.5	51.9		ng/L		112	70 - 130
Perfluoroundecanoic acid (PFUnA)	50.2	55.8		ng/L		111	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	50.2	53.5		ng/L		107	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	50.2	50.3		ng/L		100	70 - 130
Perfluorohexanoic acid (PFHxA)	50.2	55.6		ng/L		111	70 - 130
Perfluorododecanoic acid (PFDoA)	50.2	54.5		ng/L		109	70 - 130
Perfluorooctanoic acid (PFOA)	50.2	55.9		ng/L		111	70 - 130
Perfluorodecanoic acid (PFDA)	50.2	59.5		ng/L		119	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	45.8	53.9		ng/L		118	70 - 130
Perfluorobutanesulfonic acid (PFBS)	44.4	50.1		ng/L		113	70 - 130
Perfluoroheptanoic acid (PFHpA)	50.2	55.8		ng/L		111	70 - 130
Perfluorononanoic acid (PFNA)	50.2	58.5		ng/L		117	70 - 130
Perfluorotetradecanoic acid (PFTA)	50.2	54.9		ng/L		109	70 - 130
Perfluorotridecanoic acid (PFTrDA)	50.2	56.5		ng/L		112	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	46.9	53.4		ng/L		114	70 - 130
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	47.4	51.5		ng/L		109	70 - 130

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

Lab Sample ID: LCS 380-60637/25-A
Matrix: Water
Analysis Batch: 60701

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 60637

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)			47.4	51.2		ng/L		108	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
d5-NEtFOSAA	*97*		*70 - 130*
13C2 PFHxA	*114*		*70 - 130*
13C2 PFDA	*119*		*70 - 130*
13C3-GenX	*114*		*70 - 130*

Lab Sample ID: LCSD 380-60637/26-A
Matrix: Water
Analysis Batch: 60701

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 60637

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)			50.1	59.5		ng/L		119	70 - 130	1	30
Perfluorooctanesulfonic acid (PFOS)			46.4	50.2		ng/L		108	70 - 130	3	30
Perfluoroundecanoic acid (PFUnA)			50.1	55.5		ng/L		111	70 - 130	1	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)			50.1	52.9		ng/L		106	70 - 130	1	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)			50.1	53.5		ng/L		107	70 - 130	6	30
Perfluorohexanoic acid (PFHxA)			50.1	54.9		ng/L		110	70 - 130	1	30
Perfluorododecanoic acid (PFDoA)			50.1	53.8		ng/L		107	70 - 130	1	30
Perfluorooctanoic acid (PFOA)			50.1	56.1		ng/L		112	70 - 130	0	30
Perfluorodecanoic acid (PFDA)			50.1	56.2		ng/L		112	70 - 130	6	30
Perfluorohexanesulfonic acid (PFHxS)			45.7	51.3		ng/L		112	70 - 130	5	30
Perfluorobutanesulfonic acid (PFBS)			44.3	45.9		ng/L		104	70 - 130	9	30
Perfluoroheptanoic acid (PFHpA)			50.1	53.1		ng/L		106	70 - 130	5	30
Perfluorononanoic acid (PFNA)			50.1	56.0		ng/L		112	70 - 130	4	30
Perfluorotetradecanoic acid (PFTA)			50.1	54.9		ng/L		109	70 - 130	0	30
Perfluorotridecanoic acid (PFTrDA)			50.1	54.2		ng/L		108	70 - 130	4	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)			46.8	50.8		ng/L		108	70 - 130	5	30
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)			47.3	51.4		ng/L		109	70 - 130	0	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)			47.3	49.3		ng/L		104	70 - 130	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
d5-NEtFOSAA	*102*		*70 - 130*
13C2 PFHxA	*109*		*70 - 130*
13C2 PFDA	*112*		*70 - 130*

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

Lab Sample ID: LCSD 380-60637/26-A
Matrix: Water
Analysis Batch: 60701

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 60637

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
13C3-GenX	116		70 - 130

Lab Sample ID: MRL 380-60637/24-A
Matrix: Water
Analysis Batch: 60701

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 60637

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	2.00	1.93	J	ng/L		96	50 - 150
Perfluorooctanesulfonic acid (PFOS)	1.86	2.10	J	ng/L		113	50 - 150
Perfluoroundecanoic acid (PFUnA)	2.00	2.11	J	ng/L		105	50 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2.00	2.40	J	ng/L		120	50 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2.00	2.32	J	ng/L		116	50 - 150
Perfluorohexanoic acid (PFHxA)	2.00	1.96	J	ng/L		98	50 - 150
Perfluorododecanoic acid (PFDoA)	2.00	2.09	J	ng/L		105	50 - 150
Perfluorooctanoic acid (PFOA)	2.00	2.14	J	ng/L		107	50 - 150
Perfluorodecanoic acid (PFDA)	2.00	2.23	J	ng/L		111	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	1.83	2.03	J	ng/L		111	50 - 150
Perfluorobutanesulfonic acid (PFBS)	1.77	1.69	J	ng/L		95	50 - 150
Perfluoroheptanoic acid (PFHpA)	2.00	2.12	J	ng/L		106	50 - 150
Perfluorononanoic acid (PFNA)	2.00	2.23	J	ng/L		111	50 - 150
Perfluorotetradecanoic acid (PFTA)	2.00	2.23	J	ng/L		111	50 - 150
Perfluorotridecanoic acid (PFTrDA)	2.00	2.10	J	ng/L		105	50 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	1.87	2.10	J	ng/L		112	50 - 150
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	1.89	1.92	J	ng/L		101	50 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	1.89	2.01	J	ng/L		106	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
d5-NEtFOSAA	103		70 - 130
13C2 PFHxA	100		70 - 130
13C2 PFDA	111		70 - 130
13C3-GenX	100		70 - 130

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

Lab Sample ID: 380-67520-C-1-A MS
Matrix: Water
Analysis Batch: 60701

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 60637

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		50.2	56.7		ng/L		113	70 - 130
Perfluorooctanesulfonic acid (PFOS)	<2.0		46.5	50.5		ng/L		109	70 - 130
Perfluoroundecanoic acid (PFUnA)	<2.0		50.2	54.5		ng/L		108	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		50.2	54.3		ng/L		108	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		50.2	55.2		ng/L		110	70 - 130
Perfluorohexanoic acid (PFHxA)	<2.0		50.2	53.8		ng/L		107	70 - 130
Perfluorododecanoic acid (PFDoA)	<2.0		50.2	54.6		ng/L		109	70 - 130
Perfluorooctanoic acid (PFOA)	<2.0		50.2	55.8		ng/L		111	70 - 130
Perfluorodecanoic acid (PFDA)	<2.0		50.2	56.2		ng/L		112	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	<2.0		45.8	50.0		ng/L		109	70 - 130
Perfluorobutanesulfonic acid (PFBS)	<2.0		44.4	48.7		ng/L		110	70 - 130
Perfluoroheptanoic acid (PFHpA)	<2.0		50.2	54.2		ng/L		108	70 - 130
Perfluorononanoic acid (PFNA)	<2.0		50.2	55.9		ng/L		111	70 - 130
Perfluorotetradecanoic acid (PFTA)	<2.0		50.2	53.7		ng/L		107	70 - 130
Perfluorotridecanoic acid (PFTrDA)	<2.0		50.2	54.2		ng/L		108	70 - 130
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		46.9	51.5		ng/L		110	70 - 130
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		47.4	49.9		ng/L		105	70 - 130
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		47.4	51.5		ng/L		109	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
d5-NEtFOSAA	*108*		*70 - 130*
13C2 PFHxA	*108*		*70 - 130*
13C2 PFDA	*112*		*70 - 130*
13C3-GenX	*114*		*70 - 130*

Lab Sample ID: 380-67520-D-1-A MSD
Matrix: Water
Analysis Batch: 60701

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 60637

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA/GenX)	<2.0		50.2	56.3		ng/L		112	70 - 130	1	30
Perfluorooctanesulfonic acid (PFOS)	<2.0		46.5	52.1		ng/L		112	70 - 130	3	30
Perfluoroundecanoic acid (PFUnA)	<2.0		50.2	58.6		ng/L		117	70 - 130	7	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	<2.0		50.2	54.7		ng/L		109	70 - 130	1	30

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

Lab Sample ID: 380-67520-D-1-A MSD
Matrix: Water
Analysis Batch: 60701

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 60637

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	<2.0		50.2	53.3		ng/L		106	70 - 130	3	30
Perfluorohexanoic acid (PFHxA)	<2.0		50.2	56.9		ng/L		113	70 - 130	6	30
Perfluorododecanoic acid (PFDoA)	<2.0		50.2	56.9		ng/L		113	70 - 130	4	30
Perfluorooctanoic acid (PFOA)	<2.0		50.2	54.9		ng/L		109	70 - 130	2	30
Perfluorodecanoic acid (PFDA)	<2.0		50.2	59.8		ng/L		119	70 - 130	6	30
Perfluorohexanesulfonic acid (PFHxS)	<2.0		45.8	51.9		ng/L		113	70 - 130	4	30
Perfluorobutanesulfonic acid (PFBS)	<2.0		44.4	52.7		ng/L		119	70 - 130	8	30
Perfluoroheptanoic acid (PFHpA)	<2.0		50.2	58.0		ng/L		116	70 - 130	7	30
Perfluorononanoic acid (PFNA)	<2.0		50.2	58.6		ng/L		117	70 - 130	5	30
Perfluorotetradecanoic acid (PFTA)	<2.0		50.2	56.6		ng/L		113	70 - 130	5	30
Perfluorotridecanoic acid (PFTrDA)	<2.0		50.2	57.9		ng/L		115	70 - 130	7	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid(9Cl-PF3ONS)	<2.0		46.9	52.6		ng/L		112	70 - 130	2	30
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	<2.0		47.4	51.6		ng/L		109	70 - 130	3	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	<2.0		47.4	52.8		ng/L		111	70 - 130	2	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
d5-NEtFOSAA	*99*		*70 - 130*
13C2 PFHxA	*118*		*70 - 130*
13C2 PFDA	*115*		*70 - 130*
13C3-GenX	*112*		*70 - 130*

GC/MS Semi VOA

Prep Batch: 60329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-67495-2	AIEA GULCH WELLS PUMP 2	Total/NA	Drinking Water	525.2	
380-67495-3	AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Drinking Water	525.2	
380-67495-4	HALAWA WELLS UNITS 1 & 2 P1	Total/NA	Drinking Water	525.2	
MB 380-60329/21-A	Method Blank	Total/NA	Water	525.2	
LCS 380-60329/23-A	Lab Control Sample	Total/NA	Water	525.2	
LCSD 380-60329/24-A	Lab Control Sample Dup	Total/NA	Water	525.2	
MRL 380-60329/22-A	Lab Control Sample	Total/NA	Water	525.2	
380-67495-J-1-A MS	380-67495-J-1-A MS	Total/NA	Drinking Water	525.2	
380-67591-T-1-A DU	Duplicate	Total/NA	Water	525.2	

Analysis Batch: 60590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-67495-2	AIEA GULCH WELLS PUMP 2	Total/NA	Drinking Water	525.2	60329
380-67495-3	AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Drinking Water	525.2	60329
380-67495-4	HALAWA WELLS UNITS 1 & 2 P1	Total/NA	Drinking Water	525.2	60329
MB 380-60329/21-A	Method Blank	Total/NA	Water	525.2	60329
LCS 380-60329/23-A	Lab Control Sample	Total/NA	Water	525.2	60329
LCSD 380-60329/24-A	Lab Control Sample Dup	Total/NA	Water	525.2	60329
MRL 380-60329/22-A	Lab Control Sample	Total/NA	Water	525.2	60329
380-67495-J-1-A MS	380-67495-J-1-A MS	Total/NA	Drinking Water	525.2	60329
380-67591-T-1-A DU	Duplicate	Total/NA	Water	525.2	60329

Prep Batch: 61104

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-67495-2	AIEA GULCH WELLS PUMP 2	Total/NA	Drinking Water	525.2	
380-67495-3	AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Drinking Water	525.2	
380-67495-4	HALAWA WELLS UNITS 1 & 2 P1	Total/NA	Drinking Water	525.2	
MB 380-61104/21-A	Method Blank	Total/NA	Water	525.2	
LCS 380-61104/23-A	Lab Control Sample	Total/NA	Water	525.2	
LCSD 380-61104/24-A	Lab Control Sample Dup	Total/NA	Water	525.2	
MRL 380-61104/22-A	Lab Control Sample	Total/NA	Water	525.2	
380-67970-R-1-A MS	Matrix Spike	Total/NA	Water	525.2	
380-67970-R-2-A DU	Duplicate	Total/NA	Water	525.2	

Analysis Batch: 61305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-67495-2	AIEA GULCH WELLS PUMP 2	Total/NA	Drinking Water	525.2	61104
380-67495-3	AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Drinking Water	525.2	61104
380-67495-4	HALAWA WELLS UNITS 1 & 2 P1	Total/NA	Drinking Water	525.2	61104
MB 380-61104/21-A	Method Blank	Total/NA	Water	525.2	61104
LCS 380-61104/23-A	Lab Control Sample	Total/NA	Water	525.2	61104
LCSD 380-61104/24-A	Lab Control Sample Dup	Total/NA	Water	525.2	61104
MRL 380-61104/22-A	Lab Control Sample	Total/NA	Water	525.2	61104
380-67970-R-1-A MS	Matrix Spike	Total/NA	Water	525.2	61104
380-67970-R-2-A DU	Duplicate	Total/NA	Water	525.2	61104

LCMS

Prep Batch: 60385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-67495-1	MOANALUA WELLS	Total/NA	Drinking Water	537.1 DW	

LCMS (Continued)

Prep Batch: 60385 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-67495-2	AIEA GULCH WELLS PUMP 2	Total/NA	Drinking Water	537.1 DW	
MBL 380-60385/23-A	Method Blank	Total/NA	Water	537.1 DW	
LCS 380-60385/25-A	Lab Control Sample	Total/NA	Water	537.1 DW	
LCSD 380-60385/26-A	Lab Control Sample Dup	Total/NA	Water	537.1 DW	
MRL 380-60385/24-A	Lab Control Sample	Total/NA	Water	537.1 DW	
380-67495-1 MS	MOANALUA WELLS	Total/NA	Drinking Water	537.1 DW	
380-67495-1 MSD	MOANALUA WELLS	Total/NA	Drinking Water	537.1 DW	

Analysis Batch: 60498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-67495-1	MOANALUA WELLS	Total/NA	Drinking Water	537.1	60385
380-67495-2	AIEA GULCH WELLS PUMP 2	Total/NA	Drinking Water	537.1	60385
MBL 380-60385/23-A	Method Blank	Total/NA	Water	537.1	60385
LCS 380-60385/25-A	Lab Control Sample	Total/NA	Water	537.1	60385
LCSD 380-60385/26-A	Lab Control Sample Dup	Total/NA	Water	537.1	60385
MRL 380-60385/24-A	Lab Control Sample	Total/NA	Water	537.1	60385
380-67495-1 MS	MOANALUA WELLS	Total/NA	Drinking Water	537.1	60385
380-67495-1 MSD	MOANALUA WELLS	Total/NA	Drinking Water	537.1	60385

Prep Batch: 60637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-67495-3	AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Drinking Water	537.1 DW	
380-67495-4	HALAWA WELLS UNITS 1 & 2 P1	Total/NA	Drinking Water	537.1 DW	
380-67495-9	FB MOANALUA WELLS	Total/NA	Water	537.1 DW	
380-67495-10	FB AIEA GULCH WELLS PUMP 2	Total/NA	Water	537.1 DW	
380-67495-11	FB AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Water	537.1 DW	
380-67495-12	FB HALAWA WELLS UNITS 1 & 2 P1	Total/NA	Water	537.1 DW	
MBL 380-60637/23-A	Method Blank	Total/NA	Water	537.1 DW	
LCS 380-60637/25-A	Lab Control Sample	Total/NA	Water	537.1 DW	
LCSD 380-60637/26-A	Lab Control Sample Dup	Total/NA	Water	537.1 DW	
MRL 380-60637/24-A	Lab Control Sample	Total/NA	Water	537.1 DW	
380-67520-C-1-A MS	Matrix Spike	Total/NA	Water	537.1 DW	
380-67520-D-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	537.1 DW	

Analysis Batch: 60701

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-67495-3	AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Drinking Water	537.1	60637
380-67495-4	HALAWA WELLS UNITS 1 & 2 P1	Total/NA	Drinking Water	537.1	60637
380-67495-9	FB MOANALUA WELLS	Total/NA	Water	537.1	60637
380-67495-10	FB AIEA GULCH WELLS PUMP 2	Total/NA	Water	537.1	60637
380-67495-11	FB AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Water	537.1	60637
380-67495-12	FB HALAWA WELLS UNITS 1 & 2 P1	Total/NA	Water	537.1	60637
MBL 380-60637/23-A	Method Blank	Total/NA	Water	537.1	60637
LCS 380-60637/25-A	Lab Control Sample	Total/NA	Water	537.1	60637
LCSD 380-60637/26-A	Lab Control Sample Dup	Total/NA	Water	537.1	60637
MRL 380-60637/24-A	Lab Control Sample	Total/NA	Water	537.1	60637
380-67520-C-1-A MS	Matrix Spike	Total/NA	Water	537.1	60637
380-67520-D-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	537.1	60637

LCMS

Prep Batch: 61859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-67495-9	FB MOANALUA WELLS	Total/NA	Water	533	
380-67495-12	FB HALAWA WELLS UNITS 1 & 2 P1	Total/NA	Water	533	
MBL 380-61859/21-A	Method Blank	Total/NA	Water	533	
LCS 380-61859/23-A	Lab Control Sample	Total/NA	Water	533	
LCSD 380-61859/24-A	Lab Control Sample Dup	Total/NA	Water	533	
MRL 380-61859/22-A	Lab Control Sample	Total/NA	Water	533	
380-67495-N-3-B MS	380-67495-N-3-B MS	Total/NA	Drinking Water	533	
380-67495-O-3-B MSD	380-67495-O-3-B MSD	Total/NA	Drinking Water	533	

Analysis Batch: 62223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-67495-9	FB MOANALUA WELLS	Total/NA	Water	533	61859
380-67495-12	FB HALAWA WELLS UNITS 1 & 2 P1	Total/NA	Water	533	61859
MBL 380-61859/21-A	Method Blank	Total/NA	Water	533	61859
LCS 380-61859/23-A	Lab Control Sample	Total/NA	Water	533	61859
LCSD 380-61859/24-A	Lab Control Sample Dup	Total/NA	Water	533	61859
MRL 380-61859/22-A	Lab Control Sample	Total/NA	Water	533	61859
380-67495-N-3-B MS	380-67495-N-3-B MS	Total/NA	Drinking Water	533	61859
380-67495-O-3-B MSD	380-67495-O-3-B MSD	Total/NA	Drinking Water	533	61859

Prep Batch: 62640

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-67495-1	MOANALUA WELLS	Total/NA	Drinking Water	533	
380-67495-4	HALAWA WELLS UNITS 1 & 2 P1	Total/NA	Drinking Water	533	
MBL 380-62640/21-A	Method Blank	Total/NA	Water	533	
LCS 380-62640/23-A	Lab Control Sample	Total/NA	Water	533	
LCSD 380-62640/24-A	Lab Control Sample Dup	Total/NA	Water	533	
MRL 380-62640/22-A	Lab Control Sample	Total/NA	Water	533	
380-67949-B-2-A MS	Matrix Spike	Total/NA	Water	533	
380-67949-B-3-B MS	Matrix Spike	Total/NA	Water	533	

Analysis Batch: 63336

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-67495-1	MOANALUA WELLS	Total/NA	Drinking Water	533	62640
380-67495-4	HALAWA WELLS UNITS 1 & 2 P1	Total/NA	Drinking Water	533	62640
MBL 380-62640/21-A	Method Blank	Total/NA	Water	533	62640
LCS 380-62640/23-A	Lab Control Sample	Total/NA	Water	533	62640
LCSD 380-62640/24-A	Lab Control Sample Dup	Total/NA	Water	533	62640
MRL 380-62640/22-A	Lab Control Sample	Total/NA	Water	533	62640
380-67949-B-2-A MS	Matrix Spike	Total/NA	Water	533	62640
380-67949-B-3-B MS	Matrix Spike	Total/NA	Water	533	62640

Lab Chronicle

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

Job ID: 380-67495-1

Client Sample ID: MOANALUA WELLS
Date Collected: 10/16/23 09:39
Date Received: 10/18/23 10:20

Lab Sample ID: 380-67495-1
Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			62640	T2EP	EA POM	11/06/23 12:43
Total/NA	Analysis	533		1	63336	SZ9R	EA POM	11/10/23 09:32
Total/NA	Prep	537.1 DW			60385	U7RS	EA POM	10/20/23 04:52
Total/NA	Analysis	537.1		1	60498	UKDT	EA POM	10/22/23 11:31

Client Sample ID: AIEA GULCH WELLS PUMP 2
Date Collected: 10/16/23 10:36
Date Received: 10/18/23 10:20

Lab Sample ID: 380-67495-2
Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			60329	N8NE	EA POM	10/20/23 13:28
Total/NA	Analysis	525.2		1	60590	Q8LA	EA POM	10/22/23 20:55
Total/NA	Prep	525.2			61104	N8NE	EA POM	10/26/23 22:01
Total/NA	Analysis	525.2		1	61305	UPAC	EA POM	10/27/23 11:32
Total/NA	Prep	537.1 DW			60385	U7RS	EA POM	10/20/23 04:52
Total/NA	Analysis	537.1		1	60498	UKDT	EA POM	10/22/23 13:07

Client Sample ID: AIEA WELLS PUMPS 1&2 (260) P2
Date Collected: 10/16/23 11:05
Date Received: 10/18/23 10:20

Lab Sample ID: 380-67495-3
Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			60329	N8NE	EA POM	10/20/23 13:28
Total/NA	Analysis	525.2		1	60590	Q8LA	EA POM	10/22/23 21:15
Total/NA	Prep	525.2			61104	N8NE	EA POM	10/26/23 22:01
Total/NA	Analysis	525.2		1	61305	UPAC	EA POM	10/27/23 11:52
Total/NA	Prep	537.1 DW			60637	U7RS	EA POM	10/23/23 04:54
Total/NA	Analysis	537.1		1	60701	UKDT	EA POM	10/23/23 21:52

Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1
Date Collected: 10/16/23 10:07
Date Received: 10/18/23 10:20

Lab Sample ID: 380-67495-4
Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			60329	N8NE	EA POM	10/20/23 13:28
Total/NA	Analysis	525.2		1	60590	Q8LA	EA POM	10/22/23 21:35
Total/NA	Prep	525.2			61104	N8NE	EA POM	10/26/23 22:01
Total/NA	Analysis	525.2		1	61305	UPAC	EA POM	10/27/23 12:12
Total/NA	Prep	533			62640	T2EP	EA POM	11/06/23 12:43
Total/NA	Analysis	533		1	63336	SZ9R	EA POM	11/10/23 09:51
Total/NA	Prep	537.1 DW			60637	U7RS	EA POM	10/23/23 04:54
Total/NA	Analysis	537.1		1	60701	UKDT	EA POM	10/23/23 22:02

Lab Chronicle

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

Job ID: 380-67495-1

Client Sample ID: FB MOANALUA WELLS
Lab Sample ID: 380-67495-9
Date Collected: 10/16/23 09:39
Matrix: Water
Date Received: 10/18/23 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			61859	T2EP	EA POM	11/01/23 12:00
Total/NA	Analysis	533		1	62223	R6YA	EA POM	11/02/23 19:57
Total/NA	Prep	537.1 DW			60637	U7RS	EA POM	10/23/23 04:54
Total/NA	Analysis	537.1		1	60701	UKDT	EA POM	10/23/23 22:12

Client Sample ID: FB AIEA GULCH WELLS PUMP 2
Lab Sample ID: 380-67495-10
Date Collected: 10/16/23 10:36
Matrix: Water
Date Received: 10/18/23 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	537.1 DW			60637	U7RS	EA POM	10/23/23 04:54
Total/NA	Analysis	537.1		1	60701	UKDT	EA POM	10/23/23 22:21

Client Sample ID: FB AIEA WELLS PUMPS 1&2 (260) P2
Lab Sample ID: 380-67495-11
Date Collected: 10/16/23 11:05
Matrix: Water
Date Received: 10/18/23 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	537.1 DW			60637	U7RS	EA POM	10/23/23 04:54
Total/NA	Analysis	537.1		1	60701	UKDT	EA POM	10/23/23 22:42

Client Sample ID: FB HALAWA WELLS UNITS 1 & 2 P1
Lab Sample ID: 380-67495-12
Date Collected: 10/16/23 10:07
Matrix: Water
Date Received: 10/18/23 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	533			61859	T2EP	EA POM	11/01/23 12:00
Total/NA	Analysis	533		1	62223	R6YA	EA POM	11/02/23 20:26
Total/NA	Prep	537.1 DW			60637	U7RS	EA POM	10/23/23 04:54
Total/NA	Analysis	537.1		1	60701	UKDT	EA POM	10/23/23 22:53

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: 380-67495-1

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)

Client: City & County of Honolulu
Job ID: 380-67495-1
Project/Site: RED-HILL

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: 380-67495-1

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: 380-67495-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	PWSID Number
380-67495-1	MOANALUA WELLS	Drinking Water	10/16/23 09:39	10/18/23 10:20	HI0000331
380-67495-2	AIEA GULCH WELLS PUMP 2	Drinking Water	10/16/23 10:36	10/18/23 10:20	HI0000331
380-67495-3	AIEA WELLS PUMPS 1&2 (260) P2	Drinking Water	10/16/23 11:05	10/18/23 10:20	HI0000331
380-67495-4	HALAWA WELLS UNITS 1 & 2 P1	Drinking Water	10/16/23 10:07	10/18/23 10:20	HI0000331
380-67495-9	FB MOANALUA WELLS	Water	10/16/23 09:39	10/18/23 10:20	
380-67495-10	FB AIEA GULCH WELLS PUMP 2	Water	10/16/23 10:36	10/18/23 10:20	
380-67495-11	FB AIEA WELLS PUMPS 1&2 (260) P2	Water	10/16/23 11:05	10/18/23 10:20	
380-67495-12	FB HALAWA WELLS UNITS 1 & 2 P1	Water	10/16/23 10:07	10/18/23 10:20	

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

Chain of Custody Record

eurofins

Client Information	Sampler: BAILEY	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 1 of 2
Company: City & County of Honolulu	PWSID:	Analysis Requested		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#:			

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 - 8915 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	16-Oct-2023	0939	G	Water			2		2	2	4				
AIEA GULCH WELLS PUMP2	16-Oct-2023	1036	G	Water			2		2	2	4				
AIEA WELLS PUMPS 1&2 (260) P2	16-Oct-2023	1105	G	Water			2		2	2	4				
HALAWA WELLS UNITS 1&2 P1	16-Oct-2023	1007	G	Water			2		2	2	4				
TB MOANALUA WELLS	16-Oct-2023	0939		Water							2				
TB AIEA GULCH WELLS PUMP2	16-Oct-2023	1036		Water							2				
TB AIEA WELLS PUMPS 1&2 (260)	16-Oct-2023	1105		Water							2				
TB HALAWA WELLS UNITS 1&2	16-Oct-2023	1007		Water							2				

380-67495 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: FEDEX ① 7737 7388 1461 ② 7737 7388 1472

Empty Kit Relinquished by	Date	Time	Method of Shipment: ③ 7737 7388 1483

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
		HBWS	G.PEITNER	10/18/2023 10 20	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: (751A) GEL - FROZEN ① 2.6° 0.1°-2.5° ② 5.5° 0.1°-5.4° ③ 0.8°-0.1 -0.7°

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

Client Information	Sampler: BAILEY	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:	Analysis Requested		Job #:
Address: 630 South Beretania Street, Chemistry Lab	Due Date 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:
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#:			

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 - 8915 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	16-Oct-2023	0939	G	Water								3	3		
AIEA GULCH WELLS PUMP2	16-Oct-2023	1036	G	Water								3	3		
AIEA WELLS PUMPS 1&2 (260) P2	16-Oct-2023	1105	G	Water								3	3		
HALAWA WELLS UNITS 1&2 P1	16-Oct-2023	1057	G	Water								3	3		
FB MOANALUA WELLS	16-Oct-2023	0939		Water								1	1		
FB AIEA GULCH WELLS PUMP2	16-Oct-2023	1036		Water								1	1		
FB AIEA WELLS PUMPS 1&2 (260)	16-Oct-2023	1105		Water								1	1		
FB HALAWA WELLS UNITS 1&2	16-Oct-2023	1057		Water								1	1		

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
① 7737 7388 1461
② 7737 7388 1472

Empty Kit Relinquished by	Date	Time	Method of Shipment: FED EX ③ 7737 7388 1483

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
		HBWS	E REITNER	10/18/2023 10:20	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
(757A) GEL FROZEN ① 2.6 0.0=2.5 ② 5.5-0.1=5.4 ③ 0.8-0.1=0.7

Ver: 01/16/2019

11/13/2023

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-67495-1

Login Number: 67495
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	