eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 8/5/2024 4:12:46 PM

JOB DESCRIPTION

RED-HILL
Quarterly

JOB NUMBER

380-103361-1

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

See page two for job notes and contact information.

Eurofins Eaton Analytical Pomona

Job Notes

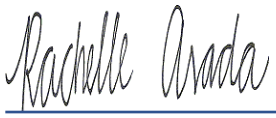
This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Compliance Statement

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

Authorization



Generated
8/5/2024 4:12:46 PM

Authorized for release by
Rachelle Arada, Project Manager
Rachelle.Arada@et.eurofinsus.com
(626)386-1106

Table of Contents

Qualifiers

GC/MS VOA

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

GC/MS VOA TICs

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

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*1	LCS/LCSD RPD exceeds control limits.
^3+	Reporting Limit Check Standard is outside acceptance limits, high biased
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.

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD 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.

HPLC/IC

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

Metals

Qualifier	Qualifier Description
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.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
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)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job Narrative
380-103361-1

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 and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided 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 7/10/2024 9:55 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.5°C and 2.8°C.

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

GC/MS Semi VOA
Method 625.1_SIM: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 570-460222 and analytical batch 570-465376 recovered outside control limits for the following analyte(s): 3-Nitroaniline, 4-Chloroaniline, Aniline and Benzidine. 3-Nitroaniline, 4-Chloroaniline, Aniline and Benzidine have been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

Method 625.1_SIM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 570-460222 and analytical batch 570-465376 recovered outside control limits for the following analytes: 3-Nitroaniline and Aniline.

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

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

Diesel Range Organics
Method 8015B_DRO_LL_CS: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 570-459748 and analytical batch 570-462177 recovered outside control limits for the following analytes: C10-C28.

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

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

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

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

HPLC/IC
Method 300_OF_48H_PREC: The following sample was diluted for Nitrite as N to prevent detector saturation due to high conductivity: MOANALUA WELLS (380-103361-1). Elevated reporting limits (RLs) are provided.

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

Metals

Job ID: 380-103361-1 (Continued) Eurofins Eaton Analytical Pomona

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

General Chemistry
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: 380-103361-1
SDG: Quarterly

Client Sample ID: MOANALUA WELLS — Lab Sample ID: 380-103361-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Tertiary Butyl Alcohol (TBA)	2.1		2.0		ug/L	1		524.2	Total/NA
Dieldrin	0.025		0.0097		ug/L	1		525.2	Total/NA
Bromide	280		5.0		ug/L	1		300.0	Total/NA
Chloride	100		2.5		mg/L	5		300.0	Total/NA
Nitrate as N	0.54		0.25		mg/L	5		300.0	Total/NA
Sulfate	17		1.3		mg/L	5		300.0	Total/NA
Calcium	20		1.0		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	18		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Potassium	2.4		1.0		mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	42		1.0		mg/L	1		200.7 Rev 4.4	Total/NA
Chromium	4.7		1.0		ug/L	1		200.8	Total/NA
Copper	7.6		2.0		ug/L	1		200.8	Total/NA
Alkalinity	60		2.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	60		2.0		mg/L	1		SM 2320B	Total/NA
Specific Conductance	500		2.0		umhos/cm	1		SM 2510B	Total/NA
Total Dissolved Solids	320		20		mg/L	1		SM 2540C	Total/NA
pH	7.9	HF			SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: TRAVEL BLANK — Lab Sample ID: 380-103361-2

No Detections.

This Detection Summary does not include radiochemical test results.

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

Job ID: 380-103361-1
SDG: Quarterly

Client Sample ID: MOANALUA WELLS

Date Collected: 07/09/24 09:52
Date Received: 07/10/24 09:55

Lab Sample ID: 380-103361-1

Matrix: Water

Method: EPA-DW 524.2 - Total Trihalomethanes

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Trihalomethanes, Total	<0.50		0.50		ug/L			07/15/24 09:42	1

Method: EPA-DW 524.2 - Volatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Tertiary Butyl Alcohol (TBA)	2.1		2.0		ug/L			07/17/24 17:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*70 - 130*		*07/17/24 17:04*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*07/17/24 17:04*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*07/17/24 17:04*	*1*

Method: EPA-DW 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.50		0.50		ug/L			07/15/24 09:42	1
1,1,1-Trichloroethane	<0.50		0.50		ug/L			07/15/24 09:42	1
1,1,2,2-Tetrachloroethane	<0.50		0.50		ug/L			07/15/24 09:42	1
1,1,2-Trichloroethane	<0.50		0.50		ug/L			07/15/24 09:42	1
1,1-Dichlorethylene	<0.50		0.50		ug/L			07/15/24 09:42	1
1,1-Dichloroethane	<0.50		0.50		ug/L			07/15/24 09:42	1
1,1-Dichloropropene	<0.50		0.50		ug/L			07/15/24 09:42	1
1,2,3-Trichlorobenzene	<0.50	^3+	0.50		ug/L			07/15/24 09:42	1
1,2,3-Trichloropropane	<0.50		0.50		ug/L			07/15/24 09:42	1
1,2,4-Trichlorobenzene	<0.50		0.50		ug/L			07/15/24 09:42	1
1,2,4-Trimethylbenzene	<0.50		0.50		ug/L			07/15/24 09:42	1
1,2-Dichloroethane	<0.50		0.50		ug/L			07/15/24 09:42	1
1,2-Dichloropropane	<0.50		0.50		ug/L			07/15/24 09:42	1
1,3,5-Trimethylbenzene	<0.50		0.50		ug/L			07/15/24 09:42	1
1,3-Dichloropropane	<0.50		0.50		ug/L			07/15/24 09:42	1
1,3-Dichloropropene, Total	<0.50		0.50		ug/L			07/15/24 09:42	1
2,2-Dichloropropane	<0.50		0.50		ug/L			07/15/24 09:42	1
2-Butanone (MEK)	<5.0		5.0		ug/L			07/15/24 09:42	1
4-Methyl-2-pentanone (MIBK)	<5.0		5.0		ug/L			07/15/24 09:42	1
Acetone	<500		500		ug/L			07/17/24 21:13	1
Benzene	<0.50		0.50		ug/L			07/15/24 09:42	1
Bromobenzene	<0.50		0.50		ug/L			07/15/24 09:42	1
Bromochloromethane	<0.50		0.50		ug/L			07/15/24 09:42	1
Bromodichloromethane	<0.50		0.50		ug/L			07/15/24 09:42	1
Bromoethane	<0.50		0.50		ug/L			07/15/24 09:42	1
Bromoform	<0.50		0.50		ug/L			07/15/24 09:42	1
Bromomethane (Methyl Bromide)	<0.50		0.50		ug/L			07/15/24 09:42	1
Carbon disulfide	<0.50		0.50		ug/L			07/15/24 09:42	1
Carbon tetrachloride	<0.50		0.50		ug/L			07/15/24 09:42	1
Chlorobenzene	<0.50		0.50		ug/L			07/15/24 09:42	1
Chlorodibromomethane	<0.50		0.50		ug/L			07/15/24 09:42	1
Chloroethane	<0.50		0.50		ug/L			07/15/24 09:42	1
Chloroform (Trichloromethane)	<0.50		0.50		ug/L			07/15/24 09:42	1
Chloromethane (methyl chloride)	<0.50		0.50		ug/L			07/15/24 09:42	1
cis-1,2-Dichloroethylene	<0.50		0.50		ug/L			07/15/24 09:42	1
cis-1,3-Dichloropropene	<0.50		0.50		ug/L			07/15/24 09:42	1
Dibromomethane	<0.50		0.50		ug/L			07/15/24 09:42	1

Client Sample ID: MOANALUA WELLS

Date Collected: 07/09/24 09:52
Date Received: 07/10/24 09:55

Lab Sample ID: 380-103361-1

Matrix: Water

Method: EPA-DW 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.50	*+	0.50		ug/L			07/15/24 09:42	1
Dichloromethane	<0.50		0.50		ug/L			07/15/24 09:42	1
Diisopropyl ether	<3.0		3.0		ug/L			07/15/24 09:42	1
Ethylbenzene	<0.50		0.50		ug/L			07/15/24 09:42	1
Hexachlorobutadiene	<0.50		0.50		ug/L			07/15/24 09:42	1
Isopropylbenzene	<0.50		0.50		ug/L			07/15/24 09:42	1
m,p-Xylenes	<0.50		0.50		ug/L			07/15/24 09:42	1
m-Dichlorobenzene (1,3-DCB)	<0.50		0.50		ug/L			07/15/24 09:42	1
Methyl-tert-butyl Ether (MTBE)	<0.50		0.50		ug/L			07/15/24 09:42	1
Naphthalene	<0.50	^3+	0.50		ug/L			07/15/24 09:42	1
n-Butylbenzene	<0.50		0.50		ug/L			07/15/24 09:42	1
N-Propylbenzene	<0.50		0.50		ug/L			07/15/24 09:42	1
o-Chlorotoluene	<0.50		0.50		ug/L			07/15/24 09:42	1
o-Dichlorobenzene (1,2-DCB)	<0.50		0.50		ug/L			07/15/24 09:42	1
o-Xylene	<0.50		0.50		ug/L			07/15/24 09:42	1
p-Chlorotoluene	<0.50		0.50		ug/L			07/15/24 09:42	1
p-Dichlorobenzene (1,4-DCB)	<0.50		0.50		ug/L			07/15/24 09:42	1
p-Isopropyltoluene	<0.50		0.50		ug/L			07/15/24 09:42	1
sec-Butylbenzene	<0.50		0.50		ug/L			07/15/24 09:42	1
Styrene	<0.50		0.50		ug/L			07/15/24 09:42	1
Tert-amyl methyl ether	<3.0		3.0		ug/L			07/15/24 09:42	1
Tert-butyl ethyl ether	<3.0		3.0		ug/L			07/15/24 09:42	1
tert-Butylbenzene	<0.50		0.50		ug/L			07/15/24 09:42	1
Tetrachloroethene (PCE)	<0.50		0.50		ug/L			07/15/24 09:42	1
Toluene	<0.50		0.50		ug/L			07/15/24 09:42	1
trans-1,2-Dichloroethylene	<0.50		0.50		ug/L			07/15/24 09:42	1
trans-1,3-Dichloropropene	<0.50		0.50		ug/L			07/15/24 09:42	1
Trichloroethylene (TCE)	<0.50		0.50		ug/L			07/15/24 09:42	1
Trichlorofluoromethane (Freon 11)	<0.50		0.50		ug/L			07/15/24 09:42	1
Trichlorotrifluoroethane	<0.50		0.50		ug/L			07/15/24 09:42	1
Vinyl Chloride (VC)	<0.30		0.30		ug/L			07/15/24 09:42	1
Xylenes, Total	<0.50		0.50		ug/L			07/15/24 09:42	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*0.54*	*T J*	*ug/L*		*2.38*	*N/A*		*07/15/24 09:42*	*1*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*07/17/24 21:13*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*07/15/24 09:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*07/17/24 21:13*	*1*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*		*07/15/24 09:42*	*1*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*07/17/24 21:13*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*07/15/24 09:42*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*07/17/24 21:13*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2,4'-DDD	<0.097		0.097		ug/L		07/11/24 09:40	07/12/24 12:20	1
2,4'-DDE	<0.097		0.097		ug/L		07/11/24 09:40	07/12/24 12:20	1
2,4'-DDT	<0.097		0.097		ug/L		07/11/24 09:40	07/12/24 12:20	1

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

Job ID: 380-103361-1
SDG: Quarterly

Client Sample ID: MOANALUA WELLS
Date Collected: 07/09/24 09:52
Date Received: 07/10/24 09:55

Lab Sample ID: 380-103361-1
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	<0.097		0.097		ug/L		07/11/24 09:40	07/12/24 12:20	1
2,6-Dinitrotoluene	<0.097		0.097		ug/L		07/11/24 09:40	07/12/24 12:20	1
4,4'-DDD	<0.097		0.097		ug/L		07/11/24 09:40	07/12/24 12:20	1
4,4'-DDE	<0.097		0.097		ug/L		07/11/24 09:40	07/12/24 12:20	1
4,4'-DDT	<0.097		0.097		ug/L		07/11/24 09:40	07/12/24 12:20	1
Acenaphthene	<0.097		0.097		ug/L		07/11/24 09:40	07/12/24 12:20	1
Acenaphthylene	<0.097		0.097		ug/L		07/11/24 09:40	07/12/24 12:20	1
Acetochlor	<0.097		0.097		ug/L		07/11/24 09:40	07/12/24 12:20	1
Alachlor	<0.048		0.048		ug/L		07/11/24 09:40	07/12/24 12:20	1
alpha-BHC	<0.097		0.097		ug/L		07/11/24 09:40	07/12/24 12:20	1
alpha-Chlordane	<0.048		0.048		ug/L		07/11/24 09:40	07/12/24 12:20	1
Anthracene	<0.019		0.019		ug/L		07/11/24 09:40	07/12/24 12:20	1
Atrazine	<0.048		0.048		ug/L		07/11/24 09:40	07/12/24 12:20	1
Benz(a)anthracene	<0.048		0.048		ug/L		07/11/24 09:40	07/12/24 12:20	1
Benzo[a]pyrene	<0.019		0.019		ug/L		07/11/24 09:40	07/12/24 12:20	1
Benzo[b]fluoranthene	<0.019		0.019		ug/L		07/11/24 09:40	07/12/24 12:20	1
Benzo[g,h,i]perylene	<0.048		0.048		ug/L		07/11/24 09:40	07/12/24 12:20	1
Benzo[k]fluoranthene	<0.019		0.019		ug/L		07/11/24 09:40	07/12/24 12:20	1
beta-BHC	<0.097		0.097		ug/L		07/11/24 09:40	07/12/24 12:20	1
Bis(2-ethylhexyl) phthalate	<0.58		0.58		ug/L		07/11/24 09:40	07/12/24 12:20	1
Aldrin	<0.0097		0.0097		ug/L		07/11/24 09:40	07/12/24 12:20	1
Bromacil	<0.097		0.097		ug/L		07/11/24 09:40	07/12/24 12:20	1
Butachlor	<0.048		0.048		ug/L		07/11/24 09:40	07/12/24 12:20	1
Butylbenzylphthalate	<0.48		0.48		ug/L		07/11/24 09:40	07/12/24 12:20	1
Chlorobenzilate	<0.097		0.097		ug/L		07/11/24 09:40	07/12/24 12:20	1
Chloroneb	<0.097		0.097		ug/L		07/11/24 09:40	07/12/24 12:20	1
Chlorothalonil (Draconil, Bravo)	<0.097		0.097		ug/L		07/11/24 09:40	07/12/24 12:20	1
Chlorpyrifos	<0.048		0.048		ug/L		07/11/24 09:40	07/12/24 12:20	1
Chrysene	<0.019		0.019		ug/L		07/11/24 09:40	07/12/24 12:20	1
delta-BHC	<0.097		0.097		ug/L		07/11/24 09:40	07/12/24 12:20	1
Di(2-ethylhexyl)adipate	<0.58		0.58		ug/L		07/11/24 09:40	07/12/24 12:20	1
Dibenz(a,h)anthracene	<0.048		0.048		ug/L		07/11/24 09:40	07/12/24 12:20	1
Diclorvos (DDVP)	<0.048		0.048		ug/L		07/11/24 09:40	07/12/24 12:20	1
Dieldrin	**0.025**		0.0097		ug/L		07/11/24 09:40	07/12/24 12:20	1
Diethylphthalate	<0.48		0.48		ug/L		07/11/24 09:40	07/12/24 12:20	1
Dimethylphthalate	<0.48		0.48		ug/L		07/11/24 09:40	07/12/24 12:20	1
Di-n-butyl phthalate	<0.97		0.97		ug/L		07/11/24 09:40	07/12/24 12:20	1
Di-n-octyl phthalate	<0.097		0.097		ug/L		07/11/24 09:40	07/12/24 12:20	1
Endosulfan I (Alpha)	<0.097		0.097		ug/L		07/11/24 09:40	07/12/24 12:20	1
Endosulfan II (Beta)	<0.097		0.097		ug/L		07/11/24 09:40	07/12/24 12:20	1
Endosulfan sulfate	<0.097		0.097		ug/L		07/11/24 09:40	07/12/24 12:20	1
Endrin	<0.0097		0.0097		ug/L		07/11/24 09:40	07/12/24 12:20	1
Endrin aldehyde	<0.097		0.097		ug/L		07/11/24 09:40	07/12/24 12:20	1
EPTC	<0.097		0.097		ug/L		07/11/24 09:40	07/12/24 12:20	1
Fluoranthene	<0.097		0.097		ug/L		07/11/24 09:40	07/12/24 12:20	1
Fluorene	<0.048		0.048		ug/L		07/11/24 09:40	07/12/24 12:20	1
gamma-BHC (Lindane)	<0.0097		0.0097		ug/L		07/11/24 09:40	07/12/24 12:20	1
gamma-Chlordane	<0.048		0.048		ug/L		07/11/24 09:40	07/12/24 12:20	1
Heptachlor	<0.0097	^3+	0.0097		ug/L		07/11/24 09:40	07/12/24 12:20	1

Client Sample ID: MOANALUA WELLS
Date Collected: 07/09/24 09:52
Date Received: 07/10/24 09:55

Lab Sample ID: 380-103361-1
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Heptachlor epoxide (isomer B)	<0.0097		0.0097		ug/L		07/11/24 09:40	07/12/24 12:20	1
Hexachlorobenzene	<0.048		0.048		ug/L		07/11/24 09:40	07/12/24 12:20	1
Hexachlorocyclopentadiene	<0.048		0.048		ug/L		07/11/24 09:40	07/12/24 12:20	1
Indeno[1,2,3-cd]pyrene	<0.048		0.048		ug/L		07/11/24 09:40	07/12/24 12:20	1
Isophorone	<0.097		0.097		ug/L		07/11/24 09:40	07/12/24 12:20	1
Malathion	<0.097		0.097		ug/L		07/11/24 09:40	07/12/24 12:20	1
Methoxychlor	<0.048		0.048		ug/L		07/11/24 09:40	07/12/24 12:20	1
Metolachlor	<0.048		0.048		ug/L		07/11/24 09:40	07/12/24 12:20	1
Molinate	<0.097		0.097		ug/L		07/11/24 09:40	07/12/24 12:20	1
Naphthalene	<0.097		0.097		ug/L		07/11/24 09:40	07/12/24 12:20	1
Parathion	<0.097		0.097		ug/L		07/11/24 09:40	07/12/24 12:20	1
Pendimethalin (Penoxaline)	<0.097		0.097		ug/L		07/11/24 09:40	07/12/24 12:20	1
Phenanthrene	<0.039		0.039		ug/L		07/11/24 09:40	07/12/24 12:20	1
Propachlor	<0.048		0.048		ug/L		07/11/24 09:40	07/12/24 12:20	1
Pyrene	<0.048		0.048		ug/L		07/11/24 09:40	07/12/24 12:20	1
Simazine	<0.048		0.048		ug/L		07/11/24 09:40	07/12/24 12:20	1
Terbacil	<0.097		0.097		ug/L		07/11/24 09:40	07/12/24 12:20	1
Terbuthylazine	<0.097		0.097		ug/L		07/11/24 09:40	07/12/24 12:20	1
Thiobencarb	<0.097		0.097		ug/L		07/11/24 09:40	07/12/24 12:20	1
Total Permethrin (mixed isomers)	<0.19		0.19		ug/L		07/11/24 09:40	07/12/24 12:20	1
trans-Nonachlor	<0.048		0.048		ug/L		07/11/24 09:40	07/12/24 12:20	1
Trifluralin	<0.097		0.097		ug/L		07/11/24 09:40	07/12/24 12:20	1
1-Methylnaphthalene	<0.097		0.097		ug/L		07/11/24 09:40	07/12/24 12:20	1
2-Methylnaphthalene	<0.097		0.097		ug/L		07/11/24 09:40	07/12/24 12:20	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*	*07/11/24 09:40*	*07/12/24 12:20*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Nitro-m-xylene	*97*		*70 - 130*	*07/11/24 09:40*	*07/12/24 12:20*	*1*
Perylene-d12	*95*		*70 - 130*	*07/11/24 09:40*	*07/12/24 12:20*	*1*
Triphenylphosphate	*98*		*70 - 130*	*07/11/24 09:40*	*07/12/24 12:20*	*1*

Method: EPA 625.1 SIM - Semivolatile Organic Compounds GC/MS (SIM)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.19		0.19		ug/L		07/15/24 05:12	08/02/24 12:40	1
2,4,5-Trichlorophenol	<4.8		4.8		ug/L		07/15/24 05:12	08/02/24 12:40	1
2,4,6-Trichlorophenol	<0.96		0.96		ug/L		07/15/24 05:12	08/02/24 12:40	1
2,4-Dichlorophenol	<0.96		0.96		ug/L		07/15/24 05:12	08/02/24 12:40	1
2,4-Dinitrophenol	<4.8		4.8		ug/L		07/15/24 05:12	08/02/24 12:40	1
2,6-Dichlorophenol	<4.8		4.8		ug/L		07/15/24 05:12	08/02/24 12:40	1
2-Chloronaphthalene	<0.19		0.19		ug/L		07/15/24 05:12	08/02/24 12:40	1
2-Chlorophenol	<0.19		0.19		ug/L		07/15/24 05:12	08/02/24 12:40	1
2-Methylnaphthalene	<0.19		0.19		ug/L		07/15/24 05:12	08/02/24 12:40	1
2-Methylphenol	<0.96		0.96		ug/L		07/15/24 05:12	08/02/24 12:40	1
2-Nitroaniline	<4.8		4.8		ug/L		07/15/24 05:12	08/02/24 12:40	1
2-Nitrophenol	<4.8		4.8		ug/L		07/15/24 05:12	08/02/24 12:40	1
3/4-Methylphenol	<1.9		1.9		ug/L		07/15/24 05:12	08/02/24 12:40	1
3-Nitroaniline	<4.8	*- *1	4.8		ug/L		07/15/24 05:12	08/02/24 12:40	1
4,6-Dinitro-2-methylphenol	<4.8		4.8		ug/L		07/15/24 05:12	08/02/24 12:40	1

Client Sample ID: MOANALUA WELLS

Date Collected: 07/09/24 09:52
Date Received: 07/10/24 09:55

Lab Sample ID: 380-103361-1

Matrix: Water

Method: EPA 625.1 SIM - Semivolatile Organic Compounds GC/MS (SIM) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
4-Bromophenyl phenyl ether	<0.19		0.19		ug/L		07/15/24 05:12	08/02/24 12:40	1
4-Chloro-3-methylphenol	<0.96		0.96		ug/L		07/15/24 05:12	08/02/24 12:40	1
4-Chloroaniline	<4.8	*-	4.8		ug/L		07/15/24 05:12	08/02/24 12:40	1
4-Chlorophenyl phenyl ether	<0.19		0.19		ug/L		07/15/24 05:12	08/02/24 12:40	1
4-Nitroaniline	<4.8		4.8		ug/L		07/15/24 05:12	08/02/24 12:40	1
4-Nitrophenol	<4.8		4.8		ug/L		07/15/24 05:12	08/02/24 12:40	1
Acenaphthene	<0.19		0.19		ug/L		07/15/24 05:12	08/02/24 12:40	1
Acenaphthylene	<0.19		0.19		ug/L		07/15/24 05:12	08/02/24 12:40	1
Aniline	<0.19	*- *1	0.19		ug/L		07/15/24 05:12	08/02/24 12:40	1
Anthracene	<0.19		0.19		ug/L		07/15/24 05:12	08/02/24 12:40	1
Benzidine	<4.8	*-	4.8		ug/L		07/15/24 05:12	08/02/24 12:40	1
Benzo[a]anthracene	<0.19		0.19		ug/L		07/15/24 05:12	08/02/24 12:40	1
Benzo[a]pyrene	<0.19		0.19		ug/L		07/15/24 05:12	08/02/24 12:40	1
Benzo[b]fluoranthene	<0.19		0.19		ug/L		07/15/24 05:12	08/02/24 12:40	1
Benzo[g,h,i]perylene	<0.19		0.19		ug/L		07/15/24 05:12	08/02/24 12:40	1
Benzo[k]fluoranthene	<0.19		0.19		ug/L		07/15/24 05:12	08/02/24 12:40	1
Benzoic acid	<9.6		9.6		ug/L		07/15/24 05:12	08/02/24 12:40	1
Benzyl alcohol	<0.96		0.96		ug/L		07/15/24 05:12	08/02/24 12:40	1
Bis(2-chloroethoxy)methane	<0.19		0.19		ug/L		07/15/24 05:12	08/02/24 12:40	1
Bis(2-chloroethyl)ether	<0.19		0.19		ug/L		07/15/24 05:12	08/02/24 12:40	1
bis (2-Chloroisopropyl) ether	<0.19		0.19		ug/L		07/15/24 05:12	08/02/24 12:40	1
Chrysene	<0.19		0.19		ug/L		07/15/24 05:12	08/02/24 12:40	1
Dibenz(a,h)anthracene	<0.19		0.19		ug/L		07/15/24 05:12	08/02/24 12:40	1
Dibenzofuran	<0.19		0.19		ug/L		07/15/24 05:12	08/02/24 12:40	1
Fluoranthene	<0.19		0.19		ug/L		07/15/24 05:12	08/02/24 12:40	1
Fluorene	<0.19		0.19		ug/L		07/15/24 05:12	08/02/24 12:40	1
Hexachloroethane	<0.19		0.19		ug/L		07/15/24 05:12	08/02/24 12:40	1
Indeno[1,2,3-cd]pyrene	<0.19		0.19		ug/L		07/15/24 05:12	08/02/24 12:40	1
Naphthalene	<0.19		0.19		ug/L		07/15/24 05:12	08/02/24 12:40	1
Nitrobenzene	<0.19		0.19		ug/L		07/15/24 05:12	08/02/24 12:40	1
N-Nitrosodi-n-propylamine	<0.19		0.19		ug/L		07/15/24 05:12	08/02/24 12:40	1
N-Nitrosodiphenylamine	<0.19		0.19		ug/L		07/15/24 05:12	08/02/24 12:40	1
Pentachlorophenol	<0.96		0.96		ug/L		07/15/24 05:12	08/02/24 12:40	1
Phenanthrene	<0.19		0.19		ug/L		07/15/24 05:12	08/02/24 12:40	1
Phenol	<0.96		0.96		ug/L		07/15/24 05:12	08/02/24 12:40	1
Pyrene	<0.19		0.19		ug/L		07/15/24 05:12	08/02/24 12:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*71*		*28 - 127*	*07/15/24 05:12*	*08/02/24 12:40*	*1*
2-Fluorobiphenyl (Surr)	*67*		*31 - 120*	*07/15/24 05:12*	*08/02/24 12:40*	*1*
2-Fluorophenol (Surr)	*46*		*17 - 120*	*07/15/24 05:12*	*08/02/24 12:40*	*1*
Nitrobenzene-d5 (Surr)	*72*		*27 - 120*	*07/15/24 05:12*	*08/02/24 12:40*	*1*
Phenol-d6 (Surr)	*29*		*10 - 120*	*07/15/24 05:12*	*08/02/24 12:40*	*1*
p-Terphenyl-d14 (Surr)	*78*		*45 - 120*	*07/15/24 05:12*	*08/02/24 12:40*	*1*

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS)

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
2-Pentenal, (E)-	*40*	*T J N*	*ug/L*		*2.84*	*1576-87-0*	*07/15/24 05:12*	*08/02/24 19:40*	*1*
4-Octen-3-one	*26*	*T J N*	*ug/L*		*3.03*	*14129-48-7*	*07/15/24 05:12*	*08/02/24 19:40*	*1*

Client Sample ID: MOANALUA WELLS

Date Collected: 07/09/24 09:52
Date Received: 07/10/24 09:55

Lab Sample ID: 380-103361-1

Matrix: Water

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Cyclotetrasiloxane, octamethyl-	11	T J N	ug/L		3.23	556-67-2	07/15/24 05:12	08/02/24 19:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	59		33 - 139	07/15/24 05:12	08/02/24 19:40	1
2-Fluorobiphenyl (Surr)	77		33 - 126	07/15/24 05:12	08/02/24 19:40	1
2-Fluorophenol (Surr)	45		12 - 120	07/15/24 05:12	08/02/24 19:40	1
Nitrobenzene-d5 (Surr)	68		36 - 120	07/15/24 05:12	08/02/24 19:40	1
Phenol-d6 (Surr)	25		10 - 120	07/15/24 05:12	08/02/24 19:40	1
p-Terphenyl-d14 (Surr)	83		47 - 131	07/15/24 05:12	08/02/24 19:40	1

Method: SW846 8015B GRO LL - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	<10		10		ug/L			07/16/24 19:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		38 - 134		07/16/24 19:41	1

Method: EPA-DW2 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	<0.020		0.020		ug/L		07/12/24 11:30	07/13/24 02:17	1
1,2-Dibromo-3-Chloropropane	<0.0099		0.0099		ug/L		07/12/24 11:30	07/13/24 02:17	1
1,2-Dibromoethane	<0.0099		0.0099		ug/L		07/12/24 11:30	07/13/24 02:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dibromopropane (Surr)	96		60 - 140	07/12/24 11:30	07/13/24 02:17	1

Method: EPA 505 - Organochlorine Pesticides/PCBs (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Toxaphene	<0.51		0.51		ug/L		07/15/24 14:30	07/16/24 02:06	1
Chlordane (n.o.s.)	<0.10		0.10		ug/L		07/15/24 14:30	07/16/24 02:06	1
PCB-1016	<0.071		0.071		ug/L		07/15/24 14:30	07/16/24 02:06	1
PCB-1221	<0.10		0.10		ug/L		07/15/24 14:30	07/16/24 02:06	1
PCB-1232	<0.10		0.10		ug/L		07/15/24 14:30	07/16/24 02:06	1
PCB-1242	<0.10		0.10		ug/L		07/15/24 14:30	07/16/24 02:06	1
PCB-1248	<0.10		0.10		ug/L		07/15/24 14:30	07/16/24 02:06	1
PCB-1254	<0.10		0.10		ug/L		07/15/24 14:30	07/16/24 02:06	1
PCB-1260	<0.071		0.071		ug/L		07/15/24 14:30	07/16/24 02:06	1
Polychlorinated biphenyls, Total	<0.10		0.10		ug/L		07/15/24 14:30	07/16/24 02:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	94		70 - 130	07/15/24 14:30	07/16/24 02:06	1

Method: SW846 8015B - Diesel Range Organics (DRO) (GC) Low Level

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<27		27		ug/L		07/12/24 09:30	07/20/24 11:05	1
Motor Oil Range Organics [C24-C36]	<27		27		ug/L		07/12/24 09:30	07/20/24 11:05	1
C8-C18	<27		27		ug/L		07/12/24 09:30	07/20/24 11:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	111		60 - 130	07/12/24 09:30	07/20/24 11:05	1

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

Job ID: 380-103361-1
SDG: Quarterly

Client Sample ID: MOANALUA WELLS

Date Collected: 07/09/24 09:52
Date Received: 07/10/24 09:55

Lab Sample ID: 380-103361-1

Matrix: Water

Method: SW846 8015B - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	<0.10		0.10		mg/L			07/15/24 19:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Hexafluoro-2-propanol (Surr)	*89*		*54 - 120*		*07/15/24 19:57*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Bromide	**280**		5.0		ug/L			07/13/24 01:01	1
Chloride	**100**		2.5		mg/L			07/11/24 00:57	5
Nitrate as N	**0.54**		0.25		mg/L			07/11/24 00:57	5
Nitrite as N	<0.25		0.25		mg/L			07/11/24 00:57	5
Sulfate	**17**		1.3		mg/L			07/11/24 00:57	5

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**20**		1.0		mg/L			07/12/24 00:43	1
Magnesium	**18**		0.10		mg/L			07/12/24 00:43	1
Potassium	**2.4**		1.0		mg/L			07/12/24 00:43	1
Sodium	**42**		1.0		mg/L			07/12/24 00:43	1

Method: EPA 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0		ug/L			07/11/24 19:04	1
Arsenic	<1.0		1.0		ug/L			07/11/24 19:04	1
Beryllium	<1.0		1.0		ug/L			07/11/24 19:04	1
Cadmium	<0.50		0.50		ug/L			07/11/24 19:04	1
Chromium	**4.7**		1.0		ug/L			07/11/24 19:04	1
Copper	**7.6**		2.0		ug/L			07/11/24 19:04	1
Lead	<0.50		0.50		ug/L			07/11/24 19:04	1
Nickel	<5.0		5.0		ug/L			07/11/24 19:04	1
Selenium	<5.0		5.0		ug/L			07/11/24 19:04	1
Silver	<0.50	F1	0.50		ug/L			07/11/24 19:04	1
Thallium	<1.0		1.0		ug/L			07/11/24 19:04	1
Zinc	<20		20		ug/L			07/11/24 19:04	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.10		ug/L		07/15/24 12:54	07/15/24 17:52	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity (SM 2320B)	**60**		2.0		mg/L			07/12/24 13:56	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**60**		2.0		mg/L			07/12/24 13:56	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<2.0		2.0		mg/L			07/12/24 13:56	1
Specific Conductance (SM 2510B)	**500**		2.0		umhos/cm			07/12/24 13:56	1
Total Dissolved Solids (SM 2540C)	**320**		20		mg/L			07/11/24 12:19	1
Fluoride (SM 4500 F C)	<0.050		0.050		mg/L			07/12/24 17:48	1
pH (SM 4500 H+ B)	**7.9**	**HF**			SU			07/12/24 13:56	1
Sulfide (SM 4500 S2 D)	<0.050		0.050		mg/L			07/12/24 15:49	1

Client Sample ID: TRAVEL BLANK

Date Collected: 07/09/24 09:52
Date Received: 07/10/24 09:55

Lab Sample ID: 380-103361-2

Matrix: Water

Method: EPA-DW 524.2 - Total Trihalomethanes

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Trihalomethanes, Total	<0.50		0.50		ug/L			07/15/24 10:05	1

Method: EPA-DW 524.2 - Volatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Tertiary Butyl Alcohol (TBA)	<2.0		2.0		ug/L			07/17/24 17:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*70 - 130*		*07/17/24 17:27*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*07/17/24 17:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*07/17/24 17:27*	*1*

Method: EPA-DW 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.50		0.50		ug/L			07/15/24 10:05	1
1,1,1-Trichloroethane	<0.50		0.50		ug/L			07/15/24 10:05	1
1,1,2,2-Tetrachloroethane	<0.50		0.50		ug/L			07/15/24 10:05	1
1,1,2-Trichloroethane	<0.50		0.50		ug/L			07/15/24 10:05	1
1,1-Dichloroethane	<0.50		0.50		ug/L			07/15/24 10:05	1
1,1-Dichlorethylene	<0.50		0.50		ug/L			07/15/24 10:05	1
1,1-Dichloropropene	<0.50		0.50		ug/L			07/15/24 10:05	1
1,2,3-Trichlorobenzene	<0.50	^3+	0.50		ug/L			07/15/24 10:05	1
1,2,3-Trichloropropane	<0.50		0.50		ug/L			07/15/24 10:05	1
1,2,4-Trichlorobenzene	<0.50		0.50		ug/L			07/15/24 10:05	1
1,2,4-Trimethylbenzene	<0.50		0.50		ug/L			07/15/24 10:05	1
1,2-Dichloroethane	<0.50		0.50		ug/L			07/15/24 10:05	1
1,2-Dichloropropane	<0.50		0.50		ug/L			07/15/24 10:05	1
1,3,5-Trimethylbenzene	<0.50		0.50		ug/L			07/15/24 10:05	1
1,3-Dichloropropane	<0.50		0.50		ug/L			07/15/24 10:05	1
2,2-Dichloropropane	<0.50		0.50		ug/L			07/15/24 10:05	1
2-Butanone (MEK)	<5.0		5.0		ug/L			07/15/24 10:05	1
4-Methyl-2-pentanone (MIBK)	<5.0		5.0		ug/L			07/15/24 10:05	1
Acetone	<500		500		ug/L			07/17/24 21:36	1
Benzene	<0.50		0.50		ug/L			07/15/24 10:05	1
Bromobenzene	<0.50		0.50		ug/L			07/15/24 10:05	1
Bromochloromethane	<0.50		0.50		ug/L			07/15/24 10:05	1
Bromodichloromethane	<0.50		0.50		ug/L			07/15/24 10:05	1
Bromoform	<0.50		0.50		ug/L			07/15/24 10:05	1
Bromomethane (Methyl Bromide)	<0.50		0.50		ug/L			07/15/24 10:05	1
Carbon disulfide	<0.50		0.50		ug/L			07/15/24 10:05	1
Carbon tetrachloride	<0.50		0.50		ug/L			07/15/24 10:05	1
Chlorobenzene	<0.50		0.50		ug/L			07/15/24 10:05	1
Chlorodibromomethane	<0.50		0.50		ug/L			07/15/24 10:05	1
Chloroethane	<0.50		0.50		ug/L			07/15/24 10:05	1
Chloroform (Trichloromethane)	<0.50		0.50		ug/L			07/15/24 10:05	1
Dichloromethane	<0.50		0.50		ug/L			07/15/24 10:05	1
cis-1,2-Dichloroethylene	<0.50		0.50		ug/L			07/15/24 10:05	1
cis-1,3-Dichloropropene	<0.50		0.50		ug/L			07/15/24 10:05	1
Dibromomethane	<0.50		0.50		ug/L			07/15/24 10:05	1
Dichlorodifluoromethane	<0.50	*+	0.50		ug/L			07/15/24 10:05	1
Ethylbenzene	<0.50		0.50		ug/L			07/15/24 10:05	1

Client Sample ID: TRAVEL BLANK
Date Collected: 07/09/24 09:52
Date Received: 07/10/24 09:55

Lab Sample ID: 380-103361-2
Matrix: Water

Method: EPA-DW 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	<0.50		0.50		ug/L			07/15/24 10:05	1
Isopropylbenzene	<0.50		0.50		ug/L			07/15/24 10:05	1
m,p-Xylenes	<0.50		0.50		ug/L			07/15/24 10:05	1
m-Dichlorobenzene (1,3-DCB)	<0.50		0.50		ug/L			07/15/24 10:05	1
Methyl-tert-butyl Ether (MTBE)	<0.50		0.50		ug/L			07/15/24 10:05	1
Naphthalene	<0.50	^3+	0.50		ug/L			07/15/24 10:05	1
n-Butylbenzene	<0.50		0.50		ug/L			07/15/24 10:05	1
N-Propylbenzene	<0.50		0.50		ug/L			07/15/24 10:05	1
o-Dichlorobenzene (1,2-DCB)	<0.50		0.50		ug/L			07/15/24 10:05	1
o-Chlorotoluene	<0.50		0.50		ug/L			07/15/24 10:05	1
o-Xylene	<0.50		0.50		ug/L			07/15/24 10:05	1
p-Chlorotoluene	<0.50		0.50		ug/L			07/15/24 10:05	1
p-Dichlorobenzene (1,4-DCB)	<0.50		0.50		ug/L			07/15/24 10:05	1
p-Isopropyltoluene	<0.50		0.50		ug/L			07/15/24 10:05	1
sec-Butylbenzene	<0.50		0.50		ug/L			07/15/24 10:05	1
Styrene	<0.50		0.50		ug/L			07/15/24 10:05	1
Tert-amyl methyl ether	<3.0		3.0		ug/L			07/15/24 10:05	1
Tert-butyl ethyl ether	<3.0		3.0		ug/L			07/15/24 10:05	1
tert-Butylbenzene	<0.50		0.50		ug/L			07/15/24 10:05	1
Tetrachloroethene (PCE)	<0.50		0.50		ug/L			07/15/24 10:05	1
Toluene	<0.50		0.50		ug/L			07/15/24 10:05	1
1,3-Dichloropropene, Total	<0.50		0.50		ug/L			07/15/24 10:05	1
Xylenes, Total	<0.50		0.50		ug/L			07/15/24 10:05	1
trans-1,2-Dichloroethylene	<0.50		0.50		ug/L			07/15/24 10:05	1
trans-1,3-Dichloropropene	<0.50		0.50		ug/L			07/15/24 10:05	1
Trichloroethylene (TCE)	<0.50		0.50		ug/L			07/15/24 10:05	1
Trichlorofluoromethane (Freon 11)	<0.50		0.50		ug/L			07/15/24 10:05	1
Vinyl Chloride (VC)	<0.30		0.30		ug/L			07/15/24 10:05	1
Trichlorotrifluoroethane	<0.50		0.50		ug/L			07/15/24 10:05	1
Bromoethane	<0.50		0.50		ug/L			07/15/24 10:05	1
Chloromethane (methyl chloride)	<0.50		0.50		ug/L			07/15/24 10:05	1
Diisopropyl ether	<3.0		3.0		ug/L			07/15/24 10:05	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*0.57*	*T J*	*ug/L*		*2.38*	*N/A*		*07/15/24 10:05*	*1*
Unknown	*0.51*	*T J*	*ug/L*		*2.38*	*N/A*		*07/17/24 21:36*	*1*
Unknown	*1.5*	*T J*	*ug/L*		*8.99*	*N/A*		*07/15/24 10:05*	*1*
Unknown	*7.4*	*T J*	*ug/L*		*9.18*	*N/A*		*07/15/24 10:05*	*1*
Unknown	*5.5*	*T J*	*ug/L*		*9.18*	*N/A*		*07/17/24 21:36*	*1*
Unknown	*0.87*	*T J*	*ug/L*		*9.26*	*N/A*		*07/15/24 10:05*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*07/15/24 10:05*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*		*07/17/24 21:36*	*1*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*07/15/24 10:05*	*1*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*07/17/24 21:36*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*07/15/24 10:05*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*07/17/24 21:36*	*1*

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

Job ID: 380-103361-1
SDG: Quarterly

Client Sample ID: TRAVEL BLANK

Date Collected: 07/09/24 09:52
Date Received: 07/10/24 09:55

Lab Sample ID: 380-103361-2

Matrix: Water

Method: SW846 8015B GRO LL - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	<10		10		ug/L			07/16/24 21:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*77*		*38 - 134*		*07/16/24 21:52*	*1*

Method: EPA-DW2 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	<0.020		0.020		ug/L		07/18/24 15:00	07/19/24 05:35	1
1,2-Dibromo-3-Chloropropane	<0.010		0.010		ug/L		07/18/24 15:00	07/19/24 05:35	1
1,2-Dibromoethane	<0.010		0.010		ug/L		07/18/24 15:00	07/19/24 05:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane (Surr)	*92*		*60 - 140*	*07/18/24 15:00*	*07/19/24 05:35*	*1*

Action Limit Summary

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

Job ID: 380-103361-1
SDG: Quarterly

Client Sample ID: MOANALUA WELLS — Lab Sample ID: 380-103361-1

Compliance Check

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

Analyte	Result	Qualifier	Unit	HI Org Limit	EPAMCL Limit	EPAMCLS Limit	Method	Prep Type
Trihalomethanes, Total	<0.50		ug/L		80		524.2	Total/NA
1,1,1-Trichloroethane	<0.50		ug/L	200.0	200		524.2	Total/NA
1,1,2-Trichloroethane	<0.50		ug/L	5.000	5		524.2	Total/NA
1,1-Dichlorethylene	<0.50		ug/L	7.000	7		524.2	Total/NA
1,2,3-Trichloropropane	<0.50		ug/L	0.6000			524.2	Total/NA
1,2,4-Trichlorobenzene	<0.50		ug/L	70.00	70		524.2	Total/NA
1,2-Dichloroethane	<0.50		ug/L	5.000	5		524.2	Total/NA
1,2-Dichloropropane	<0.50		ug/L	5.000	5		524.2	Total/NA
Benzene	<0.50		ug/L	5.000	5		524.2	Total/NA
Carbon tetrachloride	<0.50		ug/L	5.000	5		524.2	Total/NA
Chlorobenzene	<0.50		ug/L	100.0	100		524.2	Total/NA
cis-1,2-Dichloroethylene	<0.50		ug/L	70.00	70		524.2	Total/NA
Dichloromethane	<0.50		ug/L	5.000	5		524.2	Total/NA
Ethylbenzene	<0.50		ug/L	700.0	700		524.2	Total/NA
o-Dichlorobenzene (1,2-DCB)	<0.50		ug/L	600.0	600		524.2	Total/NA
p-Dichlorobenzene (1,4-DCB)	<0.50		ug/L	75.000	75		524.2	Total/NA
Styrene	<0.50		ug/L	100.0	100		524.2	Total/NA
Tetrachloroethene (PCE)	<0.50		ug/L	5.000	5		524.2	Total/NA
Toluene	<0.50		ug/L	1000	1000		524.2	Total/NA
trans-1,2-Dichloroethylene	<0.50		ug/L	100.0	100		524.2	Total/NA
Trichloroethylene (TCE)	<0.50		ug/L	5.000	5		524.2	Total/NA
Vinyl Chloride (VC)	<0.30		ug/L	2.000	2		524.2	Total/NA
Xylenes, Total	<0.50		ug/L	10000	10000		524.2	Total/NA
Alachlor	<0.048		ug/L		2		525.2	Total/NA
Atrazine	<0.048		ug/L		3		525.2	Total/NA
Benzo[a]pyrene	<0.019		ug/L		0.2		525.2	Total/NA
Bis(2-ethylhexyl) phthalate	<0.58		ug/L		6		525.2	Total/NA
Di(2-ethylhexyl)adipate	<0.58		ug/L		400		525.2	Total/NA
Endrin	<0.0097		ug/L		2		525.2	Total/NA
gamma-BHC (Lindane)	<0.0097		ug/L		0.2		525.2	Total/NA
Heptachlor	<0.0097	^3+	ug/L		0.4		525.2	Total/NA
Heptachlor epoxide (isomer B)	<0.0097		ug/L		0.2		525.2	Total/NA
Hexachlorobenzene	<0.048		ug/L		1		525.2	Total/NA
Hexachlorocyclopentadiene	<0.048		ug/L		50		525.2	Total/NA
Methoxychlor	<0.048		ug/L		40		525.2	Total/NA
Simazine	<0.048		ug/L		4		525.2	Total/NA
Benzo[a]pyrene	<0.19		ug/L		0.2		625.1 SIM	Total/NA
Pentachlorophenol	<0.96		ug/L		1		625.1 SIM	Total/NA
1,2,3-Trichloropropane	<0.020		ug/L	0.6000			504.1	Total/NA
1,2-Dibromo-3-Chloropropane	<0.0099		ug/L		0.2		504.1	Total/NA
1,2-Dibromoethane	<0.0099		ug/L		0.05		504.1	Total/NA
Toxaphene	<0.51		ug/L		3		505	Total/NA
Chlordane (n.o.s.)	<0.10		ug/L		2		505	Total/NA
Polychlorinated biphenyls, Total	<0.10		ug/L		0.5		505	Total/NA
Chloride	100		mg/L			250	300.0	Total/NA
Nitrate as N	0.54		mg/L		10		300.0	Total/NA
Nitrite as N	<0.25		mg/L		1		300.0	Total/NA
Sulfate	17		mg/L			250	300.0	Total/NA

Client Sample ID: MOANALUA WELLS (Continued) — Lab Sample ID: 380-103361-1

Compliance Check

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

Analyte	Result	Qualifier	Unit	HI Org Limit	EPAMCL Limit	EPAMCLS Limit	Method	Prep Type
Antimony	<1.0		ug/L		6		200.8	Total/NA
Arsenic	<1.0		ug/L		10		200.8	Total/NA
Beryllium	<1.0		ug/L		4		200.8	Total/NA
Cadmium	<0.50		ug/L		5		200.8	Total/NA
Chromium	4.7		ug/L		100		200.8	Total/NA
Copper	7.6		ug/L			1000	200.8	Total/NA
Lead	<0.50		ug/L		15.000		200.8	Total/NA
Selenium	<5.0		ug/L		50		200.8	Total/NA
Silver	<0.50	F1	ug/L			100	200.8	Total/NA
Thallium	<1.0		ug/L		2		200.8	Total/NA
Zinc	<20		ug/L			5000	200.8	Total/NA
Mercury	<0.10		ug/L		2		245.1	Total/NA
Total Dissolved Solids	320		mg/L			500	SM 2540C	Total/NA
Fluoride	<0.050		mg/L		4	2	SM 4500 F C	Total/NA
pH	7.9	HF	SU			6.5	SM 4500 H+ B	Total/NA

Client Sample ID: TRAVEL BLANK — Lab Sample ID: 380-103361-2

Compliance Check

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

Analyte	Result	Qualifier	Unit	HI Org Limit	EPAMCL Limit	RL	Method	Prep Type
Trihalomethanes, Total	<0.50		ug/L		80	0.50	524.2	Total/NA
1,1,1-Trichloroethane	<0.50		ug/L	200.0	200	0.50	524.2	Total/NA
1,1,2-Trichloroethane	<0.50		ug/L	5.000	5	0.50	524.2	Total/NA
1,1-Dichlorethylene	<0.50		ug/L	7.000	7	0.50	524.2	Total/NA
1,2,3-Trichloropropane	<0.50		ug/L	0.6000		0.50	524.2	Total/NA
1,2,4-Trichlorobenzene	<0.50		ug/L	70.00	70	0.50	524.2	Total/NA
1,2-Dichloroethane	<0.50		ug/L	5.000	5	0.50	524.2	Total/NA
1,2-Dichloropropane	<0.50		ug/L	5.000	5	0.50	524.2	Total/NA
Benzene	<0.50		ug/L	5.000	5	0.50	524.2	Total/NA
Carbon tetrachloride	<0.50		ug/L	5.000	5	0.50	524.2	Total/NA
Chlorobenzene	<0.50		ug/L	100.0	100	0.50	524.2	Total/NA
Dichloromethane	<0.50		ug/L	5.000	5	0.50	524.2	Total/NA
cis-1,2-Dichloroethylene	<0.50		ug/L	70.00	70	0.50	524.2	Total/NA
Ethylbenzene	<0.50		ug/L	700.0	700	0.50	524.2	Total/NA
o-Dichlorobenzene (1,2-DCB)	<0.50		ug/L	600.0	600	0.50	524.2	Total/NA
p-Dichlorobenzene (1,4-DCB)	<0.50		ug/L	75.000	75	0.50	524.2	Total/NA
Styrene	<0.50		ug/L	100.0	100	0.50	524.2	Total/NA
Tetrachloroethene (PCE)	<0.50		ug/L	5.000	5	0.50	524.2	Total/NA
Toluene	<0.50		ug/L	1000	1000	0.50	524.2	Total/NA
Xylenes, Total	<0.50		ug/L	10000	10000	0.50	524.2	Total/NA
trans-1,2-Dichloroethylene	<0.50		ug/L	100.0	100	0.50	524.2	Total/NA
Trichloroethylene (TCE)	<0.50		ug/L	5.000	5	0.50	524.2	Total/NA
Vinyl Chloride (VC)	<0.30		ug/L	2.000	2	0.30	524.2	Total/NA
1,2,3-Trichloropropane	<0.020		ug/L	0.6000		0.020	504.1	Total/NA

Action Limit Summary

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

Job ID: 380-103361-1
SDG: Quarterly

Client Sample ID: TRAVEL BLANK (Continued) Lab Sample ID: 380-103361-2

Compliance Check

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

Analyte	Result	Qualifier	Unit	HI Org Limit	EPAMCL Limit	RL	Method	Prep Type
1,2-Dibromo-3-Chloropropane	<0.010		ug/L		0.2	0.010	504.1	Total/NA
1,2-Dibromoethane	<0.010		ug/L		0.05	0.010	504.1	Total/NA

Surrogate Summary

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

Job ID: 380-103361-1
SDG: Quarterly

Method: 524.2 - Volatile Organic Compounds (GC/MS SIM)

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

		Percent Surrogate Recovery (Acceptance Limits)		
		TOL	BFB	DCA
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)
380-103361-1	MOANALUA WELLS	97	94	101
380-103361-2	TRAVEL BLANK	98	98	104
LCS 380-99491/2	Lab Control Sample	98	95	103
LCSD 380-99491/3	Lab Control Sample Dup	100	96	103
MB 380-99491/5	Method Blank	98	96	101

Surrogate Legend

TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 524.2 - Volatile Organic Compounds (GC/MS SIM)

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

		Percent Surrogate Recovery (Acceptance Limits)		
		TOL	BFB	DCA
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)
MRL 380-99491/4	Lab Control Sample	98	96	100

Surrogate Legend

TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 524.2 - Volatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)		
		DCA	BFB	TOL
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)
380-103361-1	MOANALUA WELLS	95	111	91
380-103361-1	MOANALUA WELLS	93	102	98
380-103361-2	TRAVEL BLANK	98	102	97
380-103361-2	TRAVEL BLANK	91	101	95
LCS 380-98936/3	Lab Control Sample	98	102	100
LCS 380-99494/5	Lab Control Sample	94	98	103
LCSD 380-98936/4	Lab Control Sample Dup	99	102	99
LCSD 380-99494/6	Lab Control Sample Dup	97	100	113
MB 380-98936/5	Method Blank	98	104	98
MB 380-99494/8	Method Blank	94	97	99
MRL 380-98934/5	Lab Control Sample	103	100	90
MRL 380-98934/6	Lab Control Sample	105	99	88
MRL 380-99494/3	Lab Control Sample	96	99	93
MRL 380-99494/4	Lab Control Sample	99	99	95

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

Surrogate Summary

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

Job ID: 380-103361-1
SDG: Quarterly

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)
380-103361-1	MOANALUA WELLS	97	95	98
380-103361-1 MS	MOANALUA WELLS	99	99	103
380-103361-1 MSD	MOANALUA WELLS	98	98	104
LCS 380-98487/23-A	Lab Control Sample	98	98	103
MB 380-98487/21-A	Method Blank	96	96	103
MRL 380-98487/22-A	Lab Control Sample	97	93	99

Surrogate Legend

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

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL6	TPHd14
Lab Sample ID	Client Sample ID	(33-139)	(33-126)	(12-120)	(36-120)	(10-120)	(47-131)
380-103361-1	MOANALUA WELLS	59	77	45	68	25	83
MB 570-460222/1-A	Method Blank	45	59	41	53	26	71

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL6 = Phenol-d6 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

Method: 625.1 SIM - Semivolatile Organic Compounds GC/MS (SIM)

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

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL6	TPHd14
Lab Sample ID	Client Sample ID	(28-127)	(31-120)	(17-120)	(27-120)	(10-120)	(45-120)
380-103361-1	MOANALUA WELLS	71	67	46	72	29	78
LCS 570-460222/2-A	Lab Control Sample	73	70	53	69	38	73
LCSD 570-460222/3-A	Lab Control Sample Dup	81	71	51	62	37	80
MB 570-460222/1-A	Method Blank	70	61	53	68	37	80

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL6 = Phenol-d6 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

Surrogate Summary

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

Job ID: 380-103361-1
SDG: Quarterly

Method: 8015B GRO LL - Gasoline Range Organics - (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	BFB1 (38-134)
380-103360-C-3 MS	Matrix Spike	95
380-103360-C-3 MSD	Matrix Spike Duplicate	100
380-103361-1	MOANALUA WELLS	84
380-103361-2	TRAVEL BLANK	77
LCS 570-460706/4	Lab Control Sample	99
LCSD 570-460706/5	Lab Control Sample Dup	101
MB 570-460706/6	Method Blank	97
MRL 570-460706/3	Lab Control Sample	94

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	DBPP1 (60-140)
380-102882-B-2-A DU	Duplicate	97
380-102882-D-1-A MS	Matrix Spike	87
380-103361-1	MOANALUA WELLS	96
380-103361-2	TRAVEL BLANK	92
380-103828-AP-1-A MS	Matrix Spike	91
380-104331-C-1-A DU	Duplicate	97
LCS 380-98731/38-A	Lab Control Sample	96
LCS 380-99699/29-A	Lab Control Sample	93
MBL 380-98731/13-A	Method Blank	104
MBL 380-99699/4-A	Method Blank	97
MRL 380-98731/11-A	Lab Control Sample	101
MRL 380-98731/12-A	Lab Control Sample	101
MRL 380-99699/2-A	Lab Control Sample	94
MRL 380-99699/3-A	Lab Control Sample	100

Surrogate Legend

DBPP = 1,2-Dibromopropane (Surr)

Method: 505 - Organochlorine Pesticides/PCBs (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	TCX1 (70-130)
380-102721-X-1-B MS	Matrix Spike	99
380-102721-Y-1-B MS	Matrix Spike	111
380-103361-1	MOANALUA WELLS	94
380-103474-E-1-B MS	Matrix Spike	86
380-103474-F-1-B MS	Matrix Spike	98
LCS 380-99010/16-A	Lab Control Sample	99
LCS 380-99010/48-A	Lab Control Sample	92
LCS 380-99010/8-A	Lab Control Sample	105
LCSD 380-99010/49-A	Lab Control Sample Dup	114
MB 380-99010/20-A	Method Blank	102

Surrogate Summary

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

Job ID: 380-103361-1
SDG: Quarterly

Method: 505 - Organochlorine Pesticides/PCBs (GC) (Continued)

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) TCX1 (70-130)
MRL 380-99010/18-A	Lab Control Sample	101
MRL 380-99010/19-A	Lab Control Sample	106

Surrogate Legend

TCX = Tetrachloro-m-xylene

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) OTCSN1 (60-130)
380-103360-D-3-B MS	Matrix Spike	115
380 103360 D 3 C MSD	Matrix Spike Duplicate	109
380-103361-1	MOANALUA WELLS	111
LCS 570-459748/2-A	Lab Control Sample	110
LCSD 570-459748/3-A	Lab Control Sample Dup	91
MB 570-459748/1-A	Method Blank	105
MRL 570-459748/4-A	Lab Control Sample	108

Surrogate Legend

OTCSN = n-Octacosane (Surr)

Method: 8015B - Nonhalogenated Organic Compounds - Direct Injection (GC)

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) HF2PP1 (54-120)
MRL 570-460498/6	Lab Control Sample	91

Surrogate Legend

HF2PP = Hexafluoro-2-propanol (Surr)

Method: 8015B - Nonhalogenated Organic Compounds - Direct Injection (GC)

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) HF2PP2 (54-120)
380-103361-1	MOANALUA WELLS	89
380-103361-1 MS	MOANALUA WELLS	98
380-103361-1 MSD	MOANALUA WELLS	105
LCS 570-460498/4	Lab Control Sample	110
LCSD 570-460498/5	Lab Control Sample Dup	109
MB 570-460498/3	Method Blank	96

Surrogate Legend

HF2PP = Hexafluoro-2-propanol (Surr)

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MRL 380-98934/5
Matrix: Water
Analysis Batch: 98934

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	0.500	0.485	J	ug/L		97	50 - 150
1,1,1-Trichloroethane	0.500	0.563		ug/L		113	50 - 150
1,1,2,2-Tetrachloroethane	0.500	0.682		ug/L		136	50 - 150
1,1,2-Trichloroethane	0.500	0.577		ug/L		115	50 - 150
1,1-Dichloroethane	0.500	0.457	J	ug/L		91	50 - 150
1,1-Dichlorethylene	0.500	0.462	J	ug/L		92	50 - 150
1,1-Dichloropropene	0.500	0.586		ug/L		117	50 - 150
1,2,3-Trichlorobenzene	0.500	0.852	^3+	ug/L		170	50 - 150
1,2,3-Trichloropropane	0.500	0.536		ug/L		107	50 - 150
1,2,4-Trichlorobenzene	0.500	0.689		ug/L		138	50 - 150
1,2,4-Trimethylbenzene	0.500	0.584		ug/L		117	50 - 150
1,2-Dichloroethane	0.500	0.537		ug/L		107	50 - 150
1,2-Dichloropropane	0.500	0.617		ug/L		123	50 - 150
1,3,5-Trimethylbenzene	0.500	0.565		ug/L		113	50 - 150
1,3-Dichloropropane	0.500	0.480	J	ug/L		96	50 - 150
2,2-Dichloropropane	0.500	0.413	J	ug/L		83	50 - 150
2-Butanone (MEK)	5.00	4.97	J	ug/L		99	50 - 150
4-Methyl-2-pentanone (MIBK)	5.00	5.38		ug/L		108	50 - 150
Benzene	0.500	0.599		ug/L		120	50 - 150
Bromobenzene	0.500	0.531		ug/L		106	50 - 150
Bromochloromethane	0.500	0.481	J	ug/L		96	50 - 150
Bromodichloromethane	0.500	0.653		ug/L		131	50 - 150
Bromoform	0.500	0.554		ug/L		111	50 - 150
Bromomethane (Methyl Bromide)	0.500	0.426	J	ug/L		85	50 - 150
Carbon disulfide	0.500	0.571		ug/L		114	50 - 150
Carbon tetrachloride	0.500	0.536		ug/L		107	50 - 150
Chlorobenzene	0.500	0.502		ug/L		100	50 - 150
Chlorodibromomethane	0.500	0.465	J	ug/L		93	50 - 150
cis-1,3-Dichloropropene	0.500	0.484	J	ug/L		97	50 - 150
Dichloromethane	0.500	0.438	J	ug/L		88	50 - 150
Ethylbenzene	0.500	0.493	J	ug/L		99	50 - 150
Hexachlorobutadiene	0.500	0.501		ug/L		100	50 - 150
Isopropylbenzene	0.500	0.585		ug/L		117	50 - 150
m,p-Xylenes	1.00	0.985		ug/L		98	50 - 150
m-Dichlorobenzene (1,3-DCB)	0.500	0.590		ug/L		118	50 - 150
Methyl-tert-butyl Ether (MTBE)	0.500	0.454	J	ug/L		91	50 - 150
Naphthalene	0.500	0.831	^3+	ug/L		166	50 - 150
n-Butylbenzene	0.500	0.608		ug/L		122	50 - 150
N-Propylbenzene	0.500	0.516		ug/L		103	50 - 150
o-Chlorotoluene	0.500	0.592		ug/L		118	50 - 150
o-Dichlorobenzene (1,2-DCB)	0.500	0.587		ug/L		117	50 - 150
o-Xylene	0.500	0.496	J	ug/L		99	50 - 150
p-Chlorotoluene	0.500	0.481	J	ug/L		96	50 - 150
p-Dichlorobenzene (1,4-DCB)	0.500	0.562		ug/L		112	50 - 150
p-Isopropyltoluene	0.500	0.599		ug/L		120	50 - 150
sec-Butylbenzene	0.500	0.617		ug/L		123	50 - 150
Styrene	0.500	0.497	J	ug/L		99	50 - 150
Tert-amyl methyl ether	0.500	0.507	J	ug/L		101	50 - 150

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MRL 380-98934/5
Matrix: Water
Analysis Batch: 98934

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1,3-Dichloropropene, Total	1.00	0.977		ug/L		98	50 - 150
Tert-butyl ethyl ether	0.500	0.434	J	ug/L		87	50 - 150
tert-Butylbenzene	0.500	0.585		ug/L		117	50 - 150
Tetrachloroethene (PCE)	0.500	0.504		ug/L		101	50 - 150
Toluene	0.500	0.511		ug/L		102	50 - 150
trans-1,2-Dichloroethylene	0.500	0.491	J	ug/L		98	50 - 150
trans-1,3-Dichloropropene	0.500	0.493	J	ug/L		99	50 - 150
Trichloroethylene (TCE)	0.500	0.500		ug/L		100	50 - 150
Bromoethane	0.500	0.445	J	ug/L		89	50 - 150
Trichlorofluoromethane (Freon 11)	0.500	0.507		ug/L		101	50 - 150
Trichlorotrifluoroethane	0.500	0.603		ug/L		121	50 - 150
Diisopropyl ether	0.500	0.459	J	ug/L		92	50 - 150
Vinyl Chloride (VC)	0.500	0.471		ug/L		94	50 - 150
Xylenes, Total	1.50	1.48		ug/L		99	50 - 150

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*90*		*70 - 130*

Lab Sample ID: MRL 380-98934/6
Matrix: Water
Analysis Batch: 98934

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
m,p-Xylenes	0.500	0.621		ug/L		124	50 - 150
Vinyl Chloride (VC)	0.250	0.282	J	ug/L		113	50 - 150

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*88*		*70 - 130*

Lab Sample ID: MB 380-98936/5
Matrix: Water
Analysis Batch: 98936

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.50		0.50	ug/L			07/15/24 04:44	1
1,1,1-Trichloroethane	<0.50		0.50	ug/L			07/15/24 04:44	1
1,1,2,2-Tetrachloroethane	<0.50		0.50	ug/L			07/15/24 04:44	1
1,1,2-Trichloroethane	<0.50		0.50	ug/L			07/15/24 04:44	1
1,1-Dichloroethane	<0.50		0.50	ug/L			07/15/24 04:44	1
1,1-Dichlorethylene	<0.50		0.50	ug/L			07/15/24 04:44	1
1,1-Dichloropropene	<0.50		0.50	ug/L			07/15/24 04:44	1
1,2,3-Trichlorobenzene	<0.50		0.50	ug/L			07/15/24 04:44	1
1,2,3-Trichloropropane	<0.50		0.50	ug/L			07/15/24 04:44	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 380-98936/5
Matrix: Water
Analysis Batch: 98936

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.50		0.50		ug/L			07/15/24 04:44	1
1,2,4-Trimethylbenzene	<0.50		0.50		ug/L			07/15/24 04:44	1
1,2-Dichloroethane	<0.50		0.50		ug/L			07/15/24 04:44	1
1,2-Dichloropropane	<0.50		0.50		ug/L			07/15/24 04:44	1
1,3,5-Trimethylbenzene	<0.50		0.50		ug/L			07/15/24 04:44	1
1,3-Dichloropropane	<0.50		0.50		ug/L			07/15/24 04:44	1
2,2-Dichloropropane	<0.50		0.50		ug/L			07/15/24 04:44	1
2-Butanone (MEK)	<5.0		5.0		ug/L			07/15/24 04:44	1
4-Methyl-2-pentanone (MIBK)	<5.0		5.0		ug/L			07/15/24 04:44	1
Benzene	<0.50		0.50		ug/L			07/15/24 04:44	1
Bromobenzene	<0.50		0.50		ug/L			07/15/24 04:44	1
Bromochloromethane	<0.50		0.50		ug/L			07/15/24 04:44	1
Bromodichloromethane	<0.50		0.50		ug/L			07/15/24 04:44	1
Bromoform	<0.50		0.50		ug/L			07/15/24 04:44	1
Bromomethane (Methyl Bromide)	<0.50		0.50		ug/L			07/15/24 04:44	1
Carbon disulfide	<0.50		0.50		ug/L			07/15/24 04:44	1
Carbon tetrachloride	<0.50		0.50		ug/L			07/15/24 04:44	1
Chlorobenzene	<0.50		0.50		ug/L			07/15/24 04:44	1
Chlorodibromomethane	<0.50		0.50		ug/L			07/15/24 04:44	1
Chloroethane	<0.50		0.50		ug/L			07/15/24 04:44	1
Chloroform (Trichloromethane)	<0.50		0.50		ug/L			07/15/24 04:44	1
cis-1,2-Dichloroethylene	<0.50		0.50		ug/L			07/15/24 04:44	1
cis-1,3-Dichloropropene	<0.50		0.50		ug/L			07/15/24 04:44	1
Dibromomethane	<0.50		0.50		ug/L			07/15/24 04:44	1
Dichlorodifluoromethane	<0.50		0.50		ug/L			07/15/24 04:44	1
Dichloromethane	<0.50		0.50		ug/L			07/15/24 04:44	1
Ethylbenzene	<0.50		0.50		ug/L			07/15/24 04:44	1
Hexachlorobutadiene	<0.50		0.50		ug/L			07/15/24 04:44	1
Isopropylbenzene	<0.50		0.50		ug/L			07/15/24 04:44	1
m,p-Xylenes	<0.50		0.50		ug/L			07/15/24 04:44	1
m-Dichlorobenzene (1,3-DCB)	<0.50		0.50		ug/L			07/15/24 04:44	1
Methyl-tert-butyl Ether (MTBE)	<0.50		0.50		ug/L			07/15/24 04:44	1
Naphthalene	<0.50		0.50		ug/L			07/15/24 04:44	1
n-Butylbenzene	<0.50		0.50		ug/L			07/15/24 04:44	1
N-Propylbenzene	<0.50		0.50		ug/L			07/15/24 04:44	1
o-Chlorotoluene	<0.50		0.50		ug/L			07/15/24 04:44	1
o-Dichlorobenzene (1,2-DCB)	<0.50		0.50		ug/L			07/15/24 04:44	1
o-Xylene	<0.50		0.50		ug/L			07/15/24 04:44	1
p-Chlorotoluene	<0.50		0.50		ug/L			07/15/24 04:44	1
p-Dichlorobenzene (1,4-DCB)	<0.50		0.50		ug/L			07/15/24 04:44	1
p-Isopropyltoluene	<0.50		0.50		ug/L			07/15/24 04:44	1
sec-Butylbenzene	<0.50		0.50		ug/L			07/15/24 04:44	1
Styrene	<0.50		0.50		ug/L			07/15/24 04:44	1
Tert-amyl methyl ether	<3.0		3.0		ug/L			07/15/24 04:44	1
1,3-Dichloropropene, Total	<0.50		0.50		ug/L			07/15/24 04:44	1
Tert-butyl ethyl ether	<3.0		3.0		ug/L			07/15/24 04:44	1
tert-Butylbenzene	<0.50		0.50		ug/L			07/15/24 04:44	1
Tetrachloroethene (PCE)	<0.50		0.50		ug/L			07/15/24 04:44	1
Toluene	<0.50		0.50		ug/L			07/15/24 04:44	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 380-98936/5
Matrix: Water
Analysis Batch: 98936

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethylene	<0.50		0.50		ug/L			07/15/24 04:44	1
trans-1,3-Dichloropropene	<0.50		0.50		ug/L			07/15/24 04:44	1
Trichloroethylene (TCE)	<0.50		0.50		ug/L			07/15/24 04:44	1
Bromoethane	<0.50		0.50		ug/L			07/15/24 04:44	1
Trichlorofluoromethane (Freon 11)	<0.50		0.50		ug/L			07/15/24 04:44	1
Chloromethane (methyl chloride)	<0.50		0.50		ug/L			07/15/24 04:44	1
Trichlorotrifluoroethane	<0.50		0.50		ug/L			07/15/24 04:44	1
Diisopropyl ether	<3.0		3.0		ug/L			07/15/24 04:44	1
Vinyl Chloride (VC)	<0.30		0.30		ug/L			07/15/24 04:44	1
Xylenes, Total	<0.50		0.50		ug/L			07/15/24 04:44	1

Tentatively Identified Compound	*Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*07/15/24 04:44*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*07/15/24 04:44*	*1*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*07/15/24 04:44*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*07/15/24 04:44*	*1*

Lab Sample ID: LCS 380-98936/3
Matrix: Water
Analysis Batch: 98936

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	5.00	4.68		ug/L		94	70 - 130
1,1,1-Trichloroethane	5.00	4.99		ug/L		100	70 - 130
1,1,2,2-Tetrachloroethane	5.00	5.07		ug/L		101	70 - 130
1,1,2-Trichloroethane	5.00	4.53		ug/L		91	70 - 130
1,1-Dichloroethane	5.00	4.91		ug/L		98	70 - 130
1,1-Dichlorethylene	5.00	5.13		ug/L		103	70 - 130
1,1-Dichloropropene	5.00	5.56		ug/L		111	70 - 130
1,2,3-Trichlorobenzene	5.00	5.30		ug/L		106	70 - 130
1,2,3-Trichloropropane	5.00	4.96		ug/L		99	70 - 130
1,2,4-Trichlorobenzene	5.00	5.31		ug/L		106	70 - 130
1,2,4-Trimethylbenzene	5.00	5.09		ug/L		102	70 - 130
1,2-Dichloroethane	5.00	4.90		ug/L		98	70 - 130
1,2-Dichloropropane	5.00	5.18		ug/L		104	70 - 130
1,3,5-Trimethylbenzene	5.00	5.35		ug/L		107	70 - 130
1,3-Dichloropropane	5.00	5.07		ug/L		101	70 - 130
2,2-Dichloropropane	5.00	4.13		ug/L		83	70 - 130
2-Butanone (MEK)	50.0	41.3		ug/L		83	70 - 130
4-Methyl-2-pentanone (MIBK)	50.0	47.5		ug/L		95	70 - 130
Benzene	5.00	5.13		ug/L		103	70 - 130
Bromobenzene	5.00	5.06		ug/L		101	70 - 130
Bromochloromethane	5.00	4.91		ug/L		98	70 - 130
Bromodichloromethane	5.00	4.43		ug/L		89	70 - 130
Bromoform	5.00	4.22		ug/L		84	70 - 130
Bromomethane (Methyl Bromide)	5.00	5.22		ug/L		104	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 380-98936/3
Matrix: Water
Analysis Batch: 98936

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon disulfide	5.00	5.21		ug/L		104	70 - 130
Carbon tetrachloride	5.00	5.39		ug/L		108	70 - 130
Chlorobenzene	5.00	5.10		ug/L		102	70 - 130
Chlorodibromomethane	5.00	4.52		ug/L		90	70 - 130
cis-1,3-Dichloropropene	5.00	4.82		ug/L		96	70 - 130
Dichloromethane	5.00	4.97		ug/L		99	70 - 130
Ethylbenzene	5.00	4.94		ug/L		99	70 - 130
Hexachlorobutadiene	5.00	4.81		ug/L		96	70 - 130
Isopropylbenzene	5.00	5.26		ug/L		105	70 - 130
m,p-Xylenes	10.0	9.77		ug/L		98	70 - 130
m-Dichlorobenzene (1,3-DCB)	5.00	5.14		ug/L		103	70 - 130
Methyl-tert-butyl Ether (MTBE)	5.00	4.68		ug/L		94	70 - 130
Naphthalene	5.00	5.76		ug/L		115	70 - 130
n-Butylbenzene	5.00	5.55		ug/L		111	70 - 130
N-Propylbenzene	5.00	4.96		ug/L		99	70 - 130
o-Chlorotoluene	5.00	5.31		ug/L		106	70 - 130
o-Dichlorobenzene (1,2-DCB)	5.00	5.23		ug/L		105	70 - 130
o-Xylene	5.00	4.90		ug/L		98	70 - 130
p-Chlorotoluene	5.00	5.12		ug/L		102	70 - 130
p-Dichlorobenzene (1,4-DCB)	5.00	5.11		ug/L		102	70 - 130
p-Isopropyltoluene	5.00	5.45		ug/L		109	70 - 130
sec-Butylbenzene	5.00	5.36		ug/L		107	70 - 130
Styrene	5.00	4.57		ug/L		91	70 - 130
Tert-amyl methyl ether	5.00	4.69		ug/L		94	70 - 130
1,3-Dichloropropene, Total	10.0	9.15		ug/L		92	70 - 130
Tert-butyl ethyl ether	5.00	4.74		ug/L		95	70 - 130
tert-Butylbenzene	5.00	5.30		ug/L		106	70 - 130
Tetrachloroethene (PCE)	5.00	5.06		ug/L		101	70 - 130
Toluene	5.00	5.12		ug/L		102	70 - 130
trans-1,2-Dichloroethylene	5.00	4.97		ug/L		99	70 - 130
trans-1,3-Dichloropropene	5.00	4.33		ug/L		87	70 - 130
Trichloroethylene (TCE)	5.00	4.96		ug/L		99	70 - 130
Bromoethane	5.00	4.95		ug/L		99	70 - 130
Trichlorofluoromethane (Freon 11)	5.00	5.24		ug/L		105	70 - 130
Trichlorotrifluoroethane	5.00	5.77		ug/L		115	70 - 130
Diisopropyl ether	5.00	4.67		ug/L		93	70 - 130
Vinyl Chloride (VC)	5.00	5.39		ug/L		108	70 - 130
Xylenes, Total	15.0	14.7		ug/L		98	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 380-98936/4
Matrix: Water
Analysis Batch: 98936

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			5.00	5.04		ug/L		101	70 - 130	8	20
1,1,1-Trichloroethane			5.00	5.40		ug/L		108	70 - 130	8	20
1,1,2,2-Tetrachloroethane			5.00	5.63		ug/L		113	70 - 130	10	20
1,1,2-Trichloroethane			5.00	4.83		ug/L		97	70 - 130	6	20
1,1-Dichloroethane			5.00	5.36		ug/L		107	70 - 130	9	20
1,1-Dichlorethylene			5.00	5.62		ug/L		112	70 - 130	9	20
1,1-Dichloropropene			5.00	6.06		ug/L		121	70 - 130	9	20
1,2,3-Trichlorobenzene			5.00	5.24		ug/L		105	70 - 130	1	20
1,2,3-Trichloropropane			5.00	5.58		ug/L		112	70 - 130	12	20
1,2,4-Trichlorobenzene			5.00	5.24		ug/L		105	70 - 130	1	20
1,2,4-Trimethylbenzene			5.00	5.81		ug/L		116	70 - 130	13	20
1,2-Dichloroethane			5.00	5.16		ug/L		103	70 - 130	5	20
1,2-Dichloropropane			5.00	5.80		ug/L		116	70 - 130	11	20
1,3,5-Trimethylbenzene			5.00	6.14		ug/L		123	70 - 130	14	20
1,3-Dichloropropane			5.00	5.50		ug/L		110	70 - 130	8	20
2,2-Dichloropropane			5.00	4.68		ug/L		94	70 - 130	12	20
2-Butanone (MEK)			50.0	43.8		ug/L		88	70 - 130	6	20
4-Methyl-2-pentanone (MIBK)			50.0	53.3		ug/L		107	70 - 130	12	20
Benzene			5.00	5.44		ug/L		109	70 - 130	6	20
Bromobenzene			5.00	5.42		ug/L		108	70 - 130	7	20
Bromochloromethane			5.00	5.15		ug/L		103	70 - 130	5	20
Bromodichloromethane			5.00	4.91		ug/L		98	70 - 130	10	20
Bromoform			5.00	4.88		ug/L		98	70 - 130	14	20
Bromomethane (Methyl Bromide)			5.00	5.54		ug/L		111	70 - 130	6	20
Carbon disulfide			5.00	5.45		ug/L		109	70 - 130	5	20
Carbon tetrachloride			5.00	5.80		ug/L		116	70 - 130	7	20
Chlorobenzene			5.00	5.54		ug/L		111	70 - 130	8	20
Chlorodibromomethane			5.00	5.03		ug/L		101	70 - 130	11	20
cis-1,3-Dichloropropene			5.00	5.16		ug/L		103	70 - 130	7	20
Dichloromethane			5.00	5.30		ug/L		106	70 - 130	6	20
Ethylbenzene			5.00	5.37		ug/L		107	70 - 130	8	20
Hexachlorobutadiene			5.00	5.06		ug/L		101	70 - 130	5	20
Isopropylbenzene			5.00	5.91		ug/L		118	70 - 130	12	20
m,p-Xylenes			10.0	10.6		ug/L		106	70 - 130	8	20
m-Dichlorobenzene (1,3-DCB)			5.00	5.63		ug/L		113	70 - 130	9	20
Methyl-tert-butyl Ether (MTBE)			5.00	5.01		ug/L		100	70 - 130	7	20
Naphthalene			5.00	5.53		ug/L		111	70 - 130	4	20
n-Butylbenzene			5.00	5.71		ug/L		114	70 - 130	3	20
N-Propylbenzene			5.00	5.31		ug/L		106	70 - 130	7	20
o-Chlorotoluene			5.00	5.98		ug/L		120	70 - 130	12	20
o-Dichlorobenzene (1,2-DCB)			5.00	5.49		ug/L		110	70 - 130	5	20
o-Xylene			5.00	5.41		ug/L		108	70 - 130	10	20
p-Chlorotoluene			5.00	5.36		ug/L		107	70 - 130	5	20
p-Dichlorobenzene (1,4-DCB)			5.00	5.29		ug/L		106	70 - 130	3	20
p-Isopropyltoluene			5.00	6.13		ug/L		123	70 - 130	12	20
sec-Butylbenzene			5.00	6.02		ug/L		120	70 - 130	12	20
Styrene			5.00	5.27		ug/L		105	70 - 130	14	20
Tert-amyl methyl ether			5.00	5.02		ug/L		100	70 - 130	7	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 380-98936/4
Matrix: Water
Analysis Batch: 98936

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,3-Dichloropropene, Total			10.0	9.81		ug/L		98	70 - 130	7	20
Tert-butyl ethyl ether			5.00	5.11		ug/L		102	70 - 130	8	20
tert-Butylbenzene			5.00	5.96		ug/L		119	70 - 130	12	20
Tetrachloroethene (PCE)			5.00	5.60		ug/L		112	70 - 130	10	20
Toluene			5.00	5.43		ug/L		109	70 - 130	6	20
trans-1,2-Dichloroethylene			5.00	5.41		ug/L		108	70 - 130	9	20
trans-1,3-Dichloropropene			5.00	4.65		ug/L		93	70 - 130	7	20
Trichloroethylene (TCE)			5.00	5.40		ug/L		108	70 - 130	8	20
Bromoethane			5.00	5.36		ug/L		107	70 - 130	8	20
Trichlorofluoromethane (Freon 11)			5.00	5.57		ug/L		111	70 - 130	6	20
Trichlorotrifluoroethane			5.00	6.15		ug/L		123	70 - 130	6	20
Diisopropyl ether			5.00	5.13		ug/L		103	70 - 130	9	20
Vinyl Chloride (VC)			5.00	5.82		ug/L		116	70 - 130	8	20
Xylenes, Total			15.0	16.0		ug/L		107	70 - 130	9	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Lab Sample ID: MB 380-99494/8
Matrix: Water
Analysis Batch: 99494

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.50		0.50		ug/L			07/17/24 17:58	1
1,1,1-Trichloroethane	<0.50		0.50		ug/L			07/17/24 17:58	1
1,1,2,2-Tetrachloroethane	<0.50		0.50		ug/L			07/17/24 17:58	1
1,1,2-Trichloroethane	<0.50		0.50		ug/L			07/17/24 17:58	1
1,1-Dichloroethane	<0.50		0.50		ug/L			07/17/24 17:58	1
1,1-Dichlorethylene	<0.50		0.50		ug/L			07/17/24 17:58	1
1,1-Dichloropropene	<0.50		0.50		ug/L			07/17/24 17:58	1
1,2,3-Trichlorobenzene	<0.50		0.50		ug/L			07/17/24 17:58	1
1,2,3-Trichloropropane	<0.50		0.50		ug/L			07/17/24 17:58	1
1,2,4-Trichlorobenzene	<0.50		0.50		ug/L			07/17/24 17:58	1
1,2,4-Trimethylbenzene	<0.50		0.50		ug/L			07/17/24 17:58	1
1,2-Dichloroethane	<0.50		0.50		ug/L			07/17/24 17:58	1
1,2-Dichloropropane	<0.50		0.50		ug/L			07/17/24 17:58	1
1,3,5-Trimethylbenzene	<0.50		0.50		ug/L			07/17/24 17:58	1
1,3-Dichloropropane	<0.50		0.50		ug/L			07/17/24 17:58	1
2,2-Dichloropropane	<0.50		0.50		ug/L			07/17/24 17:58	1
2-Butanone (MEK)	<5.0		5.0		ug/L			07/17/24 17:58	1
4-Methyl-2-pentanone (MIBK)	<5.0		5.0		ug/L			07/17/24 17:58	1
Acetone	<500		500		ug/L			07/17/24 17:58	1
Benzene	<0.50		0.50		ug/L			07/17/24 17:58	1
Bromobenzene	<0.50		0.50		ug/L			07/17/24 17:58	1
Bromochloromethane	<0.50		0.50		ug/L			07/17/24 17:58	1
Bromodichloromethane	<0.50		0.50		ug/L			07/17/24 17:58	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 380-99494/8
Matrix: Water
Analysis Batch: 99494

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	<0.50		0.50		ug/L			07/17/24 17:58	1
Bromomethane (Methyl Bromide)	<0.50		0.50		ug/L			07/17/24 17:58	1
Carbon disulfide	<0.50		0.50		ug/L			07/17/24 17:58	1
Carbon tetrachloride	<0.50		0.50		ug/L			07/17/24 17:58	1
Chlorobenzene	<0.50		0.50		ug/L			07/17/24 17:58	1
Chlorodibromomethane	<0.50		0.50		ug/L			07/17/24 17:58	1
Chloroethane	<0.50		0.50		ug/L			07/17/24 17:58	1
Chloroform (Trichloromethane)	<0.50		0.50		ug/L			07/17/24 17:58	1
cis-1,2-Dichloroethylene	<0.50		0.50		ug/L			07/17/24 17:58	1
cis-1,3-Dichloropropene	<0.50		0.50		ug/L			07/17/24 17:58	1
Dibromomethane	<0.50		0.50		ug/L			07/17/24 17:58	1
Dichlorodifluoromethane	<0.50		0.50		ug/L			07/17/24 17:58	1
Dichloromethane	<0.50		0.50		ug/L			07/17/24 17:58	1
Ethylbenzene	<0.50		0.50		ug/L			07/17/24 17:58	1
Hexachlorobutadiene	<0.50		0.50		ug/L			07/17/24 17:58	1
Isopropylbenzene	<0.50		0.50		ug/L			07/17/24 17:58	1
m,p-Xylenes	<0.50		0.50		ug/L			07/17/24 17:58	1
m-Dichlorobenzene (1,3-DCB)	<0.50		0.50		ug/L			07/17/24 17:58	1
Methyl-tert-butyl Ether (MTBE)	<0.50		0.50		ug/L			07/17/24 17:58	1
Naphthalene	<0.50		0.50		ug/L			07/17/24 17:58	1
n-Butylbenzene	<0.50		0.50		ug/L			07/17/24 17:58	1
N-Propylbenzene	<0.50		0.50		ug/L			07/17/24 17:58	1
o-Chlorotoluene	<0.50		0.50		ug/L			07/17/24 17:58	1
o-Dichlorobenzene (1,2-DCB)	<0.50		0.50		ug/L			07/17/24 17:58	1
o-Xylene	<0.50		0.50		ug/L			07/17/24 17:58	1
p-Chlorotoluene	<0.50		0.50		ug/L			07/17/24 17:58	1
p-Dichlorobenzene (1,4-DCB)	<0.50		0.50		ug/L			07/17/24 17:58	1
p-Isopropyltoluene	<0.50		0.50		ug/L			07/17/24 17:58	1
sec-Butylbenzene	<0.50		0.50		ug/L			07/17/24 17:58	1
Styrene	<0.50		0.50		ug/L			07/17/24 17:58	1
Tert-amyl methyl ether	<3.0		3.0		ug/L			07/17/24 17:58	1
1,3-Dichloropropene, Total	<0.50		0.50		ug/L			07/17/24 17:58	1
Tert-butyl ethyl ether	<3.0		3.0		ug/L			07/17/24 17:58	1
tert-Butylbenzene	<0.50		0.50		ug/L			07/17/24 17:58	1
Tetrachloroethene (PCE)	<0.50		0.50		ug/L			07/17/24 17:58	1
Toluene	<0.50		0.50		ug/L			07/17/24 17:58	1
trans-1,2-Dichloroethylene	<0.50		0.50		ug/L			07/17/24 17:58	1
trans-1,3-Dichloropropene	<0.50		0.50		ug/L			07/17/24 17:58	1
Trichloroethylene (TCE)	<0.50		0.50		ug/L			07/17/24 17:58	1
Bromoethane	<0.50		0.50		ug/L			07/17/24 17:58	1
Trichlorofluoromethane (Freon 11)	<0.50		0.50		ug/L			07/17/24 17:58	1
Chloromethane (methyl chloride)	<0.50		0.50		ug/L			07/17/24 17:58	1
Trichlorotrifluoroethane	<0.50		0.50		ug/L			07/17/24 17:58	1
Diisopropyl ether	<3.0		3.0		ug/L			07/17/24 17:58	1
Vinyl Chloride (VC)	<0.30		0.30		ug/L			07/17/24 17:58	1
Xylenes, Total	<0.50		0.50		ug/L			07/17/24 17:58	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 380-99494/8
Matrix: Water
Analysis Batch: 99494

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

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A		07/17/24 17:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 130		07/17/24 17:58	1
4-Bromofluorobenzene (Surr)	97		70 - 130		07/17/24 17:58	1
Toluene-d8 (Surr)	99		70 - 130		07/17/24 17:58	1

Lab Sample ID: LCS 380-99494/5
Matrix: Water
Analysis Batch: 99494

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	5.00	5.42		ug/L		108	70 - 130
1,1,1-Trichloroethane	5.00	5.14		ug/L		103	70 - 130
1,1,2,2-Tetrachloroethane	5.00	5.51		ug/L		110	70 - 130
1,1,2-Trichloroethane	5.00	5.19		ug/L		104	70 - 130
1,1-Dichloroethane	5.00	5.42		ug/L		108	70 - 130
1,1-Dichlorethylene	5.00	5.53		ug/L		111	70 - 130
1,1-Dichloropropene	5.00	5.11		ug/L		102	70 - 130
1,2,3-Trichlorobenzene	5.00	5.61		ug/L		112	70 - 130
1,2,3-Trichloropropane	5.00	5.64		ug/L		113	70 - 130
1,2,4-Trichlorobenzene	5.00	5.68		ug/L		114	70 - 130
1,2,4-Trimethylbenzene	5.00	5.91		ug/L		118	70 - 130
1,2-Dichloroethane	5.00	5.62		ug/L		112	70 - 130
1,2-Dichloropropane	5.00	5.21		ug/L		104	70 - 130
1,3,5-Trimethylbenzene	5.00	5.87		ug/L		117	70 - 130
1,3-Dichloropropane	5.00	5.82		ug/L		116	70 - 130
2,2-Dichloropropane	5.00	5.21		ug/L		104	70 - 130
2-Butanone (MEK)	50.0	52.6		ug/L		105	70 - 130
4-Methyl-2-pentanone (MIBK)	50.0	53.0		ug/L		106	70 - 130
Acetone	50.0	54.1	J	ug/L		108	70 - 130
Benzene	5.00	5.69		ug/L		114	70 - 130
Bromobenzene	5.00	5.45		ug/L		109	70 - 130
Bromochloromethane	5.00	5.44		ug/L		109	70 - 130
Bromodichloromethane	5.00	5.10		ug/L		102	70 - 130
Bromoform	5.00	5.57		ug/L		111	70 - 130
Bromomethane (Methyl Bromide)	5.00	5.57		ug/L		111	70 - 130
Carbon disulfide	5.00	5.20		ug/L		104	70 - 130
Carbon tetrachloride	5.00	4.92		ug/L		98	70 - 130
Chlorobenzene	5.00	5.81		ug/L		116	70 - 130
Chlorodibromomethane	5.00	4.82		ug/L		96	70 - 130
cis-1,3-Dichloropropene	5.00	5.57		ug/L		111	70 - 130
Dichloromethane	5.00	5.61		ug/L		112	70 - 130
Ethylbenzene	5.00	5.77		ug/L		115	70 - 130
Hexachlorobutadiene	5.00	4.70		ug/L		94	70 - 130
Isopropylbenzene	5.00	5.82		ug/L		116	70 - 130
m,p-Xylenes	10.0	11.3		ug/L		113	70 - 130
m-Dichlorobenzene (1,3-DCB)	5.00	5.64		ug/L		113	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 380-99494/5
Matrix: Water
Analysis Batch: 99494

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methyl-tert-butyl Ether (MTBE)	5.00	5.72		ug/L		114	70 - 130
Naphthalene	5.00	5.66		ug/L		113	70 - 130
n-Butylbenzene	5.00	6.14		ug/L		123	70 - 130
N-Propylbenzene	5.00	5.73		ug/L		115	70 - 130
o-Chlorotoluene	5.00	5.86		ug/L		117	70 - 130
o-Dichlorobenzene (1,2-DCB)	5.00	5.94		ug/L		119	70 - 130
o-Xylene	5.00	5.83		ug/L		117	70 - 130
p-Chlorotoluene	5.00	5.52		ug/L		110	70 - 130
p-Dichlorobenzene (1,4-DCB)	5.00	5.64		ug/L		113	70 - 130
p-Isopropyltoluene	5.00	5.82		ug/L		116	70 - 130
sec-Butylbenzene	5.00	5.78		ug/L		116	70 - 130
Styrene	5.00	5.99		ug/L		120	70 - 130
Tert-amyl methyl ether	5.00	5.46		ug/L		109	70 - 130
1,3-Dichloropropene, Total	10.0	10.4		ug/L		104	70 - 130
Tert-butyl ethyl ether	5.00	5.65		ug/L		113	70 - 130
tert-Butylbenzene	5.00	5.57		ug/L		111	70 - 130
Tetrachloroethene (PCE)	5.00	5.42		ug/L		108	70 - 130
Toluene	5.00	5.86		ug/L		117	70 - 130
trans-1,2-Dichloroethylene	5.00	5.56		ug/L		111	70 - 130
trans-1,3-Dichloropropene	5.00	4.79		ug/L		96	70 - 130
Trichloroethylene (TCE)	5.00	5.32		ug/L		106	70 - 130
Bromoethane	5.00	5.35		ug/L		107	70 - 130
Trichlorofluoromethane (Freon 11)	5.00	5.19		ug/L		104	70 - 130
Trichlorotrifluoroethane	5.00	5.27		ug/L		105	70 - 130
Diisopropyl ether	5.00	5.88		ug/L		118	70 - 130
Vinyl Chloride (VC)	5.00	5.27		ug/L		105	70 - 130
Xylenes, Total	15.0	17.1		ug/L		114	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*

Lab Sample ID: LCSD 380-99494/6
Matrix: Water
Analysis Batch: 99494

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	5.00	5.66		ug/L		113	70 - 130	4	20
1,1,1-Trichloroethane	5.00	5.40		ug/L		108	70 - 130	5	20
1,1,2,2-Tetrachloroethane	5.00	5.42		ug/L		108	70 - 130	2	20
1,1,2-Trichloroethane	5.00	5.52		ug/L		110	70 - 130	6	20
1,1-Dichloroethane	5.00	5.44		ug/L		109	70 - 130	0	20
1,1-Dichlorethylene	5.00	5.42		ug/L		108	70 - 130	2	20
1,1-Dichloropropene	5.00	5.38		ug/L		108	70 - 130	5	20
1,2,3-Trichlorobenzene	5.00	5.54		ug/L		111	70 - 130	1	20
1,2,3-Trichloropropane	5.00	5.69		ug/L		114	70 - 130	1	20
1,2,4-Trichlorobenzene	5.00	5.69		ug/L		114	70 - 130	0	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 380-99494/6
Matrix: Water
Analysis Batch: 99494

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4-Trimethylbenzene	5.00	5.94		ug/L		119	70 - 130	1	20
1,2-Dichloroethane	5.00	5.47		ug/L		109	70 - 130	3	20
1,2-Dichloropropane	5.00	5.31		ug/L		106	70 - 130	2	20
1,3,5-Trimethylbenzene	5.00	5.93		ug/L		119	70 - 130	1	20
1,3-Dichloropropane	5.00	5.86		ug/L		117	70 - 130	1	20
2,2-Dichloropropane	5.00	5.18		ug/L		104	70 - 130	1	20
2-Butanone (MEK)	50.0	49.9		ug/L		100	70 - 130	5	20
4-Methyl-2-pentanone (MIBK)	50.0	64.6		ug/L		129	70 - 130	20	20
Acetone	50.0	55.2	J	ug/L		110	70 - 130	2	20
Benzene	5.00	5.69		ug/L		114	70 - 130	0	20
Bromobenzene	5.00	5.43		ug/L		109	70 - 130	0	20
Bromochloromethane	5.00	5.61		ug/L		112	70 - 130	3	20
Bromodichloromethane	5.00	5.20		ug/L		104	70 - 130	2	20
Bromoform	5.00	5.63		ug/L		113	70 - 130	1	20
Bromomethane (Methyl Bromide)	5.00	5.71		ug/L		114	70 - 130	2	20
Carbon disulfide	5.00	5.46		ug/L		109	70 - 130	5	20
Carbon tetrachloride	5.00	5.07		ug/L		101	70 - 130	3	20
Chlorobenzene	5.00	5.87		ug/L		117	70 - 130	1	20
Chlorodibromomethane	5.00	5.19		ug/L		104	70 - 130	7	20
cis-1,3-Dichloropropene	5.00	5.24		ug/L		105	70 - 130	6	20
Dichloromethane	5.00	5.72		ug/L		114	70 - 130	2	20
Ethylbenzene	5.00	5.94		ug/L		119	70 - 130	3	20
Hexachlorobutadiene	5.00	4.85		ug/L		97	70 - 130	3	20
Isopropylbenzene	5.00	5.72		ug/L		114	70 - 130	2	20
m,p-Xylenes	10.0	11.4		ug/L		114	70 - 130	1	20
m-Dichlorobenzene (1,3-DCB)	5.00	5.65		ug/L		113	70 - 130	0	20
Methyl-tert-butyl Ether (MTBE)	5.00	5.65		ug/L		113	70 - 130	1	20
Naphthalene	5.00	5.68		ug/L		114	70 - 130	0	20
n-Butylbenzene	5.00	5.77		ug/L		115	70 - 130	6	20
N-Propylbenzene	5.00	5.89		ug/L		118	70 - 130	3	20
o-Chlorotoluene	5.00	5.90		ug/L		118	70 - 130	1	20
o-Dichlorobenzene (1,2-DCB)	5.00	5.58		ug/L		112	70 - 130	6	20
o-Xylene	5.00	5.98		ug/L		120	70 - 130	3	20
p-Chlorotoluene	5.00	5.89		ug/L		118	70 - 130	6	20
p-Dichlorobenzene (1,4-DCB)	5.00	5.36		ug/L		107	70 - 130	5	20
p-Isopropyltoluene	5.00	5.81		ug/L		116	70 - 130	0	20
sec-Butylbenzene	5.00	5.76		ug/L		115	70 - 130	0	20
Styrene	5.00	5.91		ug/L		118	70 - 130	1	20
Tert-amyl methyl ether	5.00	5.50		ug/L		110	70 - 130	1	20
1,3-Dichloropropene, Total	10.0	10.7		ug/L		107	70 - 130	3	20
Tert-butyl ethyl ether	5.00	5.49		ug/L		110	70 - 130	3	20
tert-Butylbenzene	5.00	5.75		ug/L		115	70 - 130	3	20
Tetrachloroethene (PCE)	5.00	5.49		ug/L		110	70 - 130	1	20
Toluene	5.00	6.38		ug/L		128	70 - 130	9	20
trans-1,2-Dichloroethylene	5.00	5.82		ug/L		116	70 - 130	5	20
trans-1,3-Dichloropropene	5.00	5.42		ug/L		108	70 - 130	12	20
Trichloroethylene (TCE)	5.00	5.57		ug/L		111	70 - 130	5	20
Bromoethane	5.00	5.54		ug/L		111	70 - 130	3	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 380-99494/6
Matrix: Water
Analysis Batch: 99494

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Trichlorofluoromethane (Freon 11)	5.00	5.07		ug/L		101	70 - 130	2	20
Trichlorotrifluoroethane	5.00	5.07		ug/L		101	70 - 130	4	20
Diisopropyl ether	5.00	5.82		ug/L		116	70 - 130	1	20
Vinyl Chloride (VC)	5.00	5.56		ug/L		111	70 - 130	5	20
Xylenes, Total	15.0	17.4		ug/L		116	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*113*		*70 - 130*

Lab Sample ID: MRL 380-99494/3
Matrix: Water
Analysis Batch: 99494

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
m,p-Xylenes	0.500	0.429	J	ug/L		86	50 - 150
Vinyl Chloride (VC)	0.250	0.214	J	ug/L		86	50 - 150

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*93*		*70 - 130*

Lab Sample ID: MRL 380-99494/4
Matrix: Water
Analysis Batch: 99494

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	0.500	0.454	J	ug/L		91	50 - 150
1,1,1-Trichloroethane	0.500	0.458	J	ug/L		92	50 - 150
1,1,2,2-Tetrachloroethane	0.500	0.479	J	ug/L		96	50 - 150
1,1,2-Trichloroethane	0.500	0.505		ug/L		101	50 - 150
1,1-Dichloroethane	0.500	0.434	J	ug/L		87	50 - 150
1,1-Dichlorethylene	0.500	0.441	J	ug/L		88	50 - 150
1,1-Dichloropropene	0.500	0.465	J	ug/L		93	50 - 150
1,2,3-Trichlorobenzene	0.500	0.594		ug/L		119	50 - 150
1,2,3-Trichloropropane	0.500	0.531		ug/L		106	50 - 150
1,2,4-Trichlorobenzene	0.500	0.508		ug/L		102	50 - 150
1,2,4-Trimethylbenzene	0.500	0.472	J	ug/L		94	50 - 150
1,2-Dichloroethane	0.500	0.500		ug/L		100	50 - 150
1,2-Dichloropropane	0.500	0.509		ug/L		102	50 - 150
1,3,5-Trimethylbenzene	0.500	0.498	J	ug/L		100	50 - 150
1,3-Dichloropropane	0.500	0.469	J	ug/L		94	50 - 150
2,2-Dichloropropane	0.500	0.439	J	ug/L		88	50 - 150
2-Butanone (MEK)	5.00	4.86	J	ug/L		97	50 - 150
4-Methyl-2-pentanone (MIBK)	5.00	4.52	J	ug/L		90	50 - 150

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MRL 380-99494/4
Matrix: Water
Analysis Batch: 99494

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	5.00	4.09	J	ug/L		82	50 - 150
Benzene	0.500	0.514		ug/L		103	50 - 150
Bromobenzene	0.500	0.479	J	ug/L		96	50 - 150
Bromochloromethane	0.500	0.494	J	ug/L		99	50 - 150
Bromodichloromethane	0.500	0.460	J	ug/L		92	50 - 150
Bromoform	0.500	0.529		ug/L		106	50 - 150
Bromomethane (Methyl Bromide)	0.500	0.546		ug/L		109	50 - 150
Carbon disulfide	0.500	0.411	J	ug/L		82	50 - 150
Carbon tetrachloride	0.500	0.414	J	ug/L		83	50 - 150
Chlorobenzene	0.500	0.481	J	ug/L		96	50 - 150
Chlorodibromomethane	0.500	0.388	J	ug/L		78	50 - 150
cis-1,3-Dichloropropene	0.500	0.434	J	ug/L		87	50 - 150
Dichloromethane	0.500	0.525		ug/L		105	50 - 150
Ethylbenzene	0.500	0.503		ug/L		101	50 - 150
Hexachlorobutadiene	0.500	0.398	J	ug/L		80	50 - 150
Isopropylbenzene	0.500	0.497	J	ug/L		99	50 - 150
m,p-Xylenes	1.00	1.01		ug/L		101	50 - 150
m-Dichlorobenzene (1,3-DCB)	0.500	0.493	J	ug/L		99	50 - 150
Methyl-tert-butyl Ether (MTBE)	0.500	0.464	J	ug/L		93	50 - 150
Naphthalene	0.500	0.528		ug/L		106	50 - 150
n-Butylbenzene	0.500	0.498	J	ug/L		100	50 - 150
N-Propylbenzene	0.500	0.501		ug/L		100	50 - 150
o-Chlorotoluene	0.500	0.534		ug/L		107	50 - 150
o-Dichlorobenzene (1,2-DCB)	0.500	0.491	J	ug/L		98	50 - 150
o-Xylene	0.500	0.510		ug/L		102	50 - 150
p-Chlorotoluene	0.500	0.509		ug/L		102	50 - 150
p-Dichlorobenzene (1,4-DCB)	0.500	0.519		ug/L		104	50 - 150
p-Isopropyltoluene	0.500	0.489	J	ug/L		98	50 - 150
sec-Butylbenzene	0.500	0.470	J	ug/L		94	50 - 150
Styrene	0.500	0.515		ug/L		103	50 - 150
Tert-amyl methyl ether	0.500	0.475	J	ug/L		95	50 - 150
1,3-Dichloropropene, Total	1.00	0.818		ug/L		82	50 - 150
Tert-butyl ethyl ether	0.500	0.467	J	ug/L		93	50 - 150
tert-Butylbenzene	0.500	0.495	J	ug/L		99	50 - 150
Tetrachloroethene (PCE)	0.500	0.410	J	ug/L		82	50 - 150
Toluene	0.500	0.502		ug/L		100	50 - 150
trans-1,2-Dichloroethylene	0.500	0.462	J	ug/L		92	50 - 150
trans-1,3-Dichloropropene	0.500	0.384	J	ug/L		77	50 - 150
Trichloroethylene (TCE)	0.500	0.432	J	ug/L		86	50 - 150
Bromoethane	0.500	0.594		ug/L		119	50 - 150
Trichlorofluoromethane (Freon 11)	0.500	0.360	J	ug/L		72	50 - 150
Trichlorotrifluoroethane	0.500	0.348	J	ug/L		70	50 - 150
Diisopropyl ether	0.500	0.491	J	ug/L		98	50 - 150
Vinyl Chloride (VC)	0.500	0.417		ug/L		83	50 - 150
Xylenes, Total	1.50	1.51		ug/L		101	50 - 150

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MRL 380-99494/4
Matrix: Water
Analysis Batch: 99494

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

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*

Method: 524.2 - Volatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 380-99491/5
Matrix: Water
Analysis Batch: 99491

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Tertiary Butyl Alcohol (TBA)	<2.0		2.0		ug/L			07/17/24 15:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*70 - 130*		*07/17/24 15:57*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*07/17/24 15:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*07/17/24 15:57*	*1*

Lab Sample ID: LCS 380-99491/2
Matrix: Water
Analysis Batch: 99491

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Tertiary Butyl Alcohol (TBA)			5.00	5.49		ug/L		110	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*98*		*70 - 130*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*

Lab Sample ID: LCSD 380-99491/3
Matrix: Water
Analysis Batch: 99491

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Tertiary Butyl Alcohol (TBA)			5.00	5.61		ug/L		112	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*100*		*70 - 130*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*

Lab Sample ID: MRL 380-99491/4
Matrix: Water
Analysis Batch: 99491

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Tertiary Butyl Alcohol (TBA)			2.00	2.71		ug/L		135	50 - 150		

Method: 524.2 - Volatile Organic Compounds (GC/MS SIM) (Continued)

Surrogate	MRL %Recovery	MRL Qualifier	Limits
Toluene-d8 (Surr)	*98*		*50 - 150*
4-Bromofluorobenzene (Surr)	*96*		*50 - 150*
1,2-Dichloroethane-d4 (Surr)	*100*		*50 - 150*

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

Lab Sample ID: MB 380-98487/21-A
Matrix: Water
Analysis Batch: 98737

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 98487

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2,4'-DDD	<0.099		0.099		ug/L		07/11/24 08:25	07/12/24 12:00	1
2,4'-DDE	<0.099		0.099		ug/L		07/11/24 08:25	07/12/24 12:00	1
2,4'-DDT	<0.099		0.099		ug/L		07/11/24 08:25	07/12/24 12:00	1
2,4-Dinitrotoluene	<0.099		0.099		ug/L		07/11/24 08:25	07/12/24 12:00	1
2,6-Dinitrotoluene	<0.099		0.099		ug/L		07/11/24 08:25	07/12/24 12:00	1
4,4'-DDD	<0.099		0.099		ug/L		07/11/24 08:25	07/12/24 12:00	1
4,4'-DDE	<0.099		0.099		ug/L		07/11/24 08:25	07/12/24 12:00	1
4,4'-DDT	<0.099		0.099		ug/L		07/11/24 08:25	07/12/24 12:00	1
Acenaphthene	<0.099		0.099		ug/L		07/11/24 08:25	07/12/24 12:00	1
Acenaphthylene	<0.099		0.099		ug/L		07/11/24 08:25	07/12/24 12:00	1
Acetochlor	<0.099		0.099		ug/L		07/11/24 08:25	07/12/24 12:00	1
Alachlor	<0.050		0.050		ug/L		07/11/24 08:25	07/12/24 12:00	1
alpha-BHC	<0.099		0.099		ug/L		07/11/24 08:25	07/12/24 12:00	1
alpha-Chlordane	<0.050		0.050		ug/L		07/11/24 08:25	07/12/24 12:00	1
Anthracene	<0.020		0.020		ug/L		07/11/24 08:25	07/12/24 12:00	1
Atrazine	<0.050		0.050		ug/L		07/11/24 08:25	07/12/24 12:00	1
Benz(a)anthracene	<0.050		0.050		ug/L		07/11/24 08:25	07/12/24 12:00	1
Benzo[a]pyrene	<0.020		0.020		ug/L		07/11/24 08:25	07/12/24 12:00	1
Benzo[b]fluoranthene	<0.020		0.020		ug/L		07/11/24 08:25	07/12/24 12:00	1
Benzo[g,h,i]perylene	<0.050		0.050		ug/L		07/11/24 08:25	07/12/24 12:00	1
Benzo[k]fluoranthene	<0.020		0.020		ug/L		07/11/24 08:25	07/12/24 12:00	1
beta-BHC	<0.099		0.099		ug/L		07/11/24 08:25	07/12/24 12:00	1
Bis(2-ethylhexyl) phthalate	<0.60		0.60		ug/L		07/11/24 08:25	07/12/24 12:00	1
Aldrin	<0.0099		0.0099		ug/L		07/11/24 08:25	07/12/24 12:00	1
Bromacil	<0.099		0.099		ug/L		07/11/24 08:25	07/12/24 12:00	1
Butachlor	<0.050		0.050		ug/L		07/11/24 08:25	07/12/24 12:00	1
Butylbenzylphthalate	<0.50		0.50		ug/L		07/11/24 08:25	07/12/24 12:00	1
Chlorobenzilate	<0.099		0.099		ug/L		07/11/24 08:25	07/12/24 12:00	1
Chloroneb	<0.099		0.099		ug/L		07/11/24 08:25	07/12/24 12:00	1
Chlorothalonil (Draconil, Bravo)	<0.099		0.099		ug/L		07/11/24 08:25	07/12/24 12:00	1
Chlorpyrifos	<0.050		0.050		ug/L		07/11/24 08:25	07/12/24 12:00	1
Chrysene	<0.020		0.020		ug/L		07/11/24 08:25	07/12/24 12:00	1
delta-BHC	<0.099		0.099		ug/L		07/11/24 08:25	07/12/24 12:00	1
Di(2-ethylhexyl)adipate	<0.60		0.60		ug/L		07/11/24 08:25	07/12/24 12:00	1
Dibenz(a,h)anthracene	<0.050		0.050		ug/L		07/11/24 08:25	07/12/24 12:00	1
Diclorvos (DDVP)	<0.050		0.050		ug/L		07/11/24 08:25	07/12/24 12:00	1
Dieldrin	<0.0099		0.0099		ug/L		07/11/24 08:25	07/12/24 12:00	1
Diethylphthalate	<0.50		0.50		ug/L		07/11/24 08:25	07/12/24 12:00	1
Dimethylphthalate	<0.50		0.50		ug/L		07/11/24 08:25	07/12/24 12:00	1
Di-n-butyl phthalate	<0.99		0.99		ug/L		07/11/24 08:25	07/12/24 12:00	1
Di-n-octyl phthalate	<0.099		0.099		ug/L		07/11/24 08:25	07/12/24 12:00	1

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

Lab Sample ID: MB 380-98487/21-A
Matrix: Water
Analysis Batch: 98737

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 98487

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan I (Alpha)	<0.099		0.099		ug/L		07/11/24 08:25	07/12/24 12:00	1
Endosulfan II (Beta)	<0.099		0.099		ug/L		07/11/24 08:25	07/12/24 12:00	1
Endosulfan sulfate	<0.099		0.099		ug/L		07/11/24 08:25	07/12/24 12:00	1
Endrin	<0.0099		0.0099		ug/L		07/11/24 08:25	07/12/24 12:00	1
Endrin aldehyde	<0.099		0.099		ug/L		07/11/24 08:25	07/12/24 12:00	1
EPTC	<0.099		0.099		ug/L		07/11/24 08:25	07/12/24 12:00	1
Fluoranthene	<0.099		0.099		ug/L		07/11/24 08:25	07/12/24 12:00	1
Fluorene	<0.050		0.050		ug/L		07/11/24 08:25	07/12/24 12:00	1
gamma-BHC (Lindane)	<0.0099		0.0099		ug/L		07/11/24 08:25	07/12/24 12:00	1
gamma-Chlordane	<0.050		0.050		ug/L		07/11/24 08:25	07/12/24 12:00	1
Heptachlor	<0.0099		0.0099		ug/L		07/11/24 08:25	07/12/24 12:00	1
Heptachlor epoxide (isomer B)	<0.0099		0.0099		ug/L		07/11/24 08:25	07/12/24 12:00	1
Hexachlorobenzene	<0.050		0.050		ug/L		07/11/24 08:25	07/12/24 12:00	1
Hexachlorocyclopentadiene	<0.050		0.050		ug/L		07/11/24 08:25	07/12/24 12:00	1
Indeno[1,2,3-cd]pyrene	<0.050		0.050		ug/L		07/11/24 08:25	07/12/24 12:00	1
Isophorone	<0.099		0.099		ug/L		07/11/24 08:25	07/12/24 12:00	1
Malathion	<0.099		0.099		ug/L		07/11/24 08:25	07/12/24 12:00	1
Methoxychlor	<0.050		0.050		ug/L		07/11/24 08:25	07/12/24 12:00	1
Metolachlor	<0.050		0.050		ug/L		07/11/24 08:25	07/12/24 12:00	1
Molinate	<0.099		0.099		ug/L		07/11/24 08:25	07/12/24 12:00	1
Naphthalene	<0.099		0.099		ug/L		07/11/24 08:25	07/12/24 12:00	1
Parathion	<0.099		0.099		ug/L		07/11/24 08:25	07/12/24 12:00	1
Pendimethalin (Penoxaline)	<0.099		0.099		ug/L		07/11/24 08:25	07/12/24 12:00	1
Phenanthrene	<0.040		0.040		ug/L		07/11/24 08:25	07/12/24 12:00	1
Propachlor	<0.050		0.050		ug/L		07/11/24 08:25	07/12/24 12:00	1
Pyrene	<0.050		0.050		ug/L		07/11/24 08:25	07/12/24 12:00	1
Simazine	<0.050		0.050		ug/L		07/11/24 08:25	07/12/24 12:00	1
Terbacil	<0.099		0.099		ug/L		07/11/24 08:25	07/12/24 12:00	1
Terbuthylazine	<0.099		0.099		ug/L		07/11/24 08:25	07/12/24 12:00	1
Thiobencarb	<0.099		0.099		ug/L		07/11/24 08:25	07/12/24 12:00	1
Total Permethrin (mixed isomers)	<0.20		0.20		ug/L		07/11/24 08:25	07/12/24 12:00	1
trans-Nonachlor	<0.050		0.050		ug/L		07/11/24 08:25	07/12/24 12:00	1
Trifluralin	<0.099		0.099		ug/L		07/11/24 08:25	07/12/24 12:00	1
1-Methylnaphthalene	<0.099		0.099		ug/L		07/11/24 08:25	07/12/24 12:00	1
2-Methylnaphthalene	<0.099		0.099		ug/L		07/11/24 08:25	07/12/24 12:00	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
2-Pentenal, (E)-	*0.820*	*T J N*	*ug/L*		*2.28*	*1576-87-0*	*07/11/24 08:25*	*07/12/24 12:00*	*1*
2-Pentene, 2,4,4-trimethyl-	*0.845*	*T J N*	*ug/L*		*2.37*	*107-40-4*	*07/11/24 08:25*	*07/12/24 12:00*	*1*
Camphene	*1.34*	*T J N*	*ug/L*		*2.41*	*79-92-5*	*07/11/24 08:25*	*07/12/24 12:00*	*1*
Unknown	*1.51*	*T J*	*ug/L*		*2.50*	*N/A*	*07/11/24 08:25*	*07/12/24 12:00*	*1*
Unknown	*0.682*	*T J*	*ug/L*		*4.57*	*N/A*	*07/11/24 08:25*	*07/12/24 12:00*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Nitro-m-xylene	*96*		*70 - 130*	*07/11/24 08:25*	*07/12/24 12:00*	*1*
Perylene-d12	*96*		*70 - 130*	*07/11/24 08:25*	*07/12/24 12:00*	*1*
Triphenylphosphate	*103*		*70 - 130*	*07/11/24 08:25*	*07/12/24 12:00*	*1*

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

Lab Sample ID: LCS 380-98487/23-A
Matrix: Water
Analysis Batch: 98737

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 98487

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4'-DDD	1.98	2.10		ug/L		106	70 - 130
2,4'-DDE	1.98	1.87		ug/L		94	70 - 130
2,4'-DDT	1.98	2.34		ug/L		118	70 - 130
2,4-Dinitrotoluene	1.98	2.02		ug/L		102	70 - 130
2,6-Dinitrotoluene	1.98	1.96		ug/L		99	70 - 130
4,4'-DDD	1.98	2.15		ug/L		108	70 - 130
4,4'-DDE	1.98	1.99		ug/L		101	70 - 130
4,4'-DDT	1.98	2.05		ug/L		103	70 - 130
Acenaphthene	1.98	2.07		ug/L		105	70 - 130
Acenaphthylene	1.98	2.12		ug/L		107	70 - 130
Acetochlor	1.98	2.28		ug/L		115	70 - 130
Alachlor	1.98	2.24		ug/L		113	70 - 130
alpha-BHC	1.98	1.98		ug/L		100	70 - 130
alpha-Chlordane	1.98	2.07		ug/L		104	70 - 130
Anthracene	1.98	1.85		ug/L		93	70 - 130
Atrazine	1.98	1.98		ug/L		100	70 - 130
Benz(a)anthracene	1.98	2.12		ug/L		107	70 - 130
Benzo[a]pyrene	1.98	2.10		ug/L		106	70 - 130
Benzo[b]fluoranthene	1.98	2.10		ug/L		106	70 - 130
Benzo[g,h,i]perylene	1.98	2.06		ug/L		104	70 - 130
Benzo[k]fluoranthene	1.98	2.06		ug/L		104	70 - 130
beta-BHC	1.98	2.01		ug/L		101	70 - 130
Bis(2-ethylhexyl) phthalate	1.98	2.14		ug/L		108	70 - 130
Aldrin	1.98	1.80		ug/L		91	70 - 130
Bromacil	1.98	2.08		ug/L		105	70 - 130
Butachlor	1.98	2.15		ug/L		108	70 - 130
Butylbenzylphthalate	1.98	2.37		ug/L		120	70 - 130
Chlorobenzilate	1.98	1.98		ug/L		100	70 - 130
Chloroneb	1.98	2.06		ug/L		104	70 - 130
Chlorothalonil (Draconil, Bravo)	1.98	1.83		ug/L		92	70 - 130
Chlorpyrifos	1.98	2.05		ug/L		103	70 - 130
Chrysene	1.98	2.14		ug/L		108	70 - 130
delta-BHC	1.98	1.91		ug/L		96	70 - 130
Di(2-ethylhexyl)adipate	1.98	2.23		ug/L		113	70 - 130
Dibenz(a,h)anthracene	1.98	2.08		ug/L		105	70 - 130
Diclorvos (DDVP)	1.98	1.72		ug/L		87	70 - 130
Dieldrin	1.98	1.85		ug/L		93	70 - 130
Diethylphthalate	1.98	2.19		ug/L		110	70 - 130
Dimethylphthalate	1.98	2.09		ug/L		105	70 - 130
Di-n-butyl phthalate	3.96	4.49		ug/L		113	70 - 130
Di-n-octyl phthalate	1.98	1.89		ug/L		95	70 - 130
Endosulfan I (Alpha)	1.98	1.98		ug/L		100	70 - 130
Endosulfan II (Beta)	1.98	2.09		ug/L		105	70 - 130
Endosulfan sulfate	1.98	1.92		ug/L		97	70 - 130
Endrin	1.98	1.99		ug/L		100	70 - 130
Endrin aldehyde	1.98	1.44		ug/L		73	60 - 130
EPTC	1.98	2.01		ug/L		102	70 - 130
Fluoranthene	1.98	2.06		ug/L		104	70 - 130

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

Lab Sample ID: LCS 380-98487/23-A
Matrix: Water
Analysis Batch: 98737

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 98487

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluorene	1.98	2.03		ug/L		103	70 - 130
gamma-BHC (Lindane)	1.98	2.01		ug/L		102	70 - 130
gamma-Chlordane	1.98	2.10		ug/L		106	70 - 130
Heptachlor	1.98	1.91		ug/L		96	70 - 130
Heptachlor epoxide (isomer B)	1.98	2.28		ug/L		115	70 - 130
Hexachlorobenzene	1.98	1.92		ug/L		97	70 - 130
Hexachlorocyclopentadiene	1.98	1.91		ug/L		96	70 - 130
Indeno[1,2,3-cd]pyrene	1.98	2.05		ug/L		104	70 - 130
Isophorone	1.98	1.90		ug/L		96	70 - 130
Malathion	1.98	2.15		ug/L		108	70 - 130
Methoxychlor	1.98	2.06		ug/L		104	70 - 130
Metolachlor	1.98	2.36		ug/L		119	70 - 130
Molinate	1.98	2.05		ug/L		103	70 - 130
Naphthalene	1.98	1.93		ug/L		97	70 - 130
Parathion	1.98	2.15		ug/L		109	70 - 130
Pendimethalin (Penoxaline)	1.98	2.05		ug/L		103	70 - 130
Phenanthrene	1.98	1.85		ug/L		93	70 - 130
Propachlor	1.98	2.02		ug/L		102	70 - 130
Pyrene	1.98	1.96		ug/L		99	70 - 130
Simazine	1.98	1.95		ug/L		98	70 - 130
Terbacil	1.98	2.15		ug/L		109	70 - 130
Terbuthylazine	1.98	2.15		ug/L		109	70 - 130
Thiobencarb	1.98	2.04		ug/L		103	70 - 130
trans-Nonachlor	1.98	2.21		ug/L		111	70 - 130
Trifluralin	1.98	1.90		ug/L		96	70 - 130
1-Methylnaphthalene	1.98	2.04		ug/L		103	70 - 130
2-Methylnaphthalene	1.98	1.97		ug/L		99	70 - 130

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

Lab Sample ID: MRL 380-98487/22-A
Matrix: Water
Analysis Batch: 98737

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 98487

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
2,4'-DDD	0.0994	0.109		ug/L		110	50 - 150
2,4'-DDE	0.0994	0.115		ug/L		116	50 - 150
2,4'-DDT	0.0994	0.108		ug/L		108	50 - 150
2,4-Dinitrotoluene	0.0994	0.0900	J	ug/L		91	50 - 150
2,6-Dinitrotoluene	0.0994	0.104		ug/L		104	50 - 150
4,4'-DDD	0.0994	0.112		ug/L		113	50 - 150
4,4'-DDE	0.0994	0.0926	J	ug/L		93	50 - 150
4,4'-DDT	0.0994	0.111		ug/L		111	50 - 150
Acenaphthene	0.0994	0.0958	J	ug/L		96	50 - 150
Acenaphthylene	0.0994	0.0948	J	ug/L		95	50 - 150

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

Lab Sample ID: MRL 380-98487/22-A
Matrix: Water
Analysis Batch: 98737

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 98487

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Acetochlor	0.0994	0.104		ug/L		105	50 - 150
Alachlor	0.0497	0.0634		ug/L		128	50 - 150
alpha-BHC	0.0994	0.121		ug/L		122	50 - 150
alpha-Chlordane	0.0248	<0.029		ug/L		116	50 - 150
Anthracene	0.0199	0.0279		ug/L		140	50 - 150
Atrazine	0.0497	0.0530		ug/L		107	50 - 150
Benz(a)anthracene	0.0497	0.0483	J	ug/L		97	50 - 150
Benzo[a]pyrene	0.0199	0.0237		ug/L		119	50 - 150
Benzo[b]fluoranthene	0.0199	0.0210		ug/L		105	50 - 150
Benzo[g,h,i]perylene	0.0497	0.0453	J	ug/L		91	50 - 150
Benzo[k]fluoranthene	0.0199	0.0207		ug/L		104	50 - 150
beta-BHC	0.0994	0.131		ug/L		132	50 - 150
Bis(2-ethylhexyl) phthalate	0.596	0.549	J	ug/L		92	50 - 150
Aldrin	0.00994	<0.0099		ug/L		67	50 - 150
Bromacil	0.0994	0.120		ug/L		120	50 - 150
Butachlor	0.0497	0.0547		ug/L		110	50 - 150
Butylbenzylphthalate	0.497	0.566		ug/L		114	50 - 150
Chlorobenzilate	0.0994	0.0988	J	ug/L		99	50 - 150
Chloroneb	0.0994	0.105		ug/L		106	50 - 150
Chlorothalonil (Draconil, Bravo)	0.0994	0.139		ug/L		140	50 - 150
Chlorpyrifos	0.0497	0.0582		ug/L		117	50 - 150
Chrysene	0.0199	0.0219		ug/L		110	50 - 150
delta-BHC	0.0994	0.119		ug/L		119	50 - 150
Di(2-ethylhexyl)adipate	0.596	0.631		ug/L		106	50 - 150
Dibenz(a,h)anthracene	0.0497	0.0439	J	ug/L		88	50 - 150
Diclorvos (DDVP)	0.0497	0.0561		ug/L		113	50 - 150
Dieldrin	0.00994	0.0122		ug/L		123	50 - 150
Diethylphthalate	0.497	0.540		ug/L		109	50 - 150
Dimethylphthalate	0.497	0.557		ug/L		112	50 - 150
Di-n-butyl phthalate	0.497	0.554	J	ug/L		112	49 - 243
Di-n-octyl phthalate	0.0994	0.0781	J	ug/L		79	50 - 150
Endosulfan I (Alpha)	0.0994	0.112		ug/L		112	50 - 150
Endosulfan II (Beta)	0.0994	0.121		ug/L		122	50 - 150
Endosulfan sulfate	0.0994	0.121		ug/L		122	50 - 150
Endrin	0.00994	0.00914	J	ug/L		92	50 - 150
Endrin aldehyde	0.0994	0.0945	J	ug/L		95	50 - 150
EPTC	0.0994	0.0992		ug/L		100	50 - 150
Fluoranthene	0.0994	0.109		ug/L		110	50 - 150
Fluorene	0.0497	0.0503		ug/L		101	50 - 150
gamma-BHC (Lindane)	0.00994	0.0144		ug/L		145	50 - 150
gamma-Chlordane	0.0248	0.0251	J	ug/L		101	50 - 150
Heptachlor	0.00994	0.0169	^3+	ug/L		170	50 - 150
Heptachlor epoxide (isomer B)	0.00994	0.0115		ug/L		116	50 - 150
Hexachlorobenzene	0.0497	0.0525		ug/L		106	50 - 150
Hexachlorocyclopentadiene	0.0497	0.0462	J	ug/L		93	50 - 150
Indeno[1,2,3-cd]pyrene	0.0497	0.0500		ug/L		101	50 - 150
Isophorone	0.0994	0.124		ug/L		125	50 - 150
Malathion	0.0994	0.120		ug/L		121	50 - 150
Methoxychlor	0.0497	0.0590		ug/L		119	50 - 150

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

Lab Sample ID: MRL 380-98487/22-A
Matrix: Water
Analysis Batch: 98737

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 98487

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Metolachlor	0.0497	0.0583		ug/L		117	50 - 150
Molinate	0.0994	0.109		ug/L		109	50 - 150
Naphthalene	0.0994	0.109		ug/L		110	50 - 150
Parathion	0.0994	0.117		ug/L		117	50 - 150
Pendimethalin (Penoxaline)	0.0994	0.117		ug/L		118	50 - 150
Phenanthrene	0.0397	0.0453		ug/L		114	50 - 150
Propachlor	0.0497	0.0533		ug/L		107	50 - 150
Pyrene	0.0497	0.0508		ug/L		102	50 - 150
Simazine	0.0497	0.0546		ug/L		110	50 - 150
Terbacil	0.0994	0.110		ug/L		111	50 - 150
Terbuthylazine	0.0994	0.0970	J	ug/L		98	50 - 150
Thiobencarb	0.0994	0.117		ug/L		118	50 - 150
trans-Nonachlor	0.0248	<0.026		ug/L		93	50 - 150
Trifluralin	0.0994	0.106		ug/L		106	50 - 150
1-Methylnaphthalene	0.0994	0.0991		ug/L		100	50 - 150
2-Methylnaphthalene	0.0994	0.0856	J	ug/L		86	50 - 150

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
2-Nitro-m-xylene	*97*		*70 - 130*
Perylene-d12	*93*		*70 - 130*
Triphenylphosphate	*99*		*70 - 130*

Lab Sample ID: 380-103361-1 MS
Matrix: Water
Analysis Batch: 98737

Client Sample ID: MOANALUA WELLS
Prep Type: Total/NA
Prep Batch: 98487

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2,4'-DDD	<0.097		1.94	2.02		ug/L		104	70 - 130
2,4'-DDE	<0.097		1.94	1.79		ug/L		92	70 - 130
2,4'-DDT	<0.097		1.94	2.22		ug/L		114	70 - 130
2,4-Dinitrotoluene	<0.097		1.94	1.97		ug/L		101	70 - 130
2,6-Dinitrotoluene	<0.097		1.94	1.93		ug/L		99	70 - 130
4,4'-DDD	<0.097		1.94	2.09		ug/L		108	70 - 130
4,4'-DDE	<0.097		1.94	1.90		ug/L		98	70 - 130
4,4'-DDT	<0.097		1.94	1.92		ug/L		99	70 - 130
Acenaphthene	<0.097		1.94	2.02		ug/L		104	70 - 130
Acenaphthylene	<0.097		1.94	2.04		ug/L		105	70 - 130
Acetochlor	<0.097		1.94	2.23		ug/L		115	70 - 130
Alachlor	<0.048		1.94	2.21		ug/L		114	70 - 130
alpha-BHC	<0.097		1.94	1.91		ug/L		98	70 - 130
alpha-Chlordane	<0.048		1.94	2.03		ug/L		104	70 - 130
Anthracene	<0.019		1.94	1.42		ug/L		73	70 - 130
Atrazine	<0.048		1.94	1.97		ug/L		101	70 - 130
Benz(a)anthracene	<0.048		1.94	1.94		ug/L		100	70 - 130
Benzo[a]pyrene	<0.019		1.94	1.85		ug/L		95	70 - 130
Benzo[b]fluoranthene	<0.019		1.94	2.01		ug/L		104	70 - 130
Benzo[g,h,i]perylene	<0.048		1.94	1.95		ug/L		100	70 - 130
Benzo[k]fluoranthene	<0.019		1.94	2.07		ug/L		106	70 - 130

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

Lab Sample ID: 380-103361-1 MS
Matrix: Water
Analysis Batch: 98737

Client Sample ID: MOANALUA WELLS
Prep Type: Total/NA
Prep Batch: 98487

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
beta-BHC	<0.097		1.94	1.97		ug/L		101	70 - 130
Bis(2-ethylhexyl) phthalate	<0.58		1.94	1.91		ug/L		98	70 - 130
Aldrin	<0.0097		1.94	1.84		ug/L		95	70 - 130
Bromacil	<0.097		1.94	2.14		ug/L		110	70 - 130
Butachlor	<0.048		1.94	2.12		ug/L		109	70 - 130
Butylbenzylphthalate	<0.48		1.94	2.34		ug/L		120	70 - 130
Chlorobenzilate	<0.097		1.94	1.96		ug/L		101	70 - 130
Chloroneb	<0.097		1.94	1.96		ug/L		101	70 - 130
Chlorothalonil (Draconil, Bravo)	<0.097		1.94	1.76		ug/L		90	70 - 130
Chlorpyrifos	<0.048		1.94	2.03		ug/L		104	70 - 130
Chrysene	<0.019		1.94	2.11		ug/L		109	70 - 130
delta-BHC	<0.097		1.94	1.90		ug/L		98	70 - 130
Di(2-ethylhexyl)adipate	<0.58		1.94	1.91		ug/L		98	70 - 130
Dibenz(a,h)anthracene	<0.048		1.94	1.94		ug/L		100	70 - 130
Diclorvos (DDVP)	<0.048		1.94	1.67		ug/L		86	70 - 130
Dieldrin	0.025		1.94	1.88		ug/L		95	70 - 130
Diethylphthalate	<0.48		1.94	2.15		ug/L		111	70 - 130
Dimethylphthalate	<0.48		1.94	2.07		ug/L		107	70 - 130
Di-n-butyl phthalate	<0.97		3.89	4.36		ug/L		112	70 - 130
Di-n-octyl phthalate	<0.097		1.94	1.56		ug/L		80	70 - 130
Endosulfan I (Alpha)	<0.097		1.94	1.97		ug/L		101	70 - 130
Endosulfan II (Beta)	<0.097		1.94	2.05		ug/L		106	70 - 130
Endosulfan sulfate	<0.097		1.94	1.89		ug/L		97	70 - 130
Endrin	<0.0097		1.94	2.01		ug/L		103	70 - 130
Endrin aldehyde	<0.097		1.94	1.28		ug/L		66	60 - 130
EPTC	<0.097		1.94	2.01		ug/L		103	70 - 130
Fluoranthene	<0.097		1.94	2.01		ug/L		103	70 - 130
Fluorene	<0.048		1.94	1.98		ug/L		102	70 - 130
gamma-BHC (Lindane)	<0.0097		1.94	1.97		ug/L		102	70 - 130
gamma-Chlordane	<0.048		1.94	2.03		ug/L		103	70 - 130
Heptachlor	<0.0097	^3+	1.94	1.89		ug/L		97	70 - 130
Heptachlor epoxide (isomer B)	<0.0097		1.94	2.24		ug/L		115	70 - 130
Hexachlorobenzene	<0.048		1.94	1.87		ug/L		96	70 - 130
Hexachlorocyclopentadiene	<0.048		1.94	1.87		ug/L		96	70 - 130
Indeno[1,2,3-cd]pyrene	<0.048		1.94	1.88		ug/L		97	70 - 130
Isophorone	<0.097		1.94	1.89		ug/L		98	70 - 130
Malathion	<0.097		1.94	2.14		ug/L		110	70 - 130
Methoxychlor	<0.048		1.94	2.19		ug/L		113	70 - 130
Metolachlor	<0.048		1.94	2.34		ug/L		120	70 - 130
Molinate	<0.097		1.94	2.05		ug/L		106	70 - 130
Naphthalene	<0.097		1.94	1.89		ug/L		97	70 - 130
Parathion	<0.097		1.94	2.20		ug/L		113	70 - 130
Pendimethalin (Penoxaline)	<0.097		1.94	2.03		ug/L		104	70 - 130
Phenanthrene	<0.039		1.94	1.82		ug/L		94	70 - 130
Propachlor	<0.048		1.94	1.98		ug/L		102	70 - 130
Pyrene	<0.048		1.94	1.91		ug/L		98	70 - 130
Simazine	<0.048		1.94	2.02		ug/L		104	70 - 130
Terbacil	<0.097		1.94	2.10		ug/L		108	70 - 130
Terbuthylazine	<0.097		1.94	2.17		ug/L		112	70 - 130

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

Lab Sample ID: 380-103361-1 MS
Matrix: Water
Analysis Batch: 98737

Client Sample ID: MOANALUA WELLS
Prep Type: Total/NA
Prep Batch: 98487

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Thiobencarb	<0.097		1.94	2.04		ug/L		105	70 - 130
trans-Nonachlor	<0.048		1.94	2.16		ug/L		111	70 - 130
Trifluralin	<0.097		1.94	1.83		ug/L		94	70 - 130
1-Methylnaphthalene	<0.097		1.94	1.97		ug/L		102	70 - 130
2-Methylnaphthalene	<0.097		1.94	1.87		ug/L		96	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Nitro-m-xylene	*99*		*70 - 130*
Perylene-d12	*99*		*70 - 130*
Triphenylphosphate	*103*		*70 - 130*

Lab Sample ID: 380-103361-1 MSD
Matrix: Water
Analysis Batch: 98737

Client Sample ID: MOANALUA WELLS
Prep Type: Total/NA
Prep Batch: 98487

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4'-DDD	<0.097		1.94	2.06		ug/L		106	70 - 130	2	20
2,4'-DDE	<0.097		1.94	1.82		ug/L		93	70 - 130	1	20
2,4'-DDT	<0.097		1.94	2.20		ug/L		113	70 - 130	1	20
2,4-Dinitrotoluene	<0.097		1.94	1.93		ug/L		99	70 - 130	2	20
2,6-Dinitrotoluene	<0.097		1.94	1.91		ug/L		98	70 - 130	1	20
4,4'-DDD	<0.097		1.94	2.07		ug/L		107	70 - 130	1	20
4,4'-DDE	<0.097		1.94	1.86		ug/L		96	70 - 130	2	20
4,4'-DDT	<0.097		1.94	1.90		ug/L		98	70 - 130	1	20
Acenaphthene	<0.097		1.94	2.02		ug/L		104	70 - 130	0	20
Acenaphthylene	<0.097		1.94	2.07		ug/L		107	70 - 130	2	20
Acetochlor	<0.097		1.94	2.24		ug/L		115	70 - 130	1	20
Alachlor	<0.048		1.94	2.26		ug/L		116	70 - 130	2	20
alpha-BHC	<0.097		1.94	1.91		ug/L		98	70 - 130	0	20
alpha-Chlordane	<0.048		1.94	2.05		ug/L		106	70 - 130	1	20
Anthracene	<0.019		1.94	1.36		ug/L		70	70 - 130	5	20
Atrazine	<0.048		1.94	1.98		ug/L		102	70 - 130	1	20
Benz(a)anthracene	<0.048		1.94	1.95		ug/L		100	70 - 130	1	20
Benzo[a]pyrene	<0.019		1.94	1.77		ug/L		91	70 - 130	4	20
Benzo[b]fluoranthene	<0.019		1.94	1.97		ug/L		101	70 - 130	2	20
Benzo[g,h,i]perylene	<0.048		1.94	1.89		ug/L		97	70 - 130	3	20
Benzo[k]fluoranthene	<0.019		1.94	2.00		ug/L		103	70 - 130	3	20
beta-BHC	<0.097		1.94	1.98		ug/L		102	70 - 130	0	20
Bis(2-ethylhexyl) phthalate	<0.58		1.94	1.88		ug/L		97	70 - 130	2	20
Aldrin	<0.0097		1.94	1.79		ug/L		92	70 - 130	3	20
Bromacil	<0.097		1.94	2.10		ug/L		108	70 - 130	2	20
Butachlor	<0.048		1.94	2.14		ug/L		110	70 - 130	1	20
Butylbenzylphthalate	<0.48		1.94	2.32		ug/L		120	70 - 130	1	20
Chlorobenzilate	<0.097		1.94	1.79		ug/L		92	70 - 130	9	20
Chloroneb	<0.097		1.94	2.00		ug/L		103	70 - 130	2	20
Chlorothalonil (Draconil, Bravo)	<0.097		1.94	1.79		ug/L		92	70 - 130	2	20
Chlorpyrifos	<0.048		1.94	2.07		ug/L		106	70 - 130	2	20
Chrysene	<0.019		1.94	2.10		ug/L		108	70 - 130	0	20

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

Lab Sample ID: 380-103361-1 MSD
Matrix: Water
Analysis Batch: 98737

Client Sample ID: MOANALUA WELLS
Prep Type: Total/NA
Prep Batch: 98487

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
delta-BHC	<0.097		1.94	1.92		ug/L		99	70 - 130	1	20
Di(2-ethylhexyl)adipate	<0.58		1.94	1.90		ug/L		98	70 - 130	0	20
Dibenz(a,h)anthracene	<0.048		1.94	1.91		ug/L		98	70 - 130	1	20
Diclorvos (DDVP)	<0.048		1.94	1.67		ug/L		86	70 - 130	0	20
Dieldrin	0.025		1.94	1.86		ug/L		94	70 - 130	1	20
Diethylphthalate	<0.48		1.94	2.14		ug/L		110	70 - 130	1	20
Dimethylphthalate	<0.48		1.94	2.09		ug/L		107	70 - 130	1	20
Di-n-butyl phthalate	<0.97		3.89	4.42		ug/L		114	70 - 130	1	20
Di-n-octyl phthalate	<0.097		1.94	1.56		ug/L		80	70 - 130	0	20
Endosulfan I (Alpha)	<0.097		1.94	1.99		ug/L		103	70 - 130	1	20
Endosulfan II (Beta)	<0.097		1.94	2.13		ug/L		109	70 - 130	3	20
Endosulfan sulfate	<0.097		1.94	1.90		ug/L		98	70 - 130	0	20
Endrin	<0.0097		1.94	2.00		ug/L		103	70 - 130	1	20
Endrin aldehyde	<0.097		1.94	1.31		ug/L		67	60 - 130	2	20
EPTC	<0.097		1.94	1.99		ug/L		102	70 - 130	1	20
Fluoranthene	<0.097		1.94	2.08		ug/L		107	70 - 130	4	20
Fluorene	<0.048		1.94	1.99		ug/L		102	70 - 130	0	20
gamma-BHC (Lindane)	<0.0097		1.94	1.97		ug/L		101	70 - 130	0	20
gamma-Chlordane	<0.048		1.94	2.05		ug/L		105	70 - 130	1	20
Heptachlor	<0.0097	^3+	1.94	1.86		ug/L		96	70 - 130	2	20
Heptachlor epoxide (isomer B)	<0.0097		1.94	2.32		ug/L		119	70 - 130	3	20
Hexachlorobenzene	<0.048		1.94	1.88		ug/L		97	70 - 130	1	20
Hexachlorocyclopentadiene	<0.048		1.94	1.90		ug/L		98	70 - 130	2	20
Indeno[1,2,3-cd]pyrene	<0.048		1.94	1.86		ug/L		96	70 - 130	1	20
Isophorone	<0.097		1.94	1.90		ug/L		98	70 - 130	0	20
Malathion	<0.097		1.94	2.15		ug/L		111	70 - 130	0	20
Methoxychlor	<0.048		1.94	2.17		ug/L		111	70 - 130	1	20
Metolachlor	<0.048		1.94	2.35		ug/L		121	70 - 130	0	20
Molinate	<0.097		1.94	2.04		ug/L		105	70 - 130	0	20
Naphthalene	<0.097		1.94	1.91		ug/L		98	70 - 130	1	20
Parathion	<0.097		1.94	2.13		ug/L		110	70 - 130	3	20
Pendimethalin (Penoxaline)	<0.097		1.94	2.05		ug/L		105	70 - 130	1	20
Phenanthrene	<0.039		1.94	1.88		ug/L		96	70 - 130	3	20
Propachlor	<0.048		1.94	2.01		ug/L		103	70 - 130	1	20
Pyrene	<0.048		1.94	1.94		ug/L		100	70 - 130	1	20
Simazine	<0.048		1.94	1.97		ug/L		101	70 - 130	2	20
Terbacil	<0.097		1.94	1.99		ug/L		102	70 - 130	5	20
Terbuthylazine	<0.097		1.94	2.15		ug/L		111	70 - 130	1	20
Thiobencarb	<0.097		1.94	2.11		ug/L		108	70 - 130	3	20
trans-Nonachlor	<0.048		1.94	2.17		ug/L		112	70 - 130	1	20
Trifluralin	<0.097		1.94	1.84		ug/L		95	70 - 130	1	20
1-Methylnaphthalene	<0.097		1.94	1.98		ug/L		102	70 - 130	0	20
2-Methylnaphthalene	<0.097		1.94	1.89		ug/L		97	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Nitro-m-xylene	*98*		*70 - 130*
Perylene-d12	*98*		*70 - 130*
Triphenylphosphate	*104*		*70 - 130*

Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 570-460222/1-A
Matrix: Water
Analysis Batch: 466731

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 460222

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	07/15/24 05:12	08/02/24 19:16	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	45		33 - 139	07/15/24 05:12	08/02/24 19:16	1
2-Fluorobiphenyl (Surr)	59		33 - 126	07/15/24 05:12	08/02/24 19:16	1
2-Fluorophenol (Surr)	41		12 - 120	07/15/24 05:12	08/02/24 19:16	1
Nitrobenzene-d5 (Surr)	53		36 - 120	07/15/24 05:12	08/02/24 19:16	1
Phenol-d6 (Surr)	26		10 - 120	07/15/24 05:12	08/02/24 19:16	1
p-Terphenyl-d14 (Surr)	71		47 - 131	07/15/24 05:12	08/02/24 19:16	1

Method: 625.1 SIM - Semivolatile Organic Compounds GC/MS (SIM)

Lab Sample ID: MB 570-460222/1-A
Matrix: Water
Analysis Batch: 466820

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 460222

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.20		0.20		ug/L		07/15/24 05:12	08/02/24 12:18	1
2,4,5-Trichlorophenol	<5.0		5.0		ug/L		07/15/24 05:12	08/02/24 12:18	1
2,4,6-Trichlorophenol	<1.0		1.0		ug/L		07/15/24 05:12	08/02/24 12:18	1
2,4-Dichlorophenol	<1.0		1.0		ug/L		07/15/24 05:12	08/02/24 12:18	1
2,4-Dinitrophenol	<5.0		5.0		ug/L		07/15/24 05:12	08/02/24 12:18	1
2,6-Dichlorophenol	<5.0		5.0		ug/L		07/15/24 05:12	08/02/24 12:18	1
2-Chloronaphthalene	<0.20		0.20		ug/L		07/15/24 05:12	08/02/24 12:18	1
2-Chlorophenol	<0.20		0.20		ug/L		07/15/24 05:12	08/02/24 12:18	1
2-Methylnaphthalene	<0.20		0.20		ug/L		07/15/24 05:12	08/02/24 12:18	1
2-Methylphenol	<1.0		1.0		ug/L		07/15/24 05:12	08/02/24 12:18	1
2-Nitroaniline	<5.0		5.0		ug/L		07/15/24 05:12	08/02/24 12:18	1
2-Nitrophenol	<5.0		5.0		ug/L		07/15/24 05:12	08/02/24 12:18	1
3/4-Methylphenol	<2.0		2.0		ug/L		07/15/24 05:12	08/02/24 12:18	1
3-Nitroaniline	<5.0		5.0		ug/L		07/15/24 05:12	08/02/24 12:18	1
4,6-Dinitro-2-methylphenol	<5.0		5.0		ug/L		07/15/24 05:12	08/02/24 12:18	1
4-Bromophenyl phenyl ether	<0.20		0.20		ug/L		07/15/24 05:12	08/02/24 12:18	1
4-Chloro-3-methylphenol	<1.0		1.0		ug/L		07/15/24 05:12	08/02/24 12:18	1
4-Chloroaniline	<5.0		5.0		ug/L		07/15/24 05:12	08/02/24 12:18	1
4-Chlorophenyl phenyl ether	<0.20		0.20		ug/L		07/15/24 05:12	08/02/24 12:18	1
4-Nitroaniline	<5.0		5.0		ug/L		07/15/24 05:12	08/02/24 12:18	1
4-Nitrophenol	<5.0		5.0		ug/L		07/15/24 05:12	08/02/24 12:18	1
Acenaphthene	<0.20		0.20		ug/L		07/15/24 05:12	08/02/24 12:18	1
Acenaphthylene	<0.20		0.20		ug/L		07/15/24 05:12	08/02/24 12:18	1
Aniline	<0.20		0.20		ug/L		07/15/24 05:12	08/02/24 12:18	1
Anthracene	<0.20		0.20		ug/L		07/15/24 05:12	08/02/24 12:18	1
Benzidine	<5.0		5.0		ug/L		07/15/24 05:12	08/02/24 12:18	1
Benzo[a]anthracene	<0.20		0.20		ug/L		07/15/24 05:12	08/02/24 12:18	1
Benzo[a]pyrene	<0.20		0.20		ug/L		07/15/24 05:12	08/02/24 12:18	1
Benzo[b]fluoranthene	<0.20		0.20		ug/L		07/15/24 05:12	08/02/24 12:18	1
Benzo[g,h,i]perylene	<0.20		0.20		ug/L		07/15/24 05:12	08/02/24 12:18	1
Benzo[k]fluoranthene	<0.20		0.20		ug/L		07/15/24 05:12	08/02/24 12:18	1

Method: 625.1 SIM - Semivolatile Organic Compounds GC/MS (SIM) (Continued)

Lab Sample ID: MB 570-460222/1-A
Matrix: Water
Analysis Batch: 466820

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 460222

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzoic acid	<10		10		ug/L		07/15/24 05:12	08/02/24 12:18	1
Benzyl alcohol	<1.0		1.0		ug/L		07/15/24 05:12	08/02/24 12:18	1
Bis(2-chloroethoxy)methane	<0.20		0.20		ug/L		07/15/24 05:12	08/02/24 12:18	1
Bis(2-chloroethyl)ether	<0.20		0.20		ug/L		07/15/24 05:12	08/02/24 12:18	1
bis (2-Chloroisopropyl) ether	<0.20		0.20		ug/L		07/15/24 05:12	08/02/24 12:18	1
Chrysene	<0.20		0.20		ug/L		07/15/24 05:12	08/02/24 12:18	1
Dibenz(a,h)anthracene	<0.20		0.20		ug/L		07/15/24 05:12	08/02/24 12:18	1
Dibenzofuran	<0.20		0.20		ug/L		07/15/24 05:12	08/02/24 12:18	1
Fluoranthene	<0.20		0.20		ug/L		07/15/24 05:12	08/02/24 12:18	1
Fluorene	<0.20		0.20		ug/L		07/15/24 05:12	08/02/24 12:18	1
Hexachloroethane	<0.20		0.20		ug/L		07/15/24 05:12	08/02/24 12:18	1
Indeno[1,2,3-cd]pyrene	<0.20		0.20		ug/L		07/15/24 05:12	08/02/24 12:18	1
Naphthalene	<0.20		0.20		ug/L		07/15/24 05:12	08/02/24 12:18	1
Nitrobenzene	<0.20		0.20		ug/L		07/15/24 05:12	08/02/24 12:18	1
N-Nitrosodi-n-propylamine	<0.20		0.20		ug/L		07/15/24 05:12	08/02/24 12:18	1
N-Nitrosodiphenylamine	<0.20		0.20		ug/L		07/15/24 05:12	08/02/24 12:18	1
Pentachlorophenol	<1.0		1.0		ug/L		07/15/24 05:12	08/02/24 12:18	1
Phenanthrene	<0.20		0.20		ug/L		07/15/24 05:12	08/02/24 12:18	1
Phenol	<1.0		1.0		ug/L		07/15/24 05:12	08/02/24 12:18	1
Pyrene	<0.20		0.20		ug/L		07/15/24 05:12	08/02/24 12:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*70*		*28 - 127*	*07/15/24 05:12*	*08/02/24 12:18*	*1*
2-Fluorobiphenyl (Surr)	*61*		*31 - 120*	*07/15/24 05:12*	*08/02/24 12:18*	*1*
2-Fluorophenol (Surr)	*53*		*17 - 120*	*07/15/24 05:12*	*08/02/24 12:18*	*1*
Nitrobenzene-d5 (Surr)	*68*		*27 - 120*	*07/15/24 05:12*	*08/02/24 12:18*	*1*
Phenol-d6 (Surr)	*37*		*10 - 120*	*07/15/24 05:12*	*08/02/24 12:18*	*1*
p-Terphenyl-d14 (Surr)	*80*		*45 - 120*	*07/15/24 05:12*	*08/02/24 12:18*	*1*

Lab Sample ID: LCS 570-460222/2-A
Matrix: Water
Analysis Batch: 465376

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 460222

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	20.0	14.5		ug/L		72	47 - 120
2,4,5-Trichlorophenol	20.0	17.9		ug/L		89	57 - 120
2,4,6-Trichlorophenol	20.0	16.5		ug/L		82	52 - 129
2,4-Dichlorophenol	20.0	15.8		ug/L		79	53 - 122
2,4-Dinitrophenol	20.0	18.3		ug/L		92	1 - 173
2,6-Dichlorophenol	20.0	16.0		ug/L		80	50 - 120
2-Chloronaphthalene	20.0	14.5		ug/L		73	65 - 120
2-Chlorophenol	20.0	15.6		ug/L		78	36 - 120
2-Methylnaphthalene	20.0	14.3		ug/L		71	43 - 120
2-Methylphenol	20.0	15.8		ug/L		79	46 - 120
2-Nitroaniline	20.0	17.4		ug/L		87	51 - 125
2-Nitrophenol	20.0	14.2		ug/L		71	45 - 167
3/4-Methylphenol	40.0	30.8		ug/L		77	29 - 120
3-Nitroaniline	20.0	9.53	*-	ug/L		48	62 - 129

Method: 625.1 SIM - Semivolatile Organic Compounds GC/MS (SIM) (Continued)

Lab Sample ID: LCS 570-460222/2-A
Matrix: Water
Analysis Batch: 465376

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 460222

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4,6-Dinitro-2-methylphenol	20.0	14.7		ug/L		74	53 - 130
4-Bromophenyl phenyl ether	20.0	16.0		ug/L		80	65 - 120
4-Chloro-3-methylphenol	20.0	16.5		ug/L		83	41 - 128
4-Chloroaniline	20.0	3.21	J *-	ug/L		16	51 - 120
4-Chlorophenyl phenyl ether	20.0	15.3		ug/L		76	38 - 145
4-Nitroaniline	20.0	16.1		ug/L		80	64 - 129
4-Nitrophenol	20.0	8.97		ug/L		45	13 - 129
Acenaphthene	20.0	14.9		ug/L		74	60 - 132
Acenaphthylene	20.0	17.4		ug/L		87	54 - 126
Aniline	20.0	0.782	*-	ug/L		4	52 - 121
Anthracene	20.0	16.2		ug/L		81	43 - 120
Benzidine	20.0	<0.94	*-	ug/L		0	20 - 164
Benzo[a]anthracene	20.0	16.1		ug/L		81	42 - 133
Benzo[a]pyrene	20.0	17.0		ug/L		85	32 - 148
Benzo[b]fluoranthene	20.0	18.3		ug/L		91	42 - 140
Benzo[g,h,i]perylene	20.0	19.1		ug/L		96	1 - 195
Benzo[k]fluoranthene	20.0	18.3		ug/L		92	25 - 146
Benzoic acid	20.0	8.05	J	ug/L		40	20 - 120
Benzyl alcohol	20.0	18.8		ug/L		94	44 - 122
Bis(2-chloroethoxy)methane	20.0	14.2		ug/L		71	49 - 165
Bis(2-chloroethyl)ether	20.0	14.8		ug/L		74	43 - 126
bis (2-Chloroisopropyl) ether	20.0	15.3		ug/L		77	63 - 139
Chrysene	20.0	16.2		ug/L		81	44 - 140
Dibenz(a,h)anthracene	20.0	17.0		ug/L		85	1 - 200
Dibenzofuran	20.0	15.4		ug/L		77	48 - 120
Fluoranthene	20.0	17.3		ug/L		86	43 - 121
Fluorene	20.0	15.8		ug/L		79	70 - 120
Hexachloroethane	20.0	13.0		ug/L		65	55 - 120
Indeno[1,2,3-cd]pyrene	20.0	15.9		ug/L		79	1 - 151
Naphthalene	20.0	13.7		ug/L		68	36 - 120
Nitrobenzene	20.0	14.7		ug/L		74	54 - 158
N-Nitrosodi-n-propylamine	20.0	17.1		ug/L		85	14 - 198
N-Nitrosodiphenylamine	20.0	20.1		ug/L		101	65 - 133
Pentachlorophenol	20.0	15.5		ug/L		78	38 - 152
Phenanthrene	20.0	15.6		ug/L		78	65 - 120
Phenol	20.0	8.10		ug/L		41	17 - 120
Pyrene	20.0	15.5		ug/L		78	70 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*73*		*28 - 127*
2-Fluorobiphenyl (Surr)	*70*		*31 - 120*
2-Fluorophenol (Surr)	*53*		*17 - 120*
Nitrobenzene-d5 (Surr)	*69*		*27 - 120*
Phenol-d6 (Surr)	*38*		*10 - 120*
p-Terphenyl-d14 (Surr)	*73*		*45 - 120*

Method: 625.1 SIM - Semivolatile Organic Compounds GC/MS (SIM) (Continued)

Lab Sample ID: LCSD 570-460222/3-A
Matrix: Water
Analysis Batch: 465376

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 460222

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene			20.0	13.5		ug/L		67	47 - 120	7	20
2,4,5-Trichlorophenol			20.0	18.3		ug/L		92	57 - 120	2	20
2,4,6-Trichlorophenol			20.0	17.2		ug/L		86	52 - 129	4	35
2,4-Dichlorophenol			20.0	15.0		ug/L		75	53 - 122	5	30
2,4-Dinitrophenol			20.0	19.9		ug/L		100	1 - 173	8	79
2,6-Dichlorophenol			20.0	15.0		ug/L		75	50 - 120	6	20
2-Chloronaphthalene			20.0	14.9		ug/L		74	65 - 120	2	15
2-Chlorophenol			20.0	15.6		ug/L		78	36 - 120	0	37
2-Methylnaphthalene			20.0	13.3		ug/L		66	43 - 120	7	20
2-Methylphenol			20.0	15.6		ug/L		78	46 - 120	1	20
2-Nitroaniline			20.0	18.0		ug/L		90	51 - 125	4	20
2-Nitrophenol			20.0	13.0		ug/L		65	45 - 167	9	33
3/4-Methylphenol			40.0	30.6		ug/L		76	29 - 120	1	20
3-Nitroaniline			20.0	15.2	*1	ug/L		76	62 - 129	46	20
4,6-Dinitro-2-methylphenol			20.0	15.8		ug/L		79	53 - 130	7	122
4-Bromophenyl phenyl ether			20.0	17.4		ug/L		87	65 - 120	8	26
4-Chloro-3-methylphenol			20.0	15.6		ug/L		78	41 - 128	5	44
4-Chloroaniline			20.0	3.06	J *-	ug/L		15	51 - 120	5	20
4-Chlorophenyl phenyl ether			20.0	16.0		ug/L		80	38 - 145	5	36
4-Nitroaniline			20.0	17.9		ug/L		89	64 - 129	11	20
4-Nitrophenol			20.0	9.55		ug/L		48	13 - 129	6	79
Acenaphthene			20.0	15.4		ug/L		77	60 - 132	4	29
Acenaphthylene			20.0	18.2		ug/L		91	54 - 126	4	45
Aniline			20.0	1.54	*- *1	ug/L		8	52 - 121	66	21
Anthracene			20.0	17.5		ug/L		88	43 - 120	8	40
Benzidine			20.0	<0.94	*-	ug/L		0	20 - 164	NC	30
Benzo[a]anthracene			20.0	17.8		ug/L		89	42 - 133	10	32
Benzo[a]pyrene			20.0	18.6		ug/L		93	32 - 148	9	43
Benzo[b]fluoranthene			20.0	19.7		ug/L		99	42 - 140	8	43
Benzo[g,h,i]perylene			20.0	21.5		ug/L		108	1 - 195	12	61
Benzo[k]fluoranthene			20.0	20.6		ug/L		103	25 - 146	12	38
Benzoic acid			20.0	7.66	J	ug/L		38	20 - 120	5	30
Benzyl alcohol			20.0	17.2		ug/L		86	44 - 122	9	20
Bis(2-chloroethoxy)methane			20.0	13.6		ug/L		68	49 - 165	4	32
Bis(2-chloroethyl)ether			20.0	14.5		ug/L		73	43 - 126	2	65
bis (2-Chloroisopropyl) ether			20.0	15.2		ug/L		76	63 - 139	1	46
Chrysene			20.0	17.5		ug/L		88	44 - 140	8	53
Dibenz(a,h)anthracene			20.0	18.4		ug/L		92	1 - 200	8	75
Dibenzofuran			20.0	16.4		ug/L		82	48 - 120	6	20
Fluoranthene			20.0	19.1		ug/L		95	43 - 121	10	40
Fluorene			20.0	16.6		ug/L		83	70 - 120	5	23
Hexachloroethane			20.0	12.7		ug/L		64	55 - 120	2	32
Indeno[1,2,3-cd]pyrene			20.0	18.0		ug/L		90	1 - 151	13	60
Naphthalene			20.0	12.4		ug/L		62	36 - 120	10	39
Nitrobenzene			20.0	13.3		ug/L		66	54 - 158	10	37
N-Nitrosodi-n-propylamine			20.0	16.9		ug/L		84	14 - 198	1	52
N-Nitrosodiphenylamine			20.0	21.7		ug/L		109	65 - 133	8	20
Pentachlorophenol			20.0	16.6		ug/L		83	38 - 152	7	52

Method: 625.1 SIM - Semivolatile Organic Compounds GC/MS (SIM) (Continued)

Lab Sample ID: LCSD 570-460222/3-A
Matrix: Water
Analysis Batch: 465376

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 460222

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Phenanthrene			20.0	16.9		ug/L		84	65 - 120	8	24
Phenol			20.0	8.08		ug/L		40	17 - 120	0	39
Pyrene			20.0	16.8		ug/L		84	70 - 120	8	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*81*		*28 - 127*
2-Fluorobiphenyl (Surr)	*71*		*31 - 120*
2-Fluorophenol (Surr)	*51*		*17 - 120*
Nitrobenzene-d5 (Surr)	*62*		*27 - 120*
Phenol-d6 (Surr)	*37*		*10 - 120*
p-Terphenyl-d14 (Surr)	*80*		*45 - 120*

Method: 8015B GRO LL - Gasoline Range Organics - (GC)

Lab Sample ID: MB 570-460706/6
Matrix: Water
Analysis Batch: 460706

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	<10		10		ug/L			07/16/24 13:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*38 - 134*		*07/16/24 13:13*	*1*

Lab Sample ID: LCS 570-460706/4
Matrix: Water
Analysis Batch: 460706

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (C4-C13)			400	401		ug/L		100	78 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*38 - 134*

Lab Sample ID: LCSD 570-460706/5
Matrix: Water
Analysis Batch: 460706

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (C4-C13)			400	400		ug/L		100	78 - 120	0	10

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*38 - 134*

Method: 8015B GRO LL - Gasoline Range Organics - (GC) (Continued)

Lab Sample ID: MRL 570-460706/3
Matrix: Water
Analysis Batch: 460706

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (C4-C13)			10.0	11.6		ug/L		116	50 - 150		

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*38 - 134*

Lab Sample ID: 380-103360-C-3 MS
Matrix: Water
Analysis Batch: 460706

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (C4-C13)	<10		400	372		ug/L		93	68 - 122		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*38 - 134*

Lab Sample ID: 380-103360-C-3 MSD
Matrix: Water
Analysis Batch: 460706

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (C4-C13)	<10		400	376		ug/L		94	68 - 122	1	18

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*38 - 134*

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Lab Sample ID: MBL 380-98731/13-A
Matrix: Water
Analysis Batch: 99024

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 98731

Analyte	MBL Result	MBL Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	<0.0040		0.020		ug/L		07/12/24 11:30	07/12/24 20:22	1
1,2-Dibromo-3-Chloropropane	<0.0020		0.010		ug/L		07/12/24 11:30	07/12/24 20:22	1
1,2-Dibromoethane	<0.0040		0.010		ug/L		07/12/24 11:30	07/12/24 20:22	1

Surrogate	*MBL %Recovery*	*MBL Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane (Surr)	*104*		*60 - 140*	*07/12/24 11:30*	*07/12/24 20:22*	*1*

Lab Sample ID: LCS 380-98731/38-A
Matrix: Water
Analysis Batch: 99024

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 98731

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2,3-Trichloropropane			0.200	0.209		ug/L		105	70 - 130		

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC) (Continued)

Lab Sample ID: LCS 380-98731/38-A
Matrix: Water
Analysis Batch: 99024

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 98731

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.200	0.195		ug/L		98	70 - 130		
1,2-Dibromoethane			0.200	0.217		ug/L		108	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dibromopropane (Surr)	*96*		*60 - 140*

Lab Sample ID: MRL 380-98731/11-A
Matrix: Water
Analysis Batch: 99024

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 98731

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
1,2,3-Trichloropropane			0.0200	0.0176	J	ug/L		88	60 - 140		

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
1,2-Dibromopropane (Surr)	*101*		*60 - 140*

Lab Sample ID: MRL 380-98731/12-A
Matrix: Water
Analysis Batch: 99024

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 98731

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
1,2,3-Trichloropropane			0.0500	0.0484		ug/L		97	60 - 140		
1,2-Dibromo-3-Chloropropane			0.0100	0.0110		ug/L		110	60 - 140		
1,2-Dibromoethane			0.0100	0.0113		ug/L		113	60 - 140		

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
1,2-Dibromopropane (Surr)	*101*		*60 - 140*

Lab Sample ID: 380-102882-D-1-A MS
Matrix: Water
Analysis Batch: 99024

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 98731

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2,3-Trichloropropane	<0.020		1.26	1.13		ug/L		90	65 - 135		
1,2-Dibromo-3-Chloropropane	<0.0099		0.251	0.225		ug/L		90	65 - 135		
1,2-Dibromoethane	<0.0099		0.251	0.253		ug/L		101	65 - 135		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dibromopropane (Surr)	*87*		*60 - 140*

Lab Sample ID: 380-102882-B-2-A DU
Matrix: Water
Analysis Batch: 99024

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 98731

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
1,2,3-Trichloropropane	<0.020			<0.020		ug/L				NC	20
1,2-Dibromo-3-Chloropropane	<0.0099			<0.010		ug/L				NC	20
1,2-Dibromoethane	<0.0099			<0.010		ug/L				NC	20

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC) (Continued)

Surrogate	DU %Recovery	DU Qualifier	Limits
1,2-Dibromopropane (Surr)	*97*		*60 - 140*

Lab Sample ID: MBL 380-99699/4-A
Matrix: Water
Analysis Batch: 99859

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 99699

Analyte	MBL Result	MBL Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	<0.0040		0.020		ug/L		07/18/24 15:00	07/18/24 19:09	1
1,2-Dibromo-3-Chloropropane	<0.0020		0.010		ug/L		07/18/24 15:00	07/18/24 19:09	1
1,2-Dibromoethane	<0.0040		0.010		ug/L		07/18/24 15:00	07/18/24 19:09	1

Surrogate	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dibromopropane (Surr)	*97*		*60 - 140*	*07/18/24 15:00*	*07/18/24 19:09*	*1*

Lab Sample ID: LCS 380-99699/29-A
Matrix: Water
Analysis Batch: 99859

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 99699

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2,3-Trichloropropane			0.200	0.202		ug/L		101	70 - 130		
1,2-Dibromo-3-Chloropropane			0.200	0.186		ug/L		93	70 - 130		
1,2-Dibromoethane			0.200	0.184		ug/L		92	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dibromopropane (Surr)	*93*		*60 - 140*

Lab Sample ID: MRL 380-99699/2-A
Matrix: Water
Analysis Batch: 99859

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 99699

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
1,2,3-Trichloropropane			0.0200	0.0246		ug/L		123	60 - 140		

Surrogate	MRL %Recovery	MRL Qualifier	Limits
1,2-Dibromopropane (Surr)	*94*		*60 - 140*

Lab Sample ID: MRL 380-99699/3-A
Matrix: Water
Analysis Batch: 99859

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 99699

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
1,2,3-Trichloropropane			0.0500	0.0524		ug/L		105	60 - 140		
1,2-Dibromo-3-Chloropropane			0.0100	0.0105		ug/L		105	60 - 140		
1,2-Dibromoethane			0.0100	0.00986	J	ug/L		99	60 - 140		

Surrogate	MRL %Recovery	MRL Qualifier	Limits
1,2-Dibromopropane (Surr)	*100*		*60 - 140*

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC) (Continued)

Lab Sample ID: 380-103828-AP-1-A MS
Matrix: Water
Analysis Batch: 99859

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 99699

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	<0.020		1.27	1.13		ug/L		89	65 - 135
1,2-Dibromo-3-Chloropropane	<0.010		0.254	0.233		ug/L		91	65 - 135
1,2-Dibromoethane	<0.010		0.254	0.213		ug/L		84	65 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dibromopropane (Surr)	*91*		*60 - 140*

Lab Sample ID: 380-104331-C-1-A DU
Matrix: Water
Analysis Batch: 99859

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 99699

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
1,2,3-Trichloropropane	<0.020		<0.020		ug/L		NC	20
1,2-Dibromo-3-Chloropropane	<0.010		<0.010		ug/L		NC	20
1,2-Dibromoethane	<0.010		<0.010		ug/L		NC	20

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
1,2-Dibromopropane (Surr)	*97*		*60 - 140*

Method: 505 - Organochlorine Pesticides/PCBs (GC)

Lab Sample ID: MB 380-99010/20-A
Matrix: Water
Analysis Batch: 99562

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 99010

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Toxaphene	<0.50		0.50		ug/L		07/15/24 14:30	07/15/24 22:33	1
Chlordane (n.o.s.)	<0.10		0.10		ug/L		07/15/24 14:30	07/15/24 22:33	1
PCB-1016	<0.070		0.070		ug/L		07/15/24 14:30	07/15/24 22:33	1
PCB-1221	<0.10		0.10		ug/L		07/15/24 14:30	07/15/24 22:33	1
PCB-1232	<0.10		0.10		ug/L		07/15/24 14:30	07/15/24 22:33	1
PCB-1242	<0.10		0.10		ug/L		07/15/24 14:30	07/15/24 22:33	1
PCB-1248	<0.10		0.10		ug/L		07/15/24 14:30	07/15/24 22:33	1
PCB-1254	<0.10		0.10		ug/L		07/15/24 14:30	07/15/24 22:33	1
PCB-1260	<0.070		0.070		ug/L		07/15/24 14:30	07/15/24 22:33	1
Polychlorinated biphenyls, Total	<0.10		0.10		ug/L		07/15/24 14:30	07/15/24 22:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*102*		*70 - 130*	*07/15/24 14:30*	*07/15/24 22:33*	*1*

Lab Sample ID: LCS 380-99010/16-A
Matrix: Water
Analysis Batch: 99562

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 99010

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chlordane (n.o.s.)			0.500	0.456		ug/L		91	70 - 130

Method: 505 - Organochlorine Pesticides/PCBs (GC) (Continued)

Lab Sample ID: LCS 380-99010/16-A
Matrix: Water
Analysis Batch: 99562

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 99010

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*99*		*70 - 130*

Lab Sample ID: LCS 380-99010/48-A
Matrix: Water
Analysis Batch: 99562

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 99010

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*92*		*70 - 130*

Lab Sample ID: LCS 380-99010/8-A
Matrix: Water
Analysis Batch: 99562

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 99010

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Toxaphene	2.50	2.34		ug/L		93	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*105*		*70 - 130*

Lab Sample ID: LCSD 380-99010/49-A
Matrix: Water
Analysis Batch: 99562

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 99010

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*114*		*70 - 130*

Lab Sample ID: MRL 380-99010/18-A
Matrix: Water
Analysis Batch: 99562

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 99010

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
Tetrachloro-m-xylene	*101*		*70 - 130*

Lab Sample ID: MRL 380-99010/19-A
Matrix: Water
Analysis Batch: 99562

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 99010

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Toxaphene	0.500	0.537		ug/L		107	50 - 150

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
Tetrachloro-m-xylene	*106*		*70 - 130*

Method: 505 - Organochlorine Pesticides/PCBs (GC) (Continued)

Lab Sample ID: 380-102721-X-1-B MS
Matrix: Water
Analysis Batch: 99562

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 99010

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Toxaphene	<0.51		2.52	2.34		ug/L		93	65 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*99*		*70 - 130*

Lab Sample ID: 380-102721-Y-1-B MS
Matrix: Water
Analysis Batch: 99562

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 99010

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*111*		*70 - 130*

Lab Sample ID: 380-103474-E-1-B MS
Matrix: Water
Analysis Batch: 99562

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 99010

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*86*		*70 - 130*

Lab Sample ID: 380-103474-F-1-B MS
Matrix: Water
Analysis Batch: 99562

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 99010

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Toxaphene	<0.51		2.54	2.41		ug/L		95	65 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*98*		*70 - 130*

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level

Lab Sample ID: MB 570-459748/1-A
Matrix: Water
Analysis Batch: 462177

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 459748

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<25		25		ug/L		07/12/24 09:29	07/20/24 06:13	1
Motor Oil Range Organics [C24-C36]	<25		25		ug/L		07/12/24 09:29	07/20/24 06:13	1
C8-C18	<25		25		ug/L		07/12/24 09:29	07/20/24 06:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane (Surr)	*105*		*60 - 130*	*07/12/24 09:29*	*07/20/24 06:13*	*1*

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level (Continued)

Lab Sample ID: LCS 570-459748/2-A
Matrix: Water
Analysis Batch: 462177

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 459748

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
C10-C28			1600	1420		ug/L		89	56 - 127		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
n-Octacosane (Surr)	*110*		*60 - 130*

Lab Sample ID: LCSD 570-459748/3-A
Matrix: Water
Analysis Batch: 462177

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 459748

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28			1600	1110	*1	ug/L		70	56 - 127	24	23

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
n-Octacosane (Surr)	*91*		*60 - 130*

Lab Sample ID: MRL 570-459748/4-A
Matrix: Water
Analysis Batch: 462177

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 459748

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
C10-C28			0.0200	<0.020		mg/L		87	50 - 150		

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
n-Octacosane (Surr)	*108*		*60 - 130*

Lab Sample ID: 380-103360-D-3-B MS
Matrix: Water
Analysis Batch: 462177

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 459748

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
C10-C28	<26	*1	1660	1610		ug/L		97	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
n-Octacosane (Surr)	*115*		*60 - 130*

Lab Sample ID: 380-103360-D-3-C MSD
Matrix: Water
Analysis Batch: 462177

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 459748

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28	<26	*1	1620	1500		ug/L		93	70 - 130	7	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
n-Octacosane (Surr)	*109*		*60 - 130*

Method: 8015B - Nonhalogenated Organic Compounds - Direct Injection (GC)

Lab Sample ID: MB 570-460498/3
Matrix: Water
Analysis Batch: 460498

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	<0.10		0.10		mg/L			07/15/24 17:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Hexafluoro-2-propanol (Surr)	*96*		*54 - 120*		*07/15/24 17:46*	*1*

Lab Sample ID: LCS 570-460498/4
Matrix: Water
Analysis Batch: 460498

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Ethanol			2.00	2.04		mg/L		102	78 - 131		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Hexafluoro-2-propanol (Surr)	*110*		*54 - 120*

Lab Sample ID: LCSD 570-460498/5
Matrix: Water
Analysis Batch: 460498

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ethanol			2.00	2.19		mg/L		110	78 - 131	7	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Hexafluoro-2-propanol (Surr)	*109*		*54 - 120*

Lab Sample ID: MRL 570-460498/6
Matrix: Water
Analysis Batch: 460498

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Ethanol			0.100	0.0849	J	mg/L		85	50 - 150		

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
Hexafluoro-2-propanol (Surr)	*91*		*54 - 120*

Lab Sample ID: 380-103361-1 MS
Matrix: Water
Analysis Batch: 460498

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Ethanol	<0.10		2.00	2.06		mg/L		103	20 - 173		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Hexafluoro-2-propanol (Surr)	*98*		*54 - 120*

Method: 8015B - Nonhalogenated Organic Compounds - Direct Injection (GC) (Continued)

Lab Sample ID: 380-103361-1 MSD
Matrix: Water
Analysis Batch: 460498

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ethanol	<0.10		2.00	2.05		mg/L		103	20 - 173	1	21

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Hexafluoro-2-propanol (Surr)	*105*		*54 - 120*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 380-98464/4
Matrix: Water
Analysis Batch: 98464

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<0.050		0.050		mg/L			07/10/24 15:08	1
Nitrite as N	<0.050		0.050		mg/L			07/10/24 15:08	1

Lab Sample ID: LCS 380-98464/7
Matrix: Water
Analysis Batch: 98464

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrate as N			2.50	2.47		mg/L		99	90 - 110		
Nitrite as N			1.00	0.995		mg/L		99	90 - 110		

Lab Sample ID: LCSD 380-98464/8
Matrix: Water
Analysis Batch: 98464

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate as N			2.50	2.40		mg/L		96	90 - 110	3	20
Nitrite as N			1.00	1.01		mg/L		101	90 - 110	1	20

Lab Sample ID: MRL 380-98464/5
Matrix: Water
Analysis Batch: 98464

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrate as N			0.0125	0.0117	J	mg/L		94	50 - 150		
Nitrite as N			0.0125	0.0116	J	mg/L		93	50 - 150		

Lab Sample ID: MRL 380-98464/6
Matrix: Water
Analysis Batch: 98464

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrate as N			0.0500	0.0446	J	mg/L		89	50 - 150		
Nitrite as N			0.0500	0.0457	J	mg/L		91	50 - 150		

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 380-103307-L-1 MS
Matrix: Water
Analysis Batch: 98464

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	6.4		2.50	8.95		mg/L		102	80 - 120
Nitrite as N	<0.10		1.00	0.958		mg/L		96	80 - 120

Lab Sample ID: 380-103307-L-1 MSD
Matrix: Water
Analysis Batch: 98464

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nitrate as N	6.4		2.50	8.89		mg/L		100	80 - 120	1	20
Nitrite as N	<0.10		1.00	0.958		mg/L		96	80 - 120	0	20

Lab Sample ID: MB 380-98465/4
Matrix: Water
Analysis Batch: 98465

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.50		0.50		mg/L			07/10/24 15:08	1
Sulfate	<0.25		0.25		mg/L			07/10/24 15:08	1

Lab Sample ID: LCS 380-98465/7
Matrix: Water
Analysis Batch: 98465

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride			25.0	25.3		mg/L		101	90 - 110
Sulfate			50.0	49.8		mg/L		100	90 - 110

Lab Sample ID: LCSD 380-98465/8
Matrix: Water
Analysis Batch: 98465

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			25.0	25.3		mg/L		101	90 - 110	0	20
Sulfate			50.0	50.1		mg/L		100	90 - 110	1	20

Lab Sample ID: MRL 380-98465/5
Matrix: Water
Analysis Batch: 98465

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chloride			0.125	0.115	J	mg/L		92	50 - 150
Sulfate			0.250	0.241	J	mg/L		97	50 - 150

Lab Sample ID: MRL 380-98465/6
Matrix: Water
Analysis Batch: 98465

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chloride			0.500	0.444	J	mg/L		89	50 - 150
Sulfate			0.999	0.932		mg/L		93	50 - 150

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 380-103307-L-1 MS
Matrix: Water
Analysis Batch: 98465

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	58		25.0	82.5		mg/L		97	80 - 120		
Sulfate	170		50.0	222	E	mg/L		94	80 - 120		

Lab Sample ID: 380-103307-L-1 MSD
Matrix: Water
Analysis Batch: 98465

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	58		25.0	82.1		mg/L		96	80 - 120	0	20
Sulfate	170		50.0	221	E	mg/L		92	80 - 120	1	20

Lab Sample ID: MB 380-98857/15
Matrix: Water
Analysis Batch: 98857

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Bromide	<5.0		5.0		ug/L			07/12/24 20:10	1

Lab Sample ID: LCS 380-98857/16
Matrix: Water
Analysis Batch: 98857

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Bromide			100	98.0		ug/L		98	90 - 110		

Lab Sample ID: LCSD 380-98857/17
Matrix: Water
Analysis Batch: 98857

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bromide			100	97.9		ug/L		98	90 - 110	0	10

Lab Sample ID: MRL 380-98857/14
Matrix: Water
Analysis Batch: 98857

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Bromide			5.00	4.77	J	ug/L		95	75 - 125		

Lab Sample ID: 380-103607-M-1 MS
Matrix: Water
Analysis Batch: 98857

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Bromide	160		50.0	203		ug/L		96	80 - 120		

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 380-103607-M-1 MSD
Matrix: Water
Analysis Batch: 98857

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bromide	160		50.0	203		ug/L		96	80 - 120	0	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 380-98805/53
Matrix: Water
Analysis Batch: 98805

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<1.0		1.0		mg/L			07/12/24 00:12	1
Magnesium	<0.10		0.10		mg/L			07/12/24 00:12	1
Potassium	<1.0		1.0		mg/L			07/12/24 00:12	1
Sodium	<1.0		1.0		mg/L			07/12/24 00:12	1

Lab Sample ID: LCS 380-98805/55
Matrix: Water
Analysis Batch: 98805

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Calcium			50.0	53.8		mg/L		108	85 - 115		
Magnesium			20.0	21.1		mg/L		106	85 - 115		
Potassium			20.0	21.7		mg/L		108	85 - 115		
Sodium			50.0	52.7		mg/L		105	85 - 115		

Lab Sample ID: LCSD 380-98805/56
Matrix: Water
Analysis Batch: 98805

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium			50.0	53.4		mg/L		107	85 - 115	1	20
Magnesium			20.0	21.1		mg/L		105	85 - 115	0	20
Potassium			20.0	21.6		mg/L		108	85 - 115	0	20
Sodium			50.0	52.6		mg/L		105	85 - 115	0	20

Lab Sample ID: LLCS 380-98805/54
Matrix: Water
Analysis Batch: 98805

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

Analyte			Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Calcium			1.00	1.01		mg/L		101	50 - 150		
Magnesium			0.100	0.0929	J	mg/L		93	50 - 150		
Potassium			1.00	0.713	J	mg/L		71	50 - 150		
Sodium			1.00	0.826	J	mg/L		83	50 - 150		

Lab Sample ID: 380-103313-A-2 MS
Matrix: Water
Analysis Batch: 98805

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Calcium	74		50.0	118		mg/L		89	70 - 130		

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 380-103313-A-2 MS
Matrix: Water
Analysis Batch: 98805

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Magnesium	29		20.0	47.3		mg/L		91	70 - 130
Potassium	3.0		20.0	23.5		mg/L		102	70 - 130
Sodium	23		50.0	68.4		mg/L		92	70 - 130

Lab Sample ID: 380-103313-A-2 MSD
Matrix: Water
Analysis Batch: 98805

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	74		50.0	119		mg/L		91	70 - 130	1	20
Magnesium	29		20.0	47.7		mg/L		93	70 - 130	1	20
Potassium	3.0		20.0	24.1		mg/L		105	70 - 130	2	20
Sodium	23		50.0	69.6		mg/L		94	70 - 130	2	20

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MBL 380-98735/129
Matrix: Water
Analysis Batch: 98735

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

Analyte	MBL Result	MBL Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.48		1.0		ug/L			07/11/24 18:15	1
Arsenic	<0.49		1.0		ug/L			07/11/24 18:15	1
Beryllium	<0.18		1.0		ug/L			07/11/24 18:15	1
Cadmium	<0.081		0.50		ug/L			07/11/24 18:15	1
Chromium	<0.80		1.0		ug/L			07/11/24 18:15	1
Copper	<0.27		2.0		ug/L			07/11/24 18:15	1
Lead	<0.29		0.50		ug/L			07/11/24 18:15	1
Nickel	<0.38		5.0		ug/L			07/11/24 18:15	1
Selenium	<1.0		5.0		ug/L			07/11/24 18:15	1
Silver	<0.40		0.50		ug/L			07/11/24 18:15	1
Thallium	<0.32		1.0		ug/L			07/11/24 18:15	1
Zinc	<4.3		20		ug/L			07/11/24 18:15	1

Lab Sample ID: LCS 380-98735/131
Matrix: Water
Analysis Batch: 98735

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony			50.0	49.2		ug/L		98	85 - 115
Arsenic			50.0	51.0		ug/L		102	85 - 115
Beryllium			25.0	24.7		ug/L		99	85 - 115
Cadmium			25.0	24.5		ug/L		98	85 - 115
Chromium			50.0	52.6		ug/L		105	85 - 115
Copper			50.0	51.6		ug/L		103	85 - 115
Lead			50.0	51.6		ug/L		103	85 - 115
Nickel			50.0	50.7		ug/L		101	85 - 115
Selenium			50.0	50.9		ug/L		102	85 - 115
Silver			25.0	24.2		ug/L		97	85 - 115
Thallium			50.0	50.5		ug/L		101	85 - 115

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 380-98735/131
Matrix: Water
Analysis Batch: 98735

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	50.0	48.8		ug/L		98	85 - 115

Lab Sample ID: LCSD 380-98735/132
Matrix: Water
Analysis Batch: 98735

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	50.0	53.4		ug/L		107	85 - 115	8	20
Arsenic	50.0	52.2		ug/L		104	85 - 115	2	20
Beryllium	25.0	25.6		ug/L		102	85 - 115	4	20
Cadmium	25.0	26.5		ug/L		106	85 - 115	8	20
Chromium	50.0	53.9		ug/L		108	85 - 115	3	20
Copper	50.0	52.2		ug/L		104	85 - 115	1	20
Lead	50.0	54.6		ug/L		109	85 - 115	6	20
Nickel	50.0	51.8		ug/L		104	85 - 115	2	20
Selenium	50.0	51.9		ug/L		104	85 - 115	2	20
Silver	25.0	27.2		ug/L		109	85 - 115	12	20
Thallium	50.0	53.7		ug/L		107	85 - 115	6	20
Zinc	50.0	49.8		ug/L		100	85 - 115	2	20

Lab Sample ID: LLCS 380-98735/130
Matrix: Water
Analysis Batch: 98735

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

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	1.00	0.881	J	ug/L		88	50 - 150
Arsenic	1.00	0.754	J	ug/L		75	50 - 150
Beryllium	1.00	0.907	J	ug/L		91	50 - 150
Cadmium	0.500	0.402	J	ug/L		80	50 - 150
Chromium	1.00	1.17		ug/L		117	50 - 150
Copper	2.00	1.93	J	ug/L		97	50 - 150
Lead	0.500	0.466	J	ug/L		93	50 - 150
Nickel	5.00	4.98	J	ug/L		100	50 - 150
Selenium	5.00	4.82	J	ug/L		96	50 - 150
Silver	0.500	<0.40		ug/L		73	50 - 150
Thallium	1.00	0.912	J	ug/L		91	50 - 150
Zinc	20.0	18.9	J	ug/L		94	50 - 150

Lab Sample ID: 380-103361-1 MS
Matrix: Water
Analysis Batch: 98735

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	<1.0		50.0	51.6		ug/L		103	70 - 130
Arsenic	<1.0		50.0	52.1		ug/L		104	70 - 130
Beryllium	<1.0		25.0	26.3		ug/L		105	70 - 130
Cadmium	<0.50		25.0	25.9		ug/L		104	70 - 130
Chromium	4.7		50.0	52.4		ug/L		95	70 - 130
Copper	7.6		50.0	55.3		ug/L		95	70 - 130

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 380-103361-1 MS
Matrix: Water
Analysis Batch: 98735

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	<0.50		50.0	51.9		ug/L		104	70 - 130
Nickel	<5.0		50.0	48.4		ug/L		95	70 - 130
Selenium	<5.0		50.0	57.1		ug/L		114	70 - 130
Silver	<0.50	F1	25.0	<0.50	F1	ug/L		0	70 - 130
Thallium	<1.0		50.0	51.2		ug/L		102	70 - 130
Zinc	<20		50.0	49.9		ug/L		100	70 - 130

Lab Sample ID: 380-103361-1 MSD
Matrix: Water
Analysis Batch: 98735

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	<1.0		50.0	52.2		ug/L		104	70 - 130	1	20
Arsenic	<1.0		50.0	53.5		ug/L		107	70 - 130	3	20
Beryllium	<1.0		25.0	26.1		ug/L		104	70 - 130	1	20
Cadmium	<0.50		25.0	25.7		ug/L		103	70 - 130	1	20
Chromium	4.7		50.0	54.6		ug/L		100	70 - 130	4	20
Copper	7.6		50.0	57.0		ug/L		99	70 - 130	3	20
Lead	<0.50		50.0	51.8		ug/L		104	70 - 130	0	20
Nickel	<5.0		50.0	49.5		ug/L		97	70 - 130	2	20
Selenium	<5.0		50.0	58.7		ug/L		117	70 - 130	3	20
Silver	<0.50	F1	25.0	<0.50	F1	ug/L		0	70 - 130	NC	20
Thallium	<1.0		50.0	51.2		ug/L		102	70 - 130	0	20
Zinc	<20		50.0	51.0		ug/L		102	70 - 130	2	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 810-105810/1-A
Matrix: Water
Analysis Batch: 105848

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 105810

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.10		ug/L		07/15/24 12:54	07/15/24 17:28	1

Lab Sample ID: LCS 810-105810/3-A
Matrix: Water
Analysis Batch: 105848

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 105810

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury			1.00	1.03		ug/L		103	85 - 115

Lab Sample ID: LLCS 810-105810/2-A
Matrix: Water
Analysis Batch: 105848

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 105810

Analyte			Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury			0.100	0.0981	J	ug/L		98	50 - 150

Method: 245.1 - Mercury (CVAA) (Continued)

Lab Sample ID: 810-109988-A-4-B MS
Matrix: Water
Analysis Batch: 105848

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 105810

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	<0.10		1.00	1.01		ug/L		101	70 - 130

Lab Sample ID: 810-109988-A-4-C MSD
Matrix: Water
Analysis Batch: 105848

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 105810

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	<0.10		1.00	1.01		ug/L		101	70 - 130	0	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 380-99128/1
Matrix: Water
Analysis Batch: 99128

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	<2.0		2.0		mg/L			07/12/24 12:15	1
Bicarbonate Alkalinity as CaCO3	<2.0		2.0		mg/L			07/12/24 12:15	1
Carbonate Alkalinity as CaCO3	<2.0		2.0		mg/L			07/12/24 12:15	1

Lab Sample ID: LCS 380-99128/3
Matrix: Water
Analysis Batch: 99128

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity			100	98.0		mg/L		98	90 - 110

Lab Sample ID: LCSD 380-99128/18
Matrix: Water
Analysis Batch: 99128

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Alkalinity			100	98.7		mg/L		99	90 - 110	1	20

Lab Sample ID: LLCS 380-99128/4
Matrix: Water
Analysis Batch: 99128

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

Analyte			Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity			20.0	19.4		mg/L		97	90 - 110

Lab Sample ID: MRL 380-99128/2
Matrix: Water
Analysis Batch: 99128

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity			2.00	1.84	J	mg/L		92	50 - 150

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: 380-103303-Y-1 MS
Matrix: Water
Analysis Batch: 99128

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	47		100	149		mg/L		102	80 - 120

Lab Sample ID: 380-103303-Y-1 MSD
Matrix: Water
Analysis Batch: 99128

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Alkalinity	47		100	150		mg/L		103	80 - 120	1	20

Lab Sample ID: 380-103303-Y-1 DU
Matrix: Water
Analysis Batch: 99128

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity	47		48.6		mg/L		3	20
Bicarbonate Alkalinity as CaCO3	26		26.1		mg/L		0.7	20
Carbonate Alkalinity as CaCO3	21		22.5		mg/L		6	20

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 380-99131/2
Matrix: Water
Analysis Batch: 99131

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	<2.0		2.0	umhos/cm			07/12/24 12:15	1

Lab Sample ID: LCS 380-99131/4
Matrix: Water
Analysis Batch: 99131

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Specific Conductance	1000	1000		umhos/cm		100	90 - 110

Lab Sample ID: LCSD 380-99131/16
Matrix: Water
Analysis Batch: 99131

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Specific Conductance	1000	996		umhos/cm		100	90 - 110	1	10

Lab Sample ID: MRL 380-99131/3
Matrix: Water
Analysis Batch: 99131

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Specific Conductance	2.00	2.10		umhos/cm		105	50 - 150

Method: SM 2510B - Conductivity, Specific Conductance (Continued)

Lab Sample ID: 380-103303-Y-1 DU
Matrix: Water
Analysis Batch: 99131

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Specific Conductance	310			319		umhos/cm				4	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 380-98553/1
Matrix: Water
Analysis Batch: 98553

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10		mg/L			07/11/24 12:19	1

Lab Sample ID: HLCS 380-98553/5
Matrix: Water
Analysis Batch: 98553

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

Analyte			Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			700	688		mg/L		98	80 - 114		

Lab Sample ID: LCS 380-98553/4
Matrix: Water
Analysis Batch: 98553

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			175	178		mg/L		102	80 - 114		

Lab Sample ID: MRL 380-98553/2
Matrix: Water
Analysis Batch: 98553

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			10.0	8.00	J	mg/L		80	50 - 150		

Lab Sample ID: MRL 380-98553/3
Matrix: Water
Analysis Batch: 98553

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids			10.0	9.00	J	mg/L		90	50 - 150		

Lab Sample ID: 380-103160-A-5 DU
Matrix: Water
Analysis Batch: 98553

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	250			254		mg/L				0.8	10

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 380-99127/40
Matrix: Water
Analysis Batch: 99127

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.050		0.050		mg/L			07/12/24 16:48	1

Lab Sample ID: MB 380-99127/6
Matrix: Water
Analysis Batch: 99127

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.050		0.050		mg/L			07/12/24 14:31	1

Lab Sample ID: LCS 380-99127/42
Matrix: Water
Analysis Batch: 99127

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Fluoride			1.00	1.03		mg/L		103	90 - 110		

Lab Sample ID: LCSD 380-99127/43
Matrix: Water
Analysis Batch: 99127

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride			1.00	1.04		mg/L		104	90 - 110	1	10

Lab Sample ID: MRL 380-99127/41
Matrix: Water
Analysis Batch: 99127

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Fluoride			0.0500	0.0448	J	mg/L		90	50 - 150		

Lab Sample ID: MRL 380-99127/7
Matrix: Water
Analysis Batch: 99127

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Fluoride			0.0500	0.0451	J	mg/L		90	50 - 150		

Lab Sample ID: 380-102753-E-1 MS
Matrix: Water
Analysis Batch: 99127

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Fluoride	0.41		1.00	1.45		mg/L		104	80 - 120		

Lab Sample ID: 380-102753-E-1 MSD
Matrix: Water
Analysis Batch: 99127

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoride	0.41		1.00	1.44		mg/L		103	80 - 120	1	20

Method: SM 4500 H+ B - pH

Lab Sample ID: MB 380-99133/4
Matrix: Water
Analysis Batch: 99133

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
pH	5.5				SU			07/12/24 12:15	1

Lab Sample ID: LCS 380-99133/5
Matrix: Water
Analysis Batch: 99133

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
pH			6.00	6.0		SU		100	98 - 102		

Lab Sample ID: LCSD 380-99133/17
Matrix: Water
Analysis Batch: 99133

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
pH			6.00	6.0		SU		100	98 - 102	0	2

Lab Sample ID: 380-103303-Y-1 DU
Matrix: Water
Analysis Batch: 99133

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	9.4			9.5		SU				0.5	2

Method: SM 4500 S2 D - Sulfide, Total

Lab Sample ID: MBL 380-98842/2
Matrix: Water
Analysis Batch: 98842

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

Analyte	MBL Result	MBL Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<0.0099		0.050		mg/L			07/12/24 15:49	1

Lab Sample ID: LCS 380-98842/5
Matrix: Water
Analysis Batch: 98842

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Sulfide			0.250	0.241		mg/L		96	90 - 110		

Lab Sample ID: LCSD 380-98842/6
Matrix: Water
Analysis Batch: 98842

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide			0.250	0.242		mg/L		97	90 - 110	0	20

Method: SM 4500 S2 D - Sulfide, Total (Continued)

Lab Sample ID: MRL 380-98842/3
Matrix: Water
Analysis Batch: 98842

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Sulfide			0.0500	0.0454	J	mg/L		91	50 - 150		

Lab Sample ID: 380-103673-I-1 MS
Matrix: Water
Analysis Batch: 98842

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Sulfide	<0.050	F1	0.250	0.156	F1	mg/L		63	80 - 120		

Lab Sample ID: 380-103673-I-1 MSD
Matrix: Water
Analysis Batch: 98842

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide	<0.050	F1	0.250	0.169	F1	mg/L		67	80 - 120	8	20

GC/MS VOA

Analysis Batch: 98934

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MRL 380-98934/5	Lab Control Sample	Total/NA	Water	524.2	
MRL 380-98934/6	Lab Control Sample	Total/NA	Water	524.2	

Analysis Batch: 98936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103361-1	MOANALUA WELLS	Total/NA	Water	524.2	
380-103361-2	TRAVEL BLANK	Total/NA	Water	524.2	
MB 380-98936/5	Method Blank	Total/NA	Water	524.2	
LCS 380-98936/3	Lab Control Sample	Total/NA	Water	524.2	
LCSD 380-98936/4	Lab Control Sample Dup	Total/NA	Water	524.2	

Analysis Batch: 99288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103361-1	MOANALUA WELLS	Total/NA	Water	524.2	
380-103361-2	TRAVEL BLANK	Total/NA	Water	524.2	

Analysis Batch: 99491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103361-1	MOANALUA WELLS	Total/NA	Water	524.2	
380-103361-2	TRAVEL BLANK	Total/NA	Water	524.2	
MB 380-99491/5	Method Blank	Total/NA	Water	524.2	
LCS 380-99491/2	Lab Control Sample	Total/NA	Water	524.2	
LCSD 380-99491/3	Lab Control Sample Dup	Total/NA	Water	524.2	
MRL 380-99491/4	Lab Control Sample	Total/NA	Water	524.2	

Analysis Batch: 99494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103361-1	MOANALUA WELLS	Total/NA	Water	524.2	
380-103361-2	TRAVEL BLANK	Total/NA	Water	524.2	
MB 380-99494/8	Method Blank	Total/NA	Water	524.2	
LCS 380-99494/5	Lab Control Sample	Total/NA	Water	524.2	
LCSD 380-99494/6	Lab Control Sample Dup	Total/NA	Water	524.2	
MRL 380-99494/3	Lab Control Sample	Total/NA	Water	524.2	
MRL 380-99494/4	Lab Control Sample	Total/NA	Water	524.2	

GC/MS Semi VOA

Prep Batch: 98487

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103361-1	MOANALUA WELLS	Total/NA	Water	525.2	
MB 380-98487/21-A	Method Blank	Total/NA	Water	525.2	
LCS 380-98487/23-A	Lab Control Sample	Total/NA	Water	525.2	
MRL 380-98487/22-A	Lab Control Sample	Total/NA	Water	525.2	
380-103361-1 MS	MOANALUA WELLS	Total/NA	Water	525.2	
380-103361-1 MSD	MOANALUA WELLS	Total/NA	Water	525.2	

Analysis Batch: 98737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103361-1	MOANALUA WELLS	Total/NA	Water	525.2	98487
MB 380-98487/21-A	Method Blank	Total/NA	Water	525.2	98487
LCS 380-98487/23-A	Lab Control Sample	Total/NA	Water	525.2	98487

GC/MS Semi VOA (Continued)

Analysis Batch: 98737 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MRL 380-98487/22-A	Lab Control Sample	Total/NA	Water	525.2	98487
380-103361-1 MS	MOANALUA WELLS	Total/NA	Water	525.2	98487
380-103361-1 MSD	MOANALUA WELLS	Total/NA	Water	525.2	98487

Prep Batch: 460222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103361-1	MOANALUA WELLS	Total/NA	Water	625.1	
MB 570-460222/1-A	Method Blank	Total/NA	Water	625.1	
LCS 570-460222/2-A	Lab Control Sample	Total/NA	Water	625.1	
LCSD 570-460222/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	

Analysis Batch: 465376

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 570-460222/2-A	Lab Control Sample	Total/NA	Water	625.1 SIM	460222
LCSD 570-460222/3-A	Lab Control Sample Dup	Total/NA	Water	625.1 SIM	460222

Analysis Batch: 466731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103361-1	MOANALUA WELLS	Total/NA	Water	625.1	460222
MB 570-460222/1-A	Method Blank	Total/NA	Water	625.1	460222

Analysis Batch: 466820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103361-1	MOANALUA WELLS	Total/NA	Water	625.1 SIM	460222
MB 570-460222/1-A	Method Blank	Total/NA	Water	625.1 SIM	460222

GC VOA

Analysis Batch: 460706

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103361-1	MOANALUA WELLS	Total/NA	Water	8015B GRO LL	
380-103361-2	TRAVEL BLANK	Total/NA	Water	8015B GRO LL	
MB 570-460706/6	Method Blank	Total/NA	Water	8015B GRO LL	
LCS 570-460706/4	Lab Control Sample	Total/NA	Water	8015B GRO LL	
LCSD 570-460706/5	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	
MRL 570-460706/3	Lab Control Sample	Total/NA	Water	8015B GRO LL	
380-103360-C-3 MS	Matrix Spike	Total/NA	Water	8015B GRO LL	
380-103360-C-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B GRO LL	

GC Semi VOA

Prep Batch: 98731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103361-1	MOANALUA WELLS	Total/NA	Water	504.1	
MBL 380-98731/13-A	Method Blank	Total/NA	Water	504.1	
LCS 380-98731/38-A	Lab Control Sample	Total/NA	Water	504.1	
MRL 380-98731/11-A	Lab Control Sample	Total/NA	Water	504.1	
MRL 380-98731/12-A	Lab Control Sample	Total/NA	Water	504.1	
380-102882-D-1-A MS	Matrix Spike	Total/NA	Water	504.1	
380-102882-B-2-A DU	Duplicate	Total/NA	Water	504.1	

GC Semi VOA

Prep Batch: 99010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103361-1	MOANALUA WELLS	Total/NA	Water	505	
MB 380-99010/20-A	Method Blank	Total/NA	Water	505	
LCS 380-99010/16-A	Lab Control Sample	Total/NA	Water	505	
LCS 380-99010/48-A	Lab Control Sample	Total/NA	Water	505	
LCS 380-99010/8-A	Lab Control Sample	Total/NA	Water	505	
LCSD 380-99010/49-A	Lab Control Sample Dup	Total/NA	Water	505	
MRL 380-99010/18-A	Lab Control Sample	Total/NA	Water	505	
MRL 380-99010/19-A	Lab Control Sample	Total/NA	Water	505	
380-102721-X-1-B MS	Matrix Spike	Total/NA	Water	505	
380-102721-Y-1-B MS	Matrix Spike	Total/NA	Water	505	
380-103474-E-1-B MS	Matrix Spike	Total/NA	Water	505	
380-103474-F-1-B MS	Matrix Spike	Total/NA	Water	505	

Analysis Batch: 99024

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103361-1	MOANALUA WELLS	Total/NA	Water	504.1	98731
MBL 380-98731/13-A	Method Blank	Total/NA	Water	504.1	98731
LCS 380-98731/38-A	Lab Control Sample	Total/NA	Water	504.1	98731
MRL 380-98731/11-A	Lab Control Sample	Total/NA	Water	504.1	98731
MRL 380-98731/12-A	Lab Control Sample	Total/NA	Water	504.1	98731
380-102882-D-1-A MS	Matrix Spike	Total/NA	Water	504.1	98731
380-102882-B-2-A DU	Duplicate	Total/NA	Water	504.1	98731

Analysis Batch: 99562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103361-1	MOANALUA WELLS	Total/NA	Water	505	99010
MB 380-99010/20-A	Method Blank	Total/NA	Water	505	99010
LCS 380-99010/16-A	Lab Control Sample	Total/NA	Water	505	99010
LCS 380-99010/48-A	Lab Control Sample	Total/NA	Water	505	99010
LCS 380-99010/8-A	Lab Control Sample	Total/NA	Water	505	99010
LCSD 380-99010/49-A	Lab Control Sample Dup	Total/NA	Water	505	99010
MRL 380-99010/18-A	Lab Control Sample	Total/NA	Water	505	99010
MRL 380-99010/19-A	Lab Control Sample	Total/NA	Water	505	99010
380-102721-X-1-B MS	Matrix Spike	Total/NA	Water	505	99010
380-102721-Y-1-B MS	Matrix Spike	Total/NA	Water	505	99010
380-103474-E-1-B MS	Matrix Spike	Total/NA	Water	505	99010
380-103474-F-1-B MS	Matrix Spike	Total/NA	Water	505	99010

Prep Batch: 99699

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103361-2	TRAVEL BLANK	Total/NA	Water	504.1	
MBL 380-99699/4-A	Method Blank	Total/NA	Water	504.1	
LCS 380-99699/29-A	Lab Control Sample	Total/NA	Water	504.1	
MRL 380-99699/2-A	Lab Control Sample	Total/NA	Water	504.1	
MRL 380-99699/3-A	Lab Control Sample	Total/NA	Water	504.1	
380-103828-AP-1-A MS	Matrix Spike	Total/NA	Water	504.1	
380-104331-C-1-A DU	Duplicate	Total/NA	Water	504.1	

Analysis Batch: 99859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103361-2	TRAVEL BLANK	Total/NA	Water	504.1	99699

GC Semi VOA (Continued)

Analysis Batch: 99859 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MBL 380-99699/4-A	Method Blank	Total/NA	Water	504.1	99699
LCS 380-99699/29-A	Lab Control Sample	Total/NA	Water	504.1	99699
MRL 380-99699/2-A	Lab Control Sample	Total/NA	Water	504.1	99699
MRL 380-99699/3-A	Lab Control Sample	Total/NA	Water	504.1	99699
380-103828-AP-1-A MS	Matrix Spike	Total/NA	Water	504.1	99699
380-104331-C-1-A DU	Duplicate	Total/NA	Water	504.1	99699

Prep Batch: 459748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103361-1	MOANALUA WELLS	Total/NA	Water	3510C	
MB 570-459748/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-459748/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-459748/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MRL 570-459748/4-A	Lab Control Sample	Total/NA	Water	3510C	
380-103360-D-3-B MS	Matrix Spike	Total/NA	Water	3510C	
380-103360-D-3-C MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	

Analysis Batch: 460498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103361-1	MOANALUA WELLS	Total/NA	Water	8015B	
MB 570-460498/3	Method Blank	Total/NA	Water	8015B	
LCS 570-460498/4	Lab Control Sample	Total/NA	Water	8015B	
LCSD 570-460498/5	Lab Control Sample Dup	Total/NA	Water	8015B	
MRL 570-460498/6	Lab Control Sample	Total/NA	Water	8015B	
380-103361-1 MS	MOANALUA WELLS	Total/NA	Water	8015B	
380-103361-1 MSD	MOANALUA WELLS	Total/NA	Water	8015B	

Analysis Batch: 462177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103361-1	MOANALUA WELLS	Total/NA	Water	8015B	459748
MB 570-459748/1-A	Method Blank	Total/NA	Water	8015B	459748
LCS 570-459748/2-A	Lab Control Sample	Total/NA	Water	8015B	459748
LCSD 570-459748/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	459748
MRL 570-459748/4-A	Lab Control Sample	Total/NA	Water	8015B	459748
380-103360-D-3-B MS	Matrix Spike	Total/NA	Water	8015B	459748
380-103360-D-3-C MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	459748

HPLC/IC

Analysis Batch: 98464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103361-1	MOANALUA WELLS	Total/NA	Water	300.0	
MB 380-98464/4	Method Blank	Total/NA	Water	300.0	
LCS 380-98464/7	Lab Control Sample	Total/NA	Water	300.0	
LCSD 380-98464/8	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 380-98464/5	Lab Control Sample	Total/NA	Water	300.0	
MRL 380-98464/6	Lab Control Sample	Total/NA	Water	300.0	
380-103307-L-1 MS	Matrix Spike	Total/NA	Water	300.0	
380-103307-L-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

HPLC/IC

Analysis Batch: 98465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103361-1	MOANALUA WELLS	Total/NA	Water	300.0	
MB 380-98465/4	Method Blank	Total/NA	Water	300.0	
LCS 380-98465/7	Lab Control Sample	Total/NA	Water	300.0	
LCSD 380-98465/8	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 380-98465/5	Lab Control Sample	Total/NA	Water	300.0	
MRL 380-98465/6	Lab Control Sample	Total/NA	Water	300.0	
380-103307-L-1 MS	Matrix Spike	Total/NA	Water	300.0	
380-103307-L-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 98857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103361-1	MOANALUA WELLS	Total/NA	Water	300.0	
MB 380-98857/15	Method Blank	Total/NA	Water	300.0	
LCS 380-98857/16	Lab Control Sample	Total/NA	Water	300.0	
LCSD 380-98857/17	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 380-98857/14	Lab Control Sample	Total/NA	Water	300.0	
380-103607-M-1 MS	Matrix Spike	Total/NA	Water	300.0	
380-103607-M-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Metals

Analysis Batch: 98735

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103361-1	MOANALUA WELLS	Total/NA	Water	200.8	
MBL 380-98735/129	Method Blank	Total/NA	Water	200.8	
LCS 380-98735/131	Lab Control Sample	Total/NA	Water	200.8	
LCSD 380-98735/132	Lab Control Sample Dup	Total/NA	Water	200.8	
LLCS 380-98735/130	Lab Control Sample	Total/NA	Water	200.8	
380-103361-1 MS	MOANALUA WELLS	Total/NA	Water	200.8	
380-103361-1 MSD	MOANALUA WELLS	Total/NA	Water	200.8	

Analysis Batch: 98805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103361-1	MOANALUA WELLS	Total/NA	Water	200.7 Rev 4.4	
MB 380-98805/53	Method Blank	Total/NA	Water	200.7 Rev 4.4	
LCS 380-98805/55	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	
LCSD 380-98805/56	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	
LLCS 380-98805/54	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	
380-103313-A-2 MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	
380-103313-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	

Prep Batch: 105810

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103361-1	MOANALUA WELLS	Total/NA	Water	245.1	
MB 810-105810/1-A	Method Blank	Total/NA	Water	245.1	
LCS 810-105810/3-A	Lab Control Sample	Total/NA	Water	245.1	
LLCS 810-105810/2-A	Lab Control Sample	Total/NA	Water	245.1	
810-109988-A-4-B MS	Matrix Spike	Total/NA	Water	245.1	
810-109988-A-4-C MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	

Metals

Analysis Batch: 105848

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103361-1	MOANALUA WELLS	Total/NA	Water	245.1	105810
MB 810-105810/1-A	Method Blank	Total/NA	Water	245.1	105810
LCS 810-105810/3-A	Lab Control Sample	Total/NA	Water	245.1	105810
LLCS 810-105810/2-A	Lab Control Sample	Total/NA	Water	245.1	105810
810-109988-A-4-B MS	Matrix Spike	Total/NA	Water	245.1	105810
810-109988-A-4-C MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	105810

General Chemistry

Analysis Batch: 98553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103361-1	MOANALUA WELLS	Total/NA	Water	SM 2540C	
MB 380-98553/1	Method Blank	Total/NA	Water	SM 2540C	
HLCS 380-98553/5	Lab Control Sample	Total/NA	Water	SM 2540C	
LCS 380-98553/4	Lab Control Sample	Total/NA	Water	SM 2540C	
MRL 380-98553/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MRL 380-98553/3	Lab Control Sample	Total/NA	Water	SM 2540C	
380-103160-A-5 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 98842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103361-1	MOANALUA WELLS	Total/NA	Water	SM 4500 S2 D	
MBL 380-98842/2	Method Blank	Total/NA	Water	SM 4500 S2 D	
LCS 380-98842/5	Lab Control Sample	Total/NA	Water	SM 4500 S2 D	
LCSD 380-98842/6	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 D	
MRL 380-98842/3	Lab Control Sample	Total/NA	Water	SM 4500 S2 D	
380-103673-I-1 MS	Matrix Spike	Total/NA	Water	SM 4500 S2 D	
380-103673-I-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 S2 D	

Analysis Batch: 99127

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103361-1	MOANALUA WELLS	Total/NA	Water	SM 4500 F C	
MB 380-99127/40	Method Blank	Total/NA	Water	SM 4500 F C	
MB 380-99127/6	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 380-99127/42	Lab Control Sample	Total/NA	Water	SM 4500 F C	
LCSD 380-99127/43	Lab Control Sample Dup	Total/NA	Water	SM 4500 F C	
MRL 380-99127/41	Lab Control Sample	Total/NA	Water	SM 4500 F C	
MRL 380-99127/7	Lab Control Sample	Total/NA	Water	SM 4500 F C	
380-102753-E-1 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
380-102753-E-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	

Analysis Batch: 99128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103361-1	MOANALUA WELLS	Total/NA	Water	SM 2320B	
MB 380-99128/1	Method Blank	Total/NA	Water	SM 2320B	
LCS 380-99128/3	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 380-99128/18	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
LLCS 380-99128/4	Lab Control Sample	Total/NA	Water	SM 2320B	
MRL 380-99128/2	Lab Control Sample	Total/NA	Water	SM 2320B	
380-103303-Y-1 MS	Matrix Spike	Total/NA	Water	SM 2320B	
380-103303-Y-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 2320B	

General Chemistry (Continued)

Analysis Batch: 99128 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103303-Y-1 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 99131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103361-1	MOANALUA WELLS	Total/NA	Water	SM 2510B	
MB 380-99131/2	Method Blank	Total/NA	Water	SM 2510B	
LCS 380-99131/4	Lab Control Sample	Total/NA	Water	SM 2510B	
LCSD 380-99131/16	Lab Control Sample Dup	Total/NA	Water	SM 2510B	
MRL 380-99131/3	Lab Control Sample	Total/NA	Water	SM 2510B	
380-103303-Y-1 DU	Duplicate	Total/NA	Water	SM 2510B	

Analysis Batch: 99133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103361-1	MOANALUA WELLS	Total/NA	Water	SM 4500 H+ B	
MB 380-99133/4	Method Blank	Total/NA	Water	SM 4500 H+ B	
LCS 380-99133/5	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCSD 380-99133/17	Lab Control Sample Dup	Total/NA	Water	SM 4500 H+ B	
380-103303-Y-1 DU	Duplicate	Total/NA	Water	SM 4500 H+ B	

Lab Chronicle

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

Job ID: 380-103361-1
SDG: Quarterly

Client Sample ID: MOANALUA WELLS

Lab Sample ID: 380-103361-1

Date Collected: 07/09/24 09:52
Matrix: Water
Date Received: 07/10/24 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	524.2		1	99491	P3EE	EA POM	07/17/24 17:04
Total/NA	Analysis	524.2		1	98936	N4CJ	EA POM	07/15/24 09:42
Total/NA	Analysis	524.2		1	99288	YXX2	EA POM	07/15/24 09:42
Total/NA	Analysis	524.2		1	99494	P3EE	EA POM	07/17/24 21:13
Total/NA	Prep	525.2			98487	OTM3	EA POM	07/11/24 09:40
Total/NA	Analysis	525.2		1	98737	Q8LA	EA POM	07/12/24 12:20
Total/NA	Prep	625.1			460222	H1SH	EET CAL 4	07/15/24 05:12
Total/NA	Analysis	625.1		1	466731	CG	EET CAL 4	08/02/24 19:40
Total/NA	Prep	625.1			460222	H1SH	EET CAL 4	07/15/24 05:12
Total/NA	Analysis	625.1 SIM		1	466820	PQS1	EET CAL 4	08/02/24 12:40
Total/NA	Analysis	8015B GRO LL		1	460706	A9VE	EET CAL 4	07/16/24 19:41
Total/NA	Prep	504.1			98731	LZ8Q	EA POM	07/12/24 11:30 - 07/12/24 13:00 [1]
Total/NA	Analysis	504.1		1	99024	LZ8Q	EA POM	07/13/24 02:17
Total/NA	Prep	505			99010	K9GY	EA POM	07/15/24 14:30 - 07/15/24 16:00 [1]
Total/NA	Analysis	505		1	99562	ULRL	EA POM	07/16/24 02:06
Total/NA	Prep	3510C			459748	H6FE	EET CAL 4	07/12/24 09:30
Total/NA	Analysis	8015B		1	462177	SP9M	EET CAL 4	07/20/24 11:05
Total/NA	Analysis	8015B		1	460498	ZE2W	EET CAL 4	07/15/24 19:57
Total/NA	Analysis	300.0		5	98464	XLG4	EA POM	07/11/24 00:57
Total/NA	Analysis	300.0		5	98465	XLG4	EA POM	07/11/24 00:57
Total/NA	Analysis	300.0		1	98857	UNJR	EA POM	07/13/24 01:01
Total/NA	Analysis	200.7 Rev 4.4		1	98805	T8RV	EA POM	07/12/24 00:43
Total/NA	Analysis	200.8		1	98735	VB9B	EA POM	07/11/24 19:04
Total/NA	Prep	245.1			105810	AC	EA SB	07/15/24 12:54
Total/NA	Analysis	245.1		1	105848	AC	EA SB	07/15/24 17:52
Total/NA	Analysis	SM 2320B		1	99128	GP4S	EA POM	07/12/24 13:56
Total/NA	Analysis	SM 2510B		1	99131	GP4S	EA POM	07/12/24 13:56
Total/NA	Analysis	SM 2540C		1	98553	UJRF	EA POM	07/11/24 12:19
Total/NA	Analysis	SM 4500 F C		1	99127	GP4S	EA POM	07/12/24 17:48
Total/NA	Analysis	SM 4500 H+ B		1	99133	GP4S	EA POM	07/12/24 13:56
Total/NA	Analysis	SM 4500 S2 D		1	98842	MQP5	EA POM	07/12/24 15:49

Client Sample ID: TRAVEL BLANK

Lab Sample ID: 380-103361-2

Date Collected: 07/09/24 09:52
Matrix: Water
Date Received: 07/10/24 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	524.2		1	99491	P3EE	EA POM	07/17/24 17:27
Total/NA	Analysis	524.2		1	98936	N4CJ	EA POM	07/15/24 10:05
Total/NA	Analysis	524.2		1	99288	YXX2	EA POM	07/15/24 10:05
Total/NA	Analysis	524.2		1	99494	P3EE	EA POM	07/17/24 21:36
Total/NA	Analysis	8015B GRO LL		1	460706	A9VE	EET CAL 4	07/16/24 21:52

Lab Chronicle

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

Job ID: 380-103361-1
SDG: Quarterly

Client Sample ID: TRAVEL BLANK

Date Collected: 07/09/24 09:52
Date Received: 07/10/24 09:55

Lab Sample ID: 380-103361-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	504.1			99699	LZ8Q	EA POM	07/18/24 15:00 - 07/18/24 16:00 [1]
Total/NA	Analysis	504.1		1	99859	LZ8Q	EA POM	07/19/24 05:35

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EA POM = Eurofins Eaton Analytical Pomona, 941 Corporate Center Drive, Pomona, CA 91768-2642, TEL (626)386-1100
EA SB = Eurofins Eaton Analytical South Bend, 110 S Hill Street, South Bend, IN 46617, TEL (574)233-4777
EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

Accreditation/Certification Summary

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

Job ID: 380-103361-1
SDG: Quarterly

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	01-31-25

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
505	505	Water	Polychlorinated biphenyls, Total
524.2		Water	1,3-Dichloropropene, Total
524.2		Water	2-Butanone (MEK)
524.2		Water	Acetone
524.2		Water	Bromodichloromethane
524.2		Water	Bromoethane
524.2		Water	Bromoform
524.2		Water	Chlorodibromomethane
524.2		Water	Chloroform (Trichloromethane)
524 2		Water	m,p Xylenes
524.2		Water	o-Xylene
525.2	525.2	Water	1-Methylnaphthalene
525.2	525.2	Water	2,4'-DDD
525.2	525.2	Water	2,4'-DDE
525.2	525.2	Water	2,4'-DDT
525.2	525.2	Water	2,4-Dinitrotoluene
525.2	525.2	Water	2,6-Dinitrotoluene
525.2	525.2	Water	2-Methylnaphthalene
525.2	525.2	Water	4,4'-DDD
525.2	525.2	Water	4,4'-DDE
525.2	525.2	Water	4,4'-DDT
525.2	525.2	Water	Acetochlor
525.2	525.2	Water	alpha-BHC
525.2	525.2	Water	alpha-Chlordane
525.2	525.2	Water	beta-BHC
525.2	525.2	Water	Chlorobenzilate
525.2	525.2	Water	Chloroneb
525.2	525.2	Water	Chlorothalonil (Draconil, Bravo)
525.2	525.2	Water	Chlorpyrifos
525.2	525.2	Water	delta-BHC
525.2	525.2	Water	Diclorvos (DDVP)
525.2	525.2	Water	Endosulfan I (Alpha)
525.2	525.2	Water	Endosulfan II (Beta)
525.2	525.2	Water	Endosulfan sulfate
525 2	525 2	Water	Endrin aldehyde
525.2	525.2	Water	EPTC
525.2	525.2	Water	gamma-Chlordane
525.2	525.2	Water	Isophorone
525.2	525.2	Water	Malathion
525.2	525.2	Water	Parathion
525.2	525.2	Water	Pendimethalin (Penoxaline)
525.2	525.2	Water	Terbacil
525.2	525.2	Water	Terbuthylazine
525.2	525.2	Water	Total Permethrin (mixed isomers)
525.2	525.2	Water	trans-Nonachlor

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
SM 2320B		Water	Bicarbonate Alkalinity as CaCO3
SM 2320B		Water	Carbonate Alkalinity as CaCO3
SM 4500 S2 D		Water	Sulfide

Laboratory: Eurofins Calscience

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0830	11-16-24
Arkansas DEQ	State	88-0161	07-02-25
California	State	3082	07-31-26
Kansas	NELAP	E-10420	07-31-25
Nevada	State	CA00111	10-31-24
Oregon	NELAP	4175	02-02-25
USDA	US Federal Programs	P330-22-00059	06-08-26
Washington	State	C916-18	10-11-24

Laboratory: Eurofins Eaton Analytical South Bend

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	ISO/IEC 17025	5794.01	07-21-24
Alabama	State	40700	06-30-25
Alaska	State	IN00035	06-30-25
Arizona	State	AZ0432	07-25-24
Arkansas (DW)	State	EPA IN00035	06-30-25
California	State	2920	06-30-24 *
Colorado	State	IN00035	02-28-25
Connecticut	State	PH-0132	03-31-26
Delaware (DW)	State	IN00035	06-30-25
Florida	NELAP	E87775	06-30-25
Georgia (DW)	State	929	06-30-24 *
Guam	State	23-011R	07-15-24
Hawaii	State	IN035	06-30-25
Idaho (DW)	State	IN00035	12-31-24
IL Dept. of Public Health (Micro)	State	17767	06-30-25
Illinois	NELAP	200001	09-19-24
Indiana	State	C-71-01	12-31-25
Indiana (Micro)	State	M-76-07	12-31-25
Iowa	State	IA Lab #098	08-01-24
Kansas	NELAP	E-10233	10-31-24
Kentucky (DW)	State	KY90056	12-31-24
Louisiana (DW)	State	LA014	07-16-24
Maine	State	IN00035	05-01-25
Maryland	State	209	06-30-25
Massachusetts	State	M-IN035	07-30-24
MI - RadChem Recognition	State	9926	03-22-25

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

Accreditation/Certification Summary

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

Job ID: 380-103361-1
SDG: Quarterly

Laboratory: Eurofins Eaton Analytical South Bend (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Michigan	State	9926	03-22-25
Minnesota	NELAP	1989807	12-31-24
Mississippi	State	IN00035	06-30-25
Missouri	State	880	09-30-24
Montana (DW)	State	CERT0026	07-16-24
Nebraska	State	NE-OS-05-04	06-30-25
Nevada	State	IN000352024-01	07-31-24
New Hampshire	NELAP	2124	11-05-24
New Jersey	NELAP	IN598	06-30-25
New Mexico	State	IN00035	06-30-25
New York	NELAP	11398	04-01-25
North Carolina (DW)	State	18700	07-31-24
North Dakota	State	R-035	06-30-24 *
Northern Mariana Islands (DW)	State	IN00035	06-30-25
Ohio	State	87775	06-30-25
Oklahoma	NELAP	D9508	08-31-24
Oregon	NELAP	4156	09-16-24
Pennsylvania	NELAP	68-00466	04-30-25
Puerto Rico	State	IN00035	04-01-25
Rhode Island	State	LAO00343	07-21-24
South Carolina	State	95005001	06-30-24 *
South Dakota (DW)	State	IN00035	06-30-25
Tennessee	State	TN02973	06-30-25
Texas	NELAP	T104704187-22-16	12-31-24
Texas	TCEQ Water Supply	TX207	06-30-25
USEPA Reg X SDWA	US Federal Programs	IN00035	08-24-24
USEPA UCMR 5	US Federal Programs	IN00035	12-31-25
Utah	NELAP	IN00035	07-31-24
Vermont	State	VT-8775	07-16-24
Virginia	NELAP	460275	03-14-25
Washington	State	C837	01-01-25
West Virginia (DW)	State	9927 C	01-31-25
Wisconsin	State	999766900	08-31-24
Wisconsin (Micro)	State	10121	12-31-24
Wyoming	State	8TMS-L	06-30-25

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

Method Summary

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

Job ID: 380-103361-1
SDG: Quarterly

Method	Method Description	Protocol	Laboratory
524.2	Total Trihalomethanes	EPA-DW	EA POM
524.2	Volatile Organic Compounds (GC/MS SIM)	EPA-DW	EA POM
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	EA POM
525.2	Semivolatile Organic Compounds (GC/MS)	EPA	EA POM
625.1	Semivolatile Organic Compounds (GC/MS)	EPA	EET CAL 4
625.1 SIM	Semivolatile Organic Compounds GC/MS (SIM)	EPA	EET CAL 4
8015B GRO LL	Gasoline Range Organics - (GC)	SW846	EET CAL 4
504.1	EDB, DBCP and 1,2,3-TCP (GC)	EPA-DW2	EA POM
505	Organochlorine Pesticides/PCBs (GC)	EPA	EA POM
8015B	Diesel Range Organics (DRO) (GC) Low Level	SW846	EET CAL 4
8015B	Nonhalogenated Organic Compounds - Direct Injection (GC)	SW846	EET CAL 4
300.0	Anions, Ion Chromatography	EPA	EA POM
200.7 Rev 4.4	Metals (ICP)	EPA	EA POM
200.8	Metals (ICP/MS)	EPA	EA POM
245.1	Mercury (CVAA)	EPA	EA SB
SM 2320B	Alkalinity	SM	EA POM
SM 2510B	Conductivity, Specific Conductance	SM	EA POM
SM 2540C	Solids, Total Dissolved (TDS)	SM	EA POM
SM 4500 F C	Fluoride	SM	EA POM
SM 4500 H+ B	pH	SM	EA POM
SM 4500 S2 D	Sulfide, Total	SM	EA POM
245.1	Preparation, Mercury	EPA	EA SB
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET CAL 4
5030C	Purge and Trap	SW846	EET CAL 4
504.1	Microextraction	EPA-DW	EA POM
505	Extraction, Organochlorine Pesticides/PCBs	EPA	EA POM
525.2	Extraction of Semivolatile Compounds	EPA	EA POM
625.1	Liquid-Liquid Extraction	40CFR136A	EET CAL 4
None	Autocomplete Prep - Metals - No Digestion required	None	EA POM

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.
EPA = US Environmental Protection Agency
EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.
EPA-DW2 = "Methods For The Determination of Organic Compounds in Drinking Water - Supplement III ",, EPA/600/R-95-131, August 1995
None = None
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EA POM = Eurofins Eaton Analytical Pomona, 941 Corporate Center Drive, Pomona, CA 91768-2642, TEL (626)386-1100
EA SB = Eurofins Eaton Analytical South Bend, 110 S Hill Street, South Bend, IN 46617, TEL (574)233-4777
EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

Sample Summary

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

Job ID: 380-103361-1
SDG: Quarterly

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
380-103361-1	MOANALUA WELLS	Water	07/09/24 09:52	07/10/24 09:55
380-103361-2	TRAVEL BLANK	Water	07/09/24 09:52	07/10/24 09:55

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

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: Bailey	Lab PM: Arada Rachelle	Carrier Tracking No(s):	COC No:
Client Contact: Dr Ron Fenstermacher	Phone: +1 808-748-5840	E-Mail: Rachelle Arada@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: City & County of Honolulu	PWSID:			Job #:
Address: 630 South Beretania Street; Chemistry Lab	Due Date Requested:			
City: Honolulu	TAT Requested (days):			
State Zip: HI 96843	Compliance Project: Δ No			
Phone: 808-748-5091 (tel)	PO #: C20525101 exp 05312023			
Email: rfenstemacher@hbws.org	WO #:			
Project Name: RED-HILL	Project #: 38001111			
Site:	SSOW#:			

Analysis Requested

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)	504.1_PREC, 505_LL_PREC	2320B, 2510B, SM4500_H+	200.7, 200.8	2540C_Calcd Total dissolved Solids (TDS)	SM4500_S2_D Sulfide, Total	5.24.2_Pres_PREC, 524.2_SIM_PREC	525.2_PREC 525plus PLUS TICs	300_OF_28D_B, 300_OF_28D_PREC, 300_OF_48H_PREC, 4500_F_C	245.1 Local Method	SUBCONTRACT - 625 PAH Physis LL (EAL) + TICs	SUBCONTRACT - 625 Base Neutral LL (EAL) Physis	SUBCONTRACT 625 Acid LL (EAL) Physis	8015B_GRO_LL (MOD) GRO	Total Number of containers	Special Instructions/Note:
				Preservation Code:	X	X	R	N	D	N	CB	HA	N	N	D	R	R	R	A	X	
Moanalua Wells	9-Jul-2024	0952	G	Water			6	1	1	1	1	6	3	2	1	2	2	2	4		
Travel Blank	9-Jul-2024	0952										6							2		

380-103361 COC

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:

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 7773 0273 3127 ② 7773 0273 3138

Empty Kit Relinquished by	Date	Time	Method of Shipment: FEDEX

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[redacted]	7-9-24 430	HBWS	G. RETNER	07/10/2024 09:55	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 ① 1.6° - 0.1° = 1.5° ② 2.9° - 0.1° = 2.8° GEL-FROZEN

Ver: 01/16/2019

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

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: Bailey	Lab PM: Arada Rachelle	Carrier Tracking No(s):	COC No:
Client Contact: Dr Ron Fenstermacher	Phone: +1 808-748-5840	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			
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	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)	8015B_DRO_LL_CS HNL Ranges C10-C24/C24-C36/C8-C18	8015B_DAI Ethanol	504.1_PREC - Local Method	Total Number of containers	Special Instructions/Note.
			Preservation Code:		X	X	Q	N	R	X	
Moanalua Wells	9-Jul-2024	0952	G	Water			2	2			
Travel Blank	9-Jul-2024	0952							3		

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 7773 0273 3129
② 7773 0273 3138

Empty Kit Relinquished by:	Date	Time:	Method of Shipment: FED EX

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[illegible]	[illegible]	HBWS	S.REITNER	09/10/2024 09:55	EEA
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) ① 1.6° - 0.1° = 1.5° ② 2.9° - 0.1° = 2.8° GEL-FROZEN

Ver: 01/16/2019

Eurofins Eaton Analytical Pomona
941 Corporate Center Drive
Pomona, CA 91768-2642
Phone: 626-386-1100

Chain of Custody Record

eurofins | Env

Loc: 380
103361

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Arada, Rachelle	Carrier Tracking No(s):	COC No: 380-136906.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Rachelle.Arada@et.eurofinsus.com	State of Origin: Hawaii	Page: Page 1 of 1
Company: Eurofins Environment Testing Southwest,		Accreditations Required (See note): State - Hawaii		Job #: 380-103361-1
Address: 2841 Dow Avenue, Suite 100, ,	Due Date Requested: 7/30/2024	Analysis Requested		Preservation Codes:
City: Tustin	TAT Requested (days):			
State, Zip: CA, 92780				
Phone: 714-895-5494(Tel)	PO #:			
Email:	WO #:			
Project Name: RED-HILL	Project #: 38001111			
Site: Honolulu BWS Sites	SSOW#:			Other:

Sample Identification - Client ID (Lab ID)	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)	8015B_DAI/ Ethanol	8015B_DRO_LL_CS/3510C_LL HNL Ranges: C10-C24/C24-C36/C8-C18	8015B_GRO_LL/5030C (MOD) GRO	625.1_SIM/625_Prep (MOD) Extended List	625.1/625_Prep (MOD) Tentatively Identified Compounds (Hold)	8015B_GRO_LL/5030C GRO	Total Number of containers	Special Instructions/Note:
			Preservation Code:											
MOANALUA WELLS (380-103361-1)	7/9/24	09:52 Hawaiian		Water			X	X	X	X	X		14	MRLs are needed., initial volume (500ml) and final volume (2ml). MRLs are needed.
TRAVEL BLANK (380-103361-2)	7/9/24	09:52 Hawaiian		Water								X	2	MRLs are needed.

380-103361 Chain of Custody

Note: Since laboratory accreditations are subject to change, Eurofins Eaton Analytical, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Eaton Analytical, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Eaton Analytical, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Eaton Analytical, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	7/11/24 1300	EEA	[signature]	7/11/24 13:00	EEC
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	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: 2.2/2.2 SC12

Eurofins Eaton Analytical Pomona
941 Corporate Center Drive
Pomona, CA 91768-2642
Phone: 626-386-1100

Chain of Custody Record

eurofins | Environment Testing

8/5/2024

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Arada, Rachelle	Carrier Tracking No(s):	COC No: 380-136909.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Rachelle.Arada@et.eurofinsus.com	State of Origin: Hawaii	Page: Page 1 of 1
Company: Eurofins Eaton Analytical		Accreditations Required (See note): State - Hawaii		Job #: 380-103361-1
Address: 110 S Hill Street,	Due Date Requested: 7/30/2024			Preservation Codes: -
City: South Bend	TAT Requested (days):			
State, Zip: IN, 46617				
Phone: 574-233-4777(Tel) 574-233-8207(Fax)	PO #:			
Email:	WO #:			
Project Name: RED-HILL	Project #: 38001111			
Site: Honolulu BWS Sites	SSOW#:			Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	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)	245.1/245.1_Prep Mercury by 245.1	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MOANALUA WELLS (380-103361-1)	7/9/24	09:52 Hawaiian		Water			X	1	

pH 2 prep 07/11/24

Client Provided Sample Container

Note: Since laboratory accreditations are subject to change, Eurofins Eaton Analytical, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Eaton Analytical, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Eaton Analytical, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Eaton Analytical, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	7/11/24 7:42		Penny Pehling Wright	07/12/24 0915	EEA
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	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: Ambient

Ver: 04/02/2024

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-103361-1
SDG Number: Quarterly

Login Number: 103361
List Number: 1
Creator: Elyas, Matthew

List Source: Eurofins Eaton Analytical Pomona

Question	Answer	Comment
The coolers custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
Samples were received on ice.	True	
Cooler(s) Temperature is acceptable.	True	
Cooler(s) Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and is legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
ClO4 headspace requirement met (>50% for CA, >30% for other states).	True	
Samples do not require splitting or compositing.	True	
Container provided by EEA	True	

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-103361-1
SDG Number: Quarterly

Login Number: 103361
List Number: 2
Creator: Khana, Piyush

List Source: Eurofins Calscience
List Creation: 07/11/24 03:25 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
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	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	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	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-103361-1
SDG Number: Quarterly

Login Number: 103361
List Number: 3
Creator: Pehling-Wright, Penny

List Source: Eurofins Eaton Analytical South Bend
List Creation: 07/12/24 12:06 PM

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.	False	Thermal preservation not required.
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	False	Client provided containers