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

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JOB DESCRIPTION

RED-HILL

JOB NUMBER

380-55688-1

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

Rachelle Arada

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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, low biased.
*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.

GC/MS 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/MS Semi VOA

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

GC/MS Semi VOA TICs

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

GC Semi VOA

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

HPLC/IC

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.

Metals

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

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.

Subcontract

Qualifier	Qualifier Description
U	This analyte was not detected.

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)

Glossary (Continued)

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

Job ID: 380-55688-1

Laboratory: Eurofins Eaton Analytical Pomona

Narrative

Job Narrative
380-55688-1

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

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

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

Receipt
The samples were received on 7/21/2023 9:45 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 1.6°C, 1.9°C, 2.4°C and 3.8°C

Subcontract Work
Methods 8015 Ethanol, 8015 Gas (Purgeable) LL (EAL), 8015 LL DRO/MRO/JP5/JP8: These methods were subcontracted to EMAX Laboratories Inc. The subcontract laboratory certifications are different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

Method 625 Acid/Base/PAH + TICs: This method was subcontracted to Physis Environmental Laboratories. The subcontract laboratory certification is different from that of the facility issuing the final report. The subcontract report is appended in its entirety.

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
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.

HPLC/IC
Method 300_OF_28D_PREC: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 380-48579 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

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

General Chemistry
Method SM4500_S2_D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 380-48982 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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: 380-55688-1

Client Sample ID: AIEA GULCH WELLS PUMP 2 — Lab Sample ID: 380-55688-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Bromide	150		5.0		ug/L	1		300.0	Total/NA
Chloride	96		2.5		mg/L	5		300.0	Total/NA
Nitrate as N	0.48		0.25		mg/L	5		300.0	Total/NA
Sulfate	12		1.3		mg/L	5		300.0	Total/NA
Calcium	21		1.0		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	17		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Potassium	2.0		1.0		mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	31		1.0		mg/L	1		200.7 Rev 4.4	Total/NA
Chromium	1.6		0.90		ug/L	1		200.8	Total/NA
Copper	3.3		1.0		ug/L	1		200.8	Total/NA
A kalinity	53		2.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	53		2.0		mg/L	1		SM 2320B	Total/NA
Specific Conductance	430		2.0		umhos/cm	1		SM 2510B	Total/NA
Total Dissolved Solids	260		20		mg/L	1		SM 2540C	Total/NA
pH	7.9	HF			SU	1		SM 4500 H+ B	Total/NA
Benzoic Acid	0.289		0.2	0.1	µg/L	1		625 Acid/Base/PAH + TICs	Total/NA
Disalicylidenepropanediamine	0.116		0.1	0.05	µg/L	1		625 Acid/Base/PAH + TICs	Total/NA

Client Sample ID: TB: AIEA GULCH WELLS PUMP 2 — Lab Sample ID: 380-55688-2

No Detections.

This Detection Summary does not include radiochemical test results.

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

Job ID: 380-55688-1

Client Sample ID: AIEA GULCH WELLS PUMP 2

Date Collected: 07/20/23 09:00
Date Received: 07/21/23 09:45

Lab Sample ID: 380-55688-1

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			08/01/23 16:02	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			07/24/23 17:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*70 - 130*		*07/24/23 17:19*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*07/24/23 17:19*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*07/24/23 17:19*	*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	*1	0.50		ug/L			07/31/23 02:28	1
1,1,1-Trichloroethane	<0.50		0.50		ug/L			07/31/23 02:28	1
1,1,2,2-Tetrachloroethane	<0.50		0.50		ug/L			07/31/23 02:28	1
1,1,2-Trichloroethane	<0.50		0.50		ug/L			07/31/23 02:28	1
1,1-Dichlorethylene	<0.50		0.50		ug/L			07/31/23 02:28	1
1,1-Dichloroethane	<0.50		0.50		ug/L			07/31/23 02:28	1
1,1-Dichloropropene	<0.50		0.50		ug/L			07/31/23 02:28	1
1,2,3-Trichlorobenzene	<0.50		0.50		ug/L			07/31/23 02:28	1
1,2,3-Trichloropropane	<0.50		0.50		ug/L			07/31/23 02:28	1
1,2,4-Trichlorobenzene	<0.50		0.50		ug/L			07/31/23 02:28	1
1,2,4-Trimethy benzene	<0.50		0.50		ug/L			07/31/23 02:28	1
1,2-Dichloroethane	<0.50		0.50		ug/L			07/31/23 02:28	1
1,2-Dichloropropane	<0.50		0.50		ug/L			07/31/23 02:28	1
1,3,5-Trimethy benzene	<0.50		0.50		ug/L			07/31/23 02:28	1
1,3-Dichloropropane	<0.50		0.50		ug/L			07/31/23 02:28	1
1,3-Dichloropropene, Total	<0.50		0.50		ug/L			07/31/23 02:28	1
2,2-Dichloropropane	<0.50		0.50		ug/L			07/31/23 02:28	1
2-Butanone (MEK)	<5.0		5.0		ug/L			07/31/23 02:28	1
4-Methyl-2-pentanone (MIBK)	<5.0		5.0		ug/L			07/31/23 21:18	1
Acetone	<500		500		ug/L			07/31/23 02:28	1
Benzene	<0.50		0.50		ug/L			07/31/23 02:28	1
Bromobenzene	<0.50		0.50		ug/L			07/31/23 02:28	1
Bromochloromethane	<0.50		0.50		ug/L			07/31/23 02:28	1
Bromodichloromethane	<0.50		0.50		ug/L			07/31/23 02:28	1
Bromoethane	<0.50		0.50		ug/L			07/31/23 02:28	1
Bromoform	<0.50		0.50		ug/L			07/31/23 02:28	1
Bromomethane (Methyl Bromide)	<0.50		0.50		ug/L			07/31/23 02:28	1
Carbon disulfide	<0.50		0.50		ug/L			07/31/23 02:28	1
Carbon tetrachloride	<0.50		0.50		ug/L			07/31/23 02:28	1
Chlorobenzene	<0.50		0.50		ug/L			07/31/23 02:28	1
Chlorodibromomethane	<0.50		0.50		ug/L			07/31/23 02:28	1
Chloroethane	<0.50		0.50		ug/L			07/31/23 02:28	1
Chloroform (Trichloromethane)	<0.50		0.50		ug/L			07/31/23 02:28	1
Chloromethane (methyl chloride)	<0.50		0.50		ug/L			07/31/23 02:28	1
cis-1,2-Dichloroethylene	<0.50		0.50		ug/L			07/31/23 02:28	1
cis-1,3-Dichloropropene	<0.50		0.50		ug/L			07/31/23 02:28	1
Dibromomethane	<0.50		0.50		ug/L			07/31/23 02:28	1

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

Job ID: 380-55688-1

Client Sample ID: AIEA GULCH WELLS PUMP 2
Date Collected: 07/20/23 09:00
Date Received: 07/21/23 09:45

Lab Sample ID: 380-55688-1
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			07/31/23 02:28	1
Dichloromethane	<0.50		0.50		ug/L			07/31/23 02:28	1
Diisopropyl ether	<3.0		3.0		ug/L			07/31/23 02:28	1
Ethylbenzene	<0.50		0.50		ug/L			07/31/23 02:28	1
Hexachlorobutadiene	<0.50		0.50		ug/L			07/31/23 02:28	1
Isopropy benzene	<0.50		0.50		ug/L			07/31/23 02:28	1
m,p-Xylenes	<0.50		0.50		ug/L			07/31/23 02:28	1
m-Dichlorobenzene (1,3-DCB)	<0.50		0.50		ug/L			07/31/23 02:28	1
Methyl-tert-butyl Ether (MTBE)	<0.50		0.50		ug/L			07/31/23 02:28	1
Naphthalene	<0.50		0.50		ug/L			07/31/23 02:28	1
n-Butylbenzene	<0.50		0.50		ug/L			07/31/23 02:28	1
N-Propylbenzene	<0.50		0.50		ug/L			07/31/23 02:28	1
o-Chlorotoluene	<0.50		0.50		ug/L			07/31/23 02:28	1
o-Dichlorobenzene (1,2-DCB)	<0.50		0.50		ug/L			07/31/23 02:28	1
o-Xylene	<0.50		0.50		ug/L			07/31/23 02:28	1
p-Chlorotoluene	<0.50		0.50		ug/L			07/31/23 02:28	1
p-Dichlorobenzene (1,4-DCB)	<0.50		0.50		ug/L			07/31/23 02:28	1
p-Isopropyltoluene	<0.50		0.50		ug/L			07/31/23 02:28	1
sec-Butylbenzene	<0.50		0.50		ug/L			07/31/23 02:28	1
Styrene	<0.50		0.50		ug/L			07/31/23 02:28	1
Tert-amyl methyl ether	<3.0		3.0		ug/L			07/31/23 02:28	1
Tert-butyl ethyl ether	<3.0		3.0		ug/L			07/31/23 02:28	1
tert-Butylbenzene	<0.50		0.50		ug/L			07/31/23 02:28	1
Tetrachloroethene (PCE)	<0.50	*1	0.50		ug/L			07/31/23 02:28	1
Toluene	<0.50		0.50		ug/L			07/31/23 02:28	1
trans-1,2-Dichloroethylene	<0.50		0.50		ug/L			07/31/23 02:28	1
trans-1,3-Dichloropropene	<0.50		0.50		ug/L			07/31/23 02:28	1
Trichloroethylene (TCE)	<0.50		0.50		ug/L			07/31/23 02:28	1
Trichlorofluoromethane (Freon 11)	<0.50		0.50		ug/L			07/31/23 02:28	1
Trichlorotrifluoroethane	<0.50		0.50		ug/L			07/31/23 02:28	1
Vinyl Chloride (VC)	<0.30		0.30		ug/L			07/31/23 02:28	1
Xylenes, Total	<0.50		0.50		ug/L			07/31/23 02:28	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*300*	*T J*	*ug/L*		*1.20*	*N/A*		*07/31/23 02:28*	*1*
Unknown	*0.81*	*T J*	*ug/L*		*8.57*	*N/A*		*07/31/23 02:28*	*1*
Unknown	*0.62*	*T J*	*ug/L*		*14.19*	*N/A*		*07/31/23 02:28*	*1*
Unknown	*1.0*	*T J*	*ug/L*		*14.61*	*N/A*		*07/31/23 02:28*	*1*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*07/31/23 21:18*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*07/31/23 02:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*07/31/23 21:18*	*1*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*		*07/31/23 02:28*	*1*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*		*07/31/23 21:18*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*07/31/23 02:28*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*07/31/23 21:18*	*1*

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

Job ID: 380-55688-1

Client Sample ID: AIEA GULCH WELLS PUMP 2
Date Collected: 07/20/23 09:00
Date Received: 07/21/23 09:45

Lab Sample ID: 380-55688-1
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2,4'-DDD	<0.099		0.099		ug/L		07/25/23 10:00	07/26/23 19:26	1
2,4'-DDE	<0.099		0.099		ug/L		07/25/23 10:00	07/26/23 19:26	1
2,4'-DDT	<0.099		0.099		ug/L		07/25/23 10:00	07/26/23 19:26	1
2,4-Dinitrotoluene	<0.099		0.099		ug/L		07/25/23 10:00	07/26/23 19:26	1
2,6-Dinitrotoluene	<0.099		0.099		ug/L		07/25/23 10:00	07/26/23 19:26	1
4,4'-DDD	<0.099		0.099		ug/L		07/25/23 10:00	07/26/23 19:26	1
4,4'-DDE	<0.099		0.099		ug/L		07/25/23 10:00	07/26/23 19:26	1
4,4'-DDT	<0.099		0.099		ug/L		07/25/23 10:00	07/26/23 19:26	1
Acenaphthene	<0.099		0.099		ug/L		07/25/23 10:00	07/26/23 19:26	1
Acenaphthylene	<0.099		0.099		ug/L		07/25/23 10:00	07/26/23 19:26	1
Acetochlor	<0.099		0.099		ug/L		07/25/23 10:00	07/26/23 19:26	1
Alachlor	<0.049		0.049		ug/L		07/25/23 10:00	07/26/23 19:26	1
alpha-BHC	<0.099		0.099		ug/L		07/25/23 10:00	07/26/23 19:26	1
alpha-Chlordane	<0.049		0.049		ug/L		07/25/23 10:00	07/26/23 19:26	1
Anthracene	<0.020		0.020		ug/L		07/25/23 10:00	07/26/23 19:26	1
Atrazine	<0.049		0.049		ug/L		07/25/23 10:00	07/26/23 19:26	1
Benz(a)anthracene	<0.049		0.049		ug/L		07/25/23 10:00	07/26/23 19:26	1
Benzo[a]pyrene	<0.020		0.020		ug/L		07/25/23 10:00	07/26/23 19:26	1
Benzo[b]fluoranthene	<0.020		0.020		ug/L		07/25/23 10:00	07/26/23 19:26	1
Benzo[g,h,i]perylene	<0.049		0.049		ug/L		07/25/23 10:00	07/26/23 19:26	1
Benzo[k]fluoranthene	<0.020		0.020		ug/L		07/25/23 10:00	07/26/23 19:26	1
beta-BHC	<0.099		0.099		ug/L		07/25/23 10:00	07/26/23 19:26	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59		ug/L		07/25/23 10:00	07/26/23 19:26	1
Bromacil	<0.099		0.099		ug/L		07/25/23 10:00	07/26/23 19:26	1
Butachlor	<0.049		0.049		ug/L		07/25/23 10:00	07/26/23 19:26	1
Butylbenzylphthalate	<0.49		0.49		ug/L		07/25/23 10:00	07/26/23 19:26	1
Chlorobenzilate	<0.099	^3+	0.099		ug/L		07/25/23 10:00	07/26/23 19:26	1
Chloroneb	<0.099		0.099		ug/L		07/25/23 10:00	07/26/23 19:26	1
Chlorothalonil (Draconil, Bravo)	<0.099		0.099		ug/L		07/25/23 10:00	07/26/23 19:26	1
Chlorpyrifos	<0.049		0.049		ug/L		07/25/23 10:00	07/26/23 19:26	1
Chrysene	<0.020		0.020		ug/L		07/25/23 10:00	07/26/23 19:26	1
delta-BHC	<0.099		0.099		ug/L		07/25/23 10:00	07/26/23 19:26	1
Di(2-ethylhexyl)adipate	<0.59		0.59		ug/L		07/25/23 10:00	07/26/23 19:26	1
Dibenz(a,h)anthracene	<0.049		0.049		ug/L		07/25/23 10:00	07/26/23 19:26	1
Diclorvos (DDVP)	<0.049	^3+	0.049		ug/L		07/25/23 10:00	07/26/23 19:26	1
Dieldrin	<0.20		0.20		ug/L		07/25/23 10:00	07/26/23 19:26	1
Diethylphthalate	<0.49		0.49		ug/L		07/25/23 10:00	07/26/23 19:26	1
Dimethylphthalate	<0.49		0.49		ug/L		07/25/23 10:00	07/26/23 19:26	1
Di-n-butyl phthalate	<0.99		0.99		ug/L		07/25/23 10:00	07/26/23 19:26	1
Di-n-octyl phthalate	<0.099		0.099		ug/L		07/25/23 10:00	07/26/23 19:26	1
Endosulfan I (Alpha)	<0.099		0.099		ug/L		07/25/23 10:00	07/26/23 19:26	1
Endosulfan II (Beta)	<0.099		0.099		ug/L		07/25/23 10:00	07/26/23 19:26	1
Endosulfan sulfate	<0.099		0.099		ug/L		07/25/23 10:00	07/26/23 19:26	1
Endrin	<0.099		0.099		ug/L		07/25/23 10:00	07/26/23 19:26	1
Endrin aldehyde	<0.099		0.099		ug/L		07/25/23 10:00	07/26/23 19:26	1
EPTC	<0.099		0.099		ug/L		07/25/23 10:00	07/26/23 19:26	1
Fluoranthene	<0.099		0.099		ug/L		07/25/23 10:00	07/26/23 19:26	1
Fluorene	<0.049		0.049		ug/L		07/25/23 10:00	07/26/23 19:26	1
gamma-BHC (Lindane)	<0.040		0.040		ug/L		07/25/23 10:00	07/26/23 19:26	1

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

Job ID: 380-55688-1

Client Sample ID: AIEA GULCH WELLS PUMP 2

Date Collected: 07/20/23 09:00
Date Received: 07/21/23 09:45

Lab Sample ID: 380-55688-1

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
gamma-Chlordane	<0.049		0.049		ug/L		07/25/23 10:00	07/26/23 19:26	1
Heptachlor	<0.040	^3+	0.040		ug/L		07/25/23 10:00	07/26/23 19:26	1
Heptachlor epoxide (isomer B)	<0.049		0.049		ug/L		07/25/23 10:00	07/26/23 19:26	1
Hexachlorobenzene	<0.049		0.049		ug/L		07/25/23 10:00	07/26/23 19:26	1
Hexachlorocyclopentadiene	<0.049		0.049		ug/L		07/25/23 10:00	07/26/23 19:26	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049		ug/L		07/25/23 10:00	07/26/23 19:26	1
Isophorone	<0.49		0.49		ug/L		07/25/23 10:00	07/26/23 19:26	1
Malathion	<0.099		0.099		ug/L		07/25/23 10:00	07/26/23 19:26	1
Methoxychlor	<0.099		0.099		ug/L		07/25/23 10:00	07/26/23 19:26	1
Metolachlor	<0.049		0.049		ug/L		07/25/23 10:00	07/26/23 19:26	1
Molinate	<0.099		0.099		ug/L		07/25/23 10:00	07/26/23 19:26	1
Naphthalene	<0.30		0.30		ug/L		07/25/23 10:00	07/26/23 19:26	1
Parathion	<0.099		0.099		ug/L		07/25/23 10:00	07/26/23 19:26	1
Pendimethalin (Penoxaline)	<0.099		0.099		ug/L		07/25/23 10:00	07/26/23 19:26	1
Phenanthrene	<0.040		0.040		ug/L		07/25/23 10:00	07/26/23 19:26	1
Propachlor	<0.049		0.049		ug/L		07/25/23 10:00	07/26/23 19:26	1
Pyrene	<0.049		0.049		ug/L		07/25/23 10:00	07/26/23 19:26	1
Simazine	<0.049		0.049		ug/L		07/25/23 10:00	07/26/23 19:26	1
Terbacil	<0.099		0.099		ug/L		07/25/23 10:00	07/26/23 19:26	1
Terbuthylazine	<0.099		0.099		ug/L		07/25/23 10:00	07/26/23 19:26	1
Thiobencarb	<0.20		0.20		ug/L		07/25/23 10:00	07/26/23 19:26	1
Total Permethrin (mixed isomers)	<0.20		0.20		ug/L		07/25/23 10:00	07/26/23 19:26	1
trans-Nonachlor	<0.049		0.049		ug/L		07/25/23 10:00	07/26/23 19:26	1
Trifluralin	<0.099		0.099		ug/L		07/25/23 10:00	07/26/23 19:26	1
1-Methylnaphthalene	<0.099		0.099		ug/L		07/25/23 10:00	07/26/23 19:26	1
2-Methylnaphthalene	<0.099		0.099		ug/L		07/25/23 10:00	07/26/23 19:26	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*	*07/25/23 10:00*	*07/26/23 19:26*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Nitro-m-xylene	*105*		*70 - 130*	*07/25/23 10:00*	*07/26/23 19:26*	*1*
Perylene-d12	*84*		*70 - 130*	*07/25/23 10:00*	*07/26/23 19:26*	*1*
Triphenylphosphate	*109*		*70 - 130*	*07/25/23 10:00*	*07/26/23 19:26*	*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		07/27/23 12:50	07/28/23 02:30	1
1,2-D bromo-3-Chloropropane	<0.010		0.010		ug/L		07/27/23 12:50	07/28/23 02:30	1
1,2-D bromoethane	<0.010		0.010		ug/L		07/27/23 12:50	07/28/23 02:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane (Surr)	*103*		*60 - 140*	*07/27/23 12:50*	*07/28/23 02:30*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.010		0.010		ug/L		07/26/23 12:57	07/26/23 23:35	1
Dieldrin	<0.010		0.010		ug/L		07/26/23 12:57	07/26/23 23:35	1
Toxaphene	<0.50		0.50		ug/L		07/26/23 12:57	07/26/23 23:35	1
Alachlor	<0.10		0.10		ug/L		07/26/23 12:57	07/26/23 23:35	1
Chlordane (n.o.s.)	<0.10		0.10		ug/L		07/26/23 12:57	07/26/23 23:35	1

Client Sample ID: AIEA GULCH WELLS PUMP 2

Date Collected: 07/20/23 09:00
Date Received: 07/21/23 09:45

Lab Sample ID: 380-55688-1

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Endrin	<0.010		0.010		ug/L		07/26/23 12:57	07/26/23 23:35	1
Heptachlor	<0.010		0.010		ug/L		07/26/23 12:57	07/26/23 23:35	1
Heptachlor epoxide	<0.010		0.010		ug/L		07/26/23 12:57	07/26/23 23:35	1
gamma-BHC (Lindane)	<0.010		0.010		ug/L		07/26/23 12:57	07/26/23 23:35	1
Methoxychlor	<0.050		0.050		ug/L		07/26/23 12:57	07/26/23 23:35	1
PCB-1016	<0.071		0.071		ug/L		07/26/23 12:57	07/26/23 23:35	1
PCB-1221	<0.10		0.10		ug/L		07/26/23 12:57	07/26/23 23:35	1
PCB-1232	<0.10		0.10		ug/L		07/26/23 12:57	07/26/23 23:35	1
PCB-1242	<0.10		0.10		ug/L		07/26/23 12:57	07/26/23 23:35	1
PCB-1248	<0.10		0.10		ug/L		07/26/23 12:57	07/26/23 23:35	1
PCB-1254	<0.10		0.10		ug/L		07/26/23 12:57	07/26/23 23:35	1
PCB-1260	<0.071		0.071		ug/L		07/26/23 12:57	07/26/23 23:35	1
Polychlorinated biphenyls, Total	<0.10		0.10		ug/L		07/26/23 12:57	07/26/23 23:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*100*		*70 - 130*	*07/26/23 12:57*	*07/26/23 23:35*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Bromide	**150**		5.0		ug/L			07/27/23 23:57	1
Chloride	**96**		2.5		mg/L			07/21/23 19:51	5
Nitrate as N	**0.48**		0.25		mg/L			07/21/23 19:51	5
Nitrite as N	<0.25		0.25		mg/L			07/21/23 19:51	5
Sulfate	**12**		1.3		mg/L			07/21/23 19:51	5

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**21**		1.0		mg/L			07/24/23 11:21	1
Magnesium	**17**		0.10		mg/L			07/24/23 11:21	1
Potassium	**2.0**		1.0		mg/L			07/24/23 11:21	1
Sodium	**31**		1.0		mg/L			07/24/23 11:21	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			08/30/23 15:24	1
Arsenic	<1.0		1.0		ug/L			08/30/23 15:24	1
Beryllium	<0.30		0.30		ug/L			08/30/23 15:24	1
Cadmium	<0.50		0.50		ug/L			08/30/23 15:24	1
Chromium	**1.6**		0.90		ug/L			08/30/23 15:24	1
Copper	**3.3**		1.0		ug/L			08/30/23 15:24	1
Lead	<0.50		0.50		ug/L			08/30/23 15:24	1
Nickel	<1.0		1.0		ug/L			08/30/23 15:24	1
Selenium	<2.0		2.0		ug/L			08/30/23 15:24	1
Silver	<0.50		0.50		ug/L			08/30/23 15:24	1
Thallium	<0.30		0.30		ug/L			08/30/23 15:24	1
Zinc	<5.0		5.0		ug/L			08/30/23 15:24	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.10		ug/L		07/27/23 12:00	07/27/23 21:03	1

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

Job ID: 380-55688-1

Client Sample ID: AIEA GULCH WELLS PUMP 2

Date Collected: 07/20/23 09:00
Date Received: 07/21/23 09:45

Lab Sample ID: 380-55688-1

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity (SM 2320B)	**53**		2.0		mg/L			07/24/23 17:17	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**53**		2.0		mg/L			07/24/23 17:17	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<2.0		2.0		mg/L			07/24/23 17:17	1
Specific Conductance (SM 2510B)	**430**		2.0		umhos/cm			07/24/23 17:17	1
Total Dissolved Solids (SM 2540C)	**260**		20		mg/L			07/24/23 22:31	1
Fluoride (SM 4500 F C)	<0.050		0.050		mg/L			07/24/23 18:27	1
pH (SM 4500 H+ B)	**7.9**	**HF**			SU			07/24/23 17:17	1
Sulfide (SM 4500 S2 D)	<0.050	F1	0.050		mg/L			07/26/23 14:58	1

Method: 625 Acid/Base/PAH + TICs - EPA 625 Base/Neutral and Acid Organics i

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/05/23 15:09	1
1-Methylphenanthrene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/05/23 15:09	1
2,3,5-Trimethylnaphthalene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/05/23 15:09	1
2,4,5-Trichlorophenol	ND		0.1	0.05	µg/L		07/21/23 00:00	09/05/23 15:09	1
2,4,6-Trichlorophenol	ND		0.1	0.05	µg/L		07/21/23 00:00	09/05/23 15:09	1
2,4-Dichlorophenol	ND		0.1	0.05	µg/L		07/21/23 00:00	09/05/23 15:09	1
2,4-Dinitrophenol	ND		0.2	0.1	µg/L		07/21/23 00:00	09/05/23 15:09	1
2,6-Dichlorophenol	ND		0.1	0.05	µg/L		07/21/23 00:00	09/05/23 15:09	1
2,6-Dimethylnaphthalene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/05/23 15:09	1
2,6-Di-tert-butyl-4-methylphenol	ND		0.1	0.05	µg/L		07/21/23 00:00	09/05/23 15:09	1
2,6-Di-tert-butylphenol	ND		0.1	0.05	µg/L		07/21/23 00:00	09/05/23 15:09	1
2-Chloronaphthalene	ND		0.1	0.05	µg/L		07/21/23 00:00	09/05/23 15:09	1
2-Chlorophenol	ND		0.1	0.05	µg/L		07/21/23 00:00	09/05/23 15:09	1
2-Methyl-4,6-dinitrophenol	ND		0.2	0.1	µg/L		07/21/23 00:00	09/05/23 15:09	1
2-Methylnaphthalene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/05/23 15:09	1
2-Methylphenol	ND		0.2	0.1	µg/L		07/21/23 00:00	09/05/23 15:09	1
2-Nitroaniline	ND		0.1	0.05	µg/L		07/21/23 00:00	09/05/23 15:09	1
2-Nitrophenol	ND		0.2	0.1	µg/L		07/21/23 00:00	09/05/23 15:09	1
3+4-Methylphenol	ND		0.2	0.1	µg/L		07/21/23 00:00	09/05/23 15:09	1
3-Nitroaniline	ND		0.1	0.05	µg/L		07/21/23 00:00	09/05/23 15:09	1
4-Bromophenylphenyl ether	ND		0.1	0.05	µg/L		07/21/23 00:00	09/05/23 15:09	1
4-Chloro-3-methylphenol	ND		0.2	0.1	µg/L		07/21/23 00:00	09/05/23 15:09	1
4-Chloroaniline	ND		0.1	0.05	µg/L		07/21/23 00:00	09/05/23 15:09	1
4-Chlorophenylphenyl ether	ND		0.1	0.05	µg/L		07/21/23 00:00	09/05/23 15:09	1
4-Nitroaniline	ND		0.1	0.05	µg/L		07/21/23 00:00	09/05/23 15:09	1
4-Nitrophenol	ND		0.2	0.1	µg/L		07/21/23 00:00	09/05/23 15:09	1
6-tert-butyl-2,4-dimethylphenol	ND		0.1	0.05	µg/L		07/21/23 00:00	09/05/23 15:09	1
Acenaphthene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/05/23 15:09	1
Acenaphthylene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/05/23 15:09	1
Aniline	ND		0.1	0.05	µg/L		07/21/23 00:00	09/05/23 15:09	1
Anthracene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/05/23 15:09	1
Benz[a]anthracene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/05/23 15:09	1
Benzidine	ND		0.1	0.05	µg/L		07/21/23 00:00	09/05/23 15:09	1
Benzo[a]pyrene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/05/23 15:09	1
Benzo[b]fluoranthene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/05/23 15:09	1
Benzo[e]pyrene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/05/23 15:09	1
Benzo[g,h,i]perylene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/05/23 15:09	1

Client Sample ID: AIEA GULCH WELLS PUMP 2

Date Collected: 07/20/23 09:00
Date Received: 07/21/23 09:45

Lab Sample ID: 380-55688-1

Matrix: Water

Method: 625 Acid/Base/PAH + TICs - EPA 625 Base/Neutral and Acid Organics i (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/05/23 15:09	1
Benzoic Acid	**0.289**		0.2	0.1	µg/L		07/21/23 00:00	09/05/23 15:09	1
Benzyl Alcohol	ND		0.2	0.1	µg/L		07/21/23 00:00	09/05/23 15:09	1
Biphenyl	ND		0.005	0.001	µg/L		07/21/23 00:00	09/05/23 15:09	1
Bis(2-Chloroethoxy) methane	ND		0.1	0.05	µg/L		07/21/23 00:00	09/05/23 15:09	1
Bis(2-Chloroethyl) ether	ND		0.1	0.05	µg/L		07/21/23 00:00	09/05/23 15:09	1
Bis(2-Chloroisopropyl) ether	ND		0.1	0.05	µg/L		07/21/23 00:00	09/05/23 15:09	1
Chrysene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/05/23 15:09	1
Dibenz[a,h]anthracene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/05/23 15:09	1
Dibenzo[a,l]pyrene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/05/23 15:09	1
Dibenzofuran	ND		0.1	0.05	µg/L		07/21/23 00:00	09/05/23 15:09	1
Dibenzothiophene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/05/23 15:09	1
Disalicylidenepropanediamine	**0.116**		0.1	0.05	µg/L		07/21/23 00:00	09/05/23 15:09	1
Fluoranthene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/05/23 15:09	1
Fluorene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/05/23 15:09	1
Hexachloroethane	ND		0.1	0.05	µg/L		07/21/23 00:00	09/05/23 15:09	1
Indeno[1,2,3-cd]pyrene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/05/23 15:09	1
Naphthalene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/05/23 15:09	1
Nitrobenzene	ND		0.1	0.05	µg/L		07/21/23 00:00	09/05/23 15:09	1
N-Nitrosodi-n-propylamine	ND		0.1	0.05	µg/L		07/21/23 00:00	09/05/23 15:09	1
N-Nitrosodiphenylamine	ND		0.1	0.05	µg/L		07/21/23 00:00	09/05/23 15:09	1
Pentachlorophenol	ND		0.1	0.05	µg/L		07/21/23 00:00	09/05/23 15:09	1
Perylene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/05/23 15:09	1
Phenanthrene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/05/23 15:09	1
Phenol	ND		0.2	0.1	µg/L		07/21/23 00:00	09/05/23 15:09	1
p-tert-Butylphenol	ND		0.1	0.05	µg/L		07/21/23 00:00	09/05/23 15:09	1
Pyrene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/05/23 15:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
(2,4,6-Tribromophenol)	*139*		*31 - 143*	*07/21/23 00:00*	*09/05/23 15:09*	*1*
(d10-Acenaphthene)	*95*		*27 - 133*	*07/21/23 00:00*	*09/05/23 15:09*	*1*
(d10-Phenanthrene)	*101*		*43 - 129*	*07/21/23 00:00*	*09/05/23 15:09*	*1*
(d12-Chrysene)	*102*		*52 - 144*	*07/21/23 00:00*	*09/05/23 15:09*	*1*
(d12-Perylene)	*104*		*36 - 161*	*07/21/23 00:00*	*09/05/23 15:09*	*1*
(d5-Phenol)	*77*		*0 - 85*	*07/21/23 00:00*	*09/05/23 15:09*	*1*
(d8-Naphthalene)	*85*		*25 - 125*	*07/21/23 00:00*	*09/05/23 15:09*	*1*

Method: 8015 Ethanol - SW846 8015B Gasoline Range Organics

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ETHANOL	ND	U	2000		ug/L			07/21/23 18:12	1

Method: 8015 Gas (Purgeable) LL (EAL) - SW846 8015B Gasoline Range Organics

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GASOLINE	ND	U	0.02		mg/L			07/24/23 19:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
BROMOFLUOROBENZENE	*81*		*60 - 140*		*07/24/23 19:39*	*1*

Method: 8015 LL DRO/MRO/JP5/JP8 - 8015 - TPH DRO/ORO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DIESEL	ND	U	0.027		mg/L			07/28/23 23:32	1

Client Sample ID: AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-55688-1

Date Collected: 07/20/23 09:00

Matrix: Water

Date Received: 07/21/23 09:45

Method: 8015 LL DRO/MRO/JP5/JP8 - 8015 - TPH DRO/ORO (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
JP5	ND	U	0.054		mg/L			07/28/23 23:32	1
JP8	ND	U	0.054		mg/L			07/28/23 23:32	1
MOTOR OIL	ND	U	0.054		mg/L			07/28/23 23:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
BROMOBENZENE	*62*		*60 - 130*		*07/28/23 23:32*	*1*
HEXACOSANE	*83*		*60 - 130*		*07/28/23 23:32*	*1*

Client Sample ID: TB: AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-55688-2

Date Collected: 07/20/23 09:00

Matrix: Water

Date Received: 07/21/23 09:45

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			08/01/23 16:02	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			07/24/23 17:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*70 - 130*		*07/24/23 17:42*	*1*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*07/24/23 17:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*07/24/23 17:42*	*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	*1	0.50		ug/L			07/31/23 02:48	1
1,1,1-Trichloroethane	<0.50		0.50		ug/L			07/31/23 02:48	1
1,1,2,2-Tetrachloroethane	<0.50		0.50		ug/L			07/31/23 02:48	1
1,1,2-Trichloroethane	<0.50		0.50		ug/L			07/31/23 02:48	1
1,1-Dichloroethane	<0.50		0.50		ug/L			07/31/23 02:48	1
1,1-Dichlorethylene	<0.50		0.50		ug/L			07/31/23 02:48	1
1,1-Dichloropropene	<0.50		0.50		ug/L			07/31/23 02:48	1
1,2,3-Trichlorobenzene	<0.50		0.50		ug/L			07/31/23 02:48	1
1,2,3-Trichloropropane	<0.50		0.50		ug/L			07/31/23 02:48	1
1,2,4-Trichlorobenzene	<0.50		0.50		ug/L			07/31/23 02:48	1
1,2,4-Trimethy benzene	<0.50		0.50		ug/L			07/31/23 02:48	1
1,2-Dichloroethane	<0.50		0.50		ug/L			07/31/23 02:48	1
1,2-Dichloropropane	<0.50		0.50		ug/L			07/31/23 02:48	1
1,3,5-Trimethy benzene	<0.50		0.50		ug/L			07/31/23 02:48	1
1,3-Dichloropropane	<0.50		0.50		ug/L			07/31/23 02:48	1
2,2-Dichloropropane	<0.50		0.50		ug/L			07/31/23 02:48	1
2-Butanone (MEK)	<5.0		5.0		ug/L			07/31/23 02:48	1
4-Methyl-2-pentanone (MIBK)	<5.0		5.0		ug/L			07/31/23 21:40	1
Acetone	<500		500		ug/L			07/31/23 02:48	1
Benzene	<0.50		0.50		ug/L			07/31/23 02:48	1
Bromobenzene	<0.50		0.50		ug/L			07/31/23 02:48	1
Bromochloromethane	<0.50		0.50		ug/L			07/31/23 02:48	1
Bromodichloromethane	<0.50		0.50		ug/L			07/31/23 02:48	1
Bromoform	<0.50		0.50		ug/L			07/31/23 02:48	1

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

Job ID: 380-55688-1

Client Sample ID: TB: AIEA GULCH WELLS PUMP 2
Date Collected: 07/20/23 09:00
Date Received: 07/21/23 09:45

Lab Sample ID: 380-55688-2
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane (Methyl Bromide)	<0.50		0.50		ug/L			07/31/23 02:48	1
Carbon disulfide	<0.50		0.50		ug/L			07/31/23 02:48	1
Carbon tetrachloride	<0.50		0.50		ug/L			07/31/23 02:48	1
Chlorobenzene	<0.50		0.50		ug/L			07/31/23 02:48	1
Chlorodibromomethane	<0.50		0.50		ug/L			07/31/23 02:48	1
Chloroethane	<0.50		0.50		ug/L			07/31/23 02:48	1
Chloroform (Trichloromethane)	<0.50		0.50		ug/L			07/31/23 02:48	1
Dichloromethane	<0.50		0.50		ug/L			07/31/23 02:48	1
cis-1,2-Dichloroethylene	<0.50		0.50		ug/L			07/31/23 02:48	1
cis-1,3-Dichloropropene	<0.50		0.50		ug/L			07/31/23 02:48	1
Dibromomethane	<0.50		0.50		ug/L			07/31/23 02:48	1
Dichlorodifluoromethane	<0.50		0.50		ug/L			07/31/23 02:48	1
Ethylbenzene	<0.50		0.50		ug/L			07/31/23 02:48	1
Hexachlorobutadiene	<0.50		0.50		ug/L			07/31/23 02:48	1
Isopropy benzene	<0.50		0.50		ug/L			07/31/23 02:48	1
m,p-Xylenes	<0.50		0.50		ug/L			07/31/23 02:48	1
m-Dichlorobenzene (1,3-DCB)	<0.50		0.50		ug/L			07/31/23 02:48	1
Methyl-tert-butyl Ether (MTBE)	<0.50		0.50		ug/L			07/31/23 02:48	1
Naphthalene	<0.50		0.50		ug/L			07/31/23 02:48	1
n-Butylbenzene	<0.50		0.50		ug/L			07/31/23 02:48	1
N-Propylbenzene	<0.50		0.50		ug/L			07/31/23 02:48	1
o-Dichlorobenzene (1,2-DCB)	<0.50		0.50		ug/L			07/31/23 02:48	1
o-Chlorotoluene	<0.50		0.50		ug/L			07/31/23 02:48	1
o-Xylene	<0.50		0.50		ug/L			07/31/23 02:48	1
p-Chlorotoluene	<0.50		0.50		ug/L			07/31/23 02:48	1
p-Dichlorobenzene (1,4-DCB)	<0.50		0.50		ug/L			07/31/23 02:48	1
p-Isopropyltoluene	<0.50		0.50		ug/L			07/31/23 02:48	1
sec-Butylbenzene	<0.50		0.50		ug/L			07/31/23 02:48	1
Styrene	<0.50		0.50		ug/L			07/31/23 02:48	1
Tert-amyl methyl ether	<3.0		3.0		ug/L			07/31/23 02:48	1
Tert-butyl ethyl ether	<3.0		3.0		ug/L			07/31/23 02:48	1
tert-Butylbenzene	<0.50		0.50		ug/L			07/31/23 02:48	1
Tetrachloroethene (PCE)	<0.50	*1	0.50		ug/L			07/31/23 02:48	1
Toluene	<0.50		0.50		ug/L			07/31/23 02:48	1
1,3-Dichloropropene, Total	<0.50		0.50		ug/L			07/31/23 02:48	1
Xylenes, Total	<0.50		0.50		ug/L			07/31/23 02:48	1
trans-1,2-Dichloroethylene	<0.50		0.50		ug/L			07/31/23 02:48	1
trans-1,3-Dichloropropene	<0.50		0.50		ug/L			07/31/23 02:48	1
Trichloroethylene (TCE)	<0.50		0.50		ug/L			07/31/23 02:48	1
Trichlorofluoromethane (Freon 11)	<0.50		0.50		ug/L			07/31/23 02:48	1
Vinyl Chloride (VC)	<0.30		0.30		ug/L			07/31/23 02:48	1
Trichlorotrifluoroethane	<0.50		0.50		ug/L			07/31/23 02:48	1
Bromoethane	<0.50		0.50		ug/L			07/31/23 02:48	1
Chloromethane (methyl chloride)	<0.50		0.50		ug/L			07/31/23 02:48	1
Diisopropyl ether	<3.0		3.0		ug/L			07/31/23 02:48	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*7.1*	*T J*	*ug/L*		*1.09*	*N/A*		*07/31/23 02:48*	*1*
Unknown	*190*	*T J*	*ug/L*		*1.20*	*N/A*		*07/31/23 02:48*	*1*
Unknown	*0.65*	*T J*	*ug/L*		*1.67*	*N/A*		*07/31/23 02:48*	*1*

Client Sample ID: TB: AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-55688-2

Date Collected: 07/20/23 09:00

Matrix: Water

Date Received: 07/21/23 09:45

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

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	0.67	T J	ug/L		8.55	N/A		07/31/23 02:48	1
Furfural	1.5	T J N	ug/L		8.61	98-01-1		07/31/23 21:40	1
Furfural	0.52	T J N	ug/L		10.18	98-01-1		07/31/23 02:48	1
Unknown	0.93	T J	ug/L		13.67	N/A		07/31/23 02:48	1
Unknown	0.91	T J	ug/L		14.02	N/A		07/31/23 02:48	1
Unknown	0.50	T J	ug/L		14.19	N/A		07/31/23 02:48	1
Unknown	1.7	T J	ug/L		14.61	N/A		07/31/23 02:48	1
Unknown	0.92	T J	ug/L		14.79	N/A		07/31/23 02:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		70 - 130		07/31/23 02:48	1
1,2-Dichloroethane-d4 (Surr)	102		70 - 130		07/31/23 21:40	1
4-Bromofluorobenzene (Surr)	111		70 - 130		07/31/23 02:48	1
4-Bromofluorobenzene (Surr)	108		70 - 130		07/31/23 21:40	1
Toluene-d8 (Surr)	91		70 - 130		07/31/23 02:48	1
Toluene-d8 (Surr)	93		70 - 130		07/31/23 21:40	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		07/27/23 12:50	07/28/23 03:04	1
1,2-D bromo-3-Chloropropane	<0.010		0.010		ug/L		07/27/23 12:50	07/28/23 03:04	1
1,2-D bromoethane	<0.010		0.010		ug/L		07/27/23 12:50	07/28/23 03:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dibromopropane (Surr)	103		60 - 140	07/27/23 12:50	07/28/23 03:04	1

Method: 8015 Gas (Purgeable) LL (EAL) - SW846 8015B Gasoline Range Organics

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GASOLINE	ND	U	0.02		mg/L			07/24/23 23:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
BROMOFLUOROBENZENE	77		60 - 140		07/24/23 23:09	1

Action Limit Summary

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

Job ID: 380-55688-1

Client Sample ID: AIEA GULCH WELLS PUMP 2 — Lab Sample ID: 380-55688-1

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	*1	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	<0.049		ug/L		2		525.2	Total/NA
Atrazine	<0.049		ug/L		3		525.2	Total/NA
Benzo[a]pyrene	<0.020		ug/L		0.2		525.2	Total/NA
Bis(2-ethylhexyl) phthalate	<0.59		ug/L		6		525.2	Total/NA
Di(2-ethylhexyl)adipate	<0.59		ug/L		400		525.2	Total/NA
Endrin	<0.099		ug/L		2		525.2	Total/NA
gamma-BHC (Lindane)	<0.040		ug/L		0.2		525.2	Total/NA
Heptachlor	<0.040	^3+	ug/L		0.4		525.2	Total/NA
Heptachlor epoxide (isomer B)	<0.049		ug/L		0.2		525.2	Total/NA
Hexachlorobenzene	<0.049		ug/L		1		525.2	Total/NA
Hexachlorocyclopentadiene	<0.049		ug/L		50		525.2	Total/NA
Methoxychlor	<0.099		ug/L		40		525.2	Total/NA
Simazine	<0.049		ug/L		4		525.2	Total/NA
1,2,3-Trichloropropane	<0.020		ug/L	0.6000			504.1	Total/NA
1,2-D bromo-3-Chloropropane	<0.010		ug/L		0.2		504.1	Total/NA
1,2-D bromoethane	<0.010		ug/L		0.05		504.1	Total/NA
Toxaphene	<0.50		ug/L		3		505	Total/NA
Alachlor	<0.10		ug/L		2		505	Total/NA
Endrin	<0.010		ug/L		2		505	Total/NA
Heptachlor	<0.010		ug/L		0.4		505	Total/NA
Heptachlor epoxide	<0.010		ug/L		0.2		505	Total/NA
gamma-BHC (Lindane)	<0.010		ug/L		0.2		505	Total/NA
Methoxychlor	<0.050		ug/L		40		505	Total/NA
Polychlorinated biphenyls, Total	<0.10		ug/L		0.5		505	Total/NA
Chloride	96		mg/L			250	300.0	Total/NA

Action Limit Summary

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

Job ID: 380-55688-1

Client Sample ID: AIEA GULCH WELLS PUMP 2 (Continued) — Lab Sample ID: 380-55688-1

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
Nitrate as N	0.48		mg/L		10		300.0	Total/NA
Nitrite as N	<0.25		mg/L		1		300.0	Total/NA
Sulfate	12		mg/L			250	300.0	Total/NA
Antimony	<1.0		ug/L		6		200.8	Total/NA
Arsenic	<1.0		ug/L		10		200.8	Total/NA
Beryllium	<0.30		ug/L		4		200.8	Total/NA
Cadmium	<0.50		ug/L		5		200.8	Total/NA
Chromium	1.6		ug/L		100		200.8	Total/NA
Copper	3.3		ug/L			1300	200.8	Total/NA
Lead	<0.50		ug/L		15.000		200.8	Total/NA
Selenium	<2.0		ug/L		50		200.8	Total/NA
Silver	<0.50		ug/L			100	200.8	Total/NA
Thallium	<0.30		ug/L		2		200.8	Total/NA
Zinc	<5.0		ug/L			5000	200.8	Total/NA
Mercury	<0.10		ug/L		2		245.1	Total/NA
Total Dissolved Solids	260		mg/L			500	SM 2540C	Total/NA
Fluoride	<0.050		mg/L		4	2	SM 4500 F C	Total/NA

Client Sample ID: TB: AIEA GULCH WELLS PUMP 2 — Lab Sample ID: 380-55688-2

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	*1	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

Action Limit Summary

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

Job ID: 380-55688-1

Client Sample ID: TB: AIEA GULCH WELLS PUMP 2 (Continued)

Lab Sample ID: 380-55688-2

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
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
1,2-D bromo-3-Chloropropane	<0.010		ug/L		0.2	0.010	504.1	Total/NA
1,2-D bromoethane	<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: 380-55688-1

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)
380-55688-1	AIEA GULCH WELLS PUMP 2	96	96	98
380-55688-2	TB: AIEA GULCH WELLS PUMP 2	97	92	103
LCS 380-48365/2	Lab Control Sample	100	101	93
LCSD 380-48365/3	Lab Control Sample Dup	96	97	100
MB 380-48365/5	Method Blank	99	94	103

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 380-48365/4	Lab Control Sample	95	94	102

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)
380-55688-1	AIEA GULCH WELLS PUMP 2	102	83	96
380-55688-1	AIEA GULCH WELLS PUMP 2	100	107	94
380-55688-2	TB: AIEA GULCH WELLS PUMP 2	90	111	91
380-55688-2	TB: AIEA GULCH WELLS PUMP 2	102	108	93
LCS 380-49499/5	Lab Control Sample	93	117	89
LCS 380-49511/3	Lab Control Sample	98	106	94
LCS 380-49627/11	Lab Control Sample	101	96	101
LCSD 380-49499/6	Lab Control Sample Dup	113	100	97
LCSD 380-49511/4	Lab Control Sample Dup	99	111	97
LCSD 380-49627/12	Lab Control Sample Dup	99	100	102
MB 380-49499/8	Method Blank	99	99	102
MB 380-49511/5	Method Blank	95	100	105
MB 380-49627/15	Method Blank	102	100	93
MRL 380-49499/3	Lab Control Sample	96	107	90
MRL 380-49499/4	Lab Control Sample	101	111	94
MRL 380-49627/13	Lab Control Sample	102	102	95
MRL 380-49627/14	Lab Control Sample	104	100	95

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

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)
380-55688-1	AIEA GULCH WELLS PUMP 2	105	84	109
380-55859-T-2-A DU	Duplicate	104	92	109
380-55591-AU-1-A MS	Matrix Spike	101	90	115
LCS 380-48683/3-A	Lab Control Sample	104	92	113
LCSD 380-48683/4-A	Lab Control Sample Dup	101	93	115
MB 380-48683/1-A	Method Blank	101	88	108
MRL 380-48683/2-A	Lab Control Sample	102	90	102

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)
		DBPP1
Lab Sample ID	Client Sample ID	(60-140)
380-55656-D-1-A MS	Matrix Spike	103
380-55656-G-2-A DU	Duplicate	101
380-55688-1	AIEA GULCH WELLS PUMP 2	103
380-55688-2	TB: AIEA GULCH WELLS PUMP 2	103
LCS 380-49111/3-A	Lab Control Sample	105
MBL 380-49111/4-A	Method Blank	103
MRL 380-49111/1-A	Lab Control Sample	95
MRL 380-49111/2-A	Lab Control Sample	100

Surrogate Legend

DBPP = 1,2-D bromopropane (Surr)

Method: 505 - Organochlorine Pesticides/PCBs (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)
		TCX1
Lab Sample ID	Client Sample ID	(70-130)
380-55644-I-1-A MS	Matrix Spike	107
380-55644-I-2-A MS	Matrix Spike	96
380-55644-J-1-A MS	Matrix Spike	103
380-55644-J-2-A MS	Matrix Spike	92
380-55688-1	AIEA GULCH WELLS PUMP 2	100
MBL 380-48887/4-A	Method Blank	101
MRL 380-48887/2-A	Lab Control Sample	102
MRL 380-48887/3-A	Lab Control Sample	106

Surrogate Legend

TCX = Tetrachloro-m-xylene

Surrogate Summary

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

Job ID: 380-55688-1

Method: 625 Acid/Base/PAH + TICs - EPA 625 Base/Neutral and Acid Organics i

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

		Percent Surrogate Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	Acenapht (27-133)	Phenanth (43-129)	CRY (52-144)	NPT (25-125)	PHL (0-130)	PRY (36-161)	TBP (30-130)
108517-B1	Method Blank	100	99	98	93	129	103	124
108517-BS1	Lab Control Sample	109	104	100	99	104	106	101
108517-BS2	Lab Control Sample Dup	107	105	101	96	84	107	97

Surrogate Legend

(d10-Acenaphthene) = (d10-Acenaphthene)
(d10-Phenanthrene) = (d10-Phenanthrene)
CRY = (d12-Chrysene)
NPT = (d8-Naphthalene)
PHL = (d5-Phenol)
PRY = (d12-Perylene)
TBP = (2,4,6-Tribromophenol)

Method: 625 Acid/Base/PAH + TICs - EPA 625 Base/Neutral and Acid Organics i

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

		Percent Surrogate Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	Acenapht (27-133)	Phenanth (43-129)	CRY (52-144)	NPT (25-125)	PHL (0-85)	PRY (36-161)	TBP (31-143)
380-55688-1	AIEA GULCH WELLS PUMP 2	95	101	102	85	77	104	139

Surrogate Legend

(d10-Acenaphthene) = (d10-Acenaphthene)
(d10-Phenanthrene) = (d10-Phenanthrene)
CRY = (d12-Chrysene)
NPT = (d8-Naphthalene)
PHL = (d5-Phenol)
PRY = (d12-Perylene)
TBP = (2,4,6-Tribromophenol)

Method: 8015 Gas (Purgeable) LL (EAL) - SW846 8015B Gasoline Range Organics

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

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	BFB (60-140)
23G209-01M	Matrix Spike	106
23G209-01S	Matrix Spike Duplicate	111

Surrogate Legend

BFB = BROMOFLUOROBENZENE

Method: 8015 Gas (Purgeable) LL (EAL) - SW846 8015B Gasoline Range Organics

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

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	BFB
23VG39G13B	Method Blank	

Surrogate Legend

BFB = BROMOFLUOROBENZENE

Surrogate Summary

Client: City & County of Honolulu
Job ID: 380-55688-1
Project/Site: RED-HILL

Method: 8015 Gas (Purgeable) LL (EAL) - SW846 8015B Gasoline Range Organics

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

		Percent Surrogate Recovery (Acceptance Limits)
		BFB
Lab Sample ID	Client Sample ID	(70-130)
23VG39G13C	LCD	101
23VG39G13L	Lab Control Sample	105

Surrogate Legend

BFB = BROMOFLUOROBENZENE

Method: 8015 Gas (Purgeable) LL (EAL) - SW846 8015B Gasoline Range Organics

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

		Percent Surrogate Recovery (Acceptance Limits)
		BFB
Lab Sample ID	Client Sample ID	(60-140)
380-55688-1	AIEA GULCH WELLS PUMP 2	81
380-55688-2	TB: AIEA GULCH WELLS PUMP 2	77

Surrogate Legend

BFB = BROMOFLUOROBENZENE

Method: 8015 LL DRO/MRO/JP5/JP8 - 8015 - TPH DRO/ORO

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BB	XACOSA
Lab Sample ID	Client Sample ID		
23DSG037WB	Method Blank		

Surrogate Legend

BB = BROMOBENZENE
HEXACOSANE = HEXACOSANE

Method: 8015 LL DRO/MRO/JP5/JP8 - 8015 - TPH DRO/ORO

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BB	XACOSA
Lab Sample ID	Client Sample ID	(60-130)	(60-130)
23DSG037WL	Lab Control Sample	66	87
23J5G037WL	Lab Control Sample	74	88
23J8G037WL	Lab Control Sample	94	86

Surrogate Legend

BB = BROMOBENZENE
HEXACOSANE = HEXACOSANE

Method: 8015 LL DRO/MRO/JP5/JP8 - 8015 - TPH DRO/ORO

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BB	XACOSA
Lab Sample ID	Client Sample ID	(60-130)	(60-130)
380-55688-1	AIEA GULCH WELLS PUMP 2	62	83

Surrogate Legend

BB = BROMOBENZENE

Surrogate Summary

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

Job ID: 380-55688-1

HEXACOSANE = HEXACOSANE

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

Lab Sample ID: MB 380-49499/8
Matrix: Water
Analysis Batch: 49499

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			07/30/23 15:22	1
1,1,1-Trichloroethane	<0.50		0.50		ug/L			07/30/23 15:22	1
1,1,2,2-Tetrachloroethane	<0.50		0.50		ug/L			07/30/23 15:22	1
1,1,2-Trichloroethane	<0.50		0.50		ug/L			07/30/23 15:22	1
1,1-Dichloroethane	<0.50		0.50		ug/L			07/30/23 15:22	1
1,1-Dichlorethylene	<0.50		0.50		ug/L			07/30/23 15:22	1
1,1-Dichloropropene	<0.50		0.50		ug/L			07/30/23 15:22	1
1,2,3-Trichlorobenzene	<0.50		0.50		ug/L			07/30/23 15:22	1
1,2,3-Trichloropropane	<0.50		0.50		ug/L			07/30/23 15:22	1
1,2,4-Trichlorobenzene	<0.50		0.50		ug/L			07/30/23 15:22	1
1,2,4-Trimethy benzene	<0.50		0.50		ug/L			07/30/23 15:22	1
1,2-Dichloroethane	<0.50		0.50		ug/L			07/30/23 15:22	1
1,2-Dichloropropane	<0.50		0.50		ug/L			07/30/23 15:22	1
1,3,5-Trimethy benzene	<0.50		0.50		ug/L			07/30/23 15:22	1
1,3-Dichloropropane	<0.50		0.50		ug/L			07/30/23 15:22	1
2,2-Dichloropropane	<0.50		0.50		ug/L			07/30/23 15:22	1
2-Butanone (MEK)	<5.0		5.0		ug/L			07/30/23 15:22	1
4-Methyl-2-pentanone (MIBK)	<5.0		5.0		ug/L			07/30/23 15:22	1
Acetone	<500		500		ug/L			07/30/23 15:22	1
Benzene	<0.50		0.50		ug/L			07/30/23 15:22	1
Bromobenzene	<0.50		0.50		ug/L			07/30/23 15:22	1
Bromochloromethane	<0.50		0.50		ug/L			07/30/23 15:22	1
Bromodichloromethane	<0.50		0.50		ug/L			07/30/23 15:22	1
Bromoform	<0.50		0.50		ug/L			07/30/23 15:22	1
Bromomethane (Methyl Bromide)	<0.50		0.50		ug/L			07/30/23 15:22	1
Carbon disulfide	<0.50		0.50		ug/L			07/30/23 15:22	1
Carbon tetrachloride	<0.50		0.50		ug/L			07/30/23 15:22	1
Chlorobenzene	<0.50		0.50		ug/L			07/30/23 15:22	1
Chlorodibromomethane	<0.50		0.50		ug/L			07/30/23 15:22	1
Chloroethane	<0.50		0.50		ug/L			07/30/23 15:22	1
Chloroform (Trichloromethane)	<0.50		0.50		ug/L			07/30/23 15:22	1
cis-1,2-Dichloroethylene	<0.50		0.50		ug/L			07/30/23 15:22	1
cis-1,3-Dichloropropene	<0.50		0.50		ug/L			07/30/23 15:22	1
Dibromomethane	<0.50		0.50		ug/L			07/30/23 15:22	1
Dichlorodifluoromethane	<0.50		0.50		ug/L			07/30/23 15:22	1
Dichloromethane	<0.50		0.50		ug/L			07/30/23 15:22	1
Ethylbenzene	<0.50		0.50		ug/L			07/30/23 15:22	1
Hexachlorobutadiene	<0.50		0.50		ug/L			07/30/23 15:22	1
Isopropy benzene	<0.50		0.50		ug/L			07/30/23 15:22	1
m,p-Xylenes	<0.50		0.50		ug/L			07/30/23 15:22	1
m-Dichlorobenzene (1,3-DCB)	<0.50		0.50		ug/L			07/30/23 15:22	1
Methyl-tert-butyl Ether (MTBE)	<0.50		0.50		ug/L			07/30/23 15:22	1
Naphthalene	<0.50		0.50		ug/L			07/30/23 15:22	1
n-Butylbenzene	<0.50		0.50		ug/L			07/30/23 15:22	1
N-Propylbenzene	<0.50		0.50		ug/L			07/30/23 15:22	1
o-Chlorotoluene	<0.50		0.50		ug/L			07/30/23 15:22	1
o-Dichlorobenzene (1,2-DCB)	<0.50		0.50		ug/L			07/30/23 15:22	1
o-Xylene	<0.50		0.50		ug/L			07/30/23 15:22	1

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

Lab Sample ID: MB 380-49499/8
Matrix: Water
Analysis Batch: 49499

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
p-Chlorotoluene	<0.50		0.50		ug/L			07/30/23 15:22	1
p-Dichlorobenzene (1,4-DCB)	<0.50		0.50		ug/L			07/30/23 15:22	1
p-Isopropyltoluene	<0.50		0.50		ug/L			07/30/23 15:22	1
sec-Butylbenzene	<0.50		0.50		ug/L			07/30/23 15:22	1
Styrene	<0.50		0.50		ug/L			07/30/23 15:22	1
Tert-amyl methyl ether	<3.0		3.0		ug/L			07/30/23 15:22	1
1,3-Dichloropropene, Total	<0.50		0.50		ug/L			07/30/23 15:22	1
Tert-butyl ethyl ether	<3.0		3.0		ug/L			07/30/23 15:22	1
tert-Butylbenzene	<0.50		0.50		ug/L			07/30/23 15:22	1
Tetrachloroethene (PCE)	<0.50		0.50		ug/L			07/30/23 15:22	1
Toluene	<0.50		0.50		ug/L			07/30/23 15:22	1
trans-1,2-Dichloroethylene	<0.50		0.50		ug/L			07/30/23 15:22	1
trans-1,3-Dichloropropene	<0.50		0.50		ug/L			07/30/23 15:22	1
Trichloroethylene (TCE)	<0.50		0.50		ug/L			07/30/23 15:22	1
Bromoethane	<0.50		0.50		ug/L			07/30/23 15:22	1
Trichlorofluoromethane (Freon 11)	<0.50		0.50		ug/L			07/30/23 15:22	1
Chloromethane (methyl chloride)	<0.50		0.50		ug/L			07/30/23 15:22	1
Trichlorotrifluoroethane	<0.50		0.50		ug/L			07/30/23 15:22	1
Diisopropyl ether	<3.0		3.0		ug/L			07/30/23 15:22	1
Vinyl Chloride (VC)	<0.30		0.30		ug/L			07/30/23 15:22	1
Xylenes, Total	<0.50		0.50		ug/L			07/30/23 15:22	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*17.0*	*T J*	*ug/L*		*1.09*	*N/A*		*07/30/23 15:22*	*1*
Unknown	*0.910*	*T J*	*ug/L*		*8.52*	*N/A*		*07/30/23 15:22*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*07/30/23 15:22*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*07/30/23 15:22*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*07/30/23 15:22*	*1*

Lab Sample ID: LCS 380-49499/5
Matrix: Water
Analysis Batch: 49499

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	5.06		ug/L		101	70 - 130		
1,1,1-Trichloroethane			5.00	5.10		ug/L		102	70 - 130		
1,1,2,2-Tetrachloroethane			5.00	5.75		ug/L		115	70 - 130		
1,1,2-Trichloroethane			5.00	3.68		ug/L		74	70 - 130		
1,1-Dichloroethane			5.00	4.35		ug/L		87	70 - 130		
1,1-Dichlorethylene			5.00	4.89		ug/L		98	70 - 130		
1,1-Dichloropropene			5.00	4.57		ug/L		91	70 - 130		
1,2,3-Trichlorobenzene			5.00	4.50		ug/L		90	70 - 130		
1,2,3-Trichloropropane			5.00	5.00		ug/L		100	70 - 130		
1,2,4-Trichlorobenzene			5.00	4.82		ug/L		96	70 - 130		
1,2,4-Trimethy benzene			5.00	5.35		ug/L		107	70 - 130		
1,2-Dichloroethane			5.00	4.28		ug/L		86	70 - 130		

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

Lab Sample ID: LCS 380-49499/5
Matrix: Water
Analysis Batch: 49499

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dichloropropane	5.00	4.30		ug/L		86	70 - 130
1,3,5-Trimethy benzene	5.00	5.41		ug/L		108	70 - 130
1,3-Dichloropropane	5.00	3.82		ug/L		76	70 - 130
2,2-Dichloropropane	5.00	5.28		ug/L		106	70 - 130
2-Butanone (MEK)	50.0	40.5		ug/L		81	70 - 130
4-Methyl-2-pentanone (MIBK)	50.0	37.5		ug/L		75	70 - 130
Acetone	50.0	42.7	J	ug/L		85	70 - 130
Benzene	5.00	4.48		ug/L		90	70 - 130
Bromobenzene	5.00	5.57		ug/L		111	70 - 130
Bromochloromethane	5.00	4.44		ug/L		89	70 - 130
Bromodichloromethane	5.00	4.66		ug/L		93	70 - 130
Bromoform	5.00	4.75		ug/L		95	70 - 130
Bromomethane (Methyl Bromide)	5.00	4.33		ug/L		87	70 - 130
Carbon disulfide	5.00	4.26		ug/L		85	70 - 130
Carbon tetrachloride	5.00	4.60		ug/L		92	70 - 130
Chlorobenzene	5.00	4.36		ug/L		87	70 - 130
Chlorodibromomethane	5.00	4.18		ug/L		84	70 - 130
cis-1,3-Dichloropropene	5.00	4.08		ug/L		82	70 - 130
Dichloromethane	5.00	4.72		ug/L		94	70 - 130
Ethylbenzene	5.00	4.57		ug/L		91	70 - 130
Hexachlorobutadiene	5.00	4.51		ug/L		90	70 - 130
Isopropy benzene	5.00	5.21		ug/L		104	70 - 130
m,p-Xylenes	10.0	8.57		ug/L		86	70 - 130
m-Dichlorobenzene (1,3-DCB)	5.00	4.63		ug/L		93	70 - 130
Methyl-tert-butyl Ether (MTBE)	5.00	4.94		ug/L		99	70 - 130
Naphthalene	5.00	4.10		ug/L		82	70 - 130
n-Butylbenzene	5.00	4.60		ug/L		92	70 - 130
N-Propylbenzene	5.00	4.21		ug/L		84	70 - 130
o-Chlorotoluene	5.00	5.68		ug/L		114	70 - 130
o-Dichlorobenzene (1,2-DCB)	5.00	5.23		ug/L		105	70 - 130
o-Xylene	5.00	4.75		ug/L		95	70 - 130
p-Chlorotoluene	5.00	4.52		ug/L		90	70 - 130
p-Dichlorobenzene (1,4-DCB)	5.00	4.91		ug/L		98	70 - 130
p-Isopropyltoluene	5.00	5.38		ug/L		108	70 - 130
sec-Butylbenzene	5.00	5.53		ug/L		111	70 - 130
Styrene	5.00	4.10		ug/L		82	70 - 130
Tert-amyl methyl ether	5.00	4.55		ug/L		91	70 - 130
1,3-Dichloropropene, Total	10.0	8.52		ug/L		85	70 - 130
Tert-butyl ethyl ether	5.00	4.23		ug/L		85	70 - 130
tert-Butylbenzene	5.00	5.05		ug/L		101	70 - 130
Tetrachloroethene (PCE)	5.00	4.57		ug/L		91	70 - 130
Toluene	5.00	4.03		ug/L		81	70 - 130
trans-1,2-Dichloroethylene	5.00	4.76		ug/L		95	70 - 130
trans-1,3-Dichloropropene	5.00	4.44		ug/L		89	70 - 130
Trichloroethylene (TCE)	5.00	4.74		ug/L		95	70 - 130
Bromoethane	5.00	4.84		ug/L		97	70 - 130
Trichlorofluoromethane (Freon 11)	5.00	4.99		ug/L		100	70 - 130
Trichlorotrifluoroethane	5.00	4.44		ug/L		89	70 - 130

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

Lab Sample ID: LCS 380-49499/5
Matrix: Water
Analysis Batch: 49499

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diisopropyl ether	5.00	3.81		ug/L		76	70 - 130
Vinyl Chloride (VC)	5.00	4.71		ug/L		94	70 - 130
Xylenes, Total	15.0	13.3		ug/L		89	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*
Toluene-d8 (Surr)	*89*		*70 - 130*

Lab Sample ID: LCSD 380-49499/6
Matrix: Water
Analysis Batch: 49499

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	5.83		ug/L		117	70 - 130	14	20
1,1,1-Trichloroethane	5.00	5.17		ug/L		103	70 - 130	1	20
1,1,2,2-Tetrachloroethane	5.00	4.57	*1	ug/L		91	70 - 130	23	20
1,1,2-Trichloroethane	5.00	4.77	*1	ug/L		95	70 - 130	26	20
1,1-Dichloroethane	5.00	4.97		ug/L		99	70 - 130	13	20
1,1-Dichlorethylene	5.00	4.63		ug/L		93	70 - 130	6	20
1,1-Dichloropropene	5.00	4.84		ug/L		97	70 - 130	6	20
1,2,3-Trichlorobenzene	5.00	4.95		ug/L		99	70 - 130	10	20
1,2,3-Trichloropropane	5.00	4.25		ug/L		85	70 - 130	16	20
1,2,4-Trichlorobenzene	5.00	4.92		ug/L		98	70 - 130	2	20
1,2,4-Trimethy benzene	5.00	4.70		ug/L		94	70 - 130	13	20
1,2-Dichloroethane	5.00	4.30		ug/L		86	70 - 130	0	20
1,2-Dichloropropane	5.00	4.77		ug/L		95	70 - 130	10	20
1,3,5-Trimethy benzene	5.00	4.73		ug/L		95	70 - 130	13	20
1,3-Dichloropropane	5.00	4.44		ug/L		89	70 - 130	15	20
2,2-Dichloropropane	5.00	5.74		ug/L		115	70 - 130	8	20
2-Butanone (MEK)	50.0	46.0		ug/L		92	70 - 130	13	20
4-Methyl-2-pentanone (MIBK)	50.0	38.7		ug/L		77	70 - 130	3	20
Acetone	50.0	38.9	J	ug/L		78	70 - 130	9	20
Benzene	5.00	5.01		ug/L		100	70 - 130	11	20
Bromobenzene	5.00	4.34	*1	ug/L		87	70 - 130	25	20
Bromochloromethane	5.00	5.05		ug/L		101	70 - 130	13	20
Bromodichloromethane	5.00	4.45		ug/L		89	70 - 130	5	20
Bromoform	5.00	4.87		ug/L		97	70 - 130	2	20
Bromomethane (Methyl Bromide)	5.00	4.77		ug/L		95	70 - 130	10	20
Carbon disulfide	5.00	4.83		ug/L		97	70 - 130	13	20
Carbon tetrachloride	5.00	4.81		ug/L		96	70 - 130	5	20
Chlorobenzene	5.00	4.14		ug/L		83	70 - 130	5	20
Chlorodibromomethane	5.00	4.00		ug/L		80	70 - 130	5	20
cis-1,3-Dichloropropene	5.00	4.56		ug/L		91	70 - 130	11	20
Dichloromethane	5.00	5.25		ug/L		105	70 - 130	11	20
Ethylbenzene	5.00	5.16		ug/L		103	70 - 130	12	20
Hexachlorobutadiene	5.00	5.16		ug/L		103	70 - 130	14	20
Isopropy benzene	5.00	4.68		ug/L		94	70 - 130	11	20

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

Lab Sample ID: LCSD 380-49499/6
Matrix: Water
Analysis Batch: 49499

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
m,p-Xylenes	10.0	9.62		ug/L		96	70 - 130	12	20
m-Dichlorobenzene (1,3-DCB)	5.00	4.41		ug/L		88	70 - 130	5	20
Methyl-tert-butyl Ether (MTBE)	5.00	4.88		ug/L		98	70 - 130	1	20
Naphthalene	5.00	4.49		ug/L		90	70 - 130	9	20
n-Butylbenzene	5.00	4.86		ug/L		97	70 - 130	5	20
N-Propylbenzene	5.00	4.50		ug/L		90	70 - 130	7	20
o-Chlorotoluene	5.00	5.21		ug/L		104	70 - 130	9	20
o-Dichlorobenzene (1,2-DCB)	5.00	4.53		ug/L		91	70 - 130	14	20
o-Xylene	5.00	5.14		ug/L		103	70 - 130	8	20
p-Chlorotoluene	5.00	4.63		ug/L		93	70 - 130	2	20
p-Dichlorobenzene (1,4-DCB)	5.00	4.52		ug/L		90	70 - 130	8	20
p-Isopropyltoluene	5.00	4.62		ug/L		92	70 - 130	15	20
sec-Butylbenzene	5.00	5.21		ug/L		104	70 - 130	6	20
Styrene	5.00	4.82		ug/L		96	70 - 130	16	20
Tert-amyl methyl ether	5.00	4.24		ug/L		85	70 - 130	7	20
1,3-Dichloropropene, Total	10.0	9.20		ug/L		92	70 - 130	8	20
Tert-butyl ethyl ether	5.00	4.29		ug/L		86	70 - 130	2	20
tert-Butylbenzene	5.00	4.20		ug/L		84	70 - 130	18	20
Tetrachloroethene (PCE)	5.00	4.71		ug/L		94	70 - 130	3	20
Toluene	5.00	4.44		ug/L		89	70 - 130	10	20
trans-1,2-Dichloroethylene	5.00	5.21		ug/L		104	70 - 130	9	20
trans-1,3-Dichloropropene	5.00	4.64		ug/L		93	70 - 130	4	20
Trichloroethylene (TCE)	5.00	4.93		ug/L		99	70 - 130	4	20
Bromoethane	5.00	5.39		ug/L		108	70 - 130	11	20
Trichlorofluoromethane (Freon 11)	5.00	5.73		ug/L		115	70 - 130	14	20
Trichlorotrifluoroethane	5.00	5.27		ug/L		105	70 - 130	17	20
Diisopropyl ether	5.00	4.19		ug/L		84	70 - 130	10	20
Vinyl Chloride (VC)	5.00	4.88		ug/L		98	70 - 130	3	20
Xylenes, Total	15.0	14.8		ug/L		98	70 - 130	10	20

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

Lab Sample ID: MRL 380-49499/3
Matrix: Water
Analysis Batch: 49499

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	0.570		ug/L		114	50 - 150
Vinyl Chloride (VC)	0.250	0.331		ug/L		133	50 - 150

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
Toluene-d8 (Surr)	*90*		*70 - 130*

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

Lab Sample ID: MRL 380-49499/4
Matrix: Water
Analysis Batch: 49499

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	0.545		ug/L		109	50 - 150
1,1,1-Trichloroethane	0.500	0.291	J	ug/L		58	50 - 150
1,1,2,2-Tetrachloroethane	0.500	0.737		ug/L		147	50 - 150
1,1,2-Trichloroethane	0.500	0.434	J	ug/L		87	50 - 150
1,1-Dichloroethane	0.500	0.524		ug/L		105	50 - 150
1,1-Dichlorethylene	0.500	0.446	J	ug/L		89	50 - 150
1,1-Dichloropropene	0.500	0.587		ug/L		117	50 - 150
1,2,3-Trichlorobenzene	0.500	0.496	J	ug/L		99	50 - 150
1,2,3-Trichloropropane	0.500	0.630		ug/L		126	50 - 150
1,2,4-Trichlorobenzene	0.500	0.323	J	ug/L		65	50 - 150
1,2,4-Trimethy benzene	0.500	0.604		ug/L		121	50 - 150
1,2-Dichloroethane	0.500	0.532		ug/L		106	50 - 150
1,2-Dichloropropane	0.500	0.498	J	ug/L		100	50 - 150
1,3,5-Trimethy benzene	0.500	0.621		ug/L		124	50 - 150
1,3-Dichloropropane	0.500	0.496	J	ug/L		99	50 - 150
2,2-Dichloropropane	0.500	0.407	J	ug/L		81	50 - 150
2-Butanone (MEK)	5.00	3.56	J	ug/L		71	50 - 150
4-Methyl-2-pentanone (MIBK)	5.00	5.15		ug/L		103	50 - 150
Acetone	5.00	<4.0		ug/L		68	50 - 150
Benzene	0.500	0.550		ug/L		110	50 - 150
Bromobenzene	0.500	0.592		ug/L		118	50 - 150
Bromochloromethane	0.500	0.367	J	ug/L		73	50 - 150
Bromodichloromethane	0.500	0.523		ug/L		105	50 - 150
Bromoform	0.500	0.495	J	ug/L		99	50 - 150
Bromomethane (Methyl Bromide)	0.500	0.464	J	ug/L		93	50 - 150
Carbon disulfide	0.500	0.502		ug/L		100	50 - 150
Carbon tetrachloride	0.500	0.301	J	ug/L		60	50 - 150
Chlorobenzene	0.500	0.514		ug/L		103	50 - 150
Chlorodibromomethane	0.500	0.535		ug/L		107	50 - 150
cis-1,3-Dichloropropene	0.500	0.383	J	ug/L		77	50 - 150
Dichloromethane	0.500	0.428	J	ug/L		86	50 - 150
Ethylbenzene	0.500	0.436	J	ug/L		87	50 - 150
Hexachlorobutadiene	0.500	0.367	J	ug/L		73	50 - 150
Isopropy benzene	0.500	0.624		ug/L		125	50 - 150
m,p-Xylenes	1.00	1.14		ug/L		114	50 - 150
m-Dichlorobenzene (1,3-DCB)	0.500	0.587		ug/L		117	50 - 150
Methyl-tert-butyl Ether (MTBE)	0.500	0.423	J	ug/L		85	50 - 150
Naphthalene	0.500	0.530		ug/L		106	50 - 150
n-Butylbenzene	0.500	0.601		ug/L		120	50 - 150
N-Propylbenzene	0.500	0.554		ug/L		111	50 - 150
o-Chlorotoluene	0.500	0.618		ug/L		124	50 - 150
o-Dichlorobenzene (1,2-DCB)	0.500	0.544		ug/L		109	50 - 150
o-Xylene	0.500	0.541		ug/L		108	50 - 150
p-Chlorotoluene	0.500	0.517		ug/L		103	50 - 150
p-Dichlorobenzene (1,4-DCB)	0.500	0.670		ug/L		134	50 - 150
p-Isopropyltoluene	0.500	0.614		ug/L		123	50 - 150
sec-Butylbenzene	0.500	0.679		ug/L		136	50 - 150
Styrene	0.500	0.488	J	ug/L		98	50 - 150

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

Lab Sample ID: MRL 380-49499/4
Matrix: Water
Analysis Batch: 49499

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Tert-amyl methyl ether	0.500	0.416	J	ug/L		83	50 - 150
1,3-Dichloropropene, Total	1.00	0.885		ug/L		89	50 - 150
Tert-butyl ethyl ether	0.500	0.527	J	ug/L		105	50 - 150
tert-Butylbenzene	0.500	0.594		ug/L		119	50 - 150
Tetrachloroethene (PCE)	0.500	0.421	J	ug/L		84	50 - 150
Toluene	0.500	0.491	J	ug/L		98	50 - 150
trans-1,2-Dichloroethylene	0.500	0.478	J	ug/L		96	50 - 150
trans-1,3-Dichloropropene	0.500	0.502		ug/L		100	50 - 150
Trichloroethylene (TCE)	0.500	0.548		ug/L		110	50 - 150
Bromoethane	0.500	0.369	J	ug/L		74	50 - 150
Trichlorofluoromethane (Freon 11)	0.500	0.609		ug/L		122	50 - 150
Trichlorotrifluoroethane	0.500	0.571		ug/L		114	50 - 150
Diisopropyl ether	0.500	0.356	J	ug/L		71	50 - 150
Vinyl Chloride (VC)	0.500	0.529		ug/L		106	50 - 150
Xylenes, Total	1.50	1.69		ug/L		112	50 - 150

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

Lab Sample ID: MB 380-49511/5
Matrix: Water
Analysis Batch: 49511

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			07/31/23 00:12	1
1,1,1-Trichloroethane	<0.50		0.50		ug/L			07/31/23 00:12	1
1,1,2,2-Tetrachloroethane	<0.50		0.50		ug/L			07/31/23 00:12	1
1,1,2-Trichloroethane	<0.50		0.50		ug/L			07/31/23 00:12	1
1,1-Dichloroethane	<0.50		0.50		ug/L			07/31/23 00:12	1
1,1-Dichlorethylene	<0.50		0.50		ug/L			07/31/23 00:12	1
1,1-Dichloropropene	<0.50		0.50		ug/L			07/31/23 00:12	1
1,2,3-Trichlorobenzene	<0.50		0.50		ug/L			07/31/23 00:12	1
1,2,3-Trichloropropane	<0.50		0.50		ug/L			07/31/23 00:12	1
1,2,4-Trichlorobenzene	<0.50		0.50		ug/L			07/31/23 00:12	1
1,2,4-Trimethy benzene	<0.50		0.50		ug/L			07/31/23 00:12	1
1,2-Dichloroethane	<0.50		0.50		ug/L			07/31/23 00:12	1
1,2-Dichloropropane	<0.50		0.50		ug/L			07/31/23 00:12	1
1,3,5-Trimethy benzene	<0.50		0.50		ug/L			07/31/23 00:12	1
1,3-Dichloropropane	<0.50		0.50		ug/L			07/31/23 00:12	1
2,2-Dichloropropane	<0.50		0.50		ug/L			07/31/23 00:12	1
2-Butanone (MEK)	<5.0		5.0		ug/L			07/31/23 00:12	1
4-Methyl-2-pentanone (MIBK)	<5.0		5.0		ug/L			07/31/23 00:12	1
Acetone	<500		500		ug/L			07/31/23 00:12	1
Benzene	<0.50		0.50		ug/L			07/31/23 00:12	1
Bromobenzene	<0.50		0.50		ug/L			07/31/23 00:12	1
Bromochloromethane	<0.50		0.50		ug/L			07/31/23 00:12	1

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

Lab Sample ID: MB 380-49511/5
Matrix: Water
Analysis Batch: 49511

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	<0.50		0.50		ug/L			07/31/23 00:12	1
Bromoform	<0.50		0.50		ug/L			07/31/23 00:12	1
Bromomethane (Methyl Bromide)	<0.50		0.50		ug/L			07/31/23 00:12	1
Carbon disulfide	<0.50		0.50		ug/L			07/31/23 00:12	1
Carbon tetrachloride	<0.50		0.50		ug/L			07/31/23 00:12	1
Chlorobenzene	<0.50		0.50		ug/L			07/31/23 00:12	1
Chlorodibromomethane	<0.50		0.50		ug/L			07/31/23 00:12	1
Chloroethane	<0.50		0.50		ug/L			07/31/23 00:12	1
Chloroform (Trichloromethane)	<0.50		0.50		ug/L			07/31/23 00:12	1
cis-1,2-Dichloroethylene	<0.50		0.50		ug/L			07/31/23 00:12	1
cis-1,3-Dichloropropene	<0.50		0.50		ug/L			07/31/23 00:12	1
Dibromomethane	<0.50		0.50		ug/L			07/31/23 00:12	1
Dichlorodifluoromethane	<0.50		0.50		ug/L			07/31/23 00:12	1
Dichloromethane	<0.50		0.50		ug/L			07/31/23 00:12	1
Ethylbenzene	<0.50		0.50		ug/L			07/31/23 00:12	1
Hexachlorobutadiene	<0.50		0.50		ug/L			07/31/23 00:12	1
Isopropy benzene	<0.50		0.50		ug/L			07/31/23 00:12	1
m,p-Xylenes	<0.50		0.50		ug/L			07/31/23 00:12	1
m-Dichlorobenzene (1,3-DCB)	<0.50		0.50		ug/L			07/31/23 00:12	1
Methyl-tert-butyl Ether (MTBE)	<0.50		0.50		ug/L			07/31/23 00:12	1
Naphthalene	<0.50		0.50		ug/L			07/31/23 00:12	1
n-Butylbenzene	<0.50		0.50		ug/L			07/31/23 00:12	1
N-Propylbenzene	<0.50		0.50		ug/L			07/31/23 00:12	1
o-Chlorotoluene	<0.50		0.50		ug/L			07/31/23 00:12	1
o-Dichlorobenzene (1,2-DCB)	<0.50		0.50		ug/L			07/31/23 00:12	1
o-Xylene	<0.50		0.50		ug/L			07/31/23 00:12	1
p-Chlorotoluene	<0.50		0.50		ug/L			07/31/23 00:12	1
p-Dichlorobenzene (1,4-DCB)	<0.50		0.50		ug/L			07/31/23 00:12	1
p-Isopropyltoluene	<0.50		0.50		ug/L			07/31/23 00:12	1
sec-Butylbenzene	<0.50		0.50		ug/L			07/31/23 00:12	1
Styrene	<0.50		0.50		ug/L			07/31/23 00:12	1
Tert-amyl methyl ether	<3.0		3.0		ug/L			07/31/23 00:12	1
1,3-Dichloropropene, Total	<0.50		0.50		ug/L			07/31/23 00:12	1
Tert-butyl ethyl ether	<3.0		3.0		ug/L			07/31/23 00:12	1
tert-Butylbenzene	<0.50		0.50		ug/L			07/31/23 00:12	1
Tetrachloroethene (PCE)	<0.50		0.50		ug/L			07/31/23 00:12	1
Toluene	<0.50		0.50		ug/L			07/31/23 00:12	1
trans-1,2-Dichloroethylene	<0.50		0.50		ug/L			07/31/23 00:12	1
trans-1,3-Dichloropropene	<0.50		0.50		ug/L			07/31/23 00:12	1
Trichloroethylene (TCE)	<0.50		0.50		ug/L			07/31/23 00:12	1
Bromoethane	<0.50		0.50		ug/L			07/31/23 00:12	1
Trichlorofluoromethane (Freon 11)	<0.50		0.50		ug/L			07/31/23 00:12	1
Chloromethane (methyl chloride)	<0.50		0.50		ug/L			07/31/23 00:12	1
Trichlorotrifluoroethane	<0.50		0.50		ug/L			07/31/23 00:12	1
Diisopropyl ether	<3.0		3.0		ug/L			07/31/23 00:12	1
Vinyl Chloride (VC)	<0.30		0.30		ug/L			07/31/23 00:12	1
Xylenes, Total	<0.50		0.50		ug/L			07/31/23 00:12	1

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

Lab Sample ID: MB 380-49511/5
Matrix: Water
Analysis Batch: 49511

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
Unknown	17.5	T J	ug/L		1.07	N/A		07/31/23 00:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		70 - 130		07/31/23 00:12	1
4-Bromofluorobenzene (Surr)	100		70 - 130		07/31/23 00:12	1
Toluene-d8 (Surr)	105		70 - 130		07/31/23 00:12	1

Lab Sample ID: LCS 380-49511/3
Matrix: Water
Analysis Batch: 49511

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	5.05		ug/L		101	70 - 130
1,1,1-Trichloroethane	5.00	5.60		ug/L		112	70 - 130
1,1,2,2-Tetrachloroethane	5.00	4.87		ug/L		97	70 - 130
1,1,2-Trichloroethane	5.00	4.18		ug/L		84	70 - 130
1,1-Dichloroethane	5.00	4.74		ug/L		95	70 - 130
1,1-Dichlorethylene	5.00	5.39		ug/L		108	70 - 130
1,1-Dichloropropene	5.00	4.73		ug/L		95	70 - 130
1,2,3-Trichlorobenzene	5.00	4.56		ug/L		91	70 - 130
1,2,3-Trichloropropane	5.00	6.03		ug/L		121	70 - 130
1,2,4-Trichlorobenzene	5.00	4.74		ug/L		95	70 - 130
1,2,4-Trimethy benzene	5.00	4.83		ug/L		97	70 - 130
1,2-Dichloroethane	5.00	4.39		ug/L		88	70 - 130
1,2-Dichloropropane	5.00	4.88		ug/L		98	70 - 130
1,3,5-Trimethy benzene	5.00	4.92		ug/L		98	70 - 130
1,3-Dichloropropane	5.00	3.92		ug/L		78	70 - 130
2,2-Dichloropropane	5.00	4.28		ug/L		86	70 - 130
2-Butanone (MEK)	50.0	43.1		ug/L		86	70 - 130
4-Methyl-2-pentanone (MIBK)	50.0	30.3	*-	ug/L		61	70 - 130
Acetone	50.0	39.6	J	ug/L		79	70 - 130
Benzene	5.00	4.63		ug/L		93	70 - 130
Bromobenzene	5.00	4.95		ug/L		99	70 - 130
Bromochloromethane	5.00	4.75		ug/L		95	70 - 130
Bromodichloromethane	5.00	4.39		ug/L		88	70 - 130
Bromoform	5.00	4.97		ug/L		99	70 - 130
Bromomethane (Methyl Bromide)	5.00	4.63		ug/L		93	70 - 130
Carbon disulfide	5.00	4.58		ug/L		92	70 - 130
Carbon tetrachloride	5.00	4.47		ug/L		89	70 - 130
Chlorobenzene	5.00	4.79		ug/L		96	70 - 130
Chlorodibromomethane	5.00	4.15		ug/L		83	70 - 130
cis-1,3-Dichloropropene	5.00	3.80		ug/L		76	70 - 130
Dichloromethane	5.00	5.08		ug/L		102	70 - 130
Ethylbenzene	5.00	4.84		ug/L		97	70 - 130
Hexachlorobutadiene	5.00	3.81		ug/L		76	70 - 130
Isopropy benzene	5.00	4.82		ug/L		96	70 - 130
m,p-Xylenes	10.0	9.19		ug/L		92	70 - 130
m-Dichlorobenzene (1,3-DCB)	5.00	4.33		ug/L		87	70 - 130

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

Lab Sample ID: LCS 380-49511/3
Matrix: Water
Analysis Batch: 49511

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	4.32		ug/L		86	70 - 130
Naphthalene	5.00	4.22		ug/L		84	70 - 130
n-Butylbenzene	5.00	4.86		ug/L		97	70 - 130
N-Propylbenzene	5.00	4.57		ug/L		91	70 - 130
o-Chlorotoluene	5.00	5.20		ug/L		104	70 - 130
o-Dichlorobenzene (1,2-DCB)	5.00	5.37		ug/L		107	70 - 130
o-Xylene	5.00	4.73		ug/L		95	70 - 130
p-Chlorotoluene	5.00	4.41		ug/L		88	70 - 130
p-Dichlorobenzene (1,4-DCB)	5.00	4.36		ug/L		87	70 - 130
p-Isopropyltoluene	5.00	4.48		ug/L		90	70 - 130
sec-Butylbenzene	5.00	5.07		ug/L		101	70 - 130
Styrene	5.00	4.31		ug/L		86	70 - 130
Tert-amyl methyl ether	5.00	3.92		ug/L		78	70 - 130
1,3-Dichloropropene, Total	10.0	8.12		ug/L		81	70 - 130
Tert-butyl ethyl ether	5.00	4.35		ug/L		87	70 - 130
tert-Butylbenzene	5.00	4.57		ug/L		91	70 - 130
Tetrachloroethene (PCE)	5.00	4.21		ug/L		84	70 - 130
Toluene	5.00	4.22		ug/L		84	70 - 130
trans-1,2-Dichloroethylene	5.00	5.50		ug/L		110	70 - 130
trans-1,3-Dichloropropene	5.00	4.32		ug/L		86	70 - 130
Trichloroethylene (TCE)	5.00	5.11		ug/L		102	70 - 130
Bromoethane	5.00	5.05		ug/L		101	70 - 130
Trichlorofluoromethane (Freon 11)	5.00	5.22		ug/L		104	70 - 130
Trichlorotrifluoroethane	5.00	5.02		ug/L		100	70 - 130
Diisopropyl ether	5.00	4.09		ug/L		82	70 - 130
Vinyl Chloride (VC)	5.00	4.54		ug/L		91	70 - 130
Xylenes, Total	15.0	13.9		ug/L		93	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

Lab Sample ID: LCSD 380-49511/4
Matrix: Water
Analysis Batch: 49511

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	6.29	*1	ug/L		126	70 - 130	22	20
1,1,1-Trichloroethane	5.00	5.02		ug/L		100	70 - 130	11	20
1,1,2,2-Tetrachloroethane	5.00	4.22		ug/L		84	70 - 130	14	20
1,1,2-Trichloroethane	5.00	4.17		ug/L		83	70 - 130	0	20
1,1-Dichloroethane	5.00	4.94		ug/L		99	70 - 130	4	20
1,1-Dichlorethylene	5.00	5.22		ug/L		104	70 - 130	3	20
1,1-Dichloropropene	5.00	4.49		ug/L		90	70 - 130	5	20
1,2,3-Trichlorobenzene	5.00	4.23		ug/L		85	70 - 130	8	20
1,2,3-Trichloropropane	5.00	5.88		ug/L		118	70 - 130	3	20
1,2,4-Trichlorobenzene	5.00	4.67		ug/L		93	70 - 130	1	20

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

Lab Sample ID: LCSD 380-49511/4
Matrix: Water
Analysis Batch: 49511

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-Trimethy benzene	5.00	5.20		ug/L		104	70 - 130	7	20
1,2-Dichloroethane	5.00	4.44		ug/L		89	70 - 130	1	20
1,2-Dichloropropane	5.00	4.81		ug/L		96	70 - 130	1	20
1,3,5-Trimethy benzene	5.00	5.13		ug/L		103	70 - 130	4	20
1,3-Dichloropropane	5.00	4.46		ug/L		89	70 - 130	13	20
2,2-Dichloropropane	5.00	4.59		ug/L		92	70 - 130	7	20
2-Butanone (MEK)	50.0	39.3		ug/L		79	70 - 130	9	20
4-Methyl-2-pentanone (MIBK)	50.0	35.8		ug/L		72	70 - 130	17	20
Acetone	50.0	34.9	J	ug/L		70	70 - 130	12	20
Benzene	5.00	4.71		ug/L		94	70 - 130	2	20
Bromobenzene	5.00	5.22		ug/L		104	70 - 130	5	20
Bromochloromethane	5.00	5.58		ug/L		112	70 - 130	16	20
Bromodichloromethane	5.00	4.49		ug/L		90	70 - 130	2	20
Bromoform	5.00	4.35		ug/L		87	70 - 130	13	20
Bromomethane (Methyl Bromide)	5.00	4.55		ug/L		91	70 - 130	2	20
Carbon disulfide	5.00	4.91		ug/L		98	70 - 130	7	20
Carbon tetrachloride	5.00	5.10		ug/L		102	70 - 130	13	20
Chlorobenzene	5.00	5.07		ug/L		101	70 - 130	6	20
Chlorodibromomethane	5.00	3.79		ug/L		76	70 - 130	9	20
cis-1,3-Dichloropropene	5.00	4.03		ug/L		81	70 - 130	6	20
Dichloromethane	5.00	5.10		ug/L		102	70 - 130	0	20
Ethylbenzene	5.00	4.86		ug/L		97	70 - 130	0	20
Hexachlorobutadiene	5.00	4.22		ug/L		84	70 - 130	10	20
Isopropy benzene	5.00	4.74		ug/L		95	70 - 130	2	20
m,p-Xylenes	10.0	9.21		ug/L		92	70 - 130	0	20
m-Dichlorobenzene (1,3-DCB)	5.00	4.91		ug/L		98	70 - 130	12	20
Methyl-tert-butyl Ether (MTBE)	5.00	5.16		ug/L		103	70 - 130	18	20
Naphthalene	5.00	3.98		ug/L		80	70 - 130	6	20
n-Butylbenzene	5.00	4.33		ug/L		87	70 - 130	11	20
N-Propylbenzene	5.00	4.54		ug/L		91	70 - 130	1	20
o-Chlorotoluene	5.00	5.55		ug/L		111	70 - 130	7	20
o-Dichlorobenzene (1,2-DCB)	5.00	4.57		ug/L		91	70 - 130	16	20
o-Xylene	5.00	4.81		ug/L		96	70 - 130	2	20
p-Chlorotoluene	5.00	4.98		ug/L		100	70 - 130	12	20
p-Dichlorobenzene (1,4-DCB)	5.00	4.71		ug/L		94	70 - 130	8	20
p-Isopropyltoluene	5.00	4.90		ug/L		98	70 - 130	9	20
sec-Butylbenzene	5.00	5.34		ug/L		107	70 - 130	5	20
Styrene	5.00	4.52		ug/L		90	70 - 130	5	20
Tert-amyl methyl ether	5.00	4.25		ug/L		85	70 - 130	8	20
1,3-Dichloropropene, Total	10.0	8.13		ug/L		81	70 - 130	0	20
Tert-butyl ethyl ether	5.00	4.60		ug/L		92	70 - 130	5	20
tert-Butylbenzene	5.00	4.79		ug/L		96	70 - 130	5	20
Tetrachloroethene (PCE)	5.00	5.23	*1	ug/L		105	70 - 130	22	20
Toluene	5.00	4.31		ug/L		86	70 - 130	2	20
trans-1,2-Dichloroethylene	5.00	5.69		ug/L		114	70 - 130	3	20
trans-1,3-Dichloropropene	5.00	4.10		ug/L		82	70 - 130	5	20
Trichloroethylene (TCE)	5.00	5.12		ug/L		102	70 - 130	0	20
Bromoethane	5.00	5.08		ug/L		102	70 - 130	1	20

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

Lab Sample ID: LCSD 380-49511/4
Matrix: Water
Analysis Batch: 49511

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	5.26		ug/L		105	70 - 130	1	20
Trichlorotrifluoroethane			5.00	5.00		ug/L		100	70 - 130	0	20
Diisopropyl ether			5.00	4.31		ug/L		86	70 - 130	5	20
Vinyl Chloride (VC)			5.00	5.37		ug/L		107	70 - 130	17	20
Xylenes, Total			15.0	14.0		ug/L		93	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*

Lab Sample ID: MB 380-49627/15
Matrix: Water
Analysis Batch: 49627

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			07/31/23 20:34	1
1,1,1-Trichloroethane	<0.50		0.50		ug/L			07/31/23 20:34	1
1,1,2,2-Tetrachloroethane	<0.50		0.50		ug/L			07/31/23 20:34	1
1,1,2-Trichloroethane	<0.50		0.50		ug/L			07/31/23 20:34	1
1,1-Dichloroethane	<0.50		0.50		ug/L			07/31/23 20:34	1
1,1-Dichlorethylene	<0.50		0.50		ug/L			07/31/23 20:34	1
1,1-Dichloropropene	<0.50		0.50		ug/L			07/31/23 20:34	1
1,2,3-Trichlorobenzene	<0.50		0.50		ug/L			07/31/23 20:34	1
1,2,3-Trichloropropane	<0.50		0.50		ug/L			07/31/23 20:34	1
1,2,4-Trichlorobenzene	<0.50		0.50		ug/L			07/31/23 20:34	1
1,2,4-Trimethy benzene	<0.50		0.50		ug/L			07/31/23 20:34	1
1,2-Dichloroethane	<0.50		0.50		ug/L			07/31/23 20:34	1
1,2-Dichloropropane	<0.50		0.50		ug/L			07/31/23 20:34	1
1,3,5-Trimethy benzene	<0.50		0.50		ug/L			07/31/23 20:34	1
1,3-Dichloropropane	<0.50		0.50		ug/L			07/31/23 20:34	1
2,2-Dichloropropane	<0.50		0.50		ug/L			07/31/23 20:34	1
2-Butanone (MEK)	<5.0		5.0		ug/L			07/31/23 20:34	1
4-Methyl-2-pentanone (MIBK)	<5.0		5.0		ug/L			07/31/23 20:34	1
Acetone	<500		500		ug/L			07/31/23 20:34	1
Benzene	<0.50		0.50		ug/L			07/31/23 20:34	1
Bromobenzene	<0.50		0.50		ug/L			07/31/23 20:34	1
Bromochloromethane	<0.50		0.50		ug/L			07/31/23 20:34	1
Bromodichloromethane	<0.50		0.50		ug/L			07/31/23 20:34	1
Bromoform	<0.50		0.50		ug/L			07/31/23 20:34	1
Bromomethane (Methyl Bromide)	<0.50		0.50		ug/L			07/31/23 20:34	1
Carbon disulfide	<0.50		0.50		ug/L			07/31/23 20:34	1
Carbon tetrachloride	<0.50		0.50		ug/L			07/31/23 20:34	1
Chlorobenzene	<0.50		0.50		ug/L			07/31/23 20:34	1
Chlorodibromomethane	<0.50		0.50		ug/L			07/31/23 20:34	1
Chloroethane	<0.50		0.50		ug/L			07/31/23 20:34	1
Chloroform (Trichloromethane)	<0.50		0.50		ug/L			07/31/23 20:34	1
cis-1,2-Dichloroethylene	<0.50		0.50		ug/L			07/31/23 20:34	1

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

Lab Sample ID: MB 380-49627/15
Matrix: Water
Analysis Batch: 49627

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	<0.50		0.50		ug/L			07/31/23 20:34	1
Dibromomethane	<0.50		0.50		ug/L			07/31/23 20:34	1
Dichlorodifluoromethane	<0.50		0.50		ug/L			07/31/23 20:34	1
Dichloromethane	<0.50		0.50		ug/L			07/31/23 20:34	1
Ethylbenzene	<0.50		0.50		ug/L			07/31/23 20:34	1
Hexachlorobutadiene	<0.50		0.50		ug/L			07/31/23 20:34	1
Isopropy benzene	<0.50		0.50		ug/L			07/31/23 20:34	1
m,p-Xylenes	<0.50		0.50		ug/L			07/31/23 20:34	1
m-Dichlorobenzene (1,3-DCB)	<0.50		0.50		ug/L			07/31/23 20:34	1
Methyl-tert-butyl Ether (MTBE)	<0.50		0.50		ug/L			07/31/23 20:34	1
Naphthalene	<0.50		0.50		ug/L			07/31/23 20:34	1
n-Butylbenzene	<0.50		0.50		ug/L			07/31/23 20:34	1
N-Propylbenzene	<0.50		0.50		ug/L			07/31/23 20:34	1
o-Chlorotoluene	<0.50		0.50		ug/L			07/31/23 20:34	1
o-Dichlorobenzene (1,2-DCB)	<0.50		0.50		ug/L			07/31/23 20:34	1
o-Xylene	<0.50		0.50		ug/L			07/31/23 20:34	1
p-Chlorotoluene	<0.50		0.50		ug/L			07/31/23 20:34	1
p-Dichlorobenzene (1,4-DCB)	<0.50		0.50		ug/L			07/31/23 20:34	1
p-Isopropyltoluene	<0.50		0.50		ug/L			07/31/23 20:34	1
sec-Butylbenzene	<0.50		0.50		ug/L			07/31/23 20:34	1
Styrene	<0.50		0.50		ug/L			07/31/23 20:34	1
Tert-amyl methyl ether	<3.0		3.0		ug/L			07/31/23 20:34	1
1,3-Dichloropropene, Total	<0.50		0.50		ug/L			07/31/23 20:34	1
Tert-butyl ethyl ether	<3.0		3.0		ug/L			07/31/23 20:34	1
tert-Butylbenzene	<0.50		0.50		ug/L			07/31/23 20:34	1
Tetrachloroethene (PCE)	<0.50		0.50		ug/L			07/31/23 20:34	1
Toluene	<0.50		0.50		ug/L			07/31/23 20:34	1
trans-1,2-Dichloroethylene	<0.50		0.50		ug/L			07/31/23 20:34	1
trans-1,3-Dichloropropene	<0.50		0.50		ug/L			07/31/23 20:34	1
Trichloroethylene (TCE)	<0.50		0.50		ug/L			07/31/23 20:34	1
Bromoethane	<0.50		0.50		ug/L			07/31/23 20:34	1
Trichlorofluoromethane (Freon 11)	<0.50		0.50		ug/L			07/31/23 20:34	1
Chloromethane (methyl chloride)	<0.50		0.50		ug/L			07/31/23 20:34	1
Trichlorotrifluoroethane	<0.50		0.50		ug/L			07/31/23 20:34	1
Diisopropyl ether	<3.0		3.0		ug/L			07/31/23 20:34	1
Vinyl Chloride (VC)	<0.30		0.30		ug/L			07/31/23 20:34	1
Xylenes, Total	<0.50		0.50		ug/L			07/31/23 20:34	1

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*		*07/31/23 20:34*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*07/31/23 20:34*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*07/31/23 20:34*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*07/31/23 20:34*	*1*

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

Lab Sample ID: LCS 380-49627/11
Matrix: Water
Analysis Batch: 49627

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	5.23		ug/L		105	70 - 130
1,1,1-Trichloroethane	5.00	5.05		ug/L		101	70 - 130
1,1,2,2-Tetrachloroethane	5.00	4.60		ug/L		92	70 - 130
1,1,2-Trichloroethane	5.00	5.64		ug/L		113	70 - 130
1,1-Dichloroethane	5.00	5.03		ug/L		101	70 - 130
1,1-Dichlorethylene	5.00	4.87		ug/L		97	70 - 130
1,1-Dichloropropene	5.00	4.58		ug/L		92	70 - 130
1,2,3-Trichlorobenzene	5.00	5.68		ug/L		114	70 - 130
1,2,3-Trichloropropane	5.00	4.86		ug/L		97	70 - 130
1,2,4-Trichlorobenzene	5.00	5.33		ug/L		107	70 - 130
1,2,4-Trimethy benzene	5.00	5.56		ug/L		111	70 - 130
1,2-Dichloroethane	5.00	5.00		ug/L		100	70 - 130
1,2-Dichloropropane	5.00	5.10		ug/L		102	70 - 130
1,3,5-Trimethy benzene	5.00	5.51		ug/L		110	70 - 130
1,3-Dichloropropane	5.00	5.28		ug/L		106	70 - 130
2,2-Dichloropropane	5.00	4.86		ug/L		97	70 - 130
2-Butanone (MEK)	50.0	51.5		ug/L		103	70 - 130
4-Methyl-2-pentanone (MIBK)	50.0	53.2		ug/L		106	70 - 130
Acetone	50.0	47.5	J	ug/L		95	70 - 130
Benzene	5.00	4.97		ug/L		99	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	4.98		ug/L		100	70 - 130
Bromoform	5.00	4.82		ug/L		96	70 - 130
Bromomethane (Methyl Bromide)	5.00	4.94		ug/L		99	70 - 130
Carbon disulfide	5.00	4.87		ug/L		97	70 - 130
Carbon tetrachloride	5.00	4.69		ug/L		94	70 - 130
Chlorobenzene	5.00	5.29		ug/L		106	70 - 130
Chlorodibromomethane	5.00	5.20		ug/L		104	70 - 130
cis-1,3-Dichloropropene	5.00	5.08		ug/L		102	70 - 130
Dichloromethane	5.00	4.94		ug/L		99	70 - 130
Ethylbenzene	5.00	5.57		ug/L		111	70 - 130
Hexachlorobutadiene	5.00	5.30		ug/L		106	70 - 130
Isopropy benzene	5.00	5.12		ug/L		102	70 - 130
m,p-Xylenes	10.0	10.1		ug/L		101	70 - 130
m-Dichlorobenzene (1,3-DCB)	5.00	5.42		ug/L		108	70 - 130
Methyl-tert-butyl Ether (MTBE)	5.00	5.12		ug/L		102	70 - 130
Naphthalene	5.00	4.73		ug/L		95	70 - 130
n-Butylbenzene	5.00	6.28		ug/L		126	70 - 130
N-Propylbenzene	5.00	5.66		ug/L		113	70 - 130
o-Chlorotoluene	5.00	5.66		ug/L		113	70 - 130
o-Dichlorobenzene (1,2-DCB)	5.00	5.47		ug/L		109	70 - 130
o-Xylene	5.00	5.39		ug/L		108	70 - 130
p-Chlorotoluene	5.00	5.67		ug/L		113	70 - 130
p-Dichlorobenzene (1,4-DCB)	5.00	5.28		ug/L		106	70 - 130
p-Isopropyltoluene	5.00	5.43		ug/L		109	70 - 130
sec-Butylbenzene	5.00	5.36		ug/L		107	70 - 130
Styrene	5.00	4.95		ug/L		99	70 - 130

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

Lab Sample ID: LCS 380-49627/11
Matrix: Water
Analysis Batch: 49627

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Tert-amyl methyl ether	5.00	5.02		ug/L		100	70 - 130
1,3-Dichloropropene, Total	10.0	11.0		ug/L		110	70 - 130
Tert-butyl ethyl ether	5.00	5.13		ug/L		103	70 - 130
tert-Butylbenzene	5.00	5.53		ug/L		111	70 - 130
Tetrachloroethene (PCE)	5.00	5.10		ug/L		102	70 - 130
Toluene	5.00	4.90		ug/L		98	70 - 130
trans-1,2-Dichloroethylene	5.00	4.83		ug/L		97	70 - 130
trans-1,3-Dichloropropene	5.00	5.94		ug/L		119	70 - 130
Trichloroethylene (TCE)	5.00	4.87		ug/L		97	70 - 130
Bromoethane	5.00	4.74		ug/L		95	70 - 130
Trichlorofluoromethane (Freon 11)	5.00	5.00		ug/L		100	70 - 130
Trichlorotrifluoroethane	5.00	5.20		ug/L		104	70 - 130
Diisopropyl ether	5.00	5.37		ug/L		107	70 - 130
Vinyl Chloride (VC)	5.00	5.20		ug/L		104	70 - 130
Xylenes, Total	15.0	15.5		ug/L		103	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 380-49627/12
Matrix: Water
Analysis Batch: 49627

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	4.71		ug/L		94	70 - 130	10	20
1,1,1-Trichloroethane	5.00	4.55		ug/L		91	70 - 130	11	20
1,1,2,2-Tetrachloroethane	5.00	4.16		ug/L		83	70 - 130	10	20
1,1,2-Trichloroethane	5.00	4.42	*1	ug/L		88	70 - 130	24	20
1,1-Dichloroethane	5.00	4.76		ug/L		95	70 - 130	5	20
1,1-Dichlorethylene	5.00	4.62		ug/L		92	70 - 130	5	20
1,1-Dichloropropene	5.00	4.33		ug/L		87	70 - 130	6	20
1,2,3-Trichlorobenzene	5.00	5.02		ug/L		100	70 - 130	12	20
1,2,3-Trichloropropane	5.00	4.43		ug/L		89	70 - 130	9	20
1,2,4-Trichlorobenzene	5.00	4.65		ug/L		93	70 - 130	14	20
1,2,4-Trimethy benzene	5.00	5.19		ug/L		104	70 - 130	7	20
1,2-Dichloroethane	5.00	4.63		ug/L		93	70 - 130	8	20
1,2-Dichloropropane	5.00	4.77		ug/L		95	70 - 130	7	20
1,3,5-Trimethy benzene	5.00	5.11		ug/L		102	70 - 130	8	20
1,3-Dichloropropane	5.00	4.32		ug/L		86	70 - 130	20	20
2,2-Dichloropropane	5.00	4.46		ug/L		89	70 - 130	9	20
2-Butanone (MEK)	50.0	46.1		ug/L		92	70 - 130	11	20
4-Methyl-2-pentanone (MIBK)	50.0	48.6		ug/L		97	70 - 130	9	20
Acetone	50.0	44.7	J	ug/L		89	70 - 130	6	20
Benzene	5.00	4.63		ug/L		93	70 - 130	7	20
Bromobenzene	5.00	4.64		ug/L		93	70 - 130	9	20
Bromochloromethane	5.00	4.55		ug/L		91	70 - 130	8	20

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

Lab Sample ID: LCSD 380-49627/12
Matrix: Water
Analysis Batch: 49627

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
Bromodichloromethane			5.00	4.59		ug/L		92	70 - 130	8	20
Bromoform			5.00	4.29		ug/L		86	70 - 130	12	20
Bromomethane (Methyl Bromide)			5.00	4.78		ug/L		96	70 - 130	3	20
Carbon disulfide			5.00	4.58		ug/L		92	70 - 130	6	20
Carbon tetrachloride			5.00	4.42		ug/L		88	70 - 130	6	20
Chlorobenzene			5.00	4.94		ug/L		99	70 - 130	7	20
Chlorodibromomethane			5.00	4.53		ug/L		91	70 - 130	14	20
cis-1,3-Dichloropropene			5.00	4.68		ug/L		94	70 - 130	8	20
Dichloromethane			5.00	4.63		ug/L		93	70 - 130	7	20
Ethylbenzene			5.00	5.24		ug/L		105	70 - 130	6	20
Hexachlorobutadiene			5.00	4.66		ug/L		93	70 - 130	13	20
Isopropy benzene			5.00	4.80		ug/L		96	70 - 130	7	20
m,p-Xylenes			10.0	9.39		ug/L		94	70 - 130	8	20
m-Dichlorobenzene (1,3-DCB)			5.00	5.00		ug/L		100	70 - 130	8	20
Methyl-tert-butyl Ether (MTBE)			5.00	4.76		ug/L		95	70 - 130	7	20
Naphthalene			5.00	4.12		ug/L		82	70 - 130	14	20
n-Butylbenzene			5.00	5.73		ug/L		115	70 - 130	9	20
N-Propylbenzene			5.00	5.29		ug/L		106	70 - 130	7	20
o-Chlorotoluene			5.00	5.12		ug/L		102	70 - 130	10	20
o-Dichlorobenzene (1,2-DCB)			5.00	4.83		ug/L		97	70 - 130	12	20
o-Xylene			5.00	5.16		ug/L		103	70 - 130	4	20
p-Chlorotoluene			5.00	5.16		ug/L		103	70 - 130	10	20
p-Dichlorobenzene (1,4-DCB)			5.00	4.90		ug/L		98	70 - 130	7	20
p-Isopropyltoluene			5.00	5.06		ug/L		101	70 - 130	7	20
sec-Butylbenzene			5.00	4.98		ug/L		100	70 - 130	7	20
Styrene			5.00	4.57		ug/L		91	70 - 130	8	20
Tert-amyl methyl ether			5.00	4.68		ug/L		94	70 - 130	7	20
1,3-Dichloropropene, Total			10.0	9.60		ug/L		96	70 - 130	14	20
Tert-butyl ethyl ether			5.00	4.87		ug/L		97	70 - 130	5	20
tert-Butylbenzene			5.00	5.19		ug/L		104	70 - 130	6	20
Tetrachloroethene (PCE)			5.00	4.47		ug/L		89	70 - 130	13	20
Toluene			5.00	4.54		ug/L		91	70 - 130	7	20
trans-1,2-Dichloroethylene			5.00	4.56		ug/L		91	70 - 130	6	20
trans-1,3-Dichloropropene			5.00	4.92		ug/L		98	70 - 130	19	20
Trichloroethylene (TCE)			5.00	4.60		ug/L		92	70 - 130	6	20
Bromoethane			5.00	4.50		ug/L		90	70 - 130	5	20
Trichlorofluoromethane (Freon 11)			5.00	4.57		ug/L		91	70 - 130	9	20
Trichlorotrifluoroethane			5.00	4.68		ug/L		94	70 - 130	11	20
Diisopropyl ether			5.00	5.03		ug/L		101	70 - 130	7	20
Vinyl Chloride (VC)			5.00	4.75		ug/L		95	70 - 130	9	20
Xylenes, Total			15.0	14.5		ug/L		97	70 - 130	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

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

Lab Sample ID: MRL 380-49627/13
Matrix: Water
Analysis Batch: 49627

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	0.506		ug/L		101	50 - 150
Vinyl Chloride (VC)	0.250	0.324		ug/L		130	50 - 150

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*

Lab Sample ID: MRL 380-49627/14
Matrix: Water
Analysis Batch: 49627

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	0.490	J	ug/L		98	50 - 150
1,1,1-Trichloroethane	0.500	0.488	J	ug/L		98	50 - 150
1,1,2,2-Tetrachloroethane	0.500	0.590		ug/L		118	50 - 150
1,1,2-Trichloroethane	0.500	0.475	J	ug/L		95	50 - 150
1,1-Dichloroethane	0.500	0.520		ug/L		104	50 - 150
1,1-Dichlorethylene	0.500	0.599		ug/L		120	50 - 150
1,1-Dichloropropene	0.500	0.507		ug/L		101	50 - 150
1,2,3-Trichlorobenzene	0.500	0.507		ug/L		101	50 - 150
1,2,3-Trichloropropane	0.500	0.573		ug/L		115	50 - 150
1,2,4-Trichlorobenzene	0.500	0.500		ug/L		100	50 - 150
1,2,4-Trimethy benzene	0.500	0.349	J	ug/L		70	50 - 150
1,2-Dichloroethane	0.500	0.546		ug/L		109	50 - 150
1,2-Dichloropropane	0.500	0.489	J	ug/L		98	50 - 150
1,3,5-Trimethy benzene	0.500	0.358	J	ug/L		72	50 - 150
1,3-Dichloropropane	0.500	0.527		ug/L		105	50 - 150
2,2-Dichloropropane	0.500	0.467	J	ug/L		93	50 - 150
2-Butanone (MEK)	5.00	5.05		ug/L		101	50 - 150
4-Methyl-2-pentanone (MIBK)	5.00	4.79	J	ug/L		96	50 - 150
Acetone	5.00	4.28	J	ug/L		86	50 - 150
Benzene	0.500	0.532		ug/L		106	50 - 150
Bromobenzene	0.500	0.524		ug/L		105	50 - 150
Bromochloromethane	0.500	0.485	J	ug/L		97	50 - 150
Bromodichloromethane	0.500	0.482	J	ug/L		96	50 - 150
Bromoform	0.500	0.452	J	ug/L		90	50 - 150
Bromomethane (Methyl Bromide)	0.500	0.605		ug/L		121	50 - 150
Carbon disulfide	0.500	0.479	J	ug/L		96	50 - 150
Carbon tetrachloride	0.500	0.502		ug/L		100	50 - 150
Chlorobenzene	0.500	0.433	J	ug/L		87	50 - 150
Chlorodibromomethane	0.500	0.448	J	ug/L		90	50 - 150
cis-1,3-Dichloropropene	0.500	0.415	J	ug/L		83	50 - 150
Dichloromethane	0.500	0.536		ug/L		107	50 - 150
Ethylbenzene	0.500	0.353	J	ug/L		71	50 - 150
Hexachlorobutadiene	0.500	0.553		ug/L		111	50 - 150
Isopropy benzene	0.500	0.390	J	ug/L		78	50 - 150
m,p-Xylenes	1.00	0.755		ug/L		75	50 - 150

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

Lab Sample ID: MRL 380-49627/14
Matrix: Water
Analysis Batch: 49627

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
m-Dichlorobenzene (1,3-DCB)	0.500	0.562		ug/L		112	50 - 150
Methyl-tert-butyl Ether (MTBE)	0.500	0.517		ug/L		103	50 - 150
Naphthalene	0.500	0.638		ug/L		128	50 - 150
n-Butylbenzene	0.500	0.477	J	ug/L		95	50 - 150
N-Propylbenzene	0.500	0.350	J	ug/L		70	50 - 150
o-Chlorotoluene	0.500	0.478	J	ug/L		96	50 - 150
o-Dichlorobenzene (1,2-DCB)	0.500	0.611		ug/L		122	50 - 150
o-Xylene	0.500	0.334	J	ug/L		67	50 - 150
p-Chlorotoluene	0.500	0.376	J	ug/L		75	50 - 150
p-Dichlorobenzene (1,4-DCB)	0.500	0.526		ug/L		105	50 - 150
p-Isopropyltoluene	0.500	0.394	J	ug/L		79	50 - 150
sec-Butylbenzene	0.500	0.388	J	ug/L		78	50 - 150
Styrene	0.500	0.489	J	ug/L		98	50 - 150
Tert-amyl methyl ether	0.500	0.518	J	ug/L		104	50 - 150
1,3-Dichloropropene, Total	1.00	0.839		ug/L		84	50 - 150
Tert-butyl ethyl ether	0.500	0.510	J	ug/L		102	50 - 150
tert-Butylbenzene	0.500	0.393	J	ug/L		79	50 - 150
Tetrachloroethene (PCE)	0.500	0.522		ug/L		104	50 - 150
Toluene	0.500	0.584		ug/L		117	50 - 150
trans-1,2-Dichloroethylene	0.500	0.510		ug/L		102	50 - 150
trans-1,3-Dichloropropene	0.500	0.424	J	ug/L		85	50 - 150
Trichloroethylene (TCE)	0.500	0.517		ug/L		103	50 - 150
Bromoethane	0.500	0.550		ug/L		110	50 - 150
Trichlorofluoromethane (Freon 11)	0.500	0.601		ug/L		120	50 - 150
Trichlorotrifluoroethane	0.500	0.534		ug/L		107	50 - 150
Diisopropyl ether	0.500	0.536	J	ug/L		107	50 - 150
Vinyl Chloride (VC)	0.500	0.539		ug/L		108	50 - 150
Xylenes, Total	1.50	1.09		ug/L		73	50 - 150

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*

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

Lab Sample ID: MB 380-48365/5
Matrix: Water
Analysis Batch: 48365

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			07/24/23 15:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*70 - 130*		*07/24/23 15:45*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*07/24/23 15:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*07/24/23 15:45*	*1*

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

Lab Sample ID: LCS 380-48365/2
Matrix: Water
Analysis Batch: 48365

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	5.06		ug/L		101	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*100*		*70 - 130*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*

Lab Sample ID: LCSD 380-48365/3
Matrix: Water
Analysis Batch: 48365

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	5.54		ug/L		111	70 - 130	9	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*96*		*70 - 130*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*

Lab Sample ID: MRL 380-48365/4
Matrix: Water
Analysis Batch: 48365

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	2.07		ug/L		103	50 - 150		

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
Toluene-d8 (Surr)	*95*		*50 - 150*
4-Bromofluorobenzene (Surr)	*94*		*50 - 150*
1,2-Dichloroethane-d4 (Surr)	*102*		*50 - 150*

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

Lab Sample ID: MB 380-48683/1-A
Matrix: Water
Analysis Batch: 48889

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 48683

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2,4'-DDD	<0.099		0.099		ug/L		07/25/23 08:30	07/26/23 14:03	1
2,4'-DDE	<0.099		0.099		ug/L		07/25/23 08:30	07/26/23 14:03	1
2,4'-DDT	<0.099		0.099		ug/L		07/25/23 08:30	07/26/23 14:03	1
2,4-Dinitrotoluene	<0.099		0.099		ug/L		07/25/23 08:30	07/26/23 14:03	1
2,6-Dinitrotoluene	<0.099		0.099		ug/L		07/25/23 08:30	07/26/23 14:03	1
4,4'-DDD	<0.099		0.099		ug/L		07/25/23 08:30	07/26/23 14:03	1
4,4'-DDE	<0.099		0.099		ug/L		07/25/23 08:30	07/26/23 14:03	1
4,4'-DDT	<0.099		0.099		ug/L		07/25/23 08:30	07/26/23 14:03	1
Acenaphthene	<0.099		0.099		ug/L		07/25/23 08:30	07/26/23 14:03	1
Acenaphthylene	<0.099		0.099		ug/L		07/25/23 08:30	07/26/23 14:03	1

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

Lab Sample ID: MB 380-48683/1-A
Matrix: Water
Analysis Batch: 48889

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 48683

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Acetochlor	<0.099		0.099		ug/L		07/25/23 08:30	07/26/23 14:03	1
Alachlor	<0.050		0.050		ug/L		07/25/23 08:30	07/26/23 14:03	1
alpha-BHC	<0.099		0.099		ug/L		07/25/23 08:30	07/26/23 14:03	1
alpha-Chlordane	<0.050		0.050		ug/L		07/25/23 08:30	07/26/23 14:03	1
Anthracene	<0.020		0.020		ug/L		07/25/23 08:30	07/26/23 14:03	1
Atrazine	<0.050		0.050		ug/L		07/25/23 08:30	07/26/23 14:03	1
Benz(a)anthracene	<0.050		0.050		ug/L		07/25/23 08:30	07/26/23 14:03	1
Benzo[a]pyrene	<0.020		0.020		ug/L		07/25/23 08:30	07/26/23 14:03	1
Benzo[b]fluoranthene	<0.020		0.020		ug/L		07/25/23 08:30	07/26/23 14:03	1
Benzo[g,h,i]perylene	<0.050		0.050		ug/L		07/25/23 08:30	07/26/23 14:03	1
Benzo[k]fluoranthene	<0.020		0.020		ug/L		07/25/23 08:30	07/26/23 14:03	1
beta-BHC	<0.099		0.099		ug/L		07/25/23 08:30	07/26/23 14:03	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59		ug/L		07/25/23 08:30	07/26/23 14:03	1
Bromacil	<0.099		0.099		ug/L		07/25/23 08:30	07/26/23 14:03	1
Butachlor	<0.050		0.050		ug/L		07/25/23 08:30	07/26/23 14:03	1
Butylbenzylphthalate	<0.50		0.50		ug/L		07/25/23 08:30	07/26/23 14:03	1
Chlorobenzilate	<0.099		0.099		ug/L		07/25/23 08:30	07/26/23 14:03	1
Chloroneb	<0.099		0.099		ug/L		07/25/23 08:30	07/26/23 14:03	1
Chlorothalonil (Draconil, Bravo)	<0.099		0.099		ug/L		07/25/23 08:30	07/26/23 14:03	1
Chlorpyrifos	<0.050		0.050		ug/L		07/25/23 08:30	07/26/23 14:03	1
Chrysene	<0.020		0.020		ug/L		07/25/23 08:30	07/26/23 14:03	1
delta-BHC	<0.099		0.099		ug/L		07/25/23 08:30	07/26/23 14:03	1
Di(2-ethylhexyl)adipate	<0.59		0.59		ug/L		07/25/23 08:30	07/26/23 14:03	1
Dibenz(a,h)anthracene	<0.050		0.050		ug/L		07/25/23 08:30	07/26/23 14:03	1
Diclorvos (DDVP)	<0.050		0.050		ug/L		07/25/23 08:30	07/26/23 14:03	1
Dieldrin	<0.20		0.20		ug/L		07/25/23 08:30	07/26/23 14:03	1
Diethylphthalate	<0.50		0.50		ug/L		07/25/23 08:30	07/26/23 14:03	1
Dimethylphthalate	<0.50		0.50		ug/L		07/25/23 08:30	07/26/23 14:03	1
Di-n-butyl phthalate	<0.99		0.99		ug/L		07/25/23 08:30	07/26/23 14:03	1
Di-n-octyl phthalate	<0.099		0.099		ug/L		07/25/23 08:30	07/26/23 14:03	1
Endosulfan I (Alpha)	<0.099		0.099		ug/L		07/25/23 08:30	07/26/23 14:03	1
Endosulfan II (Beta)	<0.099		0.099		ug/L		07/25/23 08:30	07/26/23 14:03	1
Endosulfan sulfate	<0.099		0.099		ug/L		07/25/23 08:30	07/26/23 14:03	1
Endrin	<0.099		0.099		ug/L		07/25/23 08:30	07/26/23 14:03	1
Endrin aldehyde	<0.099		0.099		ug/L		07/25/23 08:30	07/26/23 14:03	1
EPTC	<0.099		0.099		ug/L		07/25/23 08:30	07/26/23 14:03	1
Fluoranthene	<0.099		0.099		ug/L		07/25/23 08:30	07/26/23 14:03	1
Fluorene	<0.050		0.050		ug/L		07/25/23 08:30	07/26/23 14:03	1
gamma-BHC (Lindane)	<0.040		0.040		ug/L		07/25/23 08:30	07/26/23 14:03	1
gamma-Chlordane	<0.050		0.050		ug/L		07/25/23 08:30	07/26/23 14:03	1
Heptachlor	<0.040		0.040		ug/L		07/25/23 08:30	07/26/23 14:03	1
Heptachlor epoxide (isomer B)	<0.050		0.050		ug/L		07/25/23 08:30	07/26/23 14:03	1
Hexachlorobenzene	<0.050		0.050		ug/L		07/25/23 08:30	07/26/23 14:03	1
Hexachlorocyclopentadiene	<0.050		0.050		ug/L		07/25/23 08:30	07/26/23 14:03	1
Indeno[1,2,3-cd]pyrene	<0.050		0.050		ug/L		07/25/23 08:30	07/26/23 14:03	1
Isophorone	<0.50		0.50		ug/L		07/25/23 08:30	07/26/23 14:03	1
Malathion	<0.099		0.099		ug/L		07/25/23 08:30	07/26/23 14:03	1
Methoxychlor	<0.099		0.099		ug/L		07/25/23 08:30	07/26/23 14:03	1
Metolachlor	<0.050		0.050		ug/L		07/25/23 08:30	07/26/23 14:03	1

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

Lab Sample ID: MB 380-48683/1-A
Matrix: Water
Analysis Batch: 48889

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 48683

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Molinate	<0.099		0.099		ug/L		07/25/23 08:30	07/26/23 14:03	1
Naphthalene	<0.30		0.30		ug/L		07/25/23 08:30	07/26/23 14:03	1
Parathion	<0.099		0.099		ug/L		07/25/23 08:30	07/26/23 14:03	1
Pendimethalin (Penoxaline)	<0.099		0.099		ug/L		07/25/23 08:30	07/26/23 14:03	1
Phenanthrene	<0.040		0.040		ug/L		07/25/23 08:30	07/26/23 14:03	1
Propachlor	<0.050		0.050		ug/L		07/25/23 08:30	07/26/23 14:03	1
Pyrene	<0.050		0.050		ug/L		07/25/23 08:30	07/26/23 14:03	1
Simazine	<0.050		0.050		ug/L		07/25/23 08:30	07/26/23 14:03	1
Terbacil	<0.099		0.099		ug/L		07/25/23 08:30	07/26/23 14:03	1
Terbuthylazine	<0.099		0.099		ug/L		07/25/23 08:30	07/26/23 14:03	1
Thiobencarb	<0.20		0.20		ug/L		07/25/23 08:30	07/26/23 14:03	1
Total Permethrin (mixed isomers)	<0.20		0.20		ug/L		07/25/23 08:30	07/26/23 14:03	1
trans-Nonachlor	<0.050		0.050		ug/L		07/25/23 08:30	07/26/23 14:03	1
Trifluralin	<0.099		0.099		ug/L		07/25/23 08:30	07/26/23 14:03	1
1-Methylnaphthalene	<0.099		0.099		ug/L		07/25/23 08:30	07/26/23 14:03	1
2-Methylnaphthalene	<0.099		0.099		ug/L		07/25/23 08:30	07/26/23 14:03	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*0.759*	*T J*	*ug/L*		*2.61*	*N/A*	*07/25/23 08:30*	*07/26/23 14:03*	*1*
Tetradecanoic acid	*0.945*	*T J N*	*ug/L*		*5.87*	*544-63-8*	*07/25/23 08:30*	*07/26/23 14:03*	*1*
Octadecanoic acid	*0.554*	*T J N*	*ug/L*		*6.56*	*57-11-4*	*07/25/23 08:30*	*07/26/23 14:03*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Nitro-m-xylene	*101*		*70 - 130*	*07/25/23 08:30*	*07/26/23 14:03*	*1*
Perylene-d12	*88*		*70 - 130*	*07/25/23 08:30*	*07/26/23 14:03*	*1*
Triphenylphosphate	*108*		*70 - 130*	*07/25/23 08:30*	*07/26/23 14:03*	*1*

Lab Sample ID: LCS 380-48683/3-A
Matrix: Water
Analysis Batch: 48889

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 48683

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
2,4'-DDD			1.99	2.02		ug/L		102	70 - 130		
2,4'-DDE			1.99	2.03		ug/L		102	70 - 130		
2,4'-DDT			1.99	2.14		ug/L		108	70 - 130		
2,4-Dinitrotoluene			1.99	2.03		ug/L		102	70 - 130		
2,6-Dinitrotoluene			1.99	2.03		ug/L		102	70 - 130		
4,4'-DDD			1.99	2.05		ug/L		103	70 - 130		
4,4'-DDE			1.99	2.01		ug/L		101	70 - 130		
4,4'-DDT			1.99	2.14		ug/L		108	70 - 130		
Acenaphthene			1.99	1.88		ug/L		95	70 - 130		
Acenaphthylene			1.99	1.98		ug/L		100	70 - 130		
Acetochlor			1.99	2.56		ug/L		129	70 - 130		
Alachlor			1.99	2.36		ug/L		119	70 - 130		
alpha-BHC			1.99	2.09		ug/L		105	70 - 130		
alpha-Chlordane			1.99	2.00		ug/L		101	70 - 130		
Anthracene			1.99	2.05		ug/L		103	70 - 130		
Atrazine			1.99	2.15		ug/L		108	70 - 130		

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

Lab Sample ID: LCS 380-48683/3-A
Matrix: Water
Analysis Batch: 48889

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 48683

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benz(a)anthracene	1.99	2.04		ug/L		103	70 - 130
Benzo[a]pyrene	1.99	1.98		ug/L		100	70 - 130
Benzo[b]fluoranthene	1.99	1.97		ug/L		99	70 - 130
Benzo[g,h,i]perylene	1.99	2.15		ug/L		108	70 - 130
Benzo[k]fluoranthene	1.99	2.10		ug/L		106	70 - 130
beta-BHC	1.99	2.11		ug/L		106	70 - 130
Bis(2-ethylhexyl) phthalate	1.99	1.99		ug/L		100	70 - 130
Bromacil	1.99	2.30		ug/L		116	70 - 130
Butachlor	1.99	2.46		ug/L		124	70 - 130
Butylbenzylphthalate	1.99	2.09		ug/L		105	70 - 130
Chlorobenzilate	1.99	2.35		ug/L		118	70 - 130
Chloroneb	1.99	2.01		ug/L		101	70 - 130
Chlorothalonil (Draconil, Bravo)	1.99	2.06		ug/L		104	70 - 130
Chlorpyrifos	1.99	2.26		ug/L		114	70 - 130
Chrysene	1.99	1.98		ug/L		100	70 - 130
delta-BHC	1.99	2.04		ug/L		103	70 - 130
Di(2-ethylhexyl)adipate	1.99	2.12		ug/L		107	70 - 130
Dibenz(a,h)anthracene	1.99	2.23		ug/L		112	70 - 130
Diclorvos (DDVP)	1.99	2.56		ug/L		129	70 - 130
Dieldrin	1.99	2.01		ug/L		101	70 - 130
Diethylphthalate	1.99	2.20		ug/L		111	70 - 130
Dimethylphthalate	1.99	2.17		ug/L		109	70 - 130
Di-n-butyl phthalate	3.97	4.29		ug/L		108	70 - 130
Di-n-octyl phthalate	1.99	2.09		ug/L		105	70 - 130
Endosulfan I (Alpha)	1.99	1.93		ug/L		97	70 - 130
Endosulfan II (Beta)	1.99	2.13		ug/L		107	70 - 130
Endosulfan sulfate	1.99	2.00		ug/L		101	70 - 130
Endrin	1.99	2.44		ug/L		123	70 - 130
Endrin aldehyde	1.99	2.07		ug/L		104	70 - 130
EPTC	1.99	2.23		ug/L		112	70 - 130
Fluoranthene	1.99	2.23		ug/L		112	70 - 130
Fluorene	1.99	2.07		ug/L		104	70 - 130
gamma-BHC (Lindane)	1.99	2.08		ug/L		104	70 - 130
gamma-Chlordane	1.99	2.06		ug/L		103	70 - 130
Heptachlor	1.99	2.08		ug/L		105	70 - 130
Heptachlor epoxide (isomer B)	1.99	2.16		ug/L		108	70 - 130
Hexachlorobenzene	1.99	2.01		ug/L		101	70 - 130
Hexachlorocyclopentadiene	1.99	1.90		ug/L		95	70 - 130
Indeno[1,2,3-cd]pyrene	1.99	2.18		ug/L		110	70 - 130
Isophorone	1.99	2.08		ug/L		105	70 - 130
Malathion	1.99	2.29		ug/L		115	70 - 130
Methoxychlor	1.99	2.11		ug/L		106	70 - 130
Metolachlor	1.99	2.44		ug/L		123	70 - 130
Molinate	1.99	2.32		ug/L		117	70 - 130
Naphthalene	1.99	1.87		ug/L		94	70 - 130
Parathion	1.99	2.48		ug/L		125	70 - 130
Pendimethalin (Penoxaline)	1.99	2.25		ug/L		113	70 - 130
Phenanthrene	1.99	1.91		ug/L		96	70 - 130
Propachlor	1.99	2.25		ug/L		113	70 - 130

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

Lab Sample ID: LCS 380-48683/3-A
Matrix: Water
Analysis Batch: 48889

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 48683

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Pyrene	1.99	2.19		ug/L		110	70 - 130
Simazine	1.99	2.13		ug/L		107	70 - 130
Terbacil	1.99	2.28		ug/L		115	70 - 130
Terbuthylazine	1.99	2.29		ug/L		115	70 - 130
Thiobencarb	1.99	2.12		ug/L		107	70 - 130
trans-Nonachlor	1.99	1.88		ug/L		95	70 - 130
Trifluralin	1.99	2.15		ug/L		108	70 - 130
1-Methylnaphthalene	1.99	1.99		ug/L		100	70 - 130
2-Methylnaphthalene	1.99	1.96		ug/L		99	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Nitro-m-xylene	*104*		*70 - 130*
Perylene-d12	*92*		*70 - 130*
Triphenylphosphate	*113*		*70 - 130*

Lab Sample ID: LCSD 380-48683/4-A
Matrix: Water
Analysis Batch: 48889

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 48683

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4'-DDD	1.99	2.17		ug/L		109	70 - 130	7	20
2,4'-DDE	1.99	2.10		ug/L		106	70 - 130	3	20
2,4'-DDT	1.99	2.16		ug/L		108	70 - 130	1	20
2,4-Dinitrotoluene	1.99	2.15		ug/L		108	70 - 130	6	20
2,6-Dinitrotoluene	1.99	2.14		ug/L		107	70 - 130	5	20
4,4'-DDD	1.99	2.09		ug/L		105	70 - 130	2	20
4,4'-DDE	1.99	2.06		ug/L		103	70 - 130	2	20
4,4'-DDT	1.99	2.17		ug/L		109	70 - 130	2	20
Acenaphthene	1.99	1.96		ug/L		98	70 - 130	4	20
Acenaphthylene	1.99	2.05		ug/L		103	70 - 130	4	20
Acetochlor	1.99	2.48		ug/L		124	70 - 130	3	20
Alachlor	1.99	2.44		ug/L		123	70 - 130	3	20
alpha-BHC	1.99	2.25		ug/L		113	70 - 130	7	20
alpha-Chlordane	1.99	2.09		ug/L		105	70 - 130	4	20
Anthracene	1.99	2.08		ug/L		104	70 - 130	1	20
Atrazine	1.99	2.31		ug/L		116	70 - 130	8	20
Benz(a)anthracene	1.99	2.12		ug/L		106	70 - 130	3	20
Benzo[a]pyrene	1.99	2.06		ug/L		103	70 - 130	4	20
Benzo[b]fluoranthene	1.99	2.10		ug/L		106	70 - 130	7	20
Benzo[g,h,i]perylene	1.99	2.26		ug/L		113	70 - 130	5	20
Benzo[k]fluoranthene	1.99	2.20		ug/L		111	70 - 130	4	20
beta-BHC	1.99	2.32		ug/L		117	70 - 130	10	20
Bis(2-ethylhexyl) phthalate	1.99	2.03		ug/L		102	70 - 130	2	20
Bromacil	1.99	2.37		ug/L		119	70 - 130	3	20
Butachlor	1.99	2.56		ug/L		129	70 - 130	4	20
Butylbenzylphthalate	1.99	2.20		ug/L		110	70 - 130	5	20
Chlorobenzilate	1.99	2.45		ug/L		123	70 - 130	4	20
Chloroneb	1.99	2.10		ug/L		106	70 - 130	4	20

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

Lab Sample ID: LCSD 380-48683/4-A
Matrix: Water
Analysis Batch: 48889

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 48683

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chlorothalonil (Draconil, Bravo)	1.99	2.18		ug/L		109	70 - 130	5	20
Chlorpyrifos	1.99	2.32		ug/L		117	70 - 130	3	20
Chrysene	1.99	2.07		ug/L		104	70 - 130	4	20
delta-BHC	1.99	2.12		ug/L		107	70 - 130	4	20
Di(2-ethylhexyl)adipate	1.99	2.17		ug/L		109	70 - 130	2	20
Dibenz(a,h)anthracene	1.99	2.32		ug/L		117	70 - 130	4	20
Diclorvos (DDVP)	1.99	2.40		ug/L		121	70 - 130	6	20
Dieldrin	1.99	2.13		ug/L		107	70 - 130	6	20
Diethylphthalate	1.99	2.31		ug/L		116	70 - 130	5	20
Dimethylphthalate	1.99	2.29		ug/L		115	70 - 130	6	20
Di-n-butyl phthalate	3.98	4.43		ug/L		111	70 - 130	3	20
Di-n-octyl phthalate	1.99	2.06		ug/L		104	70 - 130	1	20
Endosulfan I (Alpha)	1.99	2.00		ug/L		101	70 - 130	4	20
Endosulfan II (Beta)	1.99	2.26		ug/L		114	70 - 130	6	20
Endosulfan sulfate	1.99	2.11		ug/L		106	70 - 130	5	20
Endrin	1.99	2.49		ug/L		125	70 - 130	2	20
Endrin aldehyde	1.99	2.13		ug/L		107	70 - 130	3	20
EPTC	1.99	2.26		ug/L		113	70 - 130	1	20
Fluoranthene	1.99	2.29		ug/L		115	70 - 130	3	20
Fluorene	1.99	2.18		ug/L		110	70 - 130	5	20
gamma-BHC (Lindane)	1.99	2.29		ug/L		115	70 - 130	10	20
gamma-Chlordane	1.99	2.15		ug/L		108	70 - 130	4	20
Heptachlor	1.99	2.13		ug/L		107	70 - 130	2	20
Heptachlor epoxide (isomer B)	1.99	2.22		ug/L		112	70 - 130	3	20
Hexachlorobenzene	1.99	2.20		ug/L		111	70 - 130	9	20
Hexachlorocyclopentadiene	1.99	2.06		ug/L		103	70 - 130	8	20
Indeno[1,2,3-cd]pyrene	1.99	2.27		ug/L		114	70 - 130	4	20
Isophorone	1.99	2.10		ug/L		106	70 - 130	1	20
Malathion	1.99	2.35		ug/L		118	70 - 130	2	20
Methoxychlor	1.99	2.23		ug/L		112	70 - 130	5	20
Metolachlor	1.99	2.48		ug/L		125	70 - 130	2	20
Molinate	1.99	2.36		ug/L		119	70 - 130	2	20
Naphthalene	1.99	1.93		ug/L		97	70 - 130	3	20
Parathion	1.99	2.49		ug/L		125	70 - 130	0	20
Pendimethalin (Penoxaline)	1.99	2.33		ug/L		117	70 - 130	4	20
Phenanthrene	1.99	1.95		ug/L		98	70 - 130	2	20
Propachlor	1.99	2.44		ug/L		123	70 - 130	8	20
Pyrene	1.99	2.27		ug/L		114	70 - 130	3	20
Simazine	1.99	2.33		ug/L		117	70 - 130	9	20
Terbacil	1.99	2.35		ug/L		118	70 - 130	3	20
Terbuthylazine	1.99	2.50		ug/L		126	70 - 130	9	20
Thiobencarb	1.99	2.15		ug/L		108	70 - 130	1	20
trans-Nonachlor	1.99	1.95		ug/L		98	70 - 130	4	20
Trifluralin	1.99	2.36		ug/L		118	70 - 130	9	20
1-Methylnaphthalene	1.99	2.02		ug/L		102	70 - 130	1	20
2-Methylnaphthalene	1.99	2.05		ug/L		103	70 - 130	5	20

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

Lab Sample ID: LCSD 380-48683/4-A
Matrix: Water
Analysis Batch: 48889

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 48683

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Nitro-m-xylene	101		70 - 130
Perylene-d12	93		70 - 130
Triphenylphosphate	115		70 - 130

Lab Sample ID: MRL 380-48683/2-A
Matrix: Water
Analysis Batch: 48889

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 48683

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
2,4'-DDD	0.0993	0.124		ug/L		125	50 - 150
2,4'-DDE	0.0993	0.102		ug/L		103	50 - 150
2,4'-DDT	0.0993	0.113		ug/L		114	50 - 150
2,4-Dinitrotoluene	0.0993	0.124		ug/L		125	50 - 150
2,6-Dinitrotoluene	0.0993	0.108		ug/L		108	50 - 150
4,4'-DDD	0.0993	0.108		ug/L		109	50 - 150
4,4'-DDE	0.0993	0.0971	J	ug/L		98	50 - 150
4,4'-DDT	0.0993	0.120		ug/L		121	50 - 150
Acenaphthene	0.0993	0.101		ug/L		102	50 - 150
Acenaphthylene	0.0993	0.0959	J	ug/L		97	50 - 150
Acetochlor	0.0497	0.0536	J	ug/L		108	50 - 150
Alachlor	0.0497	0.0562		ug/L		113	50 - 150
alpha-BHC	0.0993	0.105		ug/L		106	50 - 150
alpha-Chlordane	0.0248	<0.029		ug/L		97	50 - 150
Anthracene	0.0199	0.0196	J	ug/L		98	50 - 150
Atrazine	0.0497	0.0684		ug/L		138	50 - 150
Benz(a)anthracene	0.0497	0.0463	J	ug/L		93	50 - 150
Benzo[a]pyrene	0.0199	0.0200		ug/L		101	50 - 150
Benzo[b]fluoranthene	0.0199	0.0195	J	ug/L		98	50 - 150
Benzo[g,h,i]perylene	0.0497	0.0405	J	ug/L		82	50 - 150
Benzo[k]fluoranthene	0.0199	0.0175	J	ug/L		88	50 - 150
beta-BHC	0.0993	0.0992		ug/L		100	50 - 150
Bis(2-ethylhexyl) phthalate	0.596	0.645		ug/L		108	50 - 150
Bromacil	0.0993	0.126		ug/L		126	50 - 150
Butachlor	0.0497	0.0642		ug/L		129	50 - 150
Butylbenzylphthalate	0.149	0.200	J	ug/L		135	50 - 150
Chlorobenzilate	0.0993	0.155	^3+	ug/L		156	50 - 150
Chloroneb	0.0993	0.104		ug/L		105	50 - 150
Chlorothalonil (Draconil, Bravo)	0.0993	0.119		ug/L		120	50 - 150
Chlorpyrifos	0.0497	0.0554		ug/L		112	50 - 150
Chrysene	0.0199	0.0214		ug/L		108	50 - 150
delta-BHC	0.0993	0.113		ug/L		114	50 - 150
Di(2-ethylhexyl)adipate	0.298	0.363	J	ug/L		122	50 - 150
Dibenz(a,h)anthracene	0.0497	0.0412	J	ug/L		83	50 - 150
Diclorvos (DDVP)	0.0497	0.0828	^3+	ug/L		167	50 - 150
Dieldrin	0.0993	0.0983	J	ug/L		99	50 - 150
Diethylphthalate	0.149	0.192	J	ug/L		129	50 - 150
Dimethylphthalate	0.298	0.304	J	ug/L		102	50 - 150
Di-n-butyl phthalate	0.298	0.334	J	ug/L		112	49 - 243

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

Lab Sample ID: MRL 380-48683/2-A
Matrix: Water
Analysis Batch: 48889

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 48683

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Di-n-octyl phthalate	0.0993	0.119		ug/L		120	50 - 150
Endosulfan I (Alpha)	0.0993	0.0945	J	ug/L		95	50 - 150
Endosulfan II (Beta)	0.0993	0.119		ug/L		120	50 - 150
Endosulfan sulfate	0.0993	0.104		ug/L		104	50 - 150
Endrin	0.0993	0.121		ug/L		122	50 - 150
Endrin aldehyde	0.0993	0.142		ug/L		143	50 - 150
EPTC	0.0993	0.108		ug/L		109	50 - 150
Fluoranthene	0.0497	0.0543	J	ug/L		109	50 - 150
Fluorene	0.0497	0.0537		ug/L		108	50 - 150
gamma-BHC (Lindane)	0.0397	0.0414		ug/L		104	50 - 150
gamma-Chlordane	0.0248	0.0252	J	ug/L		102	50 - 150
Heptachlor	0.0397	0.0613	^3+	ug/L		154	50 - 150
Heptachlor epoxide (isomer B)	0.0497	0.0514		ug/L		104	50 - 150
Hexachlorobenzene	0.0497	0.0417	J	ug/L		84	50 - 150
Hexachlorocyclopentadiene	0.0497	0.0450	J	ug/L		91	50 - 150
Indeno[1,2,3-cd]pyrene	0.0497	0.0436	J	ug/L		88	50 - 150
Isophorone	0.0993	0.110	J	ug/L		111	50 - 150
Malathion	0.0993	0.128		ug/L		129	50 - 150
Methoxychlor	0.0993	0.131		ug/L		131	50 - 150
Metolachlor	0.0497	0.0644		ug/L		130	50 - 150
Molinate	0.0993	0.117		ug/L		118	50 - 150
Naphthalene	0.0993	0.130	J	ug/L		131	50 - 150
Parathion	0.0993	0.133		ug/L		134	50 - 150
Pendimethalin (Penoxaline)	0.0993	0.120		ug/L		121	50 - 150
Phenanthrene	0.0199	0.0225	J	ug/L		113	50 - 150
Propachlor	0.0497	0.0544		ug/L		110	50 - 150
Pyrene	0.0497	0.0534		ug/L		108	50 - 150
Simazine	0.0497	0.0621		ug/L		125	50 - 150
Terbacil	0.0993	0.120		ug/L		121	50 - 150
Terbuthylazine	0.0993	0.108		ug/L		108	50 - 150
Thiobencarb	0.0993	0.118	J	ug/L		118	50 - 150
trans-Nonachlor	0.0248	<0.026		ug/L		103	50 - 150
Trifluralin	0.0993	0.109		ug/L		110	50 - 150
1-Methylnaphthalene	0.0993	0.114		ug/L		115	50 - 150
2-Methylnaphthalene	0.0993	0.109		ug/L		110	50 - 150

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
2-Nitro-m-xylene	*102*		*70 - 130*
Perylene-d12	*90*		*70 - 130*
Triphenylphosphate	*102*		*70 - 130*

Lab Sample ID: 380-55591-AU-1-A MS
Matrix: Water
Analysis Batch: 48889

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 48683

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2,4'-DDD	<0.098		1.97	2.10		ug/L		107	70 - 130
2,4'-DDE	<0.098		1.97	2.02		ug/L		102	70 - 130

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

Lab Sample ID: 380-55591-AU-1-A MS
Matrix: Water
Analysis Batch: 48889

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 48683

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2,4'-DDT	<0.098		1.97	2.10		ug/L		106	70 - 130
2,4-Dinitrotoluene	<0.098		1.97	2.24		ug/L		113	70 - 130
2,6-Dinitrotoluene	<0.098		1.97	2.20		ug/L		112	70 - 130
4,4'-DDD	<0.098		1.97	2.04		ug/L		103	70 - 130
4,4'-DDE	<0.098		1.97	1.99		ug/L		101	70 - 130
4,4'-DDT	<0.098		1.97	2.11		ug/L		107	70 - 130
Acenaphthene	<0.098		1.97	1.92		ug/L		97	70 - 130
Acenaphthylene	<0.098		1.97	2.05		ug/L		104	70 - 130
Acetochlor	<0.098		1.97	2.57		ug/L		130	70 - 130
Alachlor	<0.049		1.97	2.35		ug/L		119	70 - 130
alpha-BHC	<0.098		1.97	2.13		ug/L		108	70 - 130
alpha-Chlordane	<0.049		1.97	2.03		ug/L		103	70 - 130
Anthracene	<0.020	F1	1.97	1.06	F1	ug/L		54	70 - 130
Atrazine	<0.049		1.97	2.20		ug/L		112	70 - 130
Benz(a)anthracene	<0.049		1.97	1.84		ug/L		93	70 - 130
Benzo[a]pyrene	<0.020		1.97	1.39		ug/L		71	70 - 130
Benzo[b]fluoranthene	<0.020		1.97	2.03		ug/L		103	70 - 130
Benzo[g,h,i]perylene	<0.049		1.97	2.18		ug/L		111	70 - 130
Benzo[k]fluoranthene	<0.020		1.97	2.13		ug/L		108	70 - 130
beta-BHC	<0.098		1.97	2.17		ug/L		110	70 - 130
Bis(2-ethylhexyl) phthalate	<0.59		1.97	2.00		ug/L		101	70 - 130
Bromacil	<0.098		1.97	2.41		ug/L		122	70 - 130
Butachlor	<0.049		1.97	2.50		ug/L		127	70 - 130
Butylbenzylphthalate	<0.49		1.97	2.10		ug/L		103	70 - 130
Chlorobenzilate	<0.098	^3+	1.97	2.39		ug/L		121	70 - 130
Chloroneb	<0.098		1.97	2.00		ug/L		101	70 - 130
Chlorothalonil (Draconil, Bravo)	<0.098		1.97	2.12		ug/L		107	70 - 130
Chlorpyrifos	<0.049		1.97	2.27		ug/L		115	70 - 130
Chrysene	<0.020		1.97	2.04		ug/L		103	70 - 130
delta-BHC	<0.098		1.97	2.07		ug/L		105	70 - 130
Di(2-ethylhexyl)adipate	<0.59		1.97	2.09		ug/L		102	70 - 130
Dibenz(a,h)anthracene	<0.049		1.97	2.19		ug/L		111	70 - 130
Diclorvos (DDVP)	<0.049	^3+ F1	1.97	2.64	F1	ug/L		134	70 - 130
Dieldrin	<0.20		1.97	2.06		ug/L		105	70 - 130
Diethylphthalate	<0.49		1.97	2.23		ug/L		113	70 - 130
Dimethylphthalate	<0.49		1.97	2.14		ug/L		109	70 - 130
Di-n-butyl phthalate	<0.98		3.95	4.27		ug/L		108	70 - 130
Di-n-octyl phthalate	<0.098		1.97	2.04		ug/L		104	70 - 130
Endosulfan I (Alpha)	<0.098		1.97	1.92		ug/L		97	70 - 130
Endosulfan II (Beta)	<0.098		1.97	2.19		ug/L		111	70 - 130
Endosulfan sulfate	<0.098		1.97	2.09		ug/L		106	70 - 130
Endrin	<0.098		1.97	2.28		ug/L		115	70 - 130
Endrin aldehyde	<0.098		1.97	1.97		ug/L		100	70 - 130
EPTC	<0.098		1.97	2.32		ug/L		118	70 - 130
Fluoranthene	0.15		1.97	2.33		ug/L		110	70 - 130
Fluorene	0.070		1.97	2.13		ug/L		105	70 - 130
gamma-BHC (Lindane)	<0.039		1.97	2.16		ug/L		110	70 - 130
gamma-Chlordane	<0.049		1.97	2.05		ug/L		104	70 - 130
Heptachlor	<0.039	^3+	1.97	2.06		ug/L		104	70 - 130

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

Lab Sample ID: 380-55591-AU-1-A MS
Matrix: Water
Analysis Batch: 48889

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 48683

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Heptachlor epoxide (isomer B)	<0.049		1.97	2.18		ug/L		110	70 - 130
Hexachlorobenzene	<0.049		1.97	2.10		ug/L		106	70 - 130
Hexachlorocyclopentadiene	<0.049		1.97	2.02		ug/L		103	70 - 130
Indeno[1,2,3-cd]pyrene	<0.049		1.97	2.21		ug/L		112	70 - 130
Isophorone	<0.49		1.97	2.12		ug/L		108	70 - 130
Malathion	<0.098		1.97	2.32		ug/L		118	70 - 130
Methoxychlor	<0.098		1.97	2.20		ug/L		111	70 - 130
Metolachlor	<0.049		1.97	2.43		ug/L		123	70 - 130
Molinate	<0.098		1.97	2.40		ug/L		121	70 - 130
Naphthalene	<0.30		1.97	1.90		ug/L		95	70 - 130
Parathion	<0.098		1.97	2.48		ug/L		126	70 - 130
Pendimethalin (Penoxaline)	<0.098		1.97	2.30		ug/L		116	70 - 130
Phenanthrene	0.64		1.97	2.07		ug/L		73	70 - 130
Propachlor	<0.049		1.97	2.26		ug/L		115	70 - 130
Pyrene	<0.049		1.97	2.19		ug/L		111	70 - 130
Simazine	<0.049		1.97	2.25		ug/L		114	70 - 130
Terbacil	<0.098		1.97	2.39		ug/L		121	70 - 130
Terbuthylazine	<0.098		1.97	2.37		ug/L		120	70 - 130
Thiobencarb	<0.20		1.97	2.17		ug/L		110	70 - 130
trans-Nonachlor	<0.049		1.97	1.88		ug/L		95	70 - 130
Trifluralin	<0.098		1.97	2.24		ug/L		114	70 - 130
1-Methylnaphthalene	<0.098		1.97	2.01		ug/L		102	70 - 130
2-Methylnaphthalene	<0.098		1.97	2.02		ug/L		102	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Nitro-m-xylene	*101*		*70 - 130*
Perylene-d12	*90*		*70 - 130*
Triphenylphosphate	*115*		*70 - 130*

Lab Sample ID: 380-55859-T-2-A DU
Matrix: Water
Analysis Batch: 48889

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 48683

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
2,4'-DDD	<0.099		<0.098		ug/L		NC	20
2,4'-DDE	<0.099		<0.098		ug/L		NC	20
2,4'-DDT	<0.099		<0.098		ug/L		NC	20
2,4-Dinitrotoluene	<0.099		<0.098		ug/L		NC	20
2,6-Dinitrotoluene	<0.099		<0.098		ug/L		NC	20
4,4'-DDD	<0.099		<0.098		ug/L		NC	20
4,4'-DDE	<0.099		<0.098		ug/L		NC	20
4,4'-DDT	<0.099		<0.098		ug/L		NC	20
Acenaphthene	<0.099		<0.098		ug/L		NC	20
Acenaphthylene	<0.099		<0.098		ug/L		NC	20
Acetochlor	<0.099		<0.098		ug/L		NC	20
Alachlor	<0.049		<0.049		ug/L		NC	20
alpha-BHC	<0.099		<0.098		ug/L		NC	20
alpha-Chlordane	<0.049		<0.049		ug/L		NC	20

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

Lab Sample ID: 380-55859-T-2-A DU
Matrix: Water
Analysis Batch: 48889

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 48683

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Anthracene	<0.020			<0.020		ug/L				NC	20
Atrazine	<0.049			<0.049		ug/L				NC	20
Benz(a)anthracene	<0.049			<0.049		ug/L				NC	20
Benzo[a]pyrene	<0.020			<0.020		ug/L				NC	20
Benzo[b]fluoranthene	<0.020			<0.020		ug/L				NC	20
Benzo[g,h,i]perylene	<0.049			<0.049		ug/L				NC	20
Benzo[k]fluoranthene	<0.020			<0.020		ug/L				NC	20
beta-BHC	<0.099			<0.098		ug/L				NC	20
Bis(2-ethylhexyl) phthalate	<0.59			<0.59		ug/L				NC	20
Bromacil	<0.099			<0.098		ug/L				NC	20
Butachlor	<0.049			<0.049		ug/L				NC	20
Butylbenzylphthalate	<0.49			<0.49		ug/L				NC	20
Chlorobenzilate	<0.099	^3+		<0.098		ug/L				NC	20
Chloroneb	<0.099			<0.098		ug/L				NC	20
Chlorothalonil (Draconil, Bravo)	<0.099			<0.098		ug/L				NC	20
Chlorpyrifos	<0.049			<0.049		ug/L				NC	20
Chrysene	<0.020			<0.020		ug/L				NC	20
delta-BHC	<0.099			<0.098		ug/L				NC	20
Di(2-ethylhexyl)adipate	<0.59			<0.59		ug/L				NC	20
Dibenz(a,h)anthracene	<0.049			<0.049		ug/L				NC	20
Diclorvos (DDVP)	<0.049	^3+		<0.049		ug/L				NC	20
Dieldrin	<0.20			<0.20		ug/L				NC	20
Diethylphthalate	<0.49			<0.49		ug/L				NC	20
Dimethylphthalate	<0.49			<0.49		ug/L				NC	20
Di-n-butyl phthalate	<0.99			<0.98		ug/L				NC	20
Di-n-octyl phthalate	<0.099			<0.098		ug/L				NC	20
Endosulfan I (Alpha)	<0.099			<0.098		ug/L				NC	20
Endosulfan II (Beta)	<0.099			<0.098		ug/L				NC	20
Endosulfan sulfate	<0.099			<0.098		ug/L				NC	20
Endrin	<0.099			<0.098		ug/L				NC	20
Endrin aldehyde	<0.099			<0.098		ug/L				NC	20
EPTC	<0.099			<0.098		ug/L				NC	20
Fluoranthene	<0.099			<0.098		ug/L				NC	20
Fluorene	<0.049			<0.049		ug/L				NC	20
gamma-BHC (Lindane)	<0.040			<0.039		ug/L				NC	20
gamma-Chlordane	<0.049			<0.049		ug/L				NC	20
Heptachlor	<0.040	^3+		<0.039		ug/L				NC	20
Heptachlor epoxide (isomer B)	<0.049			<0.049		ug/L				NC	20
Hexachlorobenzene	<0.049			<0.049		ug/L				NC	20
Hexachlorocyclopentadiene	<0.049			<0.049		ug/L				NC	20
Indeno[1,2,3-cd]pyrene	<0.049			<0.049		ug/L				NC	20
Isophorone	<0.49			<0.49		ug/L				NC	20
Malathion	<0.099			<0.098		ug/L				NC	20
Methoxychlor	<0.099			<0.098		ug/L				NC	20
Metolachlor	<0.049			<0.049		ug/L				NC	20
Molinate	<0.099			<0.098		ug/L				NC	20
Naphthalene	<0.30			<0.29		ug/L				NC	20
Parathion	<0.099			<0.098		ug/L				NC	20
Pendimethalin (Penoxaline)	<0.099			<0.098		ug/L				NC	20

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

Lab Sample ID: 380-55859-T-2-A DU
Matrix: Water
Analysis Batch: 48889

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 48683

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Phenanthrene	<0.040			<0.039		ug/L				NC	20
Propachlor	<0.049			<0.049		ug/L				NC	20
Pyrene	<0.049			<0.049		ug/L				NC	20
Simazine	<0.049			<0.049		ug/L				NC	20
Terbacil	<0.099			<0.098		ug/L				NC	20
Terbuthylazine	<0.099			<0.098		ug/L				NC	20
Thiobencarb	<0.20			<0.20		ug/L				NC	20
Total Permethrin (mixed isomers)	<0.20			<0.20		ug/L				NC	20
trans-Nonachlor	<0.049			<0.049		ug/L				NC	20
Trifluralin	<0.099			<0.098		ug/L				NC	20
1-Methylnaphthalene	<0.099			<0.098		ug/L				NC	20
2-Methylnaphthalene	<0.099			<0.098		ug/L				NC	20

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
2-Nitro-m-xylene	*104*		*70 - 130*
Perylene-d12	*92*		*70 - 130*
Triphenylphosphate	*109*		*70 - 130*

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

Lab Sample ID: MBL 380-49111/4-A
Matrix: Water
Analysis Batch: 49300

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 49111

Analyte	MBL Result	MBL Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	<0.0040		0.020		ug/L		07/27/23 12:50	07/27/23 17:13	1
1,2-D bromo-3-Chloropropane	<0.0020		0.010		ug/L		07/27/23 12:50	07/27/23 17:13	1
1,2-D bromoethane	<0.0040		0.010		ug/L		07/27/23 12:50	07/27/23 17:13	1

Surrogate	*MBL %Recovery*	*MBL Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane (Surr)	*103*		*60 - 140*	*07/27/23 12:50*	*07/27/23 17:13*	*1*

Lab Sample ID: LCS 380-49111/3-A
Matrix: Water
Analysis Batch: 49300

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 49111

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2,3-Trichloropropane			0.200	0.211		ug/L		106	70 - 130		
1,2-D bromo-3-Chloropropane			0.200	0.200		ug/L		100	70 - 130		
1,2-D bromoethane			0.200	0.213		ug/L		106	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dibromopropane (Surr)	*105*		*60 - 140*

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

Lab Sample ID: MRL 380-49111/1-A
Matrix: Water
Analysis Batch: 49300

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 49111

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
1,2,3-Trichloropropane			0.0200	0.0189	J	ug/L		95	60 - 140		

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
1,2-Dibromopropane (Surr)	*95*		*60 - 140*

Lab Sample ID: MRL 380-49111/2-A
Matrix: Water
Analysis Batch: 49300

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 49111

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
1,2,3-Trichloropropane			0.0500	0.0448		ug/L		90	60 - 140		
1,2-D bromo-3-Chloropropane			0.0100	0.0112		ug/L		112	60 - 140		
1,2-D bromoethane			0.0100	0.0129		ug/L		129	60 - 140		

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

Lab Sample ID: 380-55656-D-1-A MS
Matrix: Water
Analysis Batch: 49300

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 49111

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2,3-Trichloropropane	<0.020		1.28	1.32		ug/L		104	65 - 135		
1,2-D bromo-3-Chloropropane	<0.010		0.255	0.254		ug/L		100	65 - 135		
1,2-D bromoethane	<0.010		0.255	0.262		ug/L		103	65 - 135		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dibromopropane (Surr)	*103*		*60 - 140*

Lab Sample ID: 380-55656-G-2-A DU
Matrix: Water
Analysis Batch: 49300

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 49111

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
1,2,3-Trichloropropane	<0.021			<0.020		ug/L				NC	20
1,2-D bromo-3-Chloropropane	<0.010			<0.010		ug/L				NC	20
1,2-D bromoethane	<0.010			<0.010		ug/L				NC	20

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

Method: 505 - Organochlorine Pesticides/PCBs (GC)

Lab Sample ID: MBL 380-48887/4-A
Matrix: Water
Analysis Batch: 49509

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 48887

Analyte	MBL Result	MBL Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.0020		0.010		ug/L		07/26/23 12:57	07/26/23 16:28	1
Dieldrin	<0.0050		0.010		ug/L		07/26/23 12:57	07/26/23 16:28	1
Toxaphene	<0.083		0.50		ug/L		07/26/23 12:57	07/26/23 16:28	1
Alachlor	<0.041		0.10		ug/L		07/26/23 12:57	07/26/23 16:28	1
Chlordane (n.o.s.)	<0.032		0.10		ug/L		07/26/23 12:57	07/26/23 16:28	1
Endrin	<0.0050		0.010		ug/L		07/26/23 12:57	07/26/23 16:28	1
Heptachlor	<0.0030		0.010		ug/L		07/26/23 12:57	07/26/23 16:28	1
Heptachlor epoxide	<0.0050		0.010		ug/L		07/26/23 12:57	07/26/23 16:28	1
gamma-BHC (Lindane)	<0.0070		0.010		ug/L		07/26/23 12:57	07/26/23 16:28	1
Methoxychlor	<0.022		0.050		ug/L		07/26/23 12:57	07/26/23 16:28	1
PCB-1016	<0.022		0.070		ug/L		07/26/23 12:57	07/26/23 16:28	1
PCB-1221	<0.079		0.10		ug/L		07/26/23 12:57	07/26/23 16:28	1
PCB-1232	<0.085		0.10		ug/L		07/26/23 12:57	07/26/23 16:28	1
PCB-1242	<0.072		0.10		ug/L		07/26/23 12:57	07/26/23 16:28	1
PCB-1248	<0.023		0.10		ug/L		07/26/23 12:57	07/26/23 16:28	1
PCB-1254	<0.035		0.10		ug/L		07/26/23 12:57	07/26/23 16:28	1
PCB-1260	<0.033		0.070		ug/L		07/26/23 12:57	07/26/23 16:28	1
Polychlorinated biphenyls, Total	<0.085		0.10		ug/L		07/26/23 12:57	07/26/23 16:28	1

Surrogate	*MBL %Recovery*	*MBL Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*101*		*70 - 130*	*07/26/23 12:57*	*07/26/23 16:28*	*1*

Lab Sample ID: MRL 380-48887/2-A
Matrix: Water
Analysis Batch: 49509

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 48887

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Aldrin			0.0100	0.0112		ug/L		112	50 - 150		
Dieldrin			0.0100	0.0111		ug/L		111	50 - 150		
Alachlor			0.100	0.103		ug/L		103	50 - 150		
Endrin			0.0100	0.0105		ug/L		105	50 - 150		
Heptachlor			0.0100	0.0114		ug/L		114	50 - 150		
Heptachlor epoxide			0.0100	0.0112		ug/L		112	50 - 150		
gamma-BHC (Lindane)			0.0100	0.0103		ug/L		103	50 - 150		
Methoxychlor			0.0500	0.0490	J	ug/L		98	50 - 150		

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
Tetrachloro-m-xylene	*102*		*70 - 130*

Lab Sample ID: MRL 380-48887/3-A
Matrix: Water
Analysis Batch: 49509

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 48887

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Toxaphene			0.500	0.459	J	ug/L		92	50 - 150		

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

Lab Sample ID: MRL 380-48887/3-A
Matrix: Water
Analysis Batch: 49509

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 48887

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

Lab Sample ID: 380-55644-I-1-A MS
Matrix: Water
Analysis Batch: 49509

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 48887

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aldrin	<0.010		0.0202	0.0209		ug/L		104	65 - 135
Dieldrin	<0.010		0.0202	0.0210		ug/L		104	65 - 135
Alachlor	<0.10		0.202	0.205		ug/L		102	65 - 135
Endrin	<0.010		0.0202	0.0206		ug/L		102	65 - 135
Heptachlor	<0.010		0.0202	0.0201		ug/L		100	65 - 135
Heptachlor epoxide	<0.010		0.0202	0.0203		ug/L		101	65 - 135
gamma-BHC (Lindane)	<0.010		0.0202	0.0203		ug/L		100	65 - 135
Methoxychlor	<0.051		0.101	0.0964		ug/L		96	65 - 135

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene	107		70 - 130

Lab Sample ID: 380-55644-I-2-A MS
Matrix: Water
Analysis Batch: 49509

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 48887

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aldrin	<0.010		0.102	0.0810		ug/L		79	65 - 135
Dieldrin	<0.010		0.102	0.0996		ug/L		98	65 - 135
Alachlor	<0.10		1.02	1.01		ug/L		99	65 - 135
Endrin	<0.010		0.102	0.0984		ug/L		96	65 - 135
Heptachlor	<0.010		0.102	0.0941		ug/L		92	65 - 135
Heptachlor epoxide	<0.010		0.102	0.0974		ug/L		95	65 - 135
gamma-BHC (Lindane)	<0.010		0.102	0.100		ug/L		98	65 - 135
Methoxychlor	<0.050		0.510	0.515		ug/L		101	65 - 135

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene	96		70 - 130

Lab Sample ID: 380-55644-J-1-A MS
Matrix: Water
Analysis Batch: 49509

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 48887

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Toxaphene	<0.51		2.54	2.43		ug/L		96	65 - 135

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene	103		70 - 130

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

Lab Sample ID: 380-55644-J-2-A MS
Matrix: Water
Analysis Batch: 49509

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 48887

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Toxaphene	<0.50		2.54	2.45		ug/L		96	65 - 135

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

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 380-48578/4
Matrix: Water
Analysis Batch: 48578

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			07/21/23 12:53	1
Nitrite as N	<0.050		0.050		mg/L			07/21/23 12:53	1

Lab Sample ID: LCS 380-48578/7
Matrix: Water
Analysis Batch: 48578

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	2.42		mg/L		97	90 - 110
Nitrite as N			1.00	0.990		mg/L		99	90 - 110

Lab Sample ID: LCSD 380-48578/11
Matrix: Water
Analysis Batch: 48578

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	2.41		mg/L		96	90 - 110	0	20
Nitrite as N			1.00	1.01		mg/L		101	90 - 110	2	20

Lab Sample ID: MRL 380-48578/5
Matrix: Water
Analysis Batch: 48578

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	0.0119	J	mg/L		95	50 - 150
Nitrite as N			0.0125	0.0129	J	mg/L		103	50 - 150

Lab Sample ID: MRL 380-48578/6
Matrix: Water
Analysis Batch: 48578

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	0.0443	J	mg/L		89	50 - 150
Nitrite as N			0.0500	0.0580		mg/L		116	50 - 150

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 380-55739-F-2 MS
Matrix: Water
Analysis Batch: 48578

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	1.3		6.25	7.34		mg/L		97	80 - 120
Nitrite as N	<0.25		2.50	2.02		mg/L		81	80 - 120

Lab Sample ID: 380-55739-F-2 MSD
Matrix: Water
Analysis Batch: 48578

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	1.3		6.25	7.36		mg/L		97	80 - 120	0	20
Nitrite as N	<0.25		2.50	2.04		mg/L		82	80 - 120	1	20

Lab Sample ID: MB 380-48579/4
Matrix: Water
Analysis Batch: 48579

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			07/21/23 12:53	1
Sulfate	<0.25		0.25		mg/L			07/21/23 12:53	1

Lab Sample ID: LCS 380-48579/7
Matrix: Water
Analysis Batch: 48579

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	24.9		mg/L		99	90 - 110
Sulfate			50.0	51.0		mg/L		102	90 - 110

Lab Sample ID: LCSD 380-48579/11
Matrix: Water
Analysis Batch: 48579

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	24.4		mg/L		98	90 - 110	2	20
Sulfate			50.0	50.7		mg/L		102	90 - 110	1	20

Lab Sample ID: MRL 380-48579/5
Matrix: Water
Analysis Batch: 48579

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	0.131	J	mg/L		105	50 - 150
Sulfate			0.250	0.234	J	mg/L		94	50 - 150

Lab Sample ID: MRL 380-48579/6
Matrix: Water
Analysis Batch: 48579

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	0.464	J	mg/L		93	50 - 150
Sulfate			1.00	0.882		mg/L		88	50 - 150

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 380-55739-F-2 MS
Matrix: Water
Analysis Batch: 48579

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	180	F1	62.5	218	F1	mg/L		61	80 - 120
Sulfate	200		125	323		mg/L		101	80 - 120

Lab Sample ID: 380-55739-F-2 MSD
Matrix: Water
Analysis Batch: 48579

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	180	F1	62.5	219	F1	mg/L		62	80 - 120	0	20
Sulfate	200		125	324		mg/L		102	80 - 120	0	20

Lab Sample ID: MB 380-49344/4
Matrix: Water
Analysis Batch: 49344

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			07/27/23 16:41	1

Lab Sample ID: LCS 380-49344/5
Matrix: Water
Analysis Batch: 49344

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide			100	97.3		ug/L		97	90 - 110

Lab Sample ID: LCSD 380-49344/6
Matrix: Water
Analysis Batch: 49344

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	97.1		ug/L		97	90 - 110	0	10

Lab Sample ID: MRL 380-49344/3
Matrix: Water
Analysis Batch: 49344

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	4.11	J	ug/L		82	75 - 125

Lab Sample ID: 380-55688-1 MS
Matrix: Water
Analysis Batch: 49344

Client Sample ID: AIEA GULCH WELLS PUMP 2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	150		50.0	206		ug/L		106	80 - 120

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 380-55688-1 MSD
Matrix: Water
Analysis Batch: 49344

Client Sample ID: AIEA GULCH WELLS PUMP 2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bromide	150		50.0	197		ug/L		87	80 - 120	5	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 380-48558/18
Matrix: Water
Analysis Batch: 48558

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			07/24/23 11:17	1
Magnesium	<0.10		0.10		mg/L			07/24/23 11:17	1
Potassium	<1.0		1.0		mg/L			07/24/23 11:17	1
Sodium	<1.0		1.0		mg/L			07/24/23 11:17	1

Lab Sample ID: LCS 380-48558/20
Matrix: Water
Analysis Batch: 48558

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	51.8		mg/L		104	85 - 115		
Magnesium			20.0	20.4		mg/L		102	85 - 115		
Potassium			20.0	20.3		mg/L		101	85 - 115		
Sodium			50.0	51.2		mg/L		102	85 - 115		

Lab Sample ID: LCSD 380-48558/21
Matrix: Water
Analysis Batch: 48558

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	51.7		mg/L		103	85 - 115	0	20
Magnesium			20.0	20.4		mg/L		102	85 - 115	0	20
Potassium			20.0	20.2		mg/L		101	85 - 115	0	20
Sodium			50.0	51.1		mg/L		102	85 - 115	0	20

Lab Sample ID: LLCS 380-48558/19
Matrix: Water
Analysis Batch: 48558

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	1.02		mg/L		102	50 - 150		
Magnesium			0.100	0.0935	J	mg/L		93	50 - 150		
Potassium			1.00	0.560	J	mg/L		56	50 - 150		
Sodium			1.00	0.852	J	mg/L		85	50 - 150		

Lab Sample ID: 380-55688-1 MS
Matrix: Water
Analysis Batch: 48558

Client Sample ID: AIEA GULCH WELLS PUMP 2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Calcium	21		50.0	70.0		mg/L		98	70 - 130		

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

Lab Sample ID: 380-55688-1 MS
Matrix: Water
Analysis Batch: 48558

Client Sample ID: AIEA GULCH WELLS PUMP 2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Magnesium	17		20.0	36.0		mg/L		95	70 - 130
Potassium	2.0		20.0	22.8		mg/L		104	70 - 130
Sodium	31		50.0	76.8		mg/L		92	70 - 130

Lab Sample ID: 380-55688-1 MSD
Matrix: Water
Analysis Batch: 48558

Client Sample ID: AIEA GULCH WELLS PUMP 2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	21		50.0	72.8		mg/L		103	70 - 130	4	20
Magnesium	17		20.0	37.3		mg/L		102	70 - 130	4	20
Potassium	2.0		20.0	23.7		mg/L		109	70 - 130	4	20
Sodium	31		50.0	80.1		mg/L		99	70 - 130	4	20

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 810-71890/14
Matrix: Water
Analysis Batch: 71890

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0		ug/L			08/30/23 15:18	1
Arsenic	<1.0		1.0		ug/L			08/30/23 15:18	1
Beryllium	<0.30		0.30		ug/L			08/30/23 15:18	1
Cadmium	<0.50		0.50		ug/L			08/30/23 15:18	1
Chromium	<0.90		0.90		ug/L			08/30/23 15:18	1
Copper	<1.0		1.0		ug/L			08/30/23 15:18	1
Lead	<0.50		0.50		ug/L			08/30/23 15:18	1
Nickel	<1.0		1.0		ug/L			08/30/23 15:18	1
Selenium	<2.0		2.0		ug/L			08/30/23 15:18	1
Silver	<0.50		0.50		ug/L			08/30/23 15:18	1
Thallium	<0.30		0.30		ug/L			08/30/23 15:18	1
Zinc	<5.0		5.0		ug/L			08/30/23 15:18	1

Lab Sample ID: LCS 810-71890/17
Matrix: Water
Analysis Batch: 71890

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	47.4		ug/L		95	85 - 115
Arsenic			50.0	47.7		ug/L		95	85 - 115
Beryllium			50.0	45.9		ug/L		92	85 - 115
Cadmium			50.0	46.8		ug/L		94	85 - 115
Chromium			50.0	47.8		ug/L		96	85 - 115
Copper			50.0	47.2		ug/L		94	85 - 115
Lead			50.0	47.9		ug/L		96	85 - 115
Nickel			50.0	47.3		ug/L		95	85 - 115
Selenium			50.0	48.4		ug/L		97	85 - 115
Silver			50.0	47.4		ug/L		95	85 - 115
Thallium			50.0	49.1		ug/L		98	85 - 115

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

Lab Sample ID: LCS 810-71890/17
Matrix: Water
Analysis Batch: 71890

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	47.8		ug/L		96	85 - 115

Lab Sample ID: LLCS 810-71890/11
Matrix: Water
Analysis Batch: 71890

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

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.300	0.278	J	ug/L		93	50 - 150
Arsenic	0.300	<0.60		ug/L		91	50 - 150
Beryllium	0.300	0.313		ug/L		104	50 - 150
Cadmium	0.300	0.326	J	ug/L		109	50 - 150
Chromium	0.300	<0.43		ug/L		91	50 - 150
Copper	0.300	<0.57		ug/L		86	50 - 150
Lead	0.300	0.265	J	ug/L		88	50 - 150
Nickel	0.300	<0.53		ug/L		139	50 - 150
Selenium	0.300	<1.4		ug/L		118	50 - 150
Silver	0.300	<0.28		ug/L		80	50 - 150
Thallium	0.300	0.289	J	ug/L		96	50 - 150
Zinc	0.300	<2.3		ug/L		95	50 - 150

Lab Sample ID: LLCS 810-71890/12
Matrix: Water
Analysis Batch: 71890

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	0.977	J	ug/L		98	50 - 150
Arsenic	1.00	0.944	J	ug/L		94	50 - 150
Copper	1.00	0.939	J	ug/L		94	50 - 150
Nickel	1.00	0.995	J	ug/L		100	50 - 150
Selenium	1.00	<1.4		ug/L		99	50 - 150
Zinc	1.00	<2.3		ug/L		100	50 - 150

Lab Sample ID: LLCS 810-71890/13
Matrix: Water
Analysis Batch: 71890

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

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	5.00	4.81	J	ug/L		96	50 - 150

Lab Sample ID: 810-73913-A-6 MS
Matrix: Water
Analysis Batch: 71890

Client Sample ID: Matrix Spike
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	<1.0		50.0	47.3		ug/L		95	70 - 130
Arsenic	9.8		50.0	57.2		ug/L		95	70 - 130
Beryllium	<0.30		50.0	47.6		ug/L		95	70 - 130
Cadmium	<0.50		50.0	46.6		ug/L		93	70 - 130
Chromium	<0.90		50.0	47.3		ug/L		95	70 - 130
Copper	<1.0		50.0	46.0		ug/L		92	70 - 130

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

Lab Sample ID: 810-73913-A-6 MS
Matrix: Water
Analysis Batch: 71890

Client Sample ID: Matrix Spike
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	<0.50		50.0	48.1		ug/L		96	70 - 130
Nickel	<1.0		50.0	46.2		ug/L		92	70 - 130
Selenium	<2.0		50.0	48.3		ug/L		97	70 - 130
Silver	<0.50		50.0	45.1		ug/L		90	70 - 130
Thallium	<0.30		50.0	50.2		ug/L		100	70 - 130
Zinc	<5.0		50.0	49.0		ug/L		98	70 - 130

Lab Sample ID: 810-73913-A-6 MSD
Matrix: Water
Analysis Batch: 71890

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	<1.0		50.0	47.9		ug/L		96	70 - 130	1	20
Arsenic	9.8		50.0	58.0		ug/L		97	70 - 130	1	20
Beryllium	<0.30		50.0	47.9		ug/L		96	70 - 130	1	20
Cadmium	<0.50		50.0	47.9		ug/L		96	70 - 130	3	20
Chromium	<0.90		50.0	47.9		ug/L		96	70 - 130	1	20
Copper	<1.0		50.0	46.5		ug/L		93	70 - 130	1	20
Lead	<0.50		50.0	48.9		ug/L		98	70 - 130	2	20
Nickel	<1.0		50.0	47.0		ug/L		94	70 - 130	2	20
Selenium	<2.0		50.0	48.5		ug/L		97	70 - 130	0	20
Silver	<0.50		50.0	46.4		ug/L		93	70 - 130	3	20
Thallium	<0.30		50.0	50.9		ug/L		102	70 - 130	1	20
Zinc	<5.0		50.0	48.9		ug/L		98	70 - 130	0	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 810-67288/1-A
Matrix: Water
Analysis Batch: 67330

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 67288

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.10		ug/L		07/27/23 12:00	07/27/23 20:15	1

Lab Sample ID: LCS 810-67288/3-A
Matrix: Water
Analysis Batch: 67330

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 67288

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury			1.00	0.967		ug/L		97	85 - 115

Lab Sample ID: 380-55132-AV-1-B MS
Matrix: Water
Analysis Batch: 67330

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 67288

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	<0.10		1.00	0.981		ug/L		98	70 - 130

Method: 245.1 - Mercury (CVAA) (Continued)

Lab Sample ID: 380-55132-AV-1-C MSD
Matrix: Water
Analysis Batch: 67330

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 67288

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	<0.10		1.00	0.924		ug/L		92	70 - 130	6	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 380-48703/1
Matrix: Water
Analysis Batch: 48703

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
A kalinity	<2.0		2.0		mg/L			07/24/23 13:34	1
Bicarbonate Alkalinity as CaCO3	<2.0		2.0		mg/L			07/24/23 13:34	1
Carbonate Alkalinity as CaCO3	<2.0		2.0		mg/L			07/24/23 13:34	1

Lab Sample ID: LCS 380-48703/3
Matrix: Water
Analysis Batch: 48703

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
A kalinity			100	98.8		mg/L		99	90 - 110		

Lab Sample ID: LCSD 380-48703/18
Matrix: Water
Analysis Batch: 48703

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
A kalinity			100	99.7		mg/L		100	90 - 110	1	20

Lab Sample ID: LLCS 380-48703/4
Matrix: Water
Analysis Batch: 48703

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

Analyte			Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits		
A kalinity			20.0	19.6		mg/L		98	90 - 110		

Lab Sample ID: MRL 380-48703/2
Matrix: Water
Analysis Batch: 48703

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
A kalinity			2.00	1.63	J	mg/L		82	50 - 150		

Lab Sample ID: 380-55599-A-1 MS
Matrix: Water
Analysis Batch: 48703

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		
A kalinity	100		100	196		mg/L		97	80 - 120		

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: 380-55599-A-1 MSD
Matrix: Water
Analysis Batch: 48703

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
A kalinity	100		100	196		mg/L		96	80 - 120	0	20

Lab Sample ID: 380-55599-A-1 DU
Matrix: Water
Analysis Batch: 48703

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
A kalinity	100			99.6		mg/L				0.08	20
Bicarbonate Alkalinity as CaCO3	100			99.6		mg/L				0.08	20
Carbonate Alkalinity as CaCO3	<2.0			<2.0		mg/L				NC	20

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 380-48706/2
Matrix: Water
Analysis Batch: 48706

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			07/24/23 13:34	1

Lab Sample ID: LCS 380-48706/4
Matrix: Water
Analysis Batch: 48706

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 380-48706/16
Matrix: Water
Analysis Batch: 48706

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	994		umhos/cm		99	90 - 110	1	10

Lab Sample ID: MRL 380-48706/3
Matrix: Water
Analysis Batch: 48706

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	2.00		umhos/cm		100	50 - 150		

Lab Sample ID: 380-55599-A-1 DU
Matrix: Water
Analysis Batch: 48706

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Specific Conductance	240			238		umhos/cm				0	20

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

Lab Sample ID: MB 380-48653/1
Matrix: Water
Analysis Batch: 48653

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			07/24/23 22:31	1

Lab Sample ID: HLCS 380-48653/5
Matrix: Water
Analysis Batch: 48653

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	714		mg/L		102	80 - 114		

Lab Sample ID: LCS 380-48653/4
Matrix: Water
Analysis Batch: 48653

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	182		mg/L		104	80 - 114		

Lab Sample ID: MRL 380-48653/2
Matrix: Water
Analysis Batch: 48653

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	11.0		mg/L		110	50 - 150		

Lab Sample ID: MRL 380-48653/3
Matrix: Water
Analysis Batch: 48653

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	11.0		mg/L		110	50 - 150		

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 380-48702/40
Matrix: Water
Analysis Batch: 48702

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			07/24/23 16:46	1

Lab Sample ID: MB 380-48702/6
Matrix: Water
Analysis Batch: 48702

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			07/24/23 14:28	1

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: LCS 380-48702/42
Matrix: Water
Analysis Batch: 48702

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	0.997		mg/L		100	90 - 110

Lab Sample ID: LCSD 380-48702/43
Matrix: Water
Analysis Batch: 48702

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	0.994		mg/L		99	90 - 110	0	10

Lab Sample ID: MRL 380-48702/41
Matrix: Water
Analysis Batch: 48702

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	0.0481	J	mg/L		96	50 - 150

Lab Sample ID: MRL 380-48702/7
Matrix: Water
Analysis Batch: 48702

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	0.0483	J	mg/L		97	50 - 150

Lab Sample ID: 380-55381-S-1 MS
Matrix: Water
Analysis Batch: 48702

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	<0.050		1.00	0.995		mg/L		98	80 - 120

Lab Sample ID: 380-55381-S-1 MSD
Matrix: Water
Analysis Batch: 48702

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	<0.050		1.00	0.988		mg/L		97	80 - 120	1	20

Method: SM 4500 H+ B - pH

Lab Sample ID: MB 380-48708/4
Matrix: Water
Analysis Batch: 48708

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
pH	5.7				SU			07/24/23 13:34	1

Method: SM 4500 H+ B - pH (Continued)

Lab Sample ID: LCS 380-48708/5
Matrix: Water
Analysis Batch: 48708

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 380-48708/17
Matrix: Water
Analysis Batch: 48708

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: 380-55599-A-1 DU
Matrix: Water
Analysis Batch: 48708

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	8.0		7.9		SU		1	2

Method: SM 4500 S2 D - Sulfide, Total

Lab Sample ID: MB 380-48982/1
Matrix: Water
Analysis Batch: 48982

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<0.050		0.050	mg/L			07/26/23 14:58	1

Lab Sample ID: LCS 380-48982/4
Matrix: Water
Analysis Batch: 48982

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	0.273		mg/L		109	90 - 110

Lab Sample ID: LCSD 380-48982/22
Matrix: Water
Analysis Batch: 48982

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	0.272		mg/L		109	90 - 110	0	20

Lab Sample ID: MRL 380-48982/17
Matrix: Water
Analysis Batch: 48982

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	0.0620		mg/L		124	50 - 150

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

Lab Sample ID: MRL 380-48982/2
Matrix: Water
Analysis Batch: 48982

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	0.0620		mg/L		124	50 - 150		

Lab Sample ID: 380-55688-1 MS
Matrix: Water
Analysis Batch: 48982

Client Sample ID: AIEA GULCH WELLS PUMP 2
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	0.189	F1	mg/L		76	80 - 120		

Lab Sample ID: 380-55688-1 MSD
Matrix: Water
Analysis Batch: 48982

Client Sample ID: AIEA GULCH WELLS PUMP 2
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	0.174	F1	mg/L		70	80 - 120	8	20

Method: 625 Acid/Base/PAH + TICs - EPA 625 Base/Neutral and Acid Organics i

Lab Sample ID: 108517-B1
Matrix: BlankMatrix
Analysis Batch: O-42022

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: O-42022_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/01/23 03:54	1
1-Methylphenanthrene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/01/23 03:54	1
2,3,5-Trimethylnaphthalene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/01/23 03:54	1
2,4,5-Trichlorophenol	ND		0.1	0.05	µg/L		07/21/23 00:00	09/01/23 03:54	1
2,4,6-Trichlorophenol	ND		0.1	0.05	µg/L		07/21/23 00:00	09/01/23 03:54	1
2,4-Dichlorophenol	ND		0.1	0.05	µg/L		07/21/23 00:00	09/01/23 03:54	1
2,4-Dinitrophenol	ND		0.2	0.1	µg/L		07/21/23 00:00	09/01/23 03:54	1
2,6-Dichlorophenol	ND		0.1	0.05	µg/L		07/21/23 00:00	09/01/23 03:54	1
2,6-Dimethylnaphthalene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/01/23 03:54	1
2,6-Di-tert-butyl-4-methylphenol	ND		0.1	0.05	µg/L		07/21/23 00:00	09/01/23 03:54	1
2,6-Di-tert-butylphenol	ND		0.1	0.05	µg/L		07/21/23 00:00	09/01/23 03:54	1
2-Chloronaphthalene	ND		0.1	0.05	µg/L		07/21/23 00:00	09/01/23 03:54	1
2-Chlorophenol	ND		0.1	0.05	µg/L		07/21/23 00:00	09/01/23 03:54	1
2-Methyl-4,6-dinitrophenol	ND		0.2	0.1	µg/L		07/21/23 00:00	09/01/23 03:54	1
2-Methylnaphthalene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/01/23 03:54	1
2-Methylphenol	ND		0.2	0.1	µg/L		07/21/23 00:00	09/01/23 03:54	1
2-Nitroaniline	ND		0.1	0.05	µg/L		07/21/23 00:00	09/01/23 03:54	1
2-Nitrophenol	ND		0.2	0.1	µg/L		07/21/23 00:00	09/01/23 03:54	1
3+4-Methylphenol	ND		0.2	0.1	µg/L		07/21/23 00:00	09/01/23 03:54	1
3-Nitroaniline	ND		0.1	0.05	µg/L		07/21/23 00:00	09/01/23 03:54	1
4-Bromophenylphenyl ether	ND		0.1	0.05	µg/L		07/21/23 00:00	09/01/23 03:54	1
4-Chloro-3-methylphenol	ND		0.2	0.1	µg/L		07/21/23 00:00	09/01/23 03:54	1
4-Chloroaniline	ND		0.1	0.05	µg/L		07/21/23 00:00	09/01/23 03:54	1
4-Chlorophenylphenyl ether	ND		0.1	0.05	µg/L		07/21/23 00:00	09/01/23 03:54	1
4-Nitroaniline	ND		0.1	0.05	µg/L		07/21/23 00:00	09/01/23 03:54	1
4-Nitrophenol	ND		0.2	0.1	µg/L		07/21/23 00:00	09/01/23 03:54	1

Method: 625 Acid/Base/PAH + TICs - EPA 625 Base/Neutral and Acid Organics i (Continued)

Lab Sample ID: 108517-B1
Matrix: BlankMatrix
Analysis Batch: O-42022

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: O-42022_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
6-tert-butyl-2,4-dimethylphenol	ND		0.1	0.05	µg/L		07/21/23 00:00	09/01/23 03:54	1
Acenaphthene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/01/23 03:54	1
Acenaphthylene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/01/23 03:54	1
Aniline	ND		0.1	0.05	µg/L		07/21/23 00:00	09/01/23 03:54	1
Anthracene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/01/23 03:54	1
Benz[a]anthracene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/01/23 03:54	1
Benzidine	ND		0.1	0.05	µg/L		07/21/23 00:00	09/01/23 03:54	1
Benzo[a]pyrene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/01/23 03:54	1
Benzo[b]fluoranthene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/01/23 03:54	1
Benzo[e]pyrene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/01/23 03:54	1
Benzo[g,h,i]perylene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/01/23 03:54	1
Benzo[k]fluoranthene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/01/23 03:54	1
Benzoic Acid	ND		0.2	0.1	µg/L		07/21/23 00:00	09/01/23 03:54	1
Benzyl Alcohol	ND		0.2	0.1	µg/L		07/21/23 00:00	09/01/23 03:54	1
Biphenyl	ND		0.005	0.001	µg/L		07/21/23 00:00	09/01/23 03:54	1
Bis(2-Chloroethoxy) methane	ND		0.1	0.05	µg/L		07/21/23 00:00	09/01/23 03:54	1
Bis(2-Chloroethyl) ether	ND		0.1	0.05	µg/L		07/21/23 00:00	09/01/23 03:54	1
Bis(2-Chloroisopropyl) ether	ND		0.1	0.05	µg/L		07/21/23 00:00	09/01/23 03:54	1
Chrysene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/01/23 03:54	1
Dibenz[a,h]anthracene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/01/23 03:54	1
Dibenzo[a,l]pyrene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/01/23 03:54	1
Dibenzofuran	ND		0.1	0.05	µg/L		07/21/23 00:00	09/01/23 03:54	1
Dibenzothiophene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/01/23 03:54	1
Disalicylidenepropanediamine	ND		0.1	0.05	µg/L		07/21/23 00:00	09/01/23 03:54	1
Fluoranthene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/01/23 03:54	1
Fluorene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/01/23 03:54	1
Hexachloroethane	ND		0.1	0.05	µg/L		07/21/23 00:00	09/01/23 03:54	1
Indeno[1,2,3-cd]pyrene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/01/23 03:54	1
Naphthalene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/01/23 03:54	1
Nitrobenzene	ND		0.1	0.05	µg/L		07/21/23 00:00	09/01/23 03:54	1
N-Nitrosodi-n-propylamine	ND		0.1	0.05	µg/L		07/21/23 00:00	09/01/23 03:54	1
N-Nitrosodiphenylamine	ND		0.1	0.05	µg/L		07/21/23 00:00	09/01/23 03:54	1
Pentachlorophenol	ND		0.1	0.05	µg/L		07/21/23 00:00	09/01/23 03:54	1
Perylene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/01/23 03:54	1
Phenanthrene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/01/23 03:54	1
Phenol	ND		0.2	0.1	µg/L		07/21/23 00:00	09/01/23 03:54	1
p-tert-Butylphenol	ND		0.1	0.05	µg/L		07/21/23 00:00	09/01/23 03:54	1
Pyrene	ND		0.005	0.001	µg/L		07/21/23 00:00	09/01/23 03:54	1

Surrogate	*Blank %Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
(2,4,6-Tribromophenol)	*124*		*30 - 130*	*07/21/23 00:00*	*09/01/23 03:54*	*1*
(d10-Acenaphthene)	*100*		*27 - 133*	*07/21/23 00:00*	*09/01/23 03:54*	*1*
(d10-Phenanthrene)	*99*		*43 - 129*	*07/21/23 00:00*	*09/01/23 03:54*	*1*
(d12-Chrysene)	*98*		*52 - 144*	*07/21/23 00:00*	*09/01/23 03:54*	*1*
(d12-Perylene)	*103*		*36 - 161*	*07/21/23 00:00*	*09/01/23 03:54*	*1*
(d5-Phenol)	*129*		*0 - 130*	*07/21/23 00:00*	*09/01/23 03:54*	*1*
(d8-Naphthalene)	*93*		*25 - 125*	*07/21/23 00:00*	*09/01/23 03:54*	*1*

Method: 625 Acid/Base/PAH + TICs - EPA 625 Base/Neutral and Acid Organics i (Continued)

Lab Sample ID: 108517-BS1
Matrix: BlankMatrix
Analysis Batch: O-42022

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: O-42022_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	0.5	0.564		µg/L		113	31 - 128
1-Methylphenanthrene	0.5	0.572		µg/L		114	66 - 127
2,3,5-Trimethylnaphthalene	0.5	0.592		µg/L		118	55 - 122
2,4,5-Trichlorophenol	1	0.749		µg/L		75	30 - 130
2,4,6-Trichlorophenol	1	0.823		µg/L		82	30 - 130
2,4-Dichlorophenol	1	0.771		µg/L		77	51 - 117
2,4-Dinitrophenol	1	0.695		µg/L		69	0 - 152
2,6-Dichlorophenol	0.5	0.383		µg/L		77	30 - 130
2,6-Dimethylnaphthalene	0.5	0.571		µg/L		114	48 - 120
2,6-Di-tert-butyl-4-methylphenol	1	1.04		µg/L		104	50 - 150
2,6-Di-tert-butylphenol	1	0.998		µg/L		100	50 - 150
2-Chloronaphthalene	1	0.836		µg/L		84	53 - 130
2-Chlorophenol	1	0.631		µg/L		63	41 - 120
2-Methyl-4,6-dinitrophenol	1	0.814		µg/L		81	0 - 141
2-Methylnaphthalene	1.5	1.67		µg/L		111	47 - 130
2-Methylphenol	1	0.616		µg/L		62	40 - 117
2-Nitroaniline	1	0.756		µg/L		76	69 - 114
2-Nitrophenol	1	0.632		µg/L		63	40 - 117
3+4-Methylphenol	1	0.644		µg/L		64	0 - 130
3-Nitroaniline	1	0.748		µg/L		75	23 - 137
4-Bromophenylphenyl ether	1	0.951		µg/L		95	61 - 132
4-Chloro-3-methylphenol	1	0.665		µg/L		67	51 - 128
4-Chloroaniline	1	0.67		µg/L		67	50 - 150
4-Chlorophenylphenyl ether	1	0.962		µg/L		96	63 - 130
4-Nitroaniline	1	0.738		µg/L		74	10 - 159
4-Nitrophenol	1	0.944		µg/L		94	10 - 164
6-tert-butyl-2,4-dimethylphenol	1	0.935		µg/L		94	50 - 150
Acenaphthene	1.5	1.73		µg/L		115	53 - 131
Acenaphthylene	1.5	1.89		µg/L		126	43 - 140
Aniline	1	0.543		µg/L		54	50 - 150
Anthracene	1.5	1.67		µg/L		111	58 - 135
Benz[a]anthracene	1.5	1.7		µg/L		113	55 - 145
Benzidine	1	0.00381		µg/L		0	0 - 125
Benzo[a]pyrene	1.5	1.73		µg/L		115	51 - 143
Benzo[b]fluoranthene	1.5	1.74		µg/L		116	46 - 165
Benzo[e]pyrene	0.5	0.551		µg/L		110	42 - 152
Benzo[g,h,i]perylene	1.5	1.73		µg/L		115	63 - 133
Benzo[k]fluoranthene	1.5	1.69		µg/L		113	56 - 145
Benzoic Acid	1	0.163		µg/L		16	2 - 145
Benzyl Alcohol	1	0.616		µg/L		62	43 - 148
Biphenyl	0.5	0.565		µg/L		113	56 - 119
Bis(2-Chloroethoxy) methane	1	0.663		µg/L		66	66 - 122
Bis(2-Chloroethyl) ether	1	0.553		µg/L		55	43 - 127
Bis(2-Chloroisopropyl) ether	1	0.784		µg/L		78	49 - 128
Chrysene	1.5	1.56		µg/L		104	56 - 141
Dibenz[a,h]anthracene	1.5	1.86		µg/L		124	55 - 150
Dibenzo[a,l]pyrene	0.5	0.455		µg/L		91	50 - 150
Dibenzofuran	1	0.62		µg/L		62	50 - 150

Method: 625 Acid/Base/PAH + TICs - EPA 625 Base/Neutral and Acid Organics i (Continued)

Lab Sample ID: 108517-BS1
Matrix: BlankMatrix
Analysis Batch: O-42022

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: O-42022_P

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Dibenzothiophene			0.5	0.563		µg/L		113	46 - 126		
Disalicylidenepropanediamine			50	41.9		µg/L		84	50 - 150		
Fluoranthene			1.5	1.78		µg/L		119	60 - 146		
Fluorene			1.5	1.78		µg/L		119	58 - 131		
Hexachloroethane			1	0.816		µg/L		82	27 - 130		
Indeno[1,2,3-cd]pyrene			1.5	1.81		µg/L		121	50 - 151		
Naphthalene			1.5	1.55		µg/L		103	41 - 126		
Nitrobenzene			1	0.633		µg/L		63	54 - 111		
N-Nitrosodi-n-propylamine			1	0.696		µg/L		70	61 - 152		
N-Nitrosodiphenylamine			1	0.998		µg/L		100	49 - 142		
Pentachlorophenol			1	0.678		µg/L		68	36 - 111		
Perylene			0.5	0.578		µg/L		116	48 - 141		
Phenanthrene			1.5	1.65		µg/L		110	67 - 127		
Phenol			1	0.533		µg/L		53	29 - 114		
p-tert-Butylphenol			1	1.07		µg/L		107	50 - 150		
Pyrene			1.5	1.79		µg/L		119	54 - 156		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
(2,4,6-Tribromophenol)	*101*		*30 - 130*
(d10-Acenaphthene)	*109*		*27 - 133*
(d10-Phenanthrene)	*104*		*43 - 129*
(d12-Chrysene)	*100*		*52 - 144*
(d12-Perylene)	*106*		*36 - 161*
(d5-Phenol)	*104*		*0 - 130*
(d8-Naphthalene)	*99*		*25 - 125*

Lab Sample ID: 108517-BS2
Matrix: BlankMatrix
Analysis Batch: O-42022

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: O-42022_P

Analyte			Spike Added	LCS DUP Result	LCS DUP Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene			0.5	0.547		µg/L		109	31 - 128	4	30
1-Methylphenanthrene			0.5	0.568		µg/L		114	66 - 127	0	30
2,3,5-Trimethylnaphthalene			0.5	0.581		µg/L		116	55 - 122	2	30
2,4,5-Trichlorophenol			1	0.753		µg/L		75	30 - 130	0	30
2,4,6-Trichlorophenol			1	0.814		µg/L		81	30 - 130	1	30
2,4-Dichlorophenol			1	0.746		µg/L		75	51 - 117	3	30
2,4-Dinitrophenol			1	0.727		µg/L		73	0 - 152	4	30
2,6-Dichlorophenol			0.5	0.371		µg/L		74	30 - 130	4	30
2,6-Dimethylnaphthalene			0.5	0.565		µg/L		113	48 - 120	1	30
2,6-Di-tert-butyl-4-methylphenol			1	1.04		µg/L		104	50 - 150	0	30
2,6-Di-tert-butylphenol			1	0.961		µg/L		96	50 - 150	4	30
2-Chloronaphthalene			1	0.816		µg/L		82	53 - 130	2	30
2-Chlorophenol			1	0.591		µg/L		59	41 - 120	7	30
2-Methyl-4,6-dinitrophenol			1	0.828		µg/L		83	0 - 141	2	30
2-Methylnaphthalene			1.5	1.62		µg/L		108	47 - 130	2	30
2-Methylphenol			1	0.6		µg/L		60	40 - 117	3	30
2-Nitroaniline			1	0.775		µg/L		77	69 - 114	3	30

Method: 625 Acid/Base/PAH + TICs - EPA 625 Base/Neutral and Acid Organics i (Continued)

Lab Sample ID: 108517-BS2
Matrix: BlankMatrix
Analysis Batch: O-42022

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: O-42022_P

Analyte			Spike Added	LCS DUP Result	LCS DUP Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-Nitrophenol			1	0.619		µg/L		62	40 - 117	2	30
3+4-Methylphenol			1	0.614		µg/L		61	0 - 130	5	30
3-Nitroaniline			1	0.757		µg/L		76	23 - 137	1	30
4-Bromophenylphenyl ether			1	0.944		µg/L		94	61 - 132	1	30
4-Chloro-3-methylphenol			1	0.664		µg/L		66	51 - 128	0	30
4-Chloroaniline			1	0.657		µg/L		66	50 - 150	2	30
4-Chlorophenylphenyl ether			1	0.944		µg/L		94	63 - 130	2	30
4-Nitroaniline			1	0.773		µg/L		77	10 - 159	4	30
4-Nitrophenol			1	0.935		µg/L		94	10 - 164	0	30
6-tert-butyl-2,4-dimethylphenol			1	0.925		µg/L		93	50 - 150	2	30
Acenaphthene			1.5	1.69		µg/L		113	53 - 131	2	30
Acenaphthylene			1.5	1.86		µg/L		124	43 - 140	2	30
Aniline			1	0.502		µg/L		50	50 - 150	8	30
Anthracene			1.5	1.65		µg/L		110	58 - 135	1	30
Benz[a]anthracene			1.5	1.71		µg/L		114	55 - 145	1	30
Benzidine			1	0.00388		µg/L		0	0 - 125	0	30
Benzo[a]pyrene			1.5	1.72		µg/L		115	51 - 143	0	30
Benzo[b]fluoranthene			1.5	1.72		µg/L		115	46 - 165	1	30
Benzo[e]pyrene			0.5	0.546		µg/L		109	42 - 152	1	30
Benzo[g,h,i]perylene			1.5	1.7		µg/L		113	63 - 133	2	30
Benzo[k]fluoranthene			1.5	1.67		µg/L		111	56 - 145	2	30
Benzoic Acid			1	0.138		µg/L		14	2 - 145	13	30
Benzyl Alcohol			1	0.592		µg/L		59	43 - 148	5	30
Biphenyl			0.5	0.556		µg/L		111	56 - 119	2	30
Bis(2-Chloroethoxy) methane			1	0.655		µg/L		66	66 - 122	0	30
Bis(2-Chloroethyl) ether			1	0.526		µg/L		53	43 - 127	4	30
Bis(2-Chloroisopropyl) ether			1	0.708		µg/L		71	49 - 128	9	30
Chrysene			1.5	1.56		µg/L		104	56 - 141	1	30
Dibenz[a,h]anthracene			1.5	1.87		µg/L		125	55 - 150	1	30
Dibenzo[a,l]pyrene			0.5	0.455		µg/L		91	50 - 150	0	30
Dibenzofuran			1	0.669		µg/L		67	50 - 150	8	30
Dibenzothiophene			0.5	0.555		µg/L		111	46 - 126	2	30
Disalicylidenepropanediamine			50	49.8		µg/L		100	50 - 150	17	30
Fluoranthene			1.5	1.77		µg/L		118	60 - 146	1	30
Fluorene			1.5	1.78		µg/L		119	58 - 131	0	30
Hexachloroethane			1	0.771		µg/L		77	27 - 130	6	30
Indeno[1,2,3-cd]pyrene			1.5	1.81		µg/L		121	50 - 151	0	30
Naphthalene			1.5	1.5		µg/L		100	41 - 126	3	30
Nitrobenzene			1	0.623		µg/L		62	54 - 111	2	30
N-Nitrosodi-n-propylamine			1	0.68		µg/L		68	61 - 152	3	30
N-Nitrosodiphenylamine			1	0.989		µg/L		99	49 - 142	1	30
Pentachlorophenol			1	0.683		µg/L		68	36 - 111	0	30
Perylene			0.5	0.569		µg/L		114	48 - 141	2	30
Phenanthrene			1.5	1.62		µg/L		108	67 - 127	2	30
Phenol			1	0.495		µg/L		50	29 - 114	6	30
p-tert-Butylphenol			1	1.07		µg/L		107	50 - 150	0	30
Pyrene			1.5	1.77		µg/L		118	54 - 156	1	30

Method: 625 Acid/Base/PAH + TICs - EPA 625 Base/Neutral and Acid Organics i (Continued)

Lab Sample ID: 108517-BS2
Matrix: BlankMatrix
Analysis Batch: O-42022

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: O-42022_P

Surrogate	*LCS DUP %Recovery*	*LCS DUP Qualifier*	*Limits*
(2,4,6-Tribromophenol)	*97*		*30 - 130*
(d10-Acenaphthene)	*107*		*27 - 133*
(d10-Phenanthrene)	*105*		*43 - 129*
(d12-Chrysene)	*101*		*52 - 144*
(d12-Perylene)	*107*		*36 - 161*
(d5-Phenol)	*84*		*0 - 130*
(d8-Naphthalene)	*96*		*25 - 125*

Method: 8015 Ethanol - SW846 8015B Gasoline Range Organics

Lab Sample ID: 23MEG005WB
Matrix: WATER
Analysis Batch: 23MEG005W

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ETHANOL	ND	U	2000		ug/L			07/21/23 16:08	1

Lab Sample ID: 23MEG005WL
Matrix: WATER
Analysis Batch: 23MEG005W

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
ETHANOL	10000	9060		ug/L		91	60 - 130

Method: 8015 Gas (Purgeable) LL (EAL) - SW846 8015B Gasoline Range Organics

Lab Sample ID: 23VG39G13B
Matrix: WATER
Analysis Batch: 23VG39G13

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GASOLINE	ND	U	0.02		mg/L			07/24/23 16:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
BROMOFLUOROBENZENE					*07/24/23 16:32*	*1*

Lab Sample ID: 23VG39G13L
Matrix: WATER
Analysis Batch: 23VG39G13

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
GASOLINE	0.5	0.428		mg/L		86	60 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
BROMOFLUOROBENZENE	*105*		*70 - 130*

Method: 8015 Gas (Purgeable) LL (EAL) - SW846 8015B Gasoline Range Organics (Continued)

Lab Sample ID: 23G209-01M
Matrix: WATER
Analysis Batch: 23VG39G13

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	ND		0.5	0.479		mg/L		96	50 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
BROMOFLUOROBENZENE	*106*		*60 - 140*

Lab Sample ID: 23G209-01S
Matrix: WATER
Analysis Batch: 23VG39G13

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	ND		0.5	0.494		mg/L		99	50 - 130	3	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
BROMOFLUOROBENZENE	*111*		*60 - 140*

Method: 8015 LL DRO/MRO/JP5/JP8 - 8015 - TPH DRO/ORO

Lab Sample ID: 23DSG037WB
Matrix: WATER
Analysis Batch: 23DSG037W

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DIESEL	ND	U	0.025		mg/L			07/28/23 19:29	1
JP5	ND	U	0.05		mg/L			07/28/23 19:29	1
JP8	ND	U	0.05		mg/L			07/28/23 19:29	1
MOTOR OIL	ND	U	0.05		mg/L			07/28/23 19:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
BROMOBENZENE					*07/28/23 19:29*	*1*
HEXACOSANE					*07/28/23 19:29*	*1*

Lab Sample ID: 23DSG037WL
Matrix: WATER
Analysis Batch: 23DSG037W

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
DIESEL			2.5	2.13		mg/L		85	50 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
BROMOBENZENE	*66*		*60 - 130*
HEXACOSANE	*87*		*60 - 130*

Lab Sample ID: 23J5G037WL
Matrix: WATER
Analysis Batch: 23DSG037W

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
JP5			2.5	1.82		mg/L		73	30 - 160

Method: 8015 LL DRO/MRO/JP5/JP8 - 8015 - TPH DRO/ORO (Continued)

Surrogate	LCS %Recovery	LCS Qualifier	Limits
BROMOBENZENE	74		60 - 130
HEXACOSANE	88		60 - 130

Lab Sample ID: 23J8G037WL
Matrix: WATER
Analysis Batch: 23DSG037W

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
JP8			2.5	2.7		mg/L		108	30 - 160		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
BROMOBENZENE	94		60 - 130
HEXACOSANE	86		60 - 130

GC/MS VOA

Analysis Batch: 48365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-55688-1	AIEA GULCH WELLS PUMP 2	Total/NA	Water	524.2	
380-55688-2	TB: AIEA GULCH WELLS PUMP 2	Total/NA	Water	524.2	
MB 380-48365/5	Method Blank	Total/NA	Water	524.2	
LCS 380-48365/2	Lab Control Sample	Total/NA	Water	524.2	
LCSD 380-48365/3	Lab Control Sample Dup	Total/NA	Water	524.2	
MRL 380-48365/4	Lab Control Sample	Total/NA	Water	524.2	

Analysis Batch: 49499

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 380-49499/8	Method Blank	Total/NA	Water	524.2	
LCS 380-49499/5	Lab Control Sample	Total/NA	Water	524.2	
LCSD 380-49499/6	Lab Control Sample Dup	Total/NA	Water	524.2	
MRL 380-49499/3	Lab Control Sample	Total/NA	Water	524.2	
MRL 380-49499/4	Lab Control Sample	Total/NA	Water	524.2	

Analysis Batch: 49511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-55688-1	AIEA GULCH WELLS PUMP 2	Total/NA	Water	524.2	
380-55688-2	TB: AIEA GULCH WELLS PUMP 2	Total/NA	Water	524.2	
MB 380-49511/5	Method Blank	Total/NA	Water	524.2	
LCS 380-49511/3	Lab Control Sample	Total/NA	Water	524.2	
LCSD 380-49511/4	Lab Control Sample Dup	Total/NA	Water	524.2	

Analysis Batch: 49627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-55688-1	AIEA GULCH WELLS PUMP 2	Total/NA	Water	524.2	
380-55688-2	TB: AIEA GULCH WELLS PUMP 2	Total/NA	Water	524.2	
MB 380-49627/15	Method Blank	Total/NA	Water	524.2	
LCS 380-49627/11	Lab Control Sample	Total/NA	Water	524.2	
LCSD 380-49627/12	Lab Control Sample Dup	Total/NA	Water	524.2	
MRL 380-49627/13	Lab Control Sample	Total/NA	Water	524.2	
MRL 380-49627/14	Lab Control Sample	Total/NA	Water	524.2	

Analysis Batch: 49708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-55688-1	AIEA GULCH WELLS PUMP 2	Total/NA	Water	524.2	
380-55688-2	TB: AIEA GULCH WELLS PUMP 2	Total/NA	Water	524.2	

GC/MS Semi VOA

Prep Batch: 48683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-55688-1	AIEA GULCH WELLS PUMP 2	Total/NA	Water	525.2	
MB 380-48683/1-A	Method Blank	Total/NA	Water	525.2	
LCS 380-48683/3-A	Lab Control Sample	Total/NA	Water	525.2	
LCSD 380-48683/4-A	Lab Control Sample Dup	Total/NA	Water	525.2	
MRL 380-48683/2-A	Lab Control Sample	Total/NA	Water	525.2	
380-55591-AU-1-A MS	Matrix Spike	Total/NA	Water	525.2	
380-55859-T-2-A DU	Duplicate	Total/NA	Water	525.2	

GC/MS Semi VOA

Analysis Batch: 48889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-55688-1	AIEA GULCH WELLS PUMP 2	Total/NA	Water	525.2	48683
MB 380-48683/1-A	Method Blank	Total/NA	Water	525.2	48683
LCS 380-48683/3-A	Lab Control Sample	Total/NA	Water	525.2	48683
LCSD 380-48683/4-A	Lab Control Sample Dup	Total/NA	Water	525.2	48683
MRL 380-48683/2-A	Lab Control Sample	Total/NA	Water	525.2	48683
380-55591-AU-1-A MS	Matrix Spike	Total/NA	Water	525.2	48683
380-55859-T-2-A DU	Duplicate	Total/NA	Water	525.2	48683

GC Semi VOA

Prep Batch: 48887

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-55688-1	AIEA GULCH WELLS PUMP 2	Total/NA	Water	505	
MBL 380-48887/4-A	Method Blank	Total/NA	Water	505	
MRL 380-48887/2-A	Lab Control Sample	Total/NA	Water	505	
MRL 380-48887/3-A	Lab Control Sample	Total/NA	Water	505	
380-55644-I-1-A MS	Matrix Spike	Total/NA	Water	505	
380-55644-I-2-A MS	Matrix Spike	Total/NA	Water	505	
380-55644-J-1-A MS	Matrix Spike	Total/NA	Water	505	
380-55644-J-2-A MS	Matrix Spike	Total/NA	Water	505	

Prep Batch: 49111

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-55688-1	AIEA GULCH WELLS PUMP 2	Total/NA	Water	504.1	
380-55688-2	TB: AIEA GULCH WELLS PUMP 2	Total/NA	Water	504.1	
MBL 380-49111/4-A	Method Blank	Total/NA	Water	504.1	
LCS 380-49111/3-A	Lab Control Sample	Total/NA	Water	504.1	
MRL 380-49111/1-A	Lab Control Sample	Total/NA	Water	504.1	
MRL 380-49111/2-A	Lab Control Sample	Total/NA	Water	504.1	
380-55656-D-1-A MS	Matrix Spike	Total/NA	Water	504.1	
380-55656-G-2-A DU	Duplicate	Total/NA	Water	504.1	

Analysis Batch: 49300

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-55688-1	AIEA GULCH WELLS PUMP 2	Total/NA	Water	504.1	49111
380-55688-2	TB: AIEA GULCH WELLS PUMP 2	Total/NA	Water	504.1	49111
MBL 380-49111/4-A	Method Blank	Total/NA	Water	504.1	49111
LCS 380-49111/3-A	Lab Control Sample	Total/NA	Water	504.1	49111
MRL 380-49111/1-A	Lab Control Sample	Total/NA	Water	504.1	49111
MRL 380-49111/2-A	Lab Control Sample	Total/NA	Water	504.1	49111
380-55656-D-1-A MS	Matrix Spike	Total/NA	Water	504.1	49111
380-55656-G-2-A DU	Duplicate	Total/NA	Water	504.1	49111

Analysis Batch: 49509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-55688-1	AIEA GULCH WELLS PUMP 2	Total/NA	Water	505	48887
MBL 380-48887/4-A	Method Blank	Total/NA	Water	505	48887
MRL 380-48887/2-A	Lab Control Sample	Total/NA	Water	505	48887
MRL 380-48887/3-A	Lab Control Sample	Total/NA	Water	505	48887
380-55644-I-1-A MS	Matrix Spike	Total/NA	Water	505	48887
380-55644-I-2-A MS	Matrix Spike	Total/NA	Water	505	48887

GC Semi VOA (Continued)

Analysis Batch: 49509 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-55644-J-1-A MS	Matrix Spike	Total/NA	Water	505	48887
380-55644-J-2-A MS	Matrix Spike	Total/NA	Water	505	48887

HPLC/IC

Analysis Batch: 48578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-55688-1	AIEA GULCH WELLS PUMP 2	Total/NA	Water	300.0	
MB 380-48578/4	Method Blank	Total/NA	Water	300.0	
LCS 380-48578/7	Lab Control Sample	Total/NA	Water	300.0	
LCSD 380-48578/11	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 380-48578/5	Lab Control Sample	Total/NA	Water	300.0	
MRL 380-48578/6	Lab Control Sample	Total/NA	Water	300.0	
380-55739-F-2 MS	Matrix Spike	Total/NA	Water	300.0	
380-55739-F-2 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 48579

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-55688-1	AIEA GULCH WELLS PUMP 2	Total/NA	Water	300.0	
MB 380-48579/4	Method Blank	Total/NA	Water	300.0	
LCS 380-48579/7	Lab Control Sample	Total/NA	Water	300.0	
LCSD 380-48579/11	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 380-48579/5	Lab Control Sample	Total/NA	Water	300.0	
MRL 380-48579/6	Lab Control Sample	Total/NA	Water	300.0	
380-55739-F-2 MS	Matrix Spike	Total/NA	Water	300.0	
380-55739-F-2 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 49344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-55688-1	AIEA GULCH WELLS PUMP 2	Total/NA	Water	300.0	
MB 380-49344/4	Method Blank	Total/NA	Water	300.0	
LCS 380-49344/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 380-49344/6	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 380-49344/3	Lab Control Sample	Total/NA	Water	300.0	
380-55688-1 MS	AIEA GULCH WELLS PUMP 2	Total/NA	Water	300.0	
380-55688-1 MSD	AIEA GULCH WELLS PUMP 2	Total/NA	Water	300.0	

Metals

Analysis Batch: 48558

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-55688-1	AIEA GULCH WELLS PUMP 2	Total/NA	Water	200.7 Rev 4.4	
MB 380-48558/18	Method Blank	Total/NA	Water	200.7 Rev 4.4	
LCS 380-48558/20	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	
LCSD 380-48558/21	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	
LLCS 380-48558/19	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	
380-55688-1 MS	AIEA GULCH WELLS PUMP 2	Total/NA	Water	200.7 Rev 4.4	
380-55688-1 MSD	AIEA GULCH WELLS PUMP 2	Total/NA	Water	200.7 Rev 4.4	

Prep Batch: 67288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-55688-1	AIEA GULCH WELLS PUMP 2	Total/NA	Water	245.1	

Metals (Continued)

Prep Batch: 67288 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 810-67288/1-A	Method Blank	Total/NA	Water	245.1	
LCS 810-67288/3-A	Lab Control Sample	Total/NA	Water	245.1	
380-55132-AV-1-B MS	Matrix Spike	Total/NA	Water	245.1	
380-55132-AV-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	

Analysis Batch: 67330

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-55688-1	AIEA GULCH WELLS PUMP 2	Total/NA	Water	245.1	67288
MB 810-67288/1-A	Method Blank	Total/NA	Water	245.1	67288
LCS 810-67288/3-A	Lab Control Sample	Total/NA	Water	245.1	67288
380-55132-AV-1-B MS	Matrix Spike	Total/NA	Water	245.1	67288
380-55132-AV-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	67288

Analysis Batch: 71890

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-55688-1	AIEA GULCH WELLS PUMP 2	Total/NA	Water	200.8	
MB 810-71890/14	Method Blank	Total/NA	Water	200.8	
LCS 810-71890/17	Lab Control Sample	Total/NA	Water	200.8	
LLCS 810-71890/11	Lab Control Sample	Total/NA	Water	200.8	
LLCS 810-71890/12	Lab Control Sample	Total/NA	Water	200.8	
LLCS 810-71890/13	Lab Control Sample	Total/NA	Water	200.8	
810-73913-A-6 MS	Matrix Spike	Dissolved	Water	200.8	
810-73913-A-6 MSD	Matrix Spike Duplicate	Dissolved	Water	200.8	

General Chemistry

Analysis Batch: 48653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-55688-1	AIEA GULCH WELLS PUMP 2	Total/NA	Water	SM 2540C	
MB 380-48653/1	Method Blank	Total/NA	Water	SM 2540C	
HLCS 380-48653/5	Lab Control Sample	Total/NA	Water	SM 2540C	
LCS 380-48653/4	Lab Control Sample	Total/NA	Water	SM 2540C	
MRL 380-48653/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MRL 380-48653/3	Lab Control Sample	Total/NA	Water	SM 2540C	
380-55609-AB-1 MS	Matrix Spike	Total/NA	Water	SM 2540C	

Analysis Batch: 48702

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-55688-1	AIEA GULCH WELLS PUMP 2	Total/NA	Water	SM 4500 F C	
MB 380-48702/40	Method Blank	Total/NA	Water	SM 4500 F C	
MB 380-48702/6	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 380-48702/42	Lab Control Sample	Total/NA	Water	SM 4500 F C	
LCSD 380-48702/43	Lab Control Sample Dup	Total/NA	Water	SM 4500 F C	
MRL 380-48702/41	Lab Control Sample	Total/NA	Water	SM 4500 F C	
MRL 380-48702/7	Lab Control Sample	Total/NA	Water	SM 4500 F C	
380-55381-S-1 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
380-55381-S-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	

Analysis Batch: 48703

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-55688-1	AIEA GULCH WELLS PUMP 2	Total/NA	Water	SM 2320B	

General Chemistry (Continued)

Analysis Batch: 48703 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 380-48703/1	Method Blank	Total/NA	Water	SM 2320B	
LCS 380-48703/3	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 380-48703/18	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
LLCS 380-48703/4	Lab Control Sample	Total/NA	Water	SM 2320B	
MRL 380-48703/2	Lab Control Sample	Total/NA	Water	SM 2320B	
380-55599-A-1 MS	Matrix Spike	Total/NA	Water	SM 2320B	
380-55599-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 2320B	
380-55599-A-1 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 48706

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-55688-1	AIEA GULCH WELLS PUMP 2	Total/NA	Water	SM 2510B	
MB 380-48706/2	Method Blank	Total/NA	Water	SM 2510B	
LCS 380-48706/4	Lab Control Sample	Total/NA	Water	SM 2510B	
LCSD 380-48706/16	Lab Control Sample Dup	Total/NA	Water	SM 2510B	
MRL 380-48706/3	Lab Control Sample	Total/NA	Water	SM 2510B	
380-55599-A-1 DU	Duplicate	Total/NA	Water	SM 2510B	

Analysis Batch: 48708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-55688-1	AIEA GULCH WELLS PUMP 2	Total/NA	Water	SM 4500 H+ B	
MB 380-48708/4	Method Blank	Total/NA	Water	SM 4500 H+ B	
LCS 380-48708/5	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCSD 380-48708/17	Lab Control Sample Dup	Total/NA	Water	SM 4500 H+ B	
380-55599-A-1 DU	Duplicate	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 48982

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-55688-1	AIEA GULCH WELLS PUMP 2	Total/NA	Water	SM 4500 S2 D	
MB 380-48982/1	Method Blank	Total/NA	Water	SM 4500 S2 D	
LCS 380-48982/4	Lab Control Sample	Total/NA	Water	SM 4500 S2 D	
LCSD 380-48982/22	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 D	
MRL 380-48982/17	Lab Control Sample	Total/NA	Water	SM 4500 S2 D	
MRL 380-48982/2	Lab Control Sample	Total/NA	Water	SM 4500 S2 D	
380-55688-1 MS	AIEA GULCH WELLS PUMP 2	Total/NA	Water	SM 4500 S2 D	
380-55688-1 MSD	AIEA GULCH WELLS PUMP 2	Total/NA	Water	SM 4500 S2 D	

Subcontract

Analysis Batch: O-42022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-55688-1	AIEA GULCH WELLS PUMP 2	Total/NA	Water	625 Acid/Base/PAH + TICs	O-42022_P
108517-B1	Method Blank	Total/NA	BlankMatrix	625 Acid/Base/PAH + TICs	O-42022_P
108517-BS1	Lab Control Sample	Total/NA	BlankMatrix	625 Acid/Base/PAH + TICs	O-42022_P
108517-BS2	Lab Control Sample Dup	Total/NA	BlankMatrix	625 Acid/Base/PAH + TICs	O-42022_P

Subcontract

Analysis Batch: 23DSG037W

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-55688-1	AIEA GULCH WELLS PUMP 2	Total/NA	Water	8015 LL DRO/MRO/JP5/JP8	
23DSG037WB	Method Blank	Total/NA	WATER	8015 LL DRO/MRO/JP5/JP8	
23DSG037WL	Lab Control Sample	Total/NA	WATER	8015 LL DRO/MRO/JP5/JP8	
23J5G037WL	Lab Control Sample	Total/NA	WATER	8015 LL DRO/MRO/JP5/JP8	
23J8G037WL	Lab Control Sample	Total/NA	WATER	8015 LL DRO/MRO/JP5/JP8	

Analysis Batch: 23MEG005W

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-55688-1	AIEA GULCH WELLS PUMP 2	Total/NA	Water	8015 Ethanol	
23MEG005WB	Method Blank	Total/NA	WATER	8015 Ethanol	
23MEG005WL	Lab Control Sample	Total/NA	WATER	8015 Ethanol	

Analysis Batch: 23VG39G13

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-55688-1	AIEA GULCH WELLS PUMP 2	Total/NA	Water	8015 Gas (Purgeable) LL (EAL)	
380-55688-2	TB: AIEA GULCH WELLS PUMP 2	Total/NA	Water	8015 Gas (Purgeable) LL (EAL)	
23VG39G13B	Method Blank	Total/NA	WATER	8015 Gas (Purgeable) LL (EAL)	
23VG39G13L	Lab Control Sample	Total/NA	WATER	8015 Gas (Purgeable) LL (EAL)	
23G209-01M	Matrix Spike	Total/NA	WATER	8015 Gas (Purgeable) LL (EAL)	
23G209-01S	Matrix Spike Duplicate	Total/NA	WATER	8015 Gas (Purgeable) LL (EAL)	

Prep Batch: O-42022_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-55688-1	AIEA GULCH WELLS PUMP 2	Total/NA	Water	EPA_625	
108517-B1	Method Blank	Total/NA	BlankMatrix	EPA_625	
108517-BS1	Lab Control Sample	Total/NA	BlankMatrix	EPA_625	
108517-BS2	Lab Control Sample Dup	Total/NA	BlankMatrix	EPA_625	

Lab Chronicle

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

Job ID: 380-55688-1

Client Sample ID: AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-55688-1

Date Collected: 07/20/23 09:00

Matrix: Water

Date Received: 07/21/23 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	524.2		1	49627	P3EE	EA POM	07/31/23 21:18
Total/NA	Analysis	524.2		1	49511	N4CJ	EA POM	07/31/23 02:28
Total/NA	Analysis	524.2		1	49708	N1R	EA POM	08/01/23 16:02
Total/NA	Analysis	524.2		1	48365	Q6AD	EA POM	07/24/23 17:19
Total/NA	Prep	525.2			48683	OTM3	EA POM	07/25/23 10:00
Total/NA	Analysis	525.2		1	48889	Q8LA	EA POM	07/26/23 19:26
Total/NA	Prep	504.1			49111	K9GY	EA POM	07/27/23 12:50 - 07/27/23 13:47 [1]
Total/NA	Analysis	504.1		1	49300	K9GY	EA POM	07/28/23 02:30
Total/NA	Prep	505			48887	DR5R	EA POM	07/26/23 12:57 - 07/26/23 14:15 [1]
Total/NA	Analysis	505		1	49509	ULRL	EA POM	07/26/23 23:35
Total/NA	Analysis	300.0		5	48578	VB9B	EA POM	07/21/23 19:51
Total/NA	Analysis	300.0		5	48579	VB9B	EA POM	07/21/23 19:51
Total/NA	Analysis	300.0		1	49344	UNJR	EA POM	07/27/23 23:57
Total/NA	Analysis	200.7 Rev 4.4		1	48558	J9ZD	EA POM	07/24/23 11:21
Total/NA	Analysis	200.8		1	71890	NB	EA SB	08/30/23 15:24
Total/NA	Prep	245.1			67288	AC	EA SB	07/27/23 12:00
Total/NA	Analysis	245.1		1	67330	AC	EA SB	07/27/23 21:03
Total/NA	Analysis	SM 2320B		1	48703	D5MQ	EA POM	07/24/23 17:17
Total/NA	Analysis	SM 2510B		1	48706	D5MQ	EA POM	07/24/23 17:17
Total/NA	Analysis	SM 2540C		1	48653	XLG4	EA POM	07/24/23 22:31
Total/NA	Analysis	SM 4500 F C		1	48702	D5MQ	EA POM	07/24/23 18:27
Total/NA	Analysis	SM 4500 H+ B		1	48708	D5MQ	EA POM	07/24/23 17:17
Total/NA	Analysis	SM 4500 S2 D		1	48982	MH2L	EA POM	07/26/23 14:58
Total/NA	Prep	EPA_625		1	O-42022_P			07/21/23 00:00
Total/NA	Analysis	625 Acid/Base/PAH + TICs		1	O-42022	YC		09/05/23 15:09
Total/NA	Analysis	8015 Ethanol		1	23MEG005W	DBaren		07/21/23 18:12
Total/NA	Analysis	8015 Gas (Purgeable) LL (EAL)		1	23VG39G13	SCerva		07/24/23 19:39
Total/NA	Analysis	8015 LL DRO/MRO/JP5/JP8		1	23DSG037W	SDees		07/28/23 23:32

Client Sample ID: TB: AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-55688-2

Date Collected: 07/20/23 09:00

Matrix: Water

Date Received: 07/21/23 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	524.2		1	49627	P3EE	EA POM	07/31/23 21:40
Total/NA	Analysis	524.2		1	49511	N4CJ	EA POM	07/31/23 02:48
Total/NA	Analysis	524.2		1	49708	N1R	EA POM	08/01/23 16:02
Total/NA	Analysis	524.2		1	48365	Q6AD	EA POM	07/24/23 17:42
Total/NA	Prep	504.1			49111	K9GY	EA POM	07/27/23 12:50 - 07/27/23 13:47 [1]
Total/NA	Analysis	504.1		1	49300	K9GY	EA POM	07/28/23 03:04

Lab Chronicle

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

Job ID: 380-55688-1

Client Sample ID: TB: AIEA GULCH WELLS PUMP 2

Date Collected: 07/20/23 09:00
Date Received: 07/21/23 09:45

Lab Sample ID: 380-55688-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015 Gas (Purgeable) LL (EAL)		1	23VG39G13	SCerva		07/24/23 23:09

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

= Physis Environmental Laboratories, 1904 Wright Circle, Anaheim, CA 92806

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

Accreditation/Certification Summary

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

Job ID: 380-55688-1

Laboratory: Eurofins Eaton Analytical Pomona

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

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

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

Analysis Method	Prep Method	Matrix	Analyte
505	505	Water	Polychlorinated biphenyls, Total
524.2		Water	1,1,1,2-Tetrachloroethane
524.2		Water	1,1,2,2-Tetrachloroethane
524.2		Water	1,1-Dichloroethane
524.2		Water	1,1-Dichloropropene
524.2		Water	1,2,3-Trichlorobenzene
524.2		Water	1,2,3-Trichloropropane
524.2		Water	1,2,4-Trimethy benzene
524.2		Water	1,3,5-Trimethy benzene
524.2		Water	1,3-Dichloropropane
524.2		Water	1,3-Dichloropropene, Total
524.2		Water	2,2-Dichloropropane
524.2		Water	2-Butanone (MEK)
524.2		Water	4-Methyl-2-pentanone (MIBK)
524.2		Water	Acetone
524.2		Water	Bromobenzene
524.2		Water	Bromochloromethane
524.2		Water	Bromoethane
524.2		Water	Bromomethane (Methyl Bromide)
524.2		Water	Carbon disulfide
524.2		Water	Chloroethane
524.2		Water	Chloromethane (methyl chloride)
524.2		Water	cis-1,3-Dichloropropene
524.2		Water	Dibromomethane
524.2		Water	Dichlorodifluoromethane
524.2		Water	Diisopropyl ether
524.2		Water	Hexachlorobutadiene
524.2		Water	Isopropylbenzene
524.2		Water	m,p-Xylenes
524.2		Water	m-Dichlorobenzene (1,3-DCB)
524.2		Water	Naphthalene
524.2		Water	n-Butylbenzene
524.2		Water	N-Propylbenzene
524.2		Water	o-Chlorotoluene
524.2		Water	o-Xylene
524.2		Water	p-Chlorotoluene
524.2		Water	p-Isopropyltoluene
524.2		Water	sec-Butylbenzene
524.2		Water	tert-Butylbenzene
524.2		Water	Tertiary Butyl Alcohol (TBA)
524.2		Water	trans-1,3-Dichloropropene
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

Laboratory: Eurofins Eaton Analytical Pomona (Continued)

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

Authority	Program	Identification Number	Expiration Date

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

Analysis Method	Prep Method	Matrix	Analyte
525.2	525.2	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	Acenaphthene
525.2	525.2	Water	Acenaphthylene
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	Anthracene
525.2	525.2	Water	Benz(a)anthracene
525.2	525.2	Water	Benzo[b]fluoranthene
525.2	525.2	Water	Benzo[g,h,]perylene
525.2	525.2	Water	Benzo[k]fluoranthene
525.2	525.2	Water	beta-BHC
525.2	525.2	Water	Bromacil
525.2	525.2	Water	Butylbenzylphthalate
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	Chrysene
525.2	525.2	Water	delta-BHC
525.2	525.2	Water	Dibenz(a,h)anthracene
525.2	525.2	Water	Diclorvos (DDVP)
525.2	525.2	Water	Diethylphthalate
525.2	525.2	Water	Dimethylphthalate
525.2	525.2	Water	Di-n-butyl phthalate
525.2	525.2	Water	Di-n-octyl phthalate
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	Fluoranthene
525.2	525.2	Water	Fluorene
525.2	525.2	Water	gamma-Chlordane
525.2	525.2	Water	Indeno[1,2,3-cd]pyrene
525.2	525.2	Water	Isophorone
525.2	525.2	Water	Malathion
525.2	525.2	Water	Molinate
525.2	525.2	Water	Naphthalene
525.2	525.2	Water	Parathion
525.2	525.2	Water	Pendimethalin (Penoxaline)
525.2	525.2	Water	Phenanthrene

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

Job ID: 380-55688-1

Laboratory: Eurofins Eaton Analytical Pomona (Continued)

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

Authority	Program	Identification Number	Expiration Date

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

Analysis Method	Prep Method	Matrix	Analyte
525.2	525.2	Water	Pyrene
525.2	525.2	Water	Terbacil
525.2	525.2	Water	Terbuthylazine
525.2	525.2	Water	Thiobencarb
525.2	525.2	Water	Total Permethrin (mixed isomers)
525.2	525.2	Water	trans-Nonachlor
525.2	525.2	Water	Trifluralin
SM 2320B		Water	Bicarbonate Alkalinity as CaCO3
SM 2320B		Water	Carbonate Alkalinity as CaCO3
SM 4500 S2 D		Water	Sulfide

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	07-31-24
Alabama	State	40700	06-30-24
Alaska	State	IN00035	06-30-24
Arizona	State	AZ0432	07-26-24
Arkansas (DW)	State	EPA IN00035	06-30-23 *
California	State	2920	06-30-24
Colorado	State	IN00035	02-29-24
Connecticut	State	PH-0132	03-31-24
Delaware (DW)	State	IN00035	06-30-24
Florida	NELAP	E87775	06-30-24
Georgia (DW)	State	929	06-30-24
Guam	State	23-011R	07-15-24
Hawaii	State	IN035	06-30-24
Idaho (DW)	State	IN00035	12-31-23
IL Dept. of Public Health (Micro)	State	17767	07-01-24
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	10-31-23
Kansas	NELAP	E-10233	10-31-23
Kentucky (DW)	State	KY90056	12-31-23
Louisiana (DW)	State	LA014	12-31-23
Maine	State	IN00035	05-01-25
Maryland	State	209	06-30-24
Massachusetts	State	M-IN035	06-30-24
MI - RadChem Recognition	State	9926	06-30-24
Michigan	State	9926	06-30-24
Minnesota	NELAP	1989807	12-31-23
Mississippi	State	IN00035	06-30-24
Missouri	State	880	09-30-24
Montana (DW)	State	CERT0026	01-02-24
Nebraska	State	NE-OS-05-04	06-30-24

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

Accreditation/Certification Summary

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

Job ID: 380-55688-1

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
Nevada	State	IN000352024-01	07-31-24
New Hampshire	NELAP	2124	11-05-23
New Jersey	NELAP	IN598	06-30-24
New Mexico	State	IN00035	06-30-24
New York	NELAP	11398	04-01-24
North Carolina (DW)	State	18700	07-31-24
North Dakota	State	R-035	09-26-23
Northern Mariana Islands (DW)	State	IN00035	06-30-24
Ohio	State	87775	06-30-24
Oklahoma	NELAP	D9508	08-31-23
Oregon	NELAP	4156	09-16-23
Pennsylvania	NELAP	68-00466	04-30-24
Puerto Rico	State	IN00035	04-01-24
Rhode Island	State	LAO00343	12-30-23
South Carolina	State	95005001	06-30-23 *
South Dakota (DW)	State	IN00035	06-30-24
Tennessee	State	TN02973	06-30-24
Texas	NELAP	T104704187-22-16	12-31-23
Texas	TCEQ Water Supply	TX207	06-30-24
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	11-15-23
Virginia	NELAP	460275	03-14-24
Washington	State	C837	01-01-24
West Virginia (DW)	State	9927 C	12-31-23
Wisconsin	State	999766900	08-31-24
Wisconsin (Micro)	State	10121	12-31-23
Wyoming	State	8TMS-L	06-30-23 *

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

Method Summary

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

Job ID: 380-55688-1

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
504.1	EDB, DBCP and 1,2,3-TCP (GC)	EPA-DW2	EA POM
505	Organochlorine Pesticides/PCBs (GC)	EPA	EA POM
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 SB
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
625	EPA 625 Base/Neutral and Acid Organics i	EPA	
8015	8015 - TPH DRO/ORO	EPA	
8015B	SW846 8015B Gasoline Range Organics	SW846	
245.1	Preparation, Mercury	EPA	EA SB
504.1	Microextraction	EPA-DW	EA POM
505	Extraction, Organochlorine Pesticides/PCBs	EPA	EA POM
525.2	Extraction of Semivolatile Compounds	EPA	EA POM
None	Autocomplete Prep - Metals - No Digestion required	None	EA POM

Protocol References:

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:

= Physis Environmental Laboratories, 1904 Wright Circle, Anaheim, CA 92806

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

Sample Summary

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

Job ID: 380-55688-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
380-55688-1	AIEA GULCH WELLS PUMP 2	Water	07/20/23 09:00	07/21/23 09:45
380-55688-2	TB: AIEA GULCH WELLS PUMP 2	Water	07/20/23 09:00	07/21/23 09:45

EMAX
LABORATORIES, INC.
3051 Fujita Street
Torrance, CA 90505
Tel: (310)-618-8889

Date: 08-14-2023
EMAX Batch No.: 23G209

Attn: Jackie Contreras

Eurofins Eaton Analytical
750 Royal Oaks Dr., Suite 100
Monrovia, CA 91016-3629

Subject: Laboratory Report
Project: 380-55688

Enclosed is the Laboratory report for samples received on 07/21/23.
The data reported relate only to samples listed below :

Sample ID	Control #	Col Date	Matrix	Analysis
380-55688-1	G209-01	07/20/23	WATER	TPH GASOLINE TPH ETHANOL
380-55688-2	G209-02	07/20/23	WATER	TPH GASOLINE
380-55688-1MS	G209-01M	07/20/23	WATER	TPH GASOLINE
380-55688-1MSD	G209-01S	07/20/23	WATER	TPH GASOLINE

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning
these results.

Sincerely yours,

Caspar J. Pang
Laboratory Director

EMAX certifies that results included in this report meets all TNI & DOD requirements unless noted in the Case Narrative.

NELAP Accredited Certificate Number CA002912022-24
ANAB Accredited DoD ELAP and ISO/IEC 17025 Certificate Number L2278 Testing
California ELAP Accredited Certificate Number 2672

Eurofins Eaton Analytical Pomona
941 Corporate Center Drive
Pomona, CA 91768-2642
Phone: 626-386-1100

Chain of Custody Record

236209

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Arada, Rachelle	Carrier Tracking No(s):	COC No: 380-64961.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Rachelle.Arada@et.eurofinsus.com	State of Origin: Hawaii	Page: Page 1 of 1
Company: EMAX Laboratories Inc		Accreditations Required (See note): State - Hawaii		Job #: 380-55688-1
Address: 3051 Fujita Street, ,	Due Date Requested: 8/4/2023			
City: Torrance	TAT Requested (days):			
State, Zip: CA, 90505				
Phone:	PO #:			
Email:	WO #:			
Project Name: RED-HILL	Project #: 38001111			
Site: Honolulu BWS Sites	SSOW#:			

Analysis Requested

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

	Sample Identification - 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)	SUB (8015 Ethanol)/ 8015 Ethanol	SUB (8015 Gas (Purgeable) LL (EAL))/ 8015 Gas (Purgeable) LL (EAL)	SUB (8015 LL DRO/MRO/JP5/JP8)/ 8015 LL DRO/MRO/JP5/JP8	Total Number of containers	Special Instructions/Note:
				Preservation Code:								
1	AIEA GULCH WELLS PUMP 2 (380-55688-1)	7/20/23	09:00 Hawaiian		Water			X	X	X	12	See Attached Instructions
2	TB: AIEA GULCH WELLS PUMP 2 (380-55688-2)	7/20/23	09:00 Hawaiian		Water				X		2	See Attached Instructions

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
					7-21-23 13:-	
	Relinquished by:	Date/Time: 7-21-23 14:30	Company	Received by:	Date/Time: 7/21/23 14:30	Company EMAX
	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: 2.0/1.8 *CF:-0.2

EMAX LABORATORIES, INC.

REFERENCE: EMAX-SM02 Rev. 12

SAMPLE RECEIPT FORM 1

Type of Delivery	Airbill / Tracking Number	ECN 23G209
☐ Fedex ☐ UPS ☐ GSO ☐ Others		Recipient Maria Rivera
☐ EMAX Courier ☒ Client Delivery		Date 07/21/23 Time 14:30

COC INSPECTION

☒ Client Name ☒ Client PM/FC ☐ Sampler Name ☒ Sampling Date/Time ☒ Sample ID ☒ Matrix
☒ Address ☒ Tel # / Fax # ☐ Courier Signature ☒ Analysis Required ☐ Preservative (if any) ☒ TAT
Safety Issues (if any) ☐ High concentrations expected ☐ From Superfund Site ☐ Rad screening required
Note:

PACKAGING INSPECTION

Container ☒ Cooler ☐ Box ☐ Other
Condition ☐ Custody Seal ☐ Intact ☐ Damaged
Packaging correction factor: ☒ Bubble Pack ☐ Styrofoam ☐ Popcorn ☐ Sufficient ☐ _____
Temperatures (Cool, ≤6 °C but not frozen) ☒ Cooler 1 2.0/18 °C ☐ Cooler 2 _____ °C ☐ Cooler 3 _____ °C ☐ Cooler 4 _____ °C ☐ Cooler 5 _____ °C
☐ Cooler 6 _____ °C ☐ Cooler 7 _____ °C ☐ Cooler 8 _____ °C ☐ Cooler 9 _____ °C ☐ Cooler 10 _____ °C
Thermometer: -0.2 (A) S/N 221852708 B - S/N 224925379 C - S/N _____ D - S/N _____
Comments: ☐ Temperature is out of range. PM was informed IMMEDIATELY.
Note:

DISCREPANCIES

LabSampleID	LabSampleContainerID	Code	ClientSample Label ID / Information	Corrective Action
2	13, 14	D22	2nd Date: 7/12/23	R1

JSR 07/21

AB 7/24/23

☐ pH holding time requirement for water samples is 15 mins. Water samples for pH analysis are received beyond 15 minutes from sampling time.

NOTES/OBSERVATIONS:

SAMPLE MATRIX IS DRINKING WATER? ☐ YES ☐ NO

☐ Continue to next page.

LEGEND:

Code	Description- Sample Management
D1	Analysis is not indicated in _____
D2	Analysis mismatch COC vs label
D3	Sample ID mismatch COC vs label
D4	Sample ID is not indicated in _____
D5	Container -[improper] [leaking] [broken]
D6	Date/Time is not indicated in _____
D7	Date/Time mismatch COC vs label
D8	Sample listed in COC is not received
D9	Sample received is not listed in COC
D10	No initial/date on corrections in COC/label
D11	Container count mismatch COC vs received
D12	Container size mismatch COC vs received

Code	Description-Sample Management
D13	Out of Holding Time
D14	Bubble is >6mm
D15	No trip blank in cooler
D16	Preservation not indicated in _____
D17	Preservation mismatch COC vs label
D18	Insufficient chemical preservative
D19	Insufficient Sample
D20	No filtration info for dissolved analysis
D21	No sample for moisture determination
(D22)	2nd date on label is incorrect
D23	_____
D24	_____

Code	Description-Sample Management
R1	Proceed as indicated in ☒ COC ☐ Label
R2	Refer to attached instruction
R3	Cancel the analysis
R4	Use vial with smallest bubble first
R5	Log-in with latest sampling date and time+1 min
R6	Adjust pH as necessary
R7	Filter and preserved as necessary
R8	_____
R9	_____
R10	_____
R11	_____
R12	_____

REVIEWS:

Sample Labeling: Maria Rivera | Jocelyne Solis-Ramos
Date: 07/21/23 | 07/21/23

SRF: Jocelyne Solis-Ramos
Date: 07/21/23

PM: AB
Date: 7/24/23

REPORT ID: 23G209

REPORTING CONVENTIONS

DATA QUALIFIERS:

Lab Qualifier	AFCEE Qualifier	Description
J	F	Indicates that the analyte is positively identified and the result is less than RL but greater than MDL.
N		Indicates presumptive evidence of a compound.
B	B	Indicates that the analyte is found in the associated method blank as well as in the sample at above QC level.
E	J	Indicates that the result is above the maximum calibration range or estimated value.
*	*	Out of QC limit.

Note: The above qualifiers are used to flag the results unless the project requires a different set of qualification criteria.

ACRONYMS AND ABBREVIATIONS:

CRDL	Contract Required Detection Limit
RL	Reporting Limit
MRL	Method Reporting Limit
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
DO	Diluted out

DATES

The date and time information for leaching and preparation reflect the beginning date and time of the procedure unless the method, protocol, or project specifically requires otherwise.

LABORATORY REPORT FOR

EUROFINS EATON ANALYTICAL

380-55688

METHOD 5030B/8015B
TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

SDG#: 23G209

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 380-55688

SDG : 23G209

METHOD 5030B/8015B
TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

A total of two(2) water samples were received on 07/21/23 to be analyzed for Total Petroleum Hydrocarbons by Purge and Trap in accordance with Method 5030B/8015B and project specific requirements.

Holding Time
Samples were analyzed within the prescribed holding time.

Calibration
Multi-calibration points were generated to establish initial calibration (ICAL). ICAL was verified using a secondary source (ICV). Continuing calibration (CCV) verifications were carried out on a frequency specified by the project. All calibration requirements were within acceptance criteria. Refer to calibration summary forms of ICAL, ICV and CCV for details. MRL was analyzed as required by the project. Refer to MRL summary form for details.

Method Blank
Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. VG39G13B - result was compliant to project requirement. Refer to sample result summary form for details.

Lab Control Sample
Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of LCS/LCD was analyzed. VG39G13L/VG39G13C were within LCS limits. Refer to LCS summary form for details.

Matrix QC Sample
Matrix spike sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of MS/MSD was analyzed. Gasoline was within MS QC limits in G209-01M/G209-01S. Refer to Matrix QC summary form for details.

Surrogate
Surrogate was added on QC and field samples. All surrogate recoveries were within QC limits. Refer to sample result summary forms for details.

Sample Analysis
Samples were analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met.

LAB CHRONICLE
TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

Client : EUROFINS EATON ANALYTICAL
Project : 380-55688

SDG NO. : 23G209
Instrument ID : GCT039

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	VG39G13B	1	NA	07/24/2316:32	07/24/2316:32	EG24005A	EG24004A	23VG39G13	Method Blank
LCS1W	VG39G13L	1	NA	07/24/2318:24	07/24/2318:24	EG24008A	EG24004A	23VG39G13	Lab Control Sample (LCS)
LCD1W	VG39G13C	1	NA	07/24/2319:02	07/24/2319:02	EG24009A	EG24004A	23VG39G13	LCS Duplicate
380-55688-1	G209-01	1	NA	07/24/2319:39	07/24/2319:39	EG24010A	EG24004A	23VG39G13	Field Sample
380-55688-1MS	G209-01M	1	NA	07/24/2320:16	07/24/2320:16	EG24011A	EG24004A	23VG39G13	Matrix Spike Sample (MS)
380-55688-1MSD	G209-01S	1	NA	07/24/2322:32	07/24/2322:32	EG24012A	EG24004A	23VG39G13	MS Duplicate (MSD)
380-55688-2	G209-02	1	NA	07/24/2323:09	07/24/2323:09	EG24013A	EG24004A	23VG39G13	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD 5030B/8015B
TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	07/20/23 09:00
Project	: 380-55688	Date Received:	07/21/23
Batch No.	: 23G209	Date Extracted:	07/24/23 19:39
Sample ID	: 380-55688-1	Date Analyzed:	07/24/23 19:39
Lab Samp ID:	G209-01	Dilution Factor:	1
Lab File ID:	EG24010A	Matrix:	WATER
Ext Btch ID:	23VG39G13	% Moisture:	NA
Calib. Ref.:	EG24004A	Instrument ID:	39

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)	
GASOLINE	ND	0.020	0.010	
SURROGATE PARAMETERS	**RESULT**	**SPK_AMT**	**%RECOVERY**	**QC LIMIT**
Bromofluorobenzene	0.0326	0.0400	81	60-140

Notes:
Parameter H-C Range
Gasoline C6-C10
Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.
Sample Amount : 5ml Final Volume : 5ml
Prepared by : CMpang Analyzed by : CMpang

METHOD 5030B/8015B
TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	07/20/23 09:00
Project	: 380-55688	Date Received:	07/21/23
Batch No.	: 23G209	Date Extracted:	07/24/23 23:09
Sample ID	: 380-55688-2	Date Analyzed:	07/24/23 23:09
Lab Samp ID:	G209-02	Dilution Factor:	1
Lab File ID:	EG24013A	Matrix:	WATER
Ext Btch ID:	23VG39G13	% Moisture:	NA
Calib. Ref.:	EG24004A	Instrument ID:	39

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)	
GASOLINE	ND	0.020	0.010	
SURROGATE PARAMETERS	**RESULT**	**SPK_AMT**	**%RECOVERY**	**QC LIMIT**
Bromofluorobenzene	0.0308	0.0400	77	60-140

Notes:
Parameter H-C Range
Gasoline C6-C10
Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.
Sample Amount : 5ml Final Volume : 5ml
Prepared by : CMpang Analyzed by : CMpang

QC SUMMARIES

METHOD 5030B/8015B
TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	07/24/23 16:32
Project	: 380-55688	Date Received:	07/24/23
Batch No.	: 23G209	Date Extracted:	07/24/23 16:32
Sample ID	: MBLK1W	Date Analyzed:	07/24/23 16:32
Lab Samp ID:	VG39G13B	Dilution Factor:	1
Lab File ID:	EG24005A	Matrix:	WATER
Ext Btch ID:	23VG39G13	% Moisture:	NA
Calib. Ref.:	EG24004A	Instrument ID:	39

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
GASOLINE	ND	0.020	0.010

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromofluorobenzene	0.0324	0.0400	81	60-140

Notes:
Parameter H-C Range
Gasoline C6-C10
Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.
Sample Amount : 5ml Final Volume : 5ml
Prepared by : CMpang Analyzed by : CMpang

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 380-55688
BATCH NO. : 23G209
METHOD : 5030B/8015B

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: MBLK1W	LCS1W	LCD1W
LAB SAMPLE ID	: VG39G13B	VG39G13L	VG39G13C
LAB FILE ID	: EG24005A	EG24008A	EG24009A
DATE PREPARED	: 07/24/23 16:32	07/24/23 18:24	07/24/23 19:02
DATE ANALYZED	: 07/24/23 16:32	07/24/23 18:24	07/24/23 19:02
PREP BATCH	: 23VG39G13	23VG39G13	23VG39G13
CALIBRATION REF	: EG24004A	EG24004A	EG24004A

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	SpikeAmt (mg/L)	LCDResult (mg/L)	LCDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
Gasoline	ND	0.500	0.428	86	0.500	0.415	83	3	60-130	30

SURROGATE PARAMETER	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	SpikeAmt (mg/L)	LCDResult (mg/L)	LCDRec (%)	QCLimit (%)
Bromofluorobenzene	0.0400	0.0419	105	0.0400	0.0402	101	70-130

MB: Method Blank sample LCS: Lab Control Sample LCD: Lab Control Sample Duplicate

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 380-55688
BATCH NO. : 23G209
METHOD : 5030B/8015B

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: 380-55688-1	380-55688-1MS	380-55688-1MSD
LAB SAMPLE ID	: G209-01	G209-01M	G209-01S
LAB FILE ID	: EG24010A	EG24011A	EG24012A
DATE PREPARED	: 07/24/23 19:39	07/24/23 20:16	07/24/23 22:32
DATE ANALYZED	: 07/24/23 19:39	07/24/23 20:16	07/24/23 22:32
PREP BATCH	: 23VG39G13	23VG39G13	23VG39G13
CALIBRATION REF	: EG24004A	EG24004A	EG24004A

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
Gasoline	ND	0.500	0.479	96	0.500	0.494	99	3	50-130	30

SURROGATE PARAMETER	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromofluorobenzene	0.0400	0.0423	106	0.0400	0.0445	111	60-140

PS: Parent Sample MS: Matrix Spike MSD: Matrix Spike Duplicate

LABORATORY REPORT FOR

EUROFINS EATON ANALYTICAL

380-55688

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

SDG#: 23G209

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 380-55688

SDG : 23G209

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

One(1) water sample was received on 07/21/23 to be analyzed for Total Petroleum Hydrocarbons by Extraction in accordance with Method 3520C/8015B and project specific requirements.

Holding Time
The sample was analyzed within the prescribed holding time.

Calibration
Multi-calibration points were generated to establish initial calibration (ICAL). ICAL was verified using a secondary source (ICV). Continuing calibration (CCV) verifications were carried out on a frequency specified by the project. All calibration requirements were within acceptance criteria. Refer to calibration summary forms of ICAL, ICV and CCV for details. MRL was analyzed as required by the project.

Method Blank
Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. DSG037WB - result was compliant to project requirement. Refer to sample result summary form for details.

Lab Control Sample
Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) LCS was analyzed. Percent recovery for Diesel was within LCS QC limits in DSG037WL. Refer to LCS summary form for details.

Matrix QC Sample
Matrix spike sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of MS/MSD was analyzed. Diesel was within MS QC limits in 23G182-01M/23G182-01S. Refer to Matrix QC summary form for details.

Surrogate
Surrogates were added on QC and field samples. All surrogate recoveries were within QC limits. Refer to sample result summary forms for details.

Sample Analysis
The sample was analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met.

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 380-55688

SDG : 23G209

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

One(1) water sample was received on 07/21/23 to be analyzed for Petroleum Hydrocarbons by Extraction in accordance with Method 3520C/8015B and project specific requirements.

Holding Time
The sample was analyzed within the prescribed holding time.

Calibration
Multi-calibration points were generated to establish initial calibration (ICAL). ICAL was verified using a secondary source (ICV). Continuing calibration (CCV) verifications were carried out on a frequency specified by the project. All calibration requirements were within acceptance criteria. Refer to calibration summary forms of ICAL, ICV and CCV for details. MRL was analyzed as required by the project. Refer to MRL summary form for details.

Method Blank
Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. DSG037WB - result was compliant to project requirement. Refer to sample result summary form for details.

Lab Control Sample
Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) LCS was analyzed. Percent recovery for JP5 was within LCS QC limits in J5G037WL. Refer to LCS summary form for details.

Matrix QC Sample
Matrix spike sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of MS/MSD was analyzed. JP5 was within MS QC limits in 23G182-01M/23G182-01S. Refer to Matrix QC summary form for details.

Surrogate
Surrogates were added on QC and field samples. All surrogate recoveries were within QC limits. Refer to sample result summary forms for details.

Sample Analysis
The sample was analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met.

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 380-55688

SDG : 23G209

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

One(1) water sample was received on 07/21/23 to be analyzed for Petroleum Hydrocarbons by Extraction in accordance with Method 3520C/8015B and project specific requirements.

Holding Time
The sample was analyzed within the prescribed holding time.

Calibration
Multi-calibration points were generated to establish initial calibration (ICAL). ICAL was verified using a secondary source (ICV). Continuing calibration (CCV) verifications were carried out on a frequency specified by the project. All calibration requirements were within acceptance criteria. Refer to calibration summary forms of ICAL, ICV and CCV for details. MRL was analyzed as required by the project. Refer to MRL summary form for details.

Method Blank
Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. DSG037WB - result was compliant to project requirement. Refer to sample result summary form for details.

Lab Control Sample
Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) LCS was analyzed. Percent recovery for JP8 was within LCS QC limits in J8G037WL. Refer to LCS summary form for details.

Matrix QC Sample
Matrix spike sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of MS/MSD was analyzed. JP8 was within MS QC limits in 23G183-01M/23G183-01S. Refer to Matrix QC summary form for details.

Surrogate
Surrogates were added on QC and field samples. All surrogate recoveries were within QC limits. Refer to sample result summary forms for details.

Sample Analysis
The sample was analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met.

LAB CHRONICLE
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATON ANALYTICAL
Project : 380-55688

SDG NO. : 23G209
Instrument ID : D5

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	DSG037WB	1	NA	07/28/2319:29	07/27/2312:30	LG28022A	LG28016A	23DSG037W	Method Blank
LCS1W	DSG037WL	1	NA	07/28/2319:48	07/27/2312:30	LG28023A	LG28016A	23DSG037W	Lab Control Sample (LCS)
380-55688-1	G209-01	1	NA	07/28/2323:32	07/27/2312:30	LG28035A	LG28016A	23DSG037W	Field Sample

FN - Filename
% Moist - Percent Moisture

LAB CHRONICLE
PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATON ANALYTICAL
Project : 380-55688

SDG NO. : 23G209
Instrument ID : D5

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	DSG037WB	1	NA	07/28/2319:29	07/27/2312:30	LG28022A	LG28017A	23DSG037W	Method Blank
LCS1W	J5G037WL	1	NA	07/28/2320:07	07/27/2312:30	LG28024A	LG28017A	23DSG037W	Lab Control Sample (LCS)
380-55688-1	G209-01	1	NA	07/28/2323:32	07/27/2312:30	LG28035A	LG28017A	23DSG037W	Field Sample

FN - Filename
% Moist - Percent Moisture

LAB CHRONICLE
PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATON ANALYTICAL
Project : 380-55688

SDG NO. : 23G209
Instrument ID : D5

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	DSG037WB	1	NA	07/28/2319:29	07/27/2312:30	LG28022A	LG28018A	23DSG037W	Method Blank
LCS1W	J8G037WL	1	NA	07/28/2320:25	07/27/2312:30	LG28025A	LG28018A	23DSG037W	Lab Control Sample (LCS)
380-55688-1	G209-01	1	NA	07/28/2323:32	07/27/2312:30	LG28035A	LG28018A	23DSG037W	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	07/20/23 09:00
Project	: 380-55688	Date Received:	07/21/23
Batch No.	: 23G209	Date Extracted:	07/27/23 12:30
Sample ID	: 380-55688-1	Date Analyzed:	07/28/23 23:32
Lab Samp ID:	23G209-01	Dilution Factor:	1
Lab File ID:	LG28035A	Matrix:	WATER
Ext Btch ID:	23DSG037W	% Moisture:	NA
Calib. Ref.:	LG28016A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Diesel	ND	0.027	0.014
Motor Oil	ND	0.054	0.027

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.333	0.540	62	60-130
Hexacosane	0.112	0.135	83	60-130

Notes:

Parameter	H-C Range
Diesel	C10-C24
Motor Oil	C24-C36

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount	: 930ml	Final Volume	: 5ml
Prepared by	: RGalan	Analyzed by	: SDeeso

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	07/20/23 09:00
Project	: 380-55688	Date Received:	07/21/23
Batch No.	: 23G209	Date Extracted:	07/27/23 12:30
Sample ID	: 380-55688-1	Date Analyzed:	07/28/23 23:32
Lab Samp ID:	23G209-01	Dilution Factor:	1
Lab File ID:	LG28035A	Matrix:	WATER
Ext Btch ID:	23DSG037W	% Moisture:	NA
Calib. Ref.:	LG28017A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)	
JP5	ND	0.054	0.027	
SURROGATE PARAMETERS	**RESULT**	**SPK_AMT**	**%RECOVERY**	**QC LIMIT**
Bromobenzene	0.333	0.540	62	60-130
Hexacosane	0.112	0.135	83	60-130

Notes:
RL : Reporting Limit
Parameter H-C Range
JP5 C8-C18
Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.
Sample Amount : 930ml Final Volume : 5ml
Prepared by : RGalan Analyzed by : SDeeso

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	07/20/23 09:00
Project	: 380-55688	Date Received:	07/21/23
Batch No.	: 23G209	Date Extracted:	07/27/23 12:30
Sample ID	: 380-55688-1	Date Analyzed:	07/28/23 23:32
Lab Samp ID:	23G209-01	Dilution Factor:	1
Lab File ID:	LG28035A	Matrix:	WATER
Ext Btch ID:	23DSG037W	% Moisture:	NA
Calib. Ref.:	LG28018A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)	
JP8	ND	0.054	0.027	
SURROGATE PARAMETERS	**RESULT**	**SPK_AMT**	**%RECOVERY**	**QC LIMIT**
Bromobenzene	0.333	0.540	62	60-130
Hexacosane	0.112	0.135	83	60-130

Notes:
RL : Reporting Limit
Parameter H-C Range
JP8 C8-C18
Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.
Sample Amount : 930ml Final Volume : 5ml
Prepared by : RGalan Analyzed by : SDeeso

QC SUMMARIES

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	07/27/23 12:30
Project	: 380-55688	Date Received:	07/27/23
Batch No.	: 23G209	Date Extracted:	07/27/23 12:30
Sample ID	: MBLK1W	Date Analyzed:	07/28/23 19:29
Lab Samp ID:	DSG037WB	Dilution Factor:	1
Lab File ID:	LG28022A	Matrix:	WATER
Ext Btch ID:	23DSG037W	% Moisture:	NA
Calib. Ref.:	LG28016A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Diesel	ND	0.025	0.012
Motor Oil	ND	0.050	0.025

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.330	0.500	66	60-130
Hexacosane	0.108	0.125	87	60-130

Notes:

Parameter	H-C Range
Diesel	C10-C24
Motor Oil	C24-C36

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount	: 1000ml	Final Volume	: 5ml
Prepared by	: RGalan	Analyzed by	: SDeeso

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 380-55688
BATCH NO. : 23G209
METHOD : 3520C/8015B

MATRIX	: WATER	% MOISTURE:NA
DILUTION FACTOR	: 1	1
SAMPLE ID	: MBLK1W	LCS1W
LAB SAMPLE ID	: DSG037WB	DSG037WL
LAB FILE ID	: LG28022A	LG28023A
DATE PREPARED	: 07/27/23 12:30	07/27/23 12:30
DATE ANALYZED	: 07/28/23 19:29	07/28/23 19:48
PREP BATCH	: 23DSG037W	23DSG037W
CALIBRATION REF	: LG28016A	LG28016A

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Diesel	ND	2.50	2.13	85	50-130

SURROGATE PARAMETERS	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Bromobenzene	0.500	0.328	66	60-130
Hexacosane	0.125	0.109	87	60-130

MB: Method Blank sample LCS: Lab Control Sample

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 380-55350
BATCH NO. : 23G182
METHOD : 3520C/8015B

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: 380-55350-1	380-55350-1MS	380-55350-1MSD
LAB SAMPLE ID	: 23G182-01	23G182-01M	23G182-01S
LAB FILE ID	: LG28026A	LG28027A	LG28028A
DATE PREPARED	: 07/27/23 12:30	07/27/23 12:30	07/27/23 12:30
DATE ANALYZED	: 07/28/23 20:44	07/28/23 21:03	07/28/23 21:22
PREP BATCH	: 23DSG037W	23DSG037W	23DSG037W
CALIBRATION REF	: LG28016A	LG28016A	LG28016A

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
Diesel	ND	2.90	2.90	100	2.90	2.80	97	4	50-130	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromobenzene	0.580	0.442	76	0.580	0.454	78	60-130
Hexacosane	0.145	0.147	101	0.145	0.140	97	60-130

PS: Parent Sample MS: Matrix Spike MSD: Matrix Spike Duplicate

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	07/27/23 12:30
Project	: 380-55688	Date Received:	07/27/23
Batch No.	: 23G209	Date Extracted:	07/27/23 12:30
Sample ID	: MBLK1W	Date Analyzed:	07/28/23 19:29
Lab Samp ID:	DSG037WB	Dilution Factor:	1
Lab File ID:	LG28022A	Matrix:	WATER
Ext Btch ID:	23DSG037W	% Moisture:	NA
Calib. Ref.:	LG28017A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)	
JP5	ND	0.050	0.025	
SURROGATE PARAMETERS	**RESULT**	**SPK_AMT**	**%RECOVERY**	**QC LIMIT**
Bromobenzene	0.330	0.500	66	60-130
Hexacosane	0.108	0.125	87	60-130

Notes:
RL : Reporting Limit
Parameter H-C Range
JP5 C8-C18
Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.
Sample Amount : 1000ml Final Volume : 5ml
Prepared by : RGalan Analyzed by : SDeeso

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 380-55688
BATCH NO. : 23G209
METHOD : 3520C/8015B

MATRIX	: WATER	% MOISTURE:NA
DILUTION FACTOR	: 1	1
SAMPLE ID	: MBLK1W	LCS1W
LAB SAMPLE ID	: DSG037WB	J5G037WL
LAB FILE ID	: LG28022A	LG28024A
DATE PREPARED	: 07/27/23 12:30	07/27/23 12:30
DATE ANALYZED	: 07/28/23 19:29	07/28/23 20:07
PREP BATCH	: 23DSG037W	23DSG037W
CALIBRATION REF	: LG28017A	LG28017A

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
JP5	ND	2.50	1.82	73	30-160

SURROGATE PARAMETERS	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Bromobenzene	0.500	0.371	74	60-130
Hexacosane	0.125	0.109	87	60-130

MB: Method Blank sample LCS: Lab Control Sample

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 380-55350
BATCH NO. : 23G182
METHOD : 3520C/8015B

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: 380-55350-1	380-55350-1MS	380-55350-1MSD
LAB SAMPLE ID	: 23G182-01	23G182-01M	23G182-01S
LAB FILE ID	: LG28026A	LG28029A	LG28030A
DATE PREPARED	: 07/27/23 12:30	07/27/23 12:30	07/27/23 12:30
DATE ANALYZED	: 07/28/23 20:44	07/28/23 21:40	07/28/23 21:59
PREP BATCH	: 23DSG037W	23DSG037W	23DSG037W
CALIBRATION REF	: LG28017A	LG28017A	LG28017A

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
JP5	ND	2.78	2.40	86	2.88	2.21	77	8	30-160	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromobenzene	0.555	0.456	82	0.575	0.406	71	60-130
Hexacosane	0.139	0.127	92	0.144	0.128	89	60-130

PS: Parent Sample MS: Matrix Spike MSD: Matrix Spike Duplicate

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	07/27/23 12:30
Project	: 380-55688	Date Received:	07/27/23
Batch No.	: 23G209	Date Extracted:	07/27/23 12:30
Sample ID	: MBLK1W	Date Analyzed:	07/28/23 19:29
Lab Samp ID:	DSG037WB	Dilution Factor:	1
Lab File ID:	LG28022A	Matrix:	WATER
Ext Btch ID:	23DSG037W	% Moisture:	NA
Calib. Ref.:	LG28018A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
JP8	ND	0.050	0.025

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.330	0.500	66	60-130
Hexacosane	0.108	0.125	87	60-130

Notes:
RL : Reporting Limit
Parameter H-C Range
JP8 C8-C18
Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.
Sample Amount : 1000ml Final Volume : 5ml
Prepared by : RGalan Analyzed by : SDeeso

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 380-55688
BATCH NO. : 23G209
METHOD : 3520C/8015B

MATRIX	: WATER	% MOISTURE:NA
DILUTION FACTOR	: 1	1
SAMPLE ID	: MBLK1W	LCS1W
LAB SAMPLE ID	: DSG037WB	J8G037WL
LAB FILE ID	: LG28022A	LG28025A
DATE PREPARED	: 07/27/23 12:30	07/27/23 12:30
DATE ANALYZED	: 07/28/23 19:29	07/28/23 20:25
PREP BATCH	: 23DSG037W	23DSG037W
CALIBRATION REF	: LG28018A	LG28018A

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
JP8	ND	2.50	2.70	108	30-160

SURROGATE PARAMETERS	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Bromobenzene	0.500	0.471	94	60-130
Hexacosane	0.125	0.108	86	60-130

MB: Method Blank sample LCS: Lab Control Sample

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 380-55362
BATCH NO. : 23G183
METHOD : 3520C/8015B

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: 380-55362-1	380-55362-1MS	380-55362-1MSD
LAB SAMPLE ID	: 23G183-01	23G183-01M	23G183-01S
LAB FILE ID	: LG28031A	LG28032A	LG28033A
DATE PREPARED	: 07/27/23 12:30	07/27/23 12:30	07/27/23 12:30
DATE ANALYZED	: 07/28/23 22:18	07/28/23 22:36	07/28/23 22:55
PREP BATCH	: 23DSG037W	23DSG037W	23DSG037W
CALIBRATION REF	: LG28018A	LG28018A	LG28018A

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
JP8	ND	2.85	3.01	106	2.85	3.29	115	9	30-160	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromobenzene	0.570	0.547	96	0.570	0.575	101	60-130
Hexacosane	0.142	0.122	86	0.142	0.130	91	60-130

PS: Parent Sample MS: Matrix Spike MSD: Matrix Spike Duplicate

LABORATORY REPORT FOR

EUROFINS EATON ANALYTICAL

380-55688

METHOD SW8015C
ALCOHOLS BY GC

SDG#: 23G209

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 380-55688

SDG : 23G209

METHOD SW8015C
ALCOHOLS BY GC

One(1) water sample was received on 07/21/23 to be analyzed for Alcohols by GC in accordance with Method SW8015C and project specific requirements.

Holding Time
The sample was analyzed within the prescribed holding time.

Calibration
Multi-calibration points were generated to establish initial calibration (ICAL). ICAL was verified using a secondary source (ICV). Continuing calibration (CCV) verifications were carried out on a frequency specified by the project. All calibration requirements were within acceptance criteria. Refer to calibration summary forms of ICAL, ICV and CCV for details. MRL was analyzed as required by the project. Refer to MRL summary form for details.

Method Blank
Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. MEG005WB - result was compliant to project requirement. Refer to sample result summary form for details.

Lab Control Sample
Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of LCS/LCD was analyzed. MEG005WL/MEG005WC were within LCS limits. Refer to LCS summary form for details.

Matrix QC Sample
No matrix QC sample was provided on this SDG. Ethanol was within MS QC limits in G182-01M/G182-01S. Refer to Matrix QC summary form for details.

Sample Analysis
The sample was analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met.

LAB CHRONICLE
ALCOHOLS BY GC

Client : EUROFINS EATON ANALYTICAL
Project : 380-55688

SDG NO. : 23G209
Instrument ID : GCT050

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	MEG005WB	1	NA	07/21/2316:08	NA	TG21004A	TG21002A	MEG005W	Method Blank
LCS1W	MEG005WL	1	NA	07/21/2316:23	NA	TG21005A	TG21002A	MEG005W	Lab Control Sample (LCS)
LCD1W	MEG005WC	1	NA	07/21/2316:37	NA	TG21006A	TG21002A	MEG005W	LCS Duplicate
380-55688-1	G209-01	1	NA	07/21/2318:12	NA	TG21011A	TG21002A	MEG005W	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD SW8015C
ALCOHOLS BY GC

Client : EUROFINS EATON ANALYTICAL	Date Collected: 07/20/23
Project : 380-55688	Date Received: 07/21/23
Batch No. : 23G209	Date Extracted: NA
Sample ID: 380-55688-1	Date Analyzed: 07/21/23 18:12
Lab Samp ID: G209-01	Dilution Factor: 1
Lab File ID: TG21011A	Matrix : WATER
Ext Btch ID: MEG005W	% Moisture : NA
Calib. Ref.: TG21002A	Instrument ID : GCT050

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANOL	ND	2000	500

RL : Reporting Limit

QC SUMMARIES

METHOD SW8015C
ALCOHOLS BY GC

Client : EUROFINS EATON ANALYTICAL	Date Collected: NA
Project : 380-55688	Date Received: NA
Batch No. : 23G209	Date Extracted: NA
Sample ID: MBLK1W	Date Analyzed: 07/21/23 16:08
Lab Samp ID: MEG005WB	Dilution Factor: 1
Lab File ID: TG21004A	Matrix : WATER
Ext Btch ID: MEG005W	% Moisture : NA
Calib. Ref.: TG21002A	Instrument ID : GCT050

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANOL	ND	2000	500

RL : Reporting Limit

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: EUROFINS EATON ANALYTICAL
PROJECT: 380-55688
BATCH NO.: 23G209
METHOD: METHOD SW8015C

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	MEG005WB	MEG005WL	MEG005WC		
LAB FILE ID:	TG21004A	TG21005A	TG21006A		
DATE EXTRACTED:	NA	NA	NA	DATE COLLECTED:	NA
DATE ANALYZED:	07/21/2316:08	07/21/2316:23	07/21/2316:37	DATE RECEIVED:	NA
PREP. BATCH:	MEG005W	MEG005W	MEG005W		
CALIB. REF:	TG21002A	TG21002A	TG21002A		

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Ethanol	ND	10000	9060	91	10000	9910	99	9	60-130	30

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT: EUROFINS EATON ANALYTICAL
PROJECT: 380-55350
BATCH NO.: 23G182
METHOD: METHOD SW8015C

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	380-55350-1				
LAB SAMP ID:	G182-01	G182-01M	G182-01S		
LAB FILE ID:	TG21007A	TG21008A	TG21009A		
DATE EXTRACTED:	NA	NA	NA	DATE COLLECTED:	07/17/23
DATE ANALYZED:	07/21/2316:53	07/21/2317:07	07/21/2317:21	DATE RECEIVED:	07/20/23
PREP. BATCH:	MEG005W	MEG005W	MEG005W		
CALIB. REF:	TG21002A	TG21002A	TG21002A		

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	MS RSLT (ug/L)	MS % REC	SPIKE AMT (ug/L)	MSD RSLT (ug/L)	MSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Ethanol	ND	10000	9570	96	10000	9160	92	4	60-130	30

September 15, 2023

Rachelle Arada
Eurofins Eaton Analytical
750 Royal Oaks Drive
Suite 100
Monrovia, CA 91016-

Project Name: RED-HILL Project # 38001111 Job # 380-55688-1
Physis Project ID: 1407003-423

Dear Rachelle,

Enclosed are the analytical results for the sample submitted to PHYSIS Environmental Laboratories, Inc. (PHYSIS) on 7/21/2023. A total of 1 sample was received for analysis in accordance with the attached chain of custody (COC). Per the COC, the sample was analyzed for:

Organics
Polynuclear Aromatic Hydrocarbons by EPA 625.1
Disalicylidenepropanediamine by EPA 625.1
Dibenzo [a,l] Pyrene w/ PAHs by EPA 625.1
Base/Neutral Extractable Compounds by EPA 625.1
Acid Extractable Compounds w/ PAHs by EPA 625.1
6-tert-Butyl-2,4-dimethylphenol by EPA 625.1
2,6-Di-tert-butylphenol by EPA 625.1
2,6-Di-tert-butyl-4-methylphenol by EPA 625.1
p-tert-Butylphenol by EPA 625.1

Analytical results in this report apply only to samples submitted to PHYSIS in accordance with the COC and are intended to be considered in their entirety.

Please feel free to contact me at any time with any questions. PHYSIS appreciates the opportunity to provide you with our analytical and support services.

Regards,

Rachel Hansen
714 602-5320
Extension 203
rachelhansen@physislabs.com

PROJECT SAMPLE LIST

Eurofins Eaton Analytical

PHYSIS Project ID: 1407003-423

RED-HILL Project # 38001111 Job # 380-55688-1

Total Samples: 1

PHYSIS ID	Sample ID	Description	Date	Time	Matrix	Sample Type
108518	AIEA GULCH WELLS PUMP 2	380-55688-1	7/20/2023	9:00	Samplewater	Not Specified

1904 E. Wright Circle Anaheim, CA 92806 (714) 602-5320 fax (714) 602-5321 www.physislabs.com CA ELAP #2769

ABBREVIATIONS and ACRONYMS

QM	Quality Manual
QA	Quality Assurance
QC	Quality Control
MDL	method detection limit
RL	reporting limit
R1	project sample
R2	project sample replicate
MS1	matrix spike
MS2	matrix spike replicate
B1	procedural blank
B2	procedural blank replicate
BS1	blank spike
BS2	blank spike replicate
LCS1	laboratory control spike
LCS2	laboratory control spike replicate
LCM1	laboratory control material
LCM2	laboratory control material replicate
CRM1	certified reference material
CRM2	certified reference material replicate
RPD	relative percent difference
LMW	low molecular weight
HMW	high molecular weight

1904 E. Wright Circle Anaheim, CA 92806 (714) 602-5320 fax (714) 602-5321 www.physislabs.com CA ELAP #2769

QUALITY ASSURANCE SUMMARY

LABORATORY BATCH: Physis' QM defines a laboratory batch as a group of 20 or fewer project samples of similar matrix, processed together under the same conditions and with the same reagents. QC samples are associated with each batch and were used to assess the validity of the sample analyses.

PROCEDURAL BLANK: Laboratory contamination introduced during method use is assessed through the preparation and analysis of procedural blanks is provided at a minimum frequency of one per batch.

ACCURACY: Accuracy of analytical measurements is the degree of closeness based on percent recovery calculations between measured values and the actual or true value and includes a combination of reproducibility error and systematic bias due to sampling and analytical operations. Accuracy of the project data was indicated by analysis of MS, BS, LCS, LCM, CRM, and/or surrogate spikes on a minimum frequency of one per batch. Physis' QM requires that 95% of the target compounds greater than 10 times the MDL be within the specified acceptance limits.

PRECISION: Precision is the agreement among a set of replicate measurements without assumption of knowledge of the true value and is based on RPD calculations between repeated values. Precision of the project data was determined by analysis of replicate MS1/MS2, BS1/BS2, LCS1/LCS2, LCM1/LCM2, CRM1/CRM2, surrogate spikes and/or replicate project sample analysis (R1/R2) on a minimum frequency of one per batch. Physis' QM requires that for 95% of the compounds greater than 10 times the MDL, the percent RPD should be within the specified acceptance range.

BLANK SPIKES: BS is the introduction of a known concentration of analyte into the procedural blank. BS demonstrates performance of the preparation and analytical methods on a clean matrix void of potential matrix related interferences. The BS is performed in laboratory deionized water, making these recoveries a better indicator of the efficiency of the laboratory method per se.

MATRIX SPIKES: MS is the introduction of a known concentration of analyte into a sample. MS samples demonstrate the effect a particular project sample matrix has on the accuracy of a measurement. Individually, MS samples also indicate the bias of analytical measurements due to chemical interferences inherent in the in the specific project sample spiked. Intrinsic target analyte concentration in the specific project sample can also significantly impact MS recovery.

CERTIFIED REFERENCE MATERIALS: CRMs are materials of various matrices for which analytical information has been determined and certified by a recognized authority. These are used to provide a quantitative assessment of the accuracy of an analytical method. CRMs provide evidence that the laboratory preparation and analysis produces results that are comparable to those obtained by an independent organization.

LABORATORY CONTROL MATERIAL: LCM is provided because a suitable natural seawater CRM is not available and can be used to indicate accuracy of the method. Physis' internal LCM is seawater collected at ~800 meters in the Southern California San Pedro Basin and can be used as a reference for background concentrations in clean, natural seawater for comparison to project samples.

LABORATORY CONTROL SPIKES: LCS is the introduction of a known concentration of analyte into Physis' LCM. LCS samples were employed to assess the effect the seawater matrix has on the accuracy of a measurement. LCS also indicate the bias of this method due to chemical interferences inherent in the in the seawater matrix. Intrinsic LCM concentration can also significantly impact LCS recovery.

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SURROGATES: A surrogate is a pure analyte unlikely to be found in any project sample, behaves similarly to the target analyte and most often used with organic analytical procedures. Surrogates are added in known concentration to all samples and are measured to indicate overall efficiency of the method including processing and analyses.

HOLDING TIME: Method recommended holding times are the length of time a project sample can be stored under specific conditions after collection and prior to analysis without significantly affecting the analyte's concentration. Holding times can be extended if preservation techniques are employed to reduce biodegradation, volatilization, oxidation, sorption, precipitation, and other physical and chemical processes.

SAMPLE STORAGE/RETENTION: In order to maintain chemical integrity prior to analysis, all samples submitted to Physis are refrigerated (liquids) or frozen (solids) upon receipt unless otherwise recommended by applicable methods. Solid samples are retained for 1 year from collection while liquid samples are retained until method recommended holding times elapse.

TOTAL/DISSOLVED FRACTION: In some instances, the results for the dissolved fraction may be higher than the total fraction for a particular analyte (e.g. trace metals). This is typically caused by the analytical variation for each result and indicates that the target analyte is primarily in the dissolved phase, within the sample.

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PHYSIS QUALIFIER CODES

CODE	DEFINITION
#	see Case Narrative
ND	analyte not detected at or above the MDL
B	analyte was detected in the procedural blank greater than 10 times the MDL
E	analyte concentration exceeds the upper limit of the linear calibration range, reported value is estimated
H	sample received and/or analyzed past the recommended holding time
J	analyte was detected at a concentration below the RL and above the MDL, reported value is estimated
N	insufficient sample, analysis could not be performed
M	analyte was outside the specified accuracy and/or precision acceptance limits due to matrix interference. The associated B/BS were within limits, therefore the sample data was reported without further clarification
SH	analyte concentration in the project sample exceeded the spike concentration, therefore accuracy and/or precision acceptance limits do not apply
SL	analyte results were lower than 10 times the MDL, therefore accuracy and/or precision acceptance limits do not apply
NH	project sample was heterogeneous and sample homogeneity could not be readily achieved using routine laboratory practices, therefore accuracy and/or precision acceptance limits do not apply
Q	analyte was outside the specified QAPP acceptance limits for precision and/or accuracy but within Physis derived acceptance limits, therefore the sample data was reported without further clarification
R	Physis' QM allows for 5% of the target compounds greater than 10 times the MDL to be outside the specified acceptance limits for precision and/or accuracy. This is often due to random error and does not indicate any significant problems with the analysis of these project samples

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CASE NARRATIVE

QUALIFIER NOTES

In addition to the use of analyte specific Physis Qualifier Codes where applicable, the following were also noted.

ND

MDL is listed due to report format restrictions; it is not used in reporting. Analytical results reported are ND at the RL.

ANALYTICAL REPORT

PHYSIS Project ID: 1407003-423
Client: Eurofins Eaton Analytical
Project: RED-HILL Project # 38001111 Job # 380-55688-1

Acid Extractable Compounds

ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 108518-R1	**AIEA GULCH WELLS PUMP 2 380-5**	**Matrix: Samplewater**					**Sampled:**	**20-Jul-23 9:00**		**Received:**	**21-Jul-23**
(2,4,6-Tr bromophenol)	EPA 625.1	% Recovery	139	1			Total		O-42022	21-Jul-23	05-Sep-23
(d5-Phenol)	EPA 625.1	% Recovery	77	1			Total		O-42022	21-Jul-23	05-Sep-23
2,4,5-Trichlorophenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42022	21-Jul-23	05-Sep-23
2,4,6-Trichlorophenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42022	21-Jul-23	05-Sep-23
2,4-Dichlorophenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42022	21-Jul-23	05-Sep-23
2,4-Dinitrophenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-42022	21-Jul-23	05-Sep-23
2,6-Dichlorophenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42022	21-Jul-23	05-Sep-23
2,6-Di-tert-butyl-4-methylphenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42022	21-Jul-23	05-Sep-23
2,6-Di-tert-butylphenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42022	21-Jul-23	05-Sep-23
2-Chlorophenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42022	21-Jul-23	05-Sep-23
2-Methyl-4,6-dinitrophenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-42022	21-Jul-23	05-Sep-23
2-Methylphenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-42022	21-Jul-23	05-Sep-23
2-Nitrophenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-42022	21-Jul-23	05-Sep-23
3+4-Methylphenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-42022	21-Jul-23	05-Sep-23
4-Chloro-3-methylphenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-42022	21-Jul-23	05-Sep-23
4-Nitrophenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-42022	21-Jul-23	05-Sep-23
6-tert-butyl-2,4-dimethylphenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42022	21-Jul-23	05-Sep-23
Benzoic Acid	EPA 625.1	µg/L	0.289	1	0.1	0.2	Total		O-42022	21-Jul-23	05-Sep-23
Benzyl Alcohol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-42022	21-Jul-23	05-Sep-23
Pentachlorophenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42022	21-Jul-23	05-Sep-23
Phenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-42022	21-Jul-23	05-Sep-23
p-tert-Butylphenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42022	21-Jul-23	05-Sep-23

Base/Neutral Extractable Compounds

ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 108518-R1	**AIEA GULCH WELLS PUMP 2 380-5**	**Matrix: Samplewater**					**Sampled:**	**20-Jul-23 9:00**		**Received:**	**21-Jul-23**
2-Chloronaphthalene	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42022	21-Jul-23	05-Sep-23
2-Nitroaniline	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42022	21-Jul-23	05-Sep-23
3-Nitroaniline	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42022	21-Jul-23	05-Sep-23
4-Bromophenylphenyl ether	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42022	21-Jul-23	05-Sep-23
4-Chloroaniline	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42022	21-Jul-23	05-Sep-23
4-Chlorophenylphenyl ether	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42022	21-Jul-23	05-Sep-23
4-Nitroaniline	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42022	21-Jul-23	05-Sep-23
Aniline	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42022	21-Jul-23	05-Sep-23
Benzidine	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42022	21-Jul-23	05-Sep-23
Bis(2-Chloroethoxy) methane	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42022	21-Jul-23	05-Sep-23
Bis(2-Chloroethyl) ether	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42022	21-Jul-23	05-Sep-23
Bis(2-Chloroisopropyl) ether	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42022	21-Jul-23	05-Sep-23
Dibenzofuran	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42022	21-Jul-23	05-Sep-23
Disalicylidenepropanediamine	EPA 625.1	µg/L	0.116	1	0.05	0.1	Total		O-42022	21-Jul-23	05-Sep-23
Hexachloroethane	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42022	21-Jul-23	05-Sep-23
Nitrobenzene	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42022	21-Jul-23	05-Sep-23
N-Nitrosodi-n-propylamine	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42022	21-Jul-23	05-Sep-23
N-Nitrosodiphenylamine	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42022	21-Jul-23	05-Sep-23

Polynuclear Aromatic Hydrocarbons

ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 108518-R1	**AIEA GULCH WELLS PUMP 2 380-5**	**Matrix: Samplewater**					**Sampled:**	**20-Jul-23 9:00**		**Received:**	**21-Jul-23**
(d10-Acenaphthene)	EPA 625.1	% Recovery	95	1			Total		O-42022	21-Jul-23	05-Sep-23
(d10-Phenanthrene)	EPA 625.1	% Recovery	101	1			Total		O-42022	21-Jul-23	05-Sep-23
(d12-Chrysene)	EPA 625.1	% Recovery	102	1			Total		O-42022	21-Jul-23	05-Sep-23
(d12-Perylene)	EPA 625.1	% Recovery	104	1			Total		O-42022	21-Jul-23	05-Sep-23
(d8-Naphthalene)	EPA 625.1	% Recovery	85	1			Total		O-42022	21-Jul-23	05-Sep-23
1-Methylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42022	21-Jul-23	05-Sep-23
1-Methylphenanthrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42022	21-Jul-23	05-Sep-23
2,3,5-Trimethylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42022	21-Jul-23	05-Sep-23
2,6-Dimethylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42022	21-Jul-23	05-Sep-23
2-Methylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42022	21-Jul-23	05-Sep-23
Acenaphthene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42022	21-Jul-23	05-Sep-23
Acenaphthylene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42022	21-Jul-23	05-Sep-23
Anthracene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42022	21-Jul-23	05-Sep-23
Benz[a]anthracene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42022	21-Jul-23	05-Sep-23
Benzo[a]pyrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42022	21-Jul-23	05-Sep-23
Benzo[b]fluoranthene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42022	21-Jul-23	05-Sep-23
Benzo[e]pyrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42022	21-Jul-23	05-Sep-23
Benzo[g,h,i]perylene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42022	21-Jul-23	05-Sep-23
Benzo[k]fluoranthene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42022	21-Jul-23	05-Sep-23
Biphenyl	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42022	21-Jul-23	05-Sep-23
Chrysene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42022	21-Jul-23	05-Sep-23
Dibenz[a,h]anthracene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42022	21-Jul-23	05-Sep-23
Dibenzo[a,l]pyrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42022	21-Jul-23	05-Sep-23
Dibenzothiophene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42022	21-Jul-23	05-Sep-23

PHYSIS Project ID: 1407003-423
Client: Eurofins Eaton Analytical
Project: RED-HILL Project # 38001111 Job # 380-55688-1

Polynuclear Aromatic Hydrocarbons

ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Fluoranthene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42022	21-Jul-23	05-Sep-23
Fluorene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42022	21-Jul-23	05-Sep-23
Indeno[1,2,3-cd]pyrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42022	21-Jul-23	05-Sep-23
Naphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42022	21-Jul-23	05-Sep-23
Perylene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42022	21-Jul-23	05-Sep-23
Phenanthrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42022	21-Jul-23	05-Sep-23
Pyrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42022	21-Jul-23	05-Sep-23

QUALITY CONTROL REPORT

ENVIRONMENTAL LABORATORIES, INC.

Innovative Solutions for Nature

Acid Extractable Compounds — QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	ACCURACY LIMITS	PRECISION %	PRECISION LIMITS	QA CODEc
Sample ID: 108517-B1	**QAQC Procedural Blank**					**Matrix: BlankMatrix**	**Sampled:**					**Received:**	
	Method: EPA 625.1					Batch ID: O-42022		Prepared: 21-Jul-23				Analyzed: 01-Sep-23	
(2,4,6-Tribromophenol)	Total	124	1			% Recovery	100	124		30 - 130%	PASS		
(d5-Phenol)	Total	129	1			% Recovery	100	129		0 - 130%	PASS		
2,4,5-Trichlorophenol	Total	ND	1	0.05	0.1	µg/L							
2,4,6-Trichlorophenol	Total	ND	1	0.05	0.1	µg/L							
2,4-Dichlorophenol	Total	ND	1	0.05	0.1	µg/L							
2,4-Dinitrophenol	Total	ND	1	0.1	0.2	µg/L							
2,6-Dichlorophenol	Total	ND	1	0.05	0.1	µg/L							
2,6-Di-tert-butyl-4-methylphenol	Total	ND	1	0.05	0.1	µg/L							
2,6-Di-tert-butylphenol	Total	ND	1	0.05	0.1	µg/L							
2-Chlorophenol	Total	ND	1	0.05	0.1	µg/L							
2-Methyl-4,6-dinitrophenol	Total	ND	1	0.1	0.2	µg/L							
2-Methylphenol	Total	ND	1	0.1	0.2	µg/L							
2-Nitrophenol	Total	ND	1	0.1	0.2	µg/L							
3+4-Methylphenol	Total	ND	1	0.1	0.2	µg/L							
4-Chloro-3-methylphenol	Total	ND	1	0.1	0.2	µg/L							
4-Nitrophenol	Total	ND	1	0.1	0.2	µg/L							
6-tert-butyl-2,4-dimethylphenol	Total	ND	1	0.05	0.1	µg/L							
Benzoic Acid	Total	ND	1	0.1	0.2	µg/L							
Benzyl Alcohol	Total	ND	1	0.1	0.2	µg/L							
Pentachlorophenol	Total	ND	1	0.05	0.1	µg/L							
Phenol	Total	ND	1	0.1	0.2	µg/L							
p-tert-Butylphenol	Total	ND	1	0.05	0.1	µg/L							

Acid Extractable Compounds — QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	ACCURACY LIMITS	PRECISION %	PRECISION LIMITS	QA CODEc
Sample ID: 108517-BS1	**QAQC Procedural Blank**					**Matrix: BlankMatrix**		**Sampled:**				**Received:**	
	Method: EPA 625.1					Batch ID: O-42022		Prepared: 21-Jul-23				Analyzed: 01-Sep-23	
(2,4,6-Tribromophenol)	Total	101	1			% Recovery	100	0	101	30 - 130%		PASS	
(d5-Phenol)	Total	104	1			% Recovery	100	0	104	0 - 130%		PASS	
2,4,5-Trichlorophenol	Total	0.749	1	0.05	0.1	µg/L	1	0	75	30 - 130%		PASS	
2,4,6-Trichlorophenol	Total	0.823	1	0.05	0.1	µg/L	1	0	82	56 - 118%		PASS	
2,4-Dichlorophenol	Total	0.771	1	0.05	0.1	µg/L	1	0	77	51 - 117%		PASS	
2,4-Dinitrophenol	Total	0.695	1	0.1	0.2	µg/L	1	0	69	0 - 152%		PASS	
2,6-Dichlorophenol	Total	0.383	1	0.05	0.1	µg/L	0.5	0	77	30 - 130%		PASS	
2,6-Di-tert-butyl-4-methylphenol	Total	1.04	1	0.05	0.1	µg/L	1	0	104	50 - 150%		PASS	
2,6-Di-tert-butylphenol	Total	0.998	1	0.05	0.1	µg/L	1	0	100	50 - 150%		PASS	
2-Chlorophenol	Total	0.631	1	0.05	0.1	µg/L	1	0	63	41 - 110%		PASS	
2-Methyl-4,6-dinitrophenol	Total	0.814	1	0.1	0.2	µg/L	1	0	81	0 - 141%		PASS	
2-Methylphenol	Total	0.616	1	0.1	0.2	µg/L	1	0	62	40 - 117%		PASS	
2-Nitrophenol	Total	0.632	1	0.1	0.2	µg/L	1	0	63	40 - 117%		PASS	
3+4-Methylphenol	Total	0.644	1	0.1	0.2	µg/L	1	0	64	0 - 130%		PASS	
4-Chloro-3-methylphenol	Total	0.665	1	0.1	0.2	µg/L	1	0	67	51 - 128%		PASS	
4-Nitrophenol	Total	0.944	1	0.1	0.2	µg/L	1	0	94	10 - 164%		PASS	
6-tert-butyl-2,4-dimethylphenol	Total	0.935	1	0.05	0.1	µg/L	1	0	94	50 - 150%		PASS	
Benzoic Acid	Total	0.163	1	0.1	0.2	µg/L	1	0	16	2 - 145%		PASS	
Benzyl Alcohol	Total	0.616	1	0.1	0.2	µg/L	1	0	62	43 - 148%		PASS	
Pentachlorophenol	Total	0.678	1	0.05	0.1	µg/L	1	0	68	36 - 111%		PASS	
Phenol	Total	0.533	1	0.1	0.2	µg/L	1	0	53	29 - 114%		PASS	
p-tert-Butylphenol	Total	1.07	1	0.05	0.1	µg/L	1	0	107	50 - 150%		PASS	

Acid Extractable Compounds — QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	ACCURACY LIMITS		PRECISION %	PRECISION LIMITS	QA CODEc
Sample ID: 108517-BS2	**QAQC Procedural Blank**					**Matrix: BlankMatrix**		**Sampled:**				**Received:**		
	Method: EPA 625.1					Batch ID: O-42022		Prepared: 21-Jul-23				Analyzed: 01-Sep-23		
(2,4,6-Tribromophenol)	Total	97	1			% Recovery	100	0	97	30 - 130%	PASS	4	30	PASS
(d5-Phenol)	Total	84	1			% Recovery	100	0	84	0 - 130%	PASS	21	30	PASS
2,4,5-Trichlorophenol	Total	0.753	1	0.05	0.1	µg/L	1	0	75	30 - 130%	PASS	0	30	PASS
2,4,6-Trichlorophenol	Total	0.814	1	0.05	0.1	µg/L	1	0	81	56 - 118%	PASS	1	30	PASS
2,4-Dichlorophenol	Total	0.746	1	0.05	0.1	µg/L	1	0	75	51 - 117%	PASS	3	30	PASS
2,4-Dinitrophenol	Total	0.727	1	0.1	0.2	µg/L	1	0	73	0 - 152%	PASS	4	30	PASS
2,6-Dichlorophenol	Total	0.371	1	0.05	0.1	µg/L	0.5	0	74	30 - 130%	PASS	4	30	PASS
2,6-Di-tert-butyl-4-methylphenol	Total	1.04	1	0.05	0.1	µg/L	1	0	104	50 - 150%	PASS	0	30	PASS
2,6-Di-tert-butylphenol	Total	0.961	1	0.05	0.1	µg/L	1	0	96	50 - 150%	PASS	4	30	PASS
2-Chlorophenol	Total	0.591	1	0.05	0.1	µg/L	1	0	59	41 - 110%	PASS	7	30	PASS
2-Methyl-4,6-dinitrophenol	Total	0.828	1	0.1	0.2	µg/L	1	0	83	0 - 141%	PASS	2	30	PASS
2-Methylphenol	Total	0.6	1	0.1	0.2	µg/L	1	0	60	40 - 117%	PASS	3	30	PASS
2-Nitrophenol	Total	0.619	1	0.1	0.2	µg/L	1	0	62	40 - 117%	PASS	2	30	PASS
3+4-Methylphenol	Total	0.614	1	0.1	0.2	µg/L	1	0	61	0 - 130%	PASS	5	30	PASS
4-Chloro-3-methylphenol	Total	0.664	1	0.1	0.2	µg/L	1	0	66	51 - 128%	PASS	0	30	PASS
4-Nitrophenol	Total	0.935	1	0.1	0.2	µg/L	1	0	94	10 - 164%	PASS	0	30	PASS
6-tert-butyl-2,4-dimethylphenol	Total	0.925	1	0.05	0.1	µg/L	1	0	93	50 - 150%	PASS	2	30	PASS
Benzoic Acid	Total	0.138	1	0.1	0.2	µg/L	1	0	14	2 - 145%	PASS	13	30	PASS
Benzyl Alcohol	Total	0.592	1	0.1	0.2	µg/L	1	0	59	43 - 148%	PASS	5	30	PASS
Pentachlorophenol	Total	0.683	1	0.05	0.1	µg/L	1	0	68	36 - 111%	PASS	0	30	PASS
Phenol	Total	0.495	1	0.1	0.2	µg/L	1	0	50	29 - 114%	PASS	6	30	PASS
p-tert-Butylphenol	Total	1.07	1	0.05	0.1	µg/L	1	0	107	50 - 150%	PASS	0	30	PASS

Base/Neutral Extractable Compounds QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	ACCURACY LIMITS	PRECISION %	PRECISION LIMITS	QA CODEc
Sample ID: 108517-B1	**QAQC Procedural Blank**					**Matrix: BlankMatrix**	**Sampled:**					**Received:**	
	Method: EPA 625.1					Batch ID: O-42022	Prepared: 21-Jul-23					Analyzed: 01-Sep-23	
2-Chloronaphthalene	Total	ND	1	0.05	0.1	µg/L							
2-Nitroaniline	Total	ND	1	0.05	0.1	µg/L							
3-Nitroaniline	Total	ND	1	0.05	0.1	µg/L							
4-Bromophenylphenyl ether	Total	ND	1	0.05	0.1	µg/L							
4-Chloroaniline	Total	ND	1	0.05	0.1	µg/L							
4-Chlorophenylphenyl ether	Total	ND	1	0.05	0.1	µg/L							
4-Nitroaniline	Total	ND	1	0.05	0.1	µg/L							
Aniline	Total	ND	1	0.05	0.1	µg/L							
Benzidine	Total	ND	1	0.05	0.1	µg/L							
Bis(2-Chloroethoxy) methane	Total	ND	1	0.05	0.1	µg/L							
Bis(2-Chloroethyl) ether	Total	ND	1	0.05	0.1	µg/L							
Bis(2-Chloroisopropyl) ether	Total	ND	1	0.05	0.1	µg/L							
Dibenzofuran	Total	ND	1	0.05	0.1	µg/L							
Disalicylidenepropanediamine	Total	ND	1	0.05	0.1	µg/L							
Hexachloroethane	Total	ND	1	0.05	0.1	µg/L							
Nitrobenzene	Total	ND	1	0.05	0.1	µg/L							
N-Nitrosodi-n-propylamine	Total	ND	1	0.05	0.1	µg/L							
N-Nitrosodiphenylamine	Total	ND	1	0.05	0.1	µg/L							

Base/Neutral Extractable Compounds QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	ACCURACY LIMITS	PRECISION %	PRECISION LIMITS	QA CODEc
Sample ID: 108517-BS1	**QAQC Procedural Blank**					**Matrix: BlankMatrix**	**Sampled:**					**Received:**	
	Method: EPA 625.1					Batch ID: O-42022		Prepared: 21-Jul-23				Analyzed: 01-Sep-23	
2-Chloronaphthalene	Total	0.836	1	0.05	0.1	µg/L	1	0	84	53 - 130%	PASS		
2-Nitroaniline	Total	0.756	1	0.05	0.1	µg/L	1	0	76	69 - 114%	PASS		
3-Nitroaniline	Total	0.748	1	0.05	0.1	µg/L	1	0	75	23 - 137%	PASS		
4-Bromophenylphenyl ether	Total	0.951	1	0.05	0.1	µg/L	1	0	95	61 - 132%	PASS		
4-Chloroaniline	Total	0.67	1	0.05	0.1	µg/L	1	0	67	50 - 150%	PASS		
4-Chlorophenylphenyl ether	Total	0.962	1	0.05	0.1	µg/L	1	0	96	63 - 130%	PASS		
4-Nitroaniline	Total	0.738	1	0.05	0.1	µg/L	1	0	74	10 - 159%	PASS		
Aniline	Total	0.543	1	0.05	0.1	µg/L	1	0	54	50 - 150%	PASS		
Benzidine	Total	0.00381	1	0.05	0.1	µg/L	1	0	0	0 - 125%	PASS		
Bis(2-Chloroethoxy) methane	Total	0.663	1	0.05	0.1	µg/L	1	0	66	66 - 122%	PASS		
Bis(2-Chloroethyl) ether	Total	0.553	1	0.05	0.1	µg/L	1	0	55	43 - 127%	PASS		
Bis(2-Chloroisopropyl) ether	Total	0.784	1	0.05	0.1	µg/L	1	0	78	49 - 128%	PASS		
Dibenzofuran	Total	0.62	1	0.05	0.1	µg/L	1	0	62	50 - 150%	PASS		
Disalicylidenepropanediamine	Total	41.9	1	0.05	0.1	µg/L	50	0	84	50 - 150%	PASS		
Hexachloroethane	Total	0.816	1	0.05	0.1	µg/L	1	0	82	27 - 130%	PASS		
Nitrobenzene	Total	0.633	1	0.05	0.1	µg/L	1	0	63	54 - 111%	PASS		
N-Nitrosodi-n-propylamine	Total	0.696	1	0.05	0.1	µg/L	1	0	70	61 - 152%	PASS		
N-Nitrosodiphenylamine	Total	0.998	1	0.05	0.1	µg/L	1	0	100	49 - 142%	PASS		

Base/Neutral Extractable Compounds QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	ACCURACY LIMITS		PRECISION %	PRECISION LIMITS	QA CODEc
Sample ID: 108517-BS2	**QAQC Procedural Blank**					**Matrix: BlankMatrix**	**Sampled:**					**Received:**		
	Method: EPA 625.1					Batch ID: O-42022		Prepared: 21-Jul-23				Analyzed: 01-Sep-23		
2-Chloronaphthalene	Total	0.816	1	0.05	0.1	µg/L	1	0	82	53 - 130%	PASS	2	30	PASS
2-Nitroaniline	Total	0.775	1	0.05	0.1	µg/L	1	0	77	69 - 114%	PASS	3	30	PASS
3-Nitroaniline	Total	0.757	1	0.05	0.1	µg/L	1	0	76	23 - 137%	PASS	1	30	PASS
4-Bromophenylphenyl ether	Total	0.944	1	0.05	0.1	µg/L	1	0	94	61 - 132%	PASS	1	30	PASS
4-Chloroaniline	Total	0.657	1	0.05	0.1	µg/L	1	0	66	50 - 150%	PASS	2	30	PASS
4-Chlorophenylphenyl ether	Total	0.944	1	0.05	0.1	µg/L	1	0	94	63 - 130%	PASS	2	30	PASS
4-Nitroaniline	Total	0.773	1	0.05	0.1	µg/L	1	0	77	10 - 159%	PASS	4	30	PASS
Aniline	Total	0.502	1	0.05	0.1	µg/L	1	0	50	50 - 150%	PASS	8	30	PASS
Benzidine	Total	0.00388	1	0.05	0.1	µg/L	1	0	0	0 - 125%	PASS	0	30	PASS
Bis(2-Chloroethoxy) methane	Total	0.655	1	0.05	0.1	µg/L	1	0	66	66 - 122%	PASS	0	30	PASS
Bis(2-Chloroethyl) ether	Total	0.526	1	0.05	0.1	µg/L	1	0	53	43 - 127%	PASS	4	30	PASS
Bis(2-Chloroisopropyl) ether	Total	0.708	1	0.05	0.1	µg/L	1	0	71	49 - 128%	PASS	9	30	PASS
Dibenzofuran	Total	0.669	1	0.05	0.1	µg/L	1	0	67	50 - 150%	PASS	8	30	PASS
Disalicylidenepropanediamine	Total	49.8	1	0.05	0.1	µg/L	50	0	100	50 - 150%	PASS	17	30	PASS
Hexachloroethane	Total	0.771	1	0.05	0.1	µg/L	1	0	77	27 - 130%	PASS	6	30	PASS
Nitrobenzene	Total	0.623	1	0.05	0.1	µg/L	1	0	62	54 - 111%	PASS	2	30	PASS
N-Nitrosodi-n-propylamine	Total	0.68	1	0.05	0.1	µg/L	1	0	68	61 - 152%	PASS	3	30	PASS
N-Nitrosodiphenylamine	Total	0.989	1	0.05	0.1	µg/L	1	0	99	49 - 142%	PASS	1	30	PASS

Polynuclear Aromatic Hydrocarbons QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	ACCURACY LIMITS	PRECISION %	PRECISION LIMITS	QA CODEc
Sample ID: 108517-B1	**QAQC Procedural Blank**					**Matrix: BlankMatrix**	**Sampled:**			**Received:**			
		Method: EPA 625.1				Batch ID: O-42022		Prepared: 21-Jul-23		Analyzed: 01-Sep-23			
(d10-Acenaphthene)	Total	100	1			% Recovery	100	100	27 - 133%	PASS			
(d10-Phenanthrene)	Total	99	1			% Recovery	100	99	43 - 129%	PASS			
(d12-Chrysene)	Total	98	1			% Recovery	100	98	52 - 144%	PASS			
(d12-Perylene)	Total	103	1			% Recovery	100	103	36 - 161%	PASS			
(d8-Naphthalene)	Total	93	1			% Recovery	100	93	25 - 125%	PASS			
1-Methylnaphthalene	Total	ND	1	0.001	0.005	µg/L							
1-Methylphenanthrene	Total	ND	1	0.001	0.005	µg/L							
2,3,5-Trimethylnaphthalene	Total	ND	1	0.001	0.005	µg/L							
2,6-Dimethylnaphthalene	Total	ND	1	0.001	0.005	µg/L							
2-Methylnaphthalene	Total	ND	1	0.001	0.005	µg/L							
Acenaphthene	Total	ND	1	0.001	0.005	µg/L							
Acenaphthylene	Total	ND	1	0.001	0.005	µg/L							
Anthracene	Total	ND	1	0.001	0.005	µg/L							
Benz[a]anthracene	Total	ND	1	0.001	0.005	µg/L							
Benzo[a]pyrene	Total	ND	1	0.001	0.005	µg/L							
Benzo[b]fluoranthene	Total	ND	1	0.001	0.005	µg/L							
Benzo[e]pyrene	Total	ND	1	0.001	0.005	µg/L							
Benzo[g,h,i]perylene	Total	ND	1	0.001	0.005	µg/L							
Benzo[k]fluoranthene	Total	ND	1	0.001	0.005	µg/L							
Biphenyl	Total	ND	1	0.001	0.005	µg/L							
Chrysene	Total	ND	1	0.001	0.005	µg/L							
Dibenz[a,h]anthracene	Total	ND	1	0.001	0.005	µg/L							
Dibenzo[a,l]pyrene	Total	ND	1	0.001	0.005	µg/L							

PHYSIS Project ID: 1407003-423
Client: Eurofins Eaton Analytical
Project: RED-HILL Project # 38001111 Job # 380-55350-1

Polynuclear Aromatic Hydrocarbons QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	ACCURACY LIMITS	PRECISION %	PRECISION LIMITS	QA CODEc
Dibenzothiophene	Total	ND	1	0.001	0.005	µg/L							
Fluoranthene	Total	ND	1	0.001	0.005	µg/L							
Fluorene	Total	ND	1	0.001	0.005	µg/L							
Indeno[1,2,3-cd]pyrene	Total	ND	1	0.001	0.005	µg/L							
Naphthalene	Total	ND	1	0.001	0.005	µg/L							
Perylene	Total	ND	1	0.001	0.005	µg/L							
Phenanthrene	Total	ND	1	0.001	0.005	µg/L							
Pyrene	Total	ND	1	0.001	0.005	µg/L							

Polynuclear Aromatic Hydrocarbons QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	ACCURACY LIMITS	PRECISION %	PRECISION LIMITS	QA CODEc
Sample ID: 108517-BS1	**QAQC Procedural Blank**					**Matrix: BlankMatrix**		**Sampled:**				**Received:**	
	Method: EPA 625.1					Batch ID: O-42022		Prepared: 21-Jul-23				Analyzed: 01-Sep-23	
(d10-Acenaphthene)	Total	109	1			% Recovery	100	0	109	27 - 133%	PASS		
(d10-Phenanthrene)	Total	104	1			% Recovery	100	0	104	43 - 129%	PASS		
(d12-Chrysene)	Total	100	1			% Recovery	100	0	100	52 - 144%	PASS		
(d12-Perylene)	Total	106	1			% Recovery	100	0	106	36 - 161%	PASS		
(d8-Naphthalene)	Total	99	1			% Recovery	100	0	99	25 - 125%	PASS		
1-Methylnaphthalene	Total	0.564	1	0.001	0.005	µg/L	0.5	0	113	31 - 128%	PASS		
1-Methylphenanthrene	Total	0.572	1	0.001	0.005	µg/L	0.5	0	114	66 - 127%	PASS		
2,3,5-Trimethylnaphthalene	Total	0.592	1	0.001	0.005	µg/L	0.5	0	118	55 - 122%	PASS		
2,6-Dimethylnaphthalene	Total	0.571	1	0.001	0.005	µg/L	0.5	0	114	48 - 120%	PASS		
2-Methylnaphthalene	Total	1.67	1	0.001	0.005	µg/L	1.5	0	111	47 - 130%	PASS		
Acenaphthene	Total	1.73	1	0.001	0.005	µg/L	1.5	0	115	53 - 131%	PASS		
Acenaphthylene	Total	1.89	1	0.001	0.005	µg/L	1.5	0	126	43 - 140%	PASS		
Anthracene	Total	1.67	1	0.001	0.005	µg/L	1.5	0	111	58 - 135%	PASS		
Benz[a]anthracene	Total	1.7	1	0.001	0.005	µg/L	1.5	0	113	55 - 145%	PASS		
Benzo[a]pyrene	Total	1.73	1	0.001	0.005	µg/L	1.5	0	115	51 - 143%	PASS		
Benzo[b]fluoranthene	Total	1.74	1	0.001	0.005	µg/L	1.5	0	116	46 - 165%	PASS		
Benzo[e]pyrene	Total	0.551	1	0.001	0.005	µg/L	0.5	0	110	42 - 152%	PASS		
Benzo[g,h,i]perylene	Total	1.73	1	0.001	0.005	µg/L	1.5	0	115	63 - 133%	PASS		
Benzo[k]fluoranthene	Total	1.69	1	0.001	0.005	µg/L	1.5	0	113	56 - 145%	PASS		
Biphenyl	Total	0.565	1	0.001	0.005	µg/L	0.5	0	113	56 - 119%	PASS		
Chrysene	Total	1.56	1	0.001	0.005	µg/L	1.5	0	104	56 - 141%	PASS		
Dibenz[a,h]anthracene	Total	1.86	1	0.001	0.005	µg/L	1.5	0	124	55 - 150%	PASS		
Dibenzo[a,l]pyrene	Total	0.455	1	0.001	0.005	µg/L	0.5	0	91	50 - 150%	PASS		

PHYSIS Project ID: 1407003-423
Client: Eurofins Eaton Analytical
Project: RED-HILL Project # 38001111 Job # 380-55350-1

Polynuclear Aromatic Hydrocarbons QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	ACCURACY LIMITS		PRECISION %	PRECISION LIMITS	QA CODEc
Dibenzothiophene	Total	0.563	1	0.001	0.005	µg/L	0.5	0	113	46 - 126%	PASS			
Fluoranthene	Total	1.78	1	0.001	0.005	µg/L	1.5	0	119	60 - 146%	PASS			
Fluorene	Total	1.78	1	0.001	0.005	µg/L	1.5	0	119	58 - 131%	PASS			
Indeno[1,2,3-cd]pyrene	Total	1.81	1	0.001	0.005	µg/L	1.5	0	121	50 - 151%	PASS			
Naphthalene	Total	1.55	1	0.001	0.005	µg/L	1.5	0	103	41 - 126%	PASS			
Perylene	Total	0.578	1	0.001	0.005	µg/L	0.5	0	116	48 - 141%	PASS			
Phenanthrene	Total	1.65	1	0.001	0.005	µg/L	1.5	0	110	67 - 127%	PASS			
Pyrene	Total	1.79	1	0.001	0.005	µg/L	1.5	0	119	54 - 156%	PASS			

Polynuclear Aromatic Hydrocarbons QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	ACCURACY LIMITS		PRECISION %	PRECISION LIMITS	QA CODEc
Sample ID: 108517-BS2	**QAQC Procedural Blank**					**Matrix: BlankMatrix**		**Sampled:**				**Received:**		
		Method: EPA 625.1				Batch ID: O-42022		Prepared: 21-Jul-23				Analyzed: 01-Sep-23		
(d10-Acenaphthene)	Total	107	1			% Recovery	100	0	107	27 - 133%	PASS	2	30 PASS	
(d10-Phenanthrene)	Total	105	1			% Recovery	100	0	105	43 - 129%	PASS	1	30 PASS	
(d12-Chrysene)	Total	101	1			% Recovery	100	0	101	52 - 144%	PASS	1	30 PASS	
(d12-Perylene)	Total	107	1			% Recovery	100	0	107	36 - 161%	PASS	1	30 PASS	
(d8-Naphthalene)	Total	96	1			% Recovery	100	0	96	25 - 125%	PASS	3	30 PASS	
1-Methylnaphthalene	Total	0.547	1	0.001	0.005	µg/L	0.5	0	109	31 - 128%	PASS	4	30 PASS	
1-Methylphenanthrene	Total	0.568	1	0.001	0.005	µg/L	0.5	0	114	66 - 127%	PASS	0	30 PASS	
2,3,5-Trimethylnaphthalene	Total	0.581	1	0.001	0.005	µg/L	0.5	0	116	55 - 122%	PASS	2	30 PASS	
2,6-Dimethylnaphthalene	Total	0.565	1	0.001	0.005	µg/L	0.5	0	113	48 - 120%	PASS	1	30 PASS	
2-Methylnaphthalene	Total	1.62	1	0.001	0.005	µg/L	1.5	0	108	47 - 130%	PASS	2	30 PASS	
Acenaphthene	Total	1.69	1	0.001	0.005	µg/L	1.5	0	113	53 - 131%	PASS	2	30 PASS	
Acenaphthylene	Total	1.86	1	0.001	0.005	µg/L	1.5	0	124	43 - 140%	PASS	2	30 PASS	
Anthracene	Total	1.65	1	0.001	0.005	µg/L	1.5	0	110	58 - 135%	PASS	1	30 PASS	
Benz[a]anthracene	Total	1.71	1	0.001	0.005	µg/L	1.5	0	114	55 - 145%	PASS	1	30 PASS	
Benzo[a]pyrene	Total	1.72	1	0.001	0.005	µg/L	1.5	0	115	51 - 143%	PASS	0	30 PASS	
Benzo[b]fluoranthene	Total	1.72	1	0.001	0.005	µg/L	1.5	0	115	46 - 165%	PASS	1	30 PASS	
Benzo[e]pyrene	Total	0.546	1	0.001	0.005	µg/L	0.5	0	109	42 - 152%	PASS	1	30 PASS	
Benzo[g,h,i]perylene	Total	1.7	1	0.001	0.005	µg/L	1.5	0	113	63 - 133%	PASS	2	30 PASS	
Benzo[k]fluoranthene	Total	1.67	1	0.001	0.005	µg/L	1.5	0	111	56 - 145%	PASS	2	30 PASS	
Biphenyl	Total	0.556	1	0.001	0.005	µg/L	0.5	0	111	56 - 119%	PASS	2	30 PASS	
Chrysene	Total	1.56	1	0.001	0.005	µg/L	1.5	0	104	56 - 141%	PASS	1	30 PASS	
Dibenz[a,h]anthracene	Total	1.87	1	0.001	0.005	µg/L	1.5	0	125	55 - 150%	PASS	1	30 PASS	
Dibenzo[a,l]pyrene	Total	0.455	1	0.001	0.005	µg/L	0.5	0	91	50 - 150%	PASS	0	30 PASS	

PHYSIS Project ID: 1407003-423
Client: Eurofins Eaton Analytical
Project: RED-HILL Project # 38001111 Job # 380-55350-1

Polynuclear Aromatic Hydrocarbons QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	ACCURACY LIMITS		PRECISION %	PRECISION LIMITS		QA CODEc
Dibenzothiophene	Total	0.555	1	0.001	0.005	µg/L	0.5	0	111	46 - 126%	PASS	2	30	PASS	
Fluoranthene	Total	1.77	1	0.001	0.005	µg/L	1.5	0	118	60 - 146%	PASS	1	30	PASS	
Fluorene	Total	1.78	1	0.001	0.005	µg/L	1.5	0	119	58 - 131%	PASS	0	30	PASS	
Indeno[1,2,3-cd]pyrene	Total	1.81	1	0.001	0.005	µg/L	1.5	0	121	50 - 151%	PASS	0	30	PASS	
Naphthalene	Total	1.5	1	0.001	0.005	µg/L	1.5	0	100	41 - 126%	PASS	3	30	PASS	
Perylene	Total	0.569	1	0.001	0.005	µg/L	0.5	0	114	48 - 141%	PASS	2	30	PASS	
Phenanthrene	Total	1.62	1	0.001	0.005	µg/L	1.5	0	108	67 - 127%	PASS	2	30	PASS	
Pyrene	Total	1.77	1	0.001	0.005	µg/L	1.5	0	118	54 - 156%	PASS	1	30	PASS	

TENTATIVELY IDENTIFIED COMPOUNDS

Sample ID: 108518

Retention Time	Area (% of total)	Concentration (ng/L)	Library/ID	Cas Number	Match Quality (%)
34.0512	3.6507	1111	Anthracene-D10-	1719-06-8	95
75.9955	6.7049	2041	Cholest-5-en-3-ol, (3.alpha.)-	474-77-1	88
40.4167	2.4280	739	n-Hexadecanoic acid	57-10-3	96
46.8410	1.8794	572	6-Octadecenoic acid	1000336-66-8	96
39.6672	0.7227	220	Palmitoleic acid	373-49-9	97
10.2488	0.5915	180	1,5-Heptadien-4-one, 3,3,6-trimethyl-	546-49-6	89
80.8707	0.5161	157	Formamide, N,N-dimethyl-	68-12-2	84
26.3494	0.4107	125	Diethyl Phthalate	84-66-2	97

Concentration estimated using the response for Anthracene-d10

Sample ID: Lab Blank B1_42022

Retention Time	Area (% of total)	Concentration (ng/L)	Library/ID	Cas Number	Match Quality (%)
34.0553	7.2385	1111	Anthracene-D10-	1719-06-8	96
10.2498	1.4446	222	1,5-Heptadien-4-one, 3,3,6-trimethyl-	546-49-6	89
26.3533	1.3026	200	Diethyl Phthalate	84-66-2	98

Concentration estimated using the response for Anthracene-d10

CHAIN OF CUSTODY

Eurofins Eaton Analytical Pomona
941 Corporate Center Drive
Pomona, CA 91768-2642
Phone: 626-386-1100

Chain of Custody Record

eurofins | Environment Testing

11/22/2023

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Arada, Rachelle	Carrier Tracking No(s):	COC No: 380-64962.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Rachelle.Arada@et.eurofinsus.com	State of Origin: Hawaii	Page: Page 1 of 1
Company: Physis Environmental Laboratories		Accreditations Required (See note): State - Hawaii		Job #: 380-55688-1
Address: 1904 Wright Circle, ,	Due Date Requested: 8/4/2023			
City: Anaheim	TAT Requested (days):			
State, Zip: CA, 92806				
Phone:	PO #:			
Email:	WO #:			
Project Name: RED-HILL	Project #: 38001111			
Site: Honolulu BWS Sites	SSOW#:			

Analysis Requested

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

Sample Identification - 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)	SUB (625 Acid/Base/PAH + TICs)/ 625 Acid/Base/PAH + TICs	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
AIEA GULCH WELLS PUMP 2 (380-55688-1)	7/20/23	09:00 Hawaiian		Water			X	6	See Attached Instructions

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 *Unconfirmed*	***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) 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: 7-21-23 1310	Company
Relinquished by:	Date/Time: 7-21-23 1320	Company	Received by:	Date/Time: 7/21/23 1338	Company physis
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:

Ver: 06/08/2021

PHYSIS
ENVIRONMENTAL LABORATORIES, INC.
Innovative Solutions for Nature

PHYSIS
ENVIRONMENTAL LABORATORIES, INC.
Innovative Solutions for Nature

Project Iteration ID: 1407003-423
Client Name: Eurofins Eaton Analytical
Project Name: RED-HILL Project # 38001111 Job # 380-55688-1
COC Page Number: 2 of 2
Bottle Label Color: NA

Sample Receipt Summary

Receiving Info

1. Initials Received By: AG
2. Date Received: 7/21/23
3. Time Received: 13:38
4. Client Name: Eurofins
5. Courier Information: (Please circle)
   - Client
   - UPS
   - Area Fast
   - DRS
   - FedEx
   - GSO/GLS
   - Ontrac
   - PAMS
   - PHYSIS Driver:
     - i. Start Time: _____
     - ii. End Time: _____
     - iii. Total Mileage: _____
     - iv. Number of Pickups: _____
6. Container Information: (Please put the # of containers or circle none)
   - 1 Cooler
   - __ Styrofoam Cooler
   - ____ Boxes
   - None
   - ___ Carboy(s)
   - __ Carboy Trash Can(s)
   - ____ Carboy Cap(s)
   - Other _____
7. What type of ice was used: (Please circle any that apply)
   - Wet Ice
   - Blue Ice
   - Dry Ice
   - Water
   - None
8. Randomly Selected Samples Temperature (°C): 4.1 Used I/R Thermometer # 1

Inspection Info

1. Initials Inspected By: RGH

Sample Integrity Upon Receipt:

1. COC(s) included and completely filled out..... Yes / No
2. All sample containers arrived intact..... Yes / No
3. All samples listed on COC(s) are present..... Yes / No
4. Information on containers consistent with information on COC(s)..... Yes / No
5. Correct containers and volume for all analyses indicated..... Yes / No
6. All samples received within method holding time..... Yes / No
7. Correct preservation used for all analyses indicated..... Yes / No
8. Name of sampler included on COC(s)..... Yes / No

Notes:

Eurofins Eaton Analytical Pomona
941 Corporate Center Drive
Pomona, CA 91768-2642
Phone: 626-386-1100

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Bryson Nakamoto	Lab PM: Arada, Rachelle	Carrier Tracking No(s):	COC No: 380-37518-10262.1
Client Contact: Dr. Ron Fenstemacher	Phone: (808)748-5840	E-Mail: Rachelle.Arada@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: City & County of Honolulu	PWSID:			Job #:
Address: 630 South Beretania Street Chemistry Lab	Due Date Requested:			
City: Honolulu	TAT Requested (days):			
State, Zip: HI, 96843	Compliance Project: Δ Yes Δ No			
Phone: 808-748-5091(Tel)	PO #: C20525101 exp 05312023			
Email: RFENSTEMACHER@hbws.org	WO #:			
Project Name: RED-HILL	Project #: 38001111			
Site: Hawaii	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	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	524.2_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 - 8015 Jet Fuel 8 (JP8)	SUBCONTRACT - 8015 Jet Fuel 5 (JP5)	SUBCONTRACT - 8015 Diesel LL (EAL) and Motor Oil	SUBCONTRACT - 8015 Gas (Purgeable) LL (EAL)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				F	N	C	N	CB	HA		N	D	RA	RA	RA	R		
AIEA GULCH WELLS PUMP 2	7/20/2023	0900	G	Water			6	1	1	1	1	6	3	2	1	2	2	2	3		
TB: AIEA GULCH WELLS PUMP 2	7/20/2023			Water			3					6							2		

380-55688 COC

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

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

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

Special Instructions/QC Requirements:
① 7725 0031 0731 ④ ?
② 7725 0031 1025

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: FED Ex ③ 7725 0031 1223			
Relinquished by: [redacted]	Date/Time: 7/20/2023 1030	Company: HBWS	Received by: G REITMER	Date/Time: 07/21/2023 09:45	Company: EEAP	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	
	Date/Time:	Company	Received by:	Date/Time:	Company	

Eurofins Eaton Analytical Pomona
941 Corporate Center Drive
Pomona, CA 91768-2642
Phone: 626-386-1100

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Bryson Nakamoto	Lab PM: Arada, Rachelle	Carrier Tracking No(s):	COC No: 380-37518-10262.2
Client Contact: Dr. Ron Fenstemacher	Phone: (808) 748-5840	E-Mail: Rachelle.Arada@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: City & County of Honolulu	PWSID:			Job #:
Address: 630 South Beretania Street Chemistry Lab	Due Date Requested:			
City: Honolulu	TAT Requested (days):			
State, Zip: HI, 96843	Compliance Project: Δ Yes Δ No			
Phone: 808-748-5091(Tel)	PO #: C20525101 exp 05312023			
Email: RFENSTEMACHER@hbws.org	WO #:			
Project Name: RED-HILL	Project #: 38001111			
Site: Hawaii	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUBCONTRACT - 8015 Ethanol	SUBCONTRACT - 625 PAH Physis LL (EAL) + TICs	SUBCONTRACT - 625 Base Neutral LL (EAL) Physis	SUBCONTRACT - 625 Acid LL (EAL) Physis	SUBCONTRACT - 8015 Gas (Purgeable) LL (EAL)	504.1_PREC - Local Method	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	R	R	R	RA	R		
AIEA GULCH WELLS PUMP 2	7/20/2023	0900	G	Water			3	2	2	2				
TB: AIEA GULCH WELLS PUMP 2	7/20/2023			Water										

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 7728 0031 0731 ④ ? ② 7728 0031 1028

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: FED Ex ③ 7728 0031 1223

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Bryson Nakamoto	7/20/2023 1030	HBWS	G. RETTNER	07/21/2023 09:45	EEAP
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Date/Time:	Company	Received by:	Date/Time:	Company

Cooler Temperature(s) °C and Other Remarks:

Bottle Order Information

Bottle Order: *RED-HILL - Quarterly*
Bottle Order #: *1845*
Request From Client: *12/14/2022*
Date Order Posted: *6/23/2022 7:29:27AM*
Order Status: *Ready To Process*
Prepared By: *Davis Haley*
Deliver By Date: ***6/1/2023 11:59:00PM***
Lab Project Number: *38001111*
PWSID: *HI00000331*

Order Completion Information

Creator: *Michelle Do*
Filled by:
Sent Date:
Sent Via:
Tracking #:

✓ = RECEIVED ○ = RECEIVED PARTIALLY
✱ = DID NOT RECEIVE

Sets	Bottles/Set	Qty	Bottle Type Description	Preservative	Method	Matrix	Sample Type	Comments	Lot #
5	6	30	Voa Vial 40ml Amber - Sodium thiosulfate	Sodium Thiosulfate	504.1_PREC - Local Method ✓ 505_LL_PREC - (MOD) ML505 +505-EAI Aldrin Dieldrin Tox	Water Water	Normal Normal	RECEIVED 3 OUT OF 6 -GR	
5	1	5	Plastic 250ml - unpreserved	None	2320B - (MOD) Total Alkalinity SM4500_H+ - Local Method ✓ 2510B - Conductivity ✱	Water Water Water	Normal Normal Normal	DID NOT RECEIVE -GR	
5	1	5	Plastic 500ml - with Nitric Acid	Nitric Acid	200.8 - Metals, Priority Pollutant by 200.8 200.7 - (MOD) Custom ✓	Water Water	Normal Normal		
5	1	5	Plastic 500ml - unpreserved	None	2540C_Calcd - Total Dissolved Solids (TDS) ✓	Water	Normal		
5	1	5	Plastic 250ml - with Zinc Acetate & NaOH	Zinc Acetate and Sodium Hydroxide	SM4500_S2_D - Sulfide, Total ✓	Water	Normal		
5	6	30	Voa Vial 40ml Amber - Ascor. Acid & HCL	Ascorbic Acid and Hydrochloric Acid	524.2_Pres_PREC - VOASDWA plus TICs + Acetone ✓ 524.2_SIM_PREC - TBA by 524.2 SIM	Water Water	Normal Normal		
5	3	15	Amber Glass 1 Liter- Sodium Sulfite/HCl	Sodium Sulfite w/HCl	525.2_PREC - 525plus Plus TICs ✓	Water	Normal	RECEIVED 1 OUT OF 3 -GR	
5	2	10	Plastic 125mL - unpreserved	None	300_OF_28D_B - Bromide 4500_F_C - Fluoride 300_OF_28D_PREC - Chloride and Sulfate 300_OF_48H_PREC - Nitrite, Nitrate, and Nitrite+Nitrate ✓	Water Water Water Water	Normal Normal Normal Normal		
5	1	5	Plastic 250ml - with Nitric Acid	Nitric Acid	245.1 - Local Method ✓	Water	Normal		

Please notify your PM immediately if an error is found in shipment. When returning samples, please return all provided QC samples.

5	2	10	Amber Glass 1 L - NaThiosulfate 8mL HCL	Sodium Thiosulfate/Hydrochloric Acid	SUBCONTRACT - 8015 Jet Fuel 8 (JP8)	Water	Normal		
5	2	10	Amber Glass 1 L - NaThiosulfate 8mL HCL	Sodium Thiosulfate/Hydrochloric Acid	SUBCONTRACT - 8015 Jet Fuel 5 (JP5)	Water	Normal		
5	2	10	Amber Glass 1 L - NaThiosulfate 8mL HCL	Sodium Thiosulfate/Hydrochloric Acid	SUBCONTRACT - 8015 Diesel LL (EAL) and Motor Oil	Water	Normal	RECEIVED 1 OUT OF 2 -GR	
5	3	15	Voa Vial 40ml - SodiumThio w/HCl-dropper	Sodium Thiosulfate	SUBCONTRACT - 8015 Gas (Purgeable) LL (EAL)	Water	Normal		
5	3	15	Voa Vial 40ml - unpreserved	None	SUBCONTRACT - 8015 Ethanol	Water	Normal		
5	2	10	Amber Glass 1 liter - Sodium Thiosulfate	Sodium Thiosulfate	SUBCONTRACT - 625 PAH Physis LL (EAL) + TICs	Water	Normal	DID NOT RECEIVE -GR	
5	2	10	Amber Glass 1 liter - Sodium Thiosulfate	Sodium Thiosulfate	SUBCONTRACT - 625 Base Neutral LL (EAL) Physis	Water	Normal		
5	2	10	Amber Glass 1 liter - Sodium Thiosulfate	Sodium Thiosulfate	SUBCONTRACT - 625 Acid LL (EAL) Physis	Water	Normal		
5	3	15	Voa Vial 40ml Amber - Ascorbic & Maleic	Ascorbic Acid/Maleic	524.3_SIM_PREC - Low Level TCP/EDB/DBCP	Water	Normal	DID NOT RECEIVE -GR	
5	2	10	VOA Vial 40mL - NaThiosulfate/HCL	Sodium Thiosulfate/Hydrochloric Acid	SUBCONTRACT - 8015 Gas (Purgeable) LL (EAL)	Water	Trip Blank	DID NOT RECEIVE -GR	
5	6	30	Voa Vial 40ml Amber - Ascor. Acid & HCL	Ascorbic Acid and Hydrochloric Acid	524.2_Pres_PREC - VOASDWA plus TICs + Acetone	Water	Trip Blank		
					524.2_SIM_PREC - TBA by 524.2 SIM	Water	Trip Blank		
5	3	15	Voa Vial 40ml Amber - Sodium thiosulfate	Sodium Thiosulfate	504.1_PREC - Local Method	Water	Trip Blank	DID NOT RECEIVE -GR	
5	2	10	Voa Vial 40ml Amber - Ascorbic & Maleic	Ascorbic Acid/Maleic	524.3_SIM_PREC - Low Level TCP/EDB/DBCP	Water	Trip Blank	DID NOT RECEIVE -GR	

Please notify your PM immediately if an error is found in shipment. When returning samples, please return all provided QC samples.

Eurofins Eaton Analytical Pomona
941 Corporate Center Drive
Pomona, CA 91768-2642
Phone: 626-386-1100

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Arada, Rachelle	Carrier Tracking No(s):	COC No: 380-65070.1
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 #: 380-55688-1
Address: 110 S Hill Street,	Due Date Requested: 8/10/2023			
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#:			

Analysis Requested

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

Sample Identification - 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:						
AIEA GULCH WELLS PUMP 2 (380-55688-1)	7/20/23	09:00 Hawaiian		Water			X	1	
									Client Provided Sample Containers
									0.2 0.6 Wt DD

pH Acceptable

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: Guillermo Y	Date/Time: 7/24/23 8:13	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by: [signature]	Date/Time: 7/26/2023 0900	Company: EEA
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-55688-1

Login Number: 55688
List Number: 1
Creator: Elyas, Matthew

List Source: Eurofins Eaton Analytical Pomona

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

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-55688-1

Login Number: 55688
List Number: 2
Creator: Blackburn, Kelly

List Source: Eurofins Eaton Analytical South Bend
List Creation: 07/26/23 03:37 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.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Samples do not require splitting or compositing.	True	
Container provided by EEA	False	Client provided containers