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ANALYTICAL REPORT

PREPARED FOR

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Honolulu, Hawaii 96843

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JOB DESCRIPTION

RED-HILL Quarterly

JOB NUMBER

380-65446-1

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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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high 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
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
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
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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: 380-65446-1

Laboratory: Eurofins Eaton Analytical Pomona

Narrative

Job Narrative
380-65446-1

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

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

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

Receipt
The samples were received on 10/4/2023 10:40 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 6 coolers at receipt time were 1.0°C, 1.7°C, 1.9°C, 2.3°C, 2.5°C and 5.6°C

Receipt Exceptions
One or more containers for the following samples were received broken or leaking: One of the six 524.2 vials from site Halawa Wells Units 1&2 P1 (380-65446-2) arrived broken.

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
Method 524.2_Pres_PREC: Trip Blank sample indicated a detection above the reporting limit (RL) for the following analyte(s): Carbon disulfide and Chloromethane (methyl chloride). Associated field sample had no detection. Per client's requirements, VOC analysis should have a corresponding Trip Blank. Method 524.2 field sample and trip blank data excluded due to the Trip Blank detection. Aiea Gulch Wells Pump 2 (380-65446-1) and TB Aiea Gulch Wells Pump 2 (380-65446-3)

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: Due to the high concentration of Chloride, the matrix spike / matrix spike duplicate (MS/MSD) for analytical batch 380-58027 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method 300_OF_28D_PREC: The method blank for analytical batch 380-58033 contained Chloride above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

Job ID: 380-65446-1 (Continued)

Laboratory: Eurofins Eaton Analytical Pomona (Continued)

Method 300_OF_28D_PREC: Due to the high concentration of Chloride, the matrix spike / matrix spike duplicate (MS/MSD) for analytical batch 380-58035 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method 300_OF_48H_PREC: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 380-58026 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 2320B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 380-58462 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.

Detection Summary

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

Job ID: 380-65446-1

Client Sample ID: Aiea Gulch Wells Pump 2 — Lab Sample ID: 380-65446-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Bromide	170		5.0		ug/L	1		300.0	Total/NA
Chloride	94	F1	1.0		mg/L	2		300.0	Total/NA
Nitrate as N	0.56		0.050		mg/L	1		300.0	Total/NA
Sulfate	14		0.25		mg/L	1		300.0	Total/NA
Calcium	22		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	2.2		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		1.0		ug/L	1		200.8	Total Recoverable
Copper	2.6		2.0		ug/L	1		200.8	Total Recoverable
Alkalinity	54		2.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	54		2.0		mg/L	1		SM 2320B	Total/NA
Specific Conductance	440		2.0		umhos/cm	1		SM 2510B	Total/NA
Total Dissolved Solids	240		20		mg/L	1		SM 2540C	Total/NA
pH	7.8	HF			SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: Halawa Wells Units 1&2 P1 — Lab Sample ID: 380-65446-2

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Dieldrin	0.046		0.010		ug/L	1		505	Total/NA
Chlordane (n.o.s.)	0.26		0.10		ug/L	1		505	Total/NA
Heptachlor epoxide	0.018		0.010		ug/L	1		505	Total/NA
Bromide	750		25		ug/L	5		300.0	Total/NA
Chloride	210		2.5		mg/L	5		300.0	Total/NA
Nitrate as N	1.5		0.10		mg/L	2		300.0	Total/NA
Sulfate	44		0.50		mg/L	2		300.0	Total/NA
Calcium	36		1.0		mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	33		0.10		mg/L	1		200.7 Rev 4.4	Total/NA
Potassium	4.0		1.0		mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	70		1.0		mg/L	1		200.7 Rev 4.4	Total/NA
Chromium	2.2		1.0		ug/L	1		200.8	Total Recoverable
Alkalinity	67		2.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	67		2.0		mg/L	1		SM 2320B	Total/NA
Specific Conductance	860		2.0		umhos/cm	1		SM 2510B	Total/NA
Total Dissolved Solids	460		20		mg/L	1		SM 2540C	Total/NA
Fluoride	0.050		0.050		mg/L	1		SM 4500 F C	Total/NA
pH	7.8	HF			SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: TB Aiea Gulch Wells Pump 2 — Lab Sample ID: 380-65446-3

No Detections.

Client Sample ID: TB Halawa Wells Units 1&2 P1 — Lab Sample ID: 380-65446-4

No Detections.

This Detection Summary does not include radiochemical test results.

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

Job ID: 380-65446-1

Client Sample ID: Aiea Gulch Wells Pump 2

Date Collected: 10/03/23 10:57
Date Received: 10/04/23 10:40

Lab Sample ID: 380-65446-1

Matrix: Water

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			10/10/23 16:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*70 - 130*		*10/10/23 16:17*	*1*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*10/10/23 16:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*118*		*70 - 130*		*10/10/23 16:17*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2,4'-DDD	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:32	1
2,4'-DDE	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:32	1
2,4'-DDT	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:32	1
2,4-Dinitrotoluene	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:32	1
2,6-Dinitrotoluene	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:32	1
4,4'-DDD	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:32	1
4,4'-DDE	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:32	1
4,4'-DDT	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:32	1
Acenaphthene	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:32	1
Acenaphthylene	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:32	1
Acetochlor	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:32	1
Alachlor	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:32	1
alpha-BHC	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:32	1
alpha-Chlordane	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:32	1
Anthracene	<0.019		0.019		ug/L		10/06/23 13:45	10/08/23 18:32	1
Atrazine	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:32	1
Benz(a)anthracene	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:32	1
Benzo[a]pyrene	<0.019		0.019		ug/L		10/06/23 13:45	10/08/23 18:32	1
Benzo[b]fluoranthene	<0.019		0.019		ug/L		10/06/23 13:45	10/08/23 18:32	1
Benzo[g,h,i]perylene	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:32	1
Benzo[k]fluoranthene	<0.019		0.019		ug/L		10/06/23 13:45	10/08/23 18:32	1
beta-BHC	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:32	1
Bis(2-ethylhexyl) phthalate	<0.58		0.58		ug/L		10/06/23 13:45	10/08/23 18:32	1
Bromacil	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:32	1
Butachlor	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:32	1
Butylbenzylphthalate	<0.49		0.49		ug/L		10/06/23 13:45	10/08/23 18:32	1
Chlorobenzilate	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:32	1
Chloroneb	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:32	1
Chlorothalonil (Draconil, Bravo)	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:32	1
Chlorpyrifos	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:32	1
Chrysene	<0.019		0.019		ug/L		10/06/23 13:45	10/08/23 18:32	1
delta-BHC	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:32	1
Di(2-ethylhexyl)adipate	<0.58		0.58		ug/L		10/06/23 13:45	10/08/23 18:32	1
Dibenz(a,h)anthracene	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:32	1
Diclorvos (DDVP)	<0.049	^3+	0.049		ug/L		10/06/23 13:45	10/08/23 18:32	1
Dieldrin	<0.19		0.19		ug/L		10/06/23 13:45	10/08/23 18:32	1
Diethylphthalate	<0.49		0.49		ug/L		10/06/23 13:45	10/08/23 18:32	1
Dimethylphthalate	<0.49		0.49		ug/L		10/06/23 13:45	10/08/23 18:32	1
Di-n-butyl phthalate	<0.97		0.97		ug/L		10/06/23 13:45	10/08/23 18:32	1
Di-n-octyl phthalate	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:32	1
Endosulfan I (Alpha)	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:32	1

Client Sample ID: Aiea Gulch Wells Pump 2

Lab Sample ID: 380-65446-1

Date Collected: 10/03/23 10:57

Matrix: Water

Date Received: 10/04/23 10:40

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan II (Beta)	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:32	1
Endosulfan sulfate	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:32	1
Endrin	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:32	1
Endrin aldehyde	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:32	1
EPTC	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:32	1
Fluoranthene	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:32	1
Fluorene	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:32	1
gamma-BHC (Lindane)	<0.039		0.039		ug/L		10/06/23 13:45	10/08/23 18:32	1
gamma-Chlordane	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:32	1
Heptachlor	<0.039		0.039		ug/L		10/06/23 13:45	10/08/23 18:32	1
Heptachlor epoxide (isomer B)	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:32	1
Hexachlorobenzene	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:32	1
Hexachlorocyclopentadiene	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:32	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:32	1
Isophorone	<0.49		0.49		ug/L		10/06/23 13:45	10/08/23 18:32	1
Malathion	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:32	1
Methoxychlor	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:32	1
Metolachlor	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:32	1
Molinate	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:32	1
Naphthalene	<0.29		0.29		ug/L		10/06/23 13:45	10/08/23 18:32	1
Parathion	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:32	1
Pendimethalin (Penoxaline)	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:32	1
Phenanthrene	<0.039		0.039		ug/L		10/06/23 13:45	10/08/23 18:32	1
Propachlor	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:32	1
Pyrene	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:32	1
Simazine	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:32	1
Terbacil	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:32	1
Terbuthylazine	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:32	1
Thiobencarb	<0.19		0.19		ug/L		10/06/23 13:45	10/08/23 18:32	1
Total Permethrin (mixed isomers)	<0.19		0.19		ug/L		10/06/23 13:45	10/08/23 18:32	1
trans-Nonachlor	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:32	1
Trifluralin	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:32	1
1-Methylnaphthalene	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:32	1
2-Methylnaphthalene	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:32	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*	*10/06/23 13:45*	*10/08/23 18:32*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Nitro-m-xylene	*94*		*70 - 130*	*10/06/23 13:45*	*10/08/23 18:32*	*1*
Perylene-d12	*92*		*70 - 130*	*10/06/23 13:45*	*10/08/23 18:32*	*1*
Triphenylphosphate	*115*		*70 - 130*	*10/06/23 13:45*	*10/08/23 18:32*	*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		10/06/23 11:50	10/06/23 21:50	1
1,2-Dibromo-3-Chloropropane	<0.0099		0.0099		ug/L		10/06/23 11:50	10/06/23 21:50	1
1,2-Dibromoethane	<0.0099		0.0099		ug/L		10/06/23 11:50	10/06/23 21:50	1

Client Sample ID: Aiea Gulch Wells Pump 2

Date Collected: 10/03/23 10:57
Date Received: 10/04/23 10:40

Lab Sample ID: 380-65446-1

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane (Surr)	*91*		*60 - 140*	*10/06/23 11:50*	*10/06/23 21:50*	*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		10/06/23 13:40	10/07/23 07:33	1
Dieldrin	<0.010		0.010		ug/L		10/06/23 13:40	10/07/23 07:33	1
Toxaphene	<0.50		0.50		ug/L		10/06/23 13:40	10/07/23 07:33	1
Alachlor	<0.10		0.10		ug/L		10/06/23 13:40	10/07/23 07:33	1
Chlordane (n.o.s.)	<0.10		0.10		ug/L		10/06/23 13:40	10/07/23 07:33	1
Endrin	<0.010		0.010		ug/L		10/06/23 13:40	10/07/23 07:33	1
Heptachlor	<0.010		0.010		ug/L		10/06/23 13:40	10/07/23 07:33	1
Heptachlor epoxide	<0.010		0.010		ug/L		10/06/23 13:40	10/07/23 07:33	1
gamma-BHC (Lindane)	<0.010		0.010		ug/L		10/06/23 13:40	10/07/23 07:33	1
Methoxychlor	<0.050		0.050		ug/L		10/06/23 13:40	10/07/23 07:33	1
PCB-1016	<0.070		0.070		ug/L		10/06/23 13:40	10/07/23 07:33	1
PCB-1221	<0.10		0.10		ug/L		10/06/23 13:40	10/07/23 07:33	1
PCB-1232	<0.10		0.10		ug/L		10/06/23 13:40	10/07/23 07:33	1
PCB-1242	<0.10		0.10		ug/L		10/06/23 13:40	10/07/23 07:33	1
PCB-1248	<0.10		0.10		ug/L		10/06/23 13:40	10/07/23 07:33	1
PCB-1254	<0.10		0.10		ug/L		10/06/23 13:40	10/07/23 07:33	1
PCB-1260	<0.070		0.070		ug/L		10/06/23 13:40	10/07/23 07:33	1
Polychlorinated biphenyls, Total	<0.10		0.10		ug/L		10/06/23 13:40	10/07/23 07:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*94*		*70 - 130*	*10/06/23 13:40*	*10/07/23 07:33*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Bromide	**170**		5.0		ug/L			10/06/23 02:54	1
Chloride	**94**	**F1**	1.0		mg/L			10/05/23 01:29	2
Nitrate as N	**0.56**		0.050		mg/L			10/05/23 05:50	1
Nitrite as N	<0.050		0.050		mg/L			10/05/23 05:50	1
Sulfate	**14**		0.25		mg/L			10/05/23 05:50	1

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**22**		1.0		mg/L			10/12/23 12:26	1
Magnesium	**17**		0.10		mg/L			10/12/23 12:26	1
Potassium	**2.2**		1.0		mg/L			10/12/23 12:26	1
Sodium	**31**		1.0		mg/L			10/12/23 12:26	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0		ug/L		10/09/23 08:54	10/09/23 23:40	1
Arsenic	<1.0		1.0		ug/L		10/09/23 08:54	10/09/23 23:40	1
Beryllium	<1.0		1.0		ug/L		10/09/23 08:54	10/09/23 23:40	1
Cadmium	<0.50		0.50		ug/L		10/09/23 08:54	10/09/23 23:40	1
Chromium	**1.6**		1.0		ug/L		10/09/23 08:54	10/09/23 23:40	1
Copper	**2.6**		2.0		ug/L		10/09/23 08:54	10/09/23 23:40	1
Lead	<0.50		0.50		ug/L		10/09/23 08:54	10/09/23 23:40	1
Nickel	<5.0		5.0		ug/L		10/09/23 08:54	10/09/23 23:40	1

Client Sample ID: Aiea Gulch Wells Pump 2

Lab Sample ID: 380-65446-1

Date Collected: 10/03/23 10:57

Matrix: Water

Date Received: 10/04/23 10:40

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Selenium	<5.0		5.0		ug/L		10/09/23 08:54	10/09/23 23:40	1
Silver	<0.50		0.50		ug/L		10/09/23 08:54	10/09/23 23:40	1
Thallium	<1.0		1.0		ug/L		10/09/23 08:54	10/09/23 23:40	1
Zinc	<20		20		ug/L		10/09/23 08:54	10/09/23 23:40	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.10		ug/L		10/09/23 13:26	10/09/23 19:57	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity (SM 2320B)	**54**		2.0		mg/L			10/06/23 22:28	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**54**		2.0		mg/L			10/06/23 22:28	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<2.0		2.0		mg/L			10/06/23 22:28	1
Specific Conductance (SM 2510B)	**440**		2.0		umhos/cm			10/06/23 22:28	1
Total Dissolved Solids (SM 2540C)	**240**		20		mg/L			10/05/23 18:53	1
Fluoride (SM 4500 F C)	<0.050		0.050		mg/L			10/06/23 20:29	1
pH (SM 4500 H+ B)	**7.8**	**HF**			SU			10/06/23 22:28	1
Sulfide (SM 4500 S2 D)	<0.050		0.050		mg/L			10/05/23 14:35	1

Client Sample ID: Halawa Wells Units 1&2 P1

Lab Sample ID: 380-65446-2

Date Collected: 10/03/23 09:59

Matrix: Water

Date Received: 10/04/23 10:40

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			10/10/23 16:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*70 - 130*		*10/10/23 16:40*	*1*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*10/10/23 16:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*10/10/23 16:40*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.50		0.50		ug/L			10/09/23 04:09	1
1,1,1-Trichloroethane	<0.50		0.50		ug/L			10/09/23 04:09	1
1,1,2,2-Tetrachloroethane	<0.50		0.50		ug/L			10/09/23 04:09	1
1,1,2-Trichloroethane	<0.50		0.50		ug/L			10/09/23 04:09	1
1,1-Dichlorethylene	<0.50		0.50		ug/L			10/09/23 04:09	1
1,1-Dichloroethane	<0.50		0.50		ug/L			10/09/23 04:09	1
1,1-Dichloropropene	<0.50		0.50		ug/L			10/09/23 04:09	1
1,2,3-Trichlorobenzene	<0.50		0.50		ug/L			10/09/23 04:09	1
1,2,3-Trichloropropane	<0.50		0.50		ug/L			10/09/23 04:09	1
1,2,4-Trichlorobenzene	<0.50	*+ *1	0.50		ug/L			10/09/23 04:09	1
1,2,4-Trimethylbenzene	<0.50		0.50		ug/L			10/09/23 04:09	1
1,2-Dichloroethane	<0.50		0.50		ug/L			10/09/23 04:09	1
1,2-Dichloropropane	<0.50		0.50		ug/L			10/09/23 04:09	1
1,3,5-Trimethylbenzene	<0.50		0.50		ug/L			10/09/23 04:09	1

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

Job ID: 380-65446-1

Client Sample ID: Halawa Wells Units 1&2 P1
Date Collected: 10/03/23 09:59
Date Received: 10/04/23 10:40

Lab Sample ID: 380-65446-2
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichloropropane	<0.50		0.50		ug/L			10/09/23 04:09	1
1,3-Dichloropropene, Total	<0.50		0.50		ug/L			10/09/23 04:09	1
2,2-Dichloropropane	<0.50		0.50		ug/L			10/09/23 04:09	1
2-Butanone (MEK)	<5.0		5.0		ug/L			10/09/23 04:09	1
4-Methyl-2-pentanone (MIBK)	<5.0		5.0		ug/L			10/09/23 04:09	1
Acetone	<500		500		ug/L			10/09/23 04:09	1
Benzene	<0.50		0.50		ug/L			10/09/23 04:09	1
Bromobenzene	<0.50		0.50		ug/L			10/09/23 04:09	1
Bromochloromethane	<0.50		0.50		ug/L			10/09/23 04:09	1
Bromodichloromethane	<0.50		0.50		ug/L			10/09/23 04:09	1
Bromoethane	<0.50		0.50		ug/L			10/09/23 04:09	1
Bromoform	<0.50		0.50		ug/L			10/09/23 04:09	1
Bromomethane (Methyl Bromide)	<0.50		0.50		ug/L			10/09/23 04:09	1
Carbon disulfide	<0.50		0.50		ug/L			10/09/23 04:09	1
Carbon tetrachloride	<0.50		0.50		ug/L			10/09/23 04:09	1
Chlorobenzene	<0.50		0.50		ug/L			10/09/23 04:09	1
Chlorodibromomethane	<0.50		0.50		ug/L			10/09/23 04:09	1
Chloroethane	<0.50		0.50		ug/L			10/09/23 04:09	1
Chloroform (Trichloromethane)	<0.50		0.50		ug/L			10/09/23 04:09	1
Chloromethane (methyl chloride)	<0.50		0.50		ug/L			10/09/23 04:09	1
cis-1,2-Dichloroethylene	<0.50		0.50		ug/L			10/09/23 04:09	1
cis-1,3-Dichloropropene	<0.50		0.50		ug/L			10/09/23 04:09	1
Dibromomethane	<0.50		0.50		ug/L			10/09/23 04:09	1
Dichlorodifluoromethane	<0.50		0.50		ug/L			10/09/23 04:09	1
Dichloromethane	<0.50		0.50		ug/L			10/09/23 04:09	1
Diisopropyl ether	<3.0		3.0		ug/L			10/09/23 04:09	1
Ethylbenzene	<0.50		0.50		ug/L			10/09/23 04:09	1
Hexachlorobutadiene	<0.50		0.50		ug/L			10/09/23 04:09	1
Isopropylbenzene	<0.50		0.50		ug/L			10/09/23 04:09	1
m,p-Xylenes	<0.50		0.50		ug/L			10/09/23 04:09	1
m-Dichlorobenzene (1,3-DCB)	<0.50		0.50		ug/L			10/09/23 04:09	1
Methyl-tert-butyl Ether (MTBE)	<0.50		0.50		ug/L			10/09/23 04:09	1
Naphthalene	<0.50		0.50		ug/L			10/09/23 04:09	1
n-Butylbenzene	<0.50		0.50		ug/L			10/09/23 04:09	1
N-Propylbenzene	<0.50		0.50		ug/L			10/09/23 04:09	1
o-Chlorotoluene	<0.50		0.50		ug/L			10/09/23 04:09	1
o-Dichlorobenzene (1,2-DCB)	<0.50		0.50		ug/L			10/09/23 04:09	1
o-Xylene	<0.50		0.50		ug/L			10/09/23 04:09	1
p-Chlorotoluene	<0.50		0.50		ug/L			10/09/23 04:09	1
p-Dichlorobenzene (1,4-DCB)	<0.50		0.50		ug/L			10/09/23 04:09	1
p-Isopropyltoluene	<0.50		0.50		ug/L			10/09/23 04:09	1
sec-Butylbenzene	<0.50		0.50		ug/L			10/09/23 04:09	1
Styrene	<0.50		0.50		ug/L			10/09/23 04:09	1
Tert-amyl methyl ether	<3.0		3.0		ug/L			10/09/23 04:09	1
Tert-butyl ethyl ether	<3.0		3.0		ug/L			10/09/23 04:09	1
tert-Butylbenzene	<0.50		0.50		ug/L			10/09/23 04:09	1
Tetrachloroethene (PCE)	<0.50		0.50		ug/L			10/09/23 04:09	1
Toluene	<0.50		0.50		ug/L			10/09/23 04:09	1
trans-1,2-Dichloroethylene	<0.50		0.50		ug/L			10/09/23 04:09	1

Client Sample ID: Halawa Wells Units 1&2 P1
Date Collected: 10/03/23 09:59
Date Received: 10/04/23 10:40

Lab Sample ID: 380-65446-2
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<0.50		0.50		ug/L			10/09/23 04:09	1
Trichloroethylene (TCE)	<0.50		0.50		ug/L			10/09/23 04:09	1
Trichlorofluoromethane (Freon 11)	<0.50		0.50		ug/L			10/09/23 04:09	1
Trichlorotrifluoroethane	<0.50		0.50		ug/L			10/09/23 04:09	1
Vinyl Chloride (VC)	<0.30		0.30		ug/L			10/09/23 04:09	1
Xylenes, Total	<0.50		0.50		ug/L			10/09/23 04:09	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*		*10/09/23 04:09*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*		*10/09/23 04:09*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*10/09/23 04:09*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*10/09/23 04:09*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2,4'-DDD	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:52	1
2,4'-DDE	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:52	1
2,4'-DDT	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:52	1
2,4-Dinitrotoluene	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:52	1
2,6-Dinitrotoluene	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:52	1
4,4'-DDD	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:52	1
4,4'-DDE	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:52	1
4,4'-DDT	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:52	1
Acenaphthene	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:52	1
Acenaphthylene	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:52	1
Acetochlor	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:52	1
Alachlor	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:52	1
alpha-BHC	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:52	1
alpha-Chlordane	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:52	1
Anthracene	<0.019		0.019		ug/L		10/06/23 13:45	10/08/23 18:52	1
Atrazine	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:52	1
Benz(a)anthracene	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:52	1
Benzo[a]pyrene	<0.019		0.019		ug/L		10/06/23 13:45	10/08/23 18:52	1
Benzo[b]fluoranthene	<0.019		0.019		ug/L		10/06/23 13:45	10/08/23 18:52	1
Benzo[g,h,i]perylene	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:52	1
Benzo[k]fluoranthene	<0.019		0.019		ug/L		10/06/23 13:45	10/08/23 18:52	1
beta-BHC	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:52	1
Bis(2-ethylhexyl) phthalate	<0.58		0.58		ug/L		10/06/23 13:45	10/08/23 18:52	1
Bromacil	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:52	1
Butachlor	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:52	1
Butylbenzylphthalate	<0.49		0.49		ug/L		10/06/23 13:45	10/08/23 18:52	1
Chlorobenzilate	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:52	1
Chloroneb	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:52	1
Chlorothalonil (Draconil, Bravo)	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:52	1
Chlorpyrifos	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:52	1
Chrysene	<0.019		0.019		ug/L		10/06/23 13:45	10/08/23 18:52	1
delta-BHC	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:52	1
Di(2-ethylhexyl)adipate	<0.58		0.58		ug/L		10/06/23 13:45	10/08/23 18:52	1

Client Sample ID: Halawa Wells Units 1&2 P1

Date Collected: 10/03/23 09:59
Date Received: 10/04/23 10:40

Lab Sample ID: 380-65446-2

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:52	1
Diclorvos (DDVP)	<0.049	^3+	0.049		ug/L		10/06/23 13:45	10/08/23 18:52	1
Dieldrin	<0.19		0.19		ug/L		10/06/23 13:45	10/08/23 18:52	1
Diethylphthalate	<0.49		0.49		ug/L		10/06/23 13:45	10/08/23 18:52	1
Dimethylphthalate	<0.49		0.49		ug/L		10/06/23 13:45	10/08/23 18:52	1
Di-n-butyl phthalate	<0.97		0.97		ug/L		10/06/23 13:45	10/08/23 18:52	1
Di-n-octyl phthalate	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:52	1
Endosulfan I (Alpha)	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:52	1
Endosulfan II (Beta)	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:52	1
Endosulfan sulfate	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:52	1
Endrin	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:52	1
Endrin aldehyde	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:52	1
EPTC	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:52	1
Fluoranthene	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:52	1
Fluorene	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:52	1
gamma-BHC (Lindane)	<0.039		0.039		ug/L		10/06/23 13:45	10/08/23 18:52	1
gamma-Chlordane	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:52	1
Heptachlor	<0.039		0.039		ug/L		10/06/23 13:45	10/08/23 18:52	1
Heptachlor epoxide (isomer B)	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:52	1
Hexachlorobenzene	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:52	1
Hexachlorocyclopentadiene	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:52	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:52	1
Isophorone	<0.49		0.49		ug/L		10/06/23 13:45	10/08/23 18:52	1
Malathion	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:52	1
Methoxychlor	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:52	1
Metolachlor	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:52	1
Molinate	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:52	1
Naphthalene	<0.29		0.29		ug/L		10/06/23 13:45	10/08/23 18:52	1
Parathion	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:52	1
Pendimethalin (Penoxaline)	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:52	1
Phenanthrene	<0.039		0.039		ug/L		10/06/23 13:45	10/08/23 18:52	1
Propachlor	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:52	1
Pyrene	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:52	1
Simazine	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:52	1
Terbacil	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:52	1
Terbuthylazine	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:52	1
Thiobencarb	<0.19		0.19		ug/L		10/06/23 13:45	10/08/23 18:52	1
Total Permethrin (mixed isomers)	<0.19		0.19		ug/L		10/06/23 13:45	10/08/23 18:52	1
trans-Nonachlor	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 18:52	1
Trifluralin	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:52	1
1-Methylnaphthalene	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:52	1
2-Methylnaphthalene	<0.097		0.097		ug/L		10/06/23 13:45	10/08/23 18:52	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*	*10/06/23 13:45*	*10/08/23 18:52*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Nitro-m-xylene	*95*		*70 - 130*	*10/06/23 13:45*	*10/08/23 18:52*	*1*
Perylene-d12	*96*		*70 - 130*	*10/06/23 13:45*	*10/08/23 18:52*	*1*
Triphenylphosphate	*116*		*70 - 130*	*10/06/23 13:45*	*10/08/23 18:52*	*1*

Client Sample ID: Halawa Wells Units 1&2 P1

Date Collected: 10/03/23 09:59
Date Received: 10/04/23 10:40

Lab Sample ID: 380-65446-2

Matrix: Water

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		10/06/23 11:50	10/06/23 23:58	1
1,2-Dibromo-3-Chloropropane	<0.0099		0.0099		ug/L		10/06/23 11:50	10/06/23 23:58	1
1,2-Dibromoethane	<0.0099		0.0099		ug/L		10/06/23 11:50	10/06/23 23:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane (Surr)	*88*		*60 - 140*	*10/06/23 11:50*	*10/06/23 23:58*	*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		10/06/23 13:40	10/07/23 07:54	1
Dieldrin	**0.046**		0.010		ug/L		10/06/23 13:40	10/07/23 07:54	1
Toxaphene	<0.50		0.50		ug/L		10/06/23 13:40	10/07/23 07:54	1
Alachlor	<0.10		0.10		ug/L		10/06/23 13:40	10/07/23 07:54	1
Chlordane (n.o.s.)	**0.26**		0.10		ug/L		10/09/23 11:49	10/09/23 16:46	1
Endrin	<0.010		0.010		ug/L		10/06/23 13:40	10/07/23 07:54	1
Heptachlor	<0.010		0.010		ug/L		10/06/23 13:40	10/07/23 07:54	1
Heptachlor epoxide	**0.018**		0.010		ug/L		10/06/23 13:40	10/07/23 07:54	1
gamma-BHC (Lindane)	<0.010		0.010		ug/L		10/06/23 13:40	10/07/23 07:54	1
Methoxychlor	<0.050		0.050		ug/L		10/06/23 13:40	10/07/23 07:54	1
PCB-1016	<0.070		0.070		ug/L		10/06/23 13:40	10/07/23 07:54	1
PCB-1221	<0.10		0.10		ug/L		10/06/23 13:40	10/07/23 07:54	1
PCB-1232	<0.10		0.10		ug/L		10/06/23 13:40	10/07/23 07:54	1
PCB-1242	<0.10		0.10		ug/L		10/06/23 13:40	10/07/23 07:54	1
PCB-1248	<0.10		0.10		ug/L		10/06/23 13:40	10/07/23 07:54	1
PCB-1254	<0.10		0.10		ug/L		10/06/23 13:40	10/07/23 07:54	1
PCB-1260	<0.070		0.070		ug/L		10/06/23 13:40	10/07/23 07:54	1
Polychlorinated biphenyls, Total	<0.10		0.10		ug/L		10/06/23 13:40	10/07/23 07:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*94*		*70 - 130*	*10/06/23 13:40*	*10/07/23 07:54*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Bromide	**750**		25		ug/L			10/11/23 21:16	5
Chloride	**210**		2.5		mg/L			10/05/23 01:19	5
Nitrate as N	**1.5**		0.10		mg/L			10/05/23 00:29	2
Nitrite as N	<0.10	F1	0.10		mg/L			10/05/23 00:29	2
Sulfate	**44**		0.50		mg/L			10/05/23 00:29	2

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**36**		1.0		mg/L			10/12/23 12:27	1
Magnesium	**33**		0.10		mg/L			10/12/23 12:27	1
Potassium	**4.0**		1.0		mg/L			10/12/23 12:27	1
Sodium	**70**		1.0		mg/L			10/12/23 12:27	1

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0		ug/L		10/09/23 08:54	10/09/23 23:54	1
Arsenic	<1.0		1.0		ug/L		10/09/23 08:54	10/09/23 23:54	1
Beryllium	<1.0		1.0		ug/L		10/09/23 08:54	10/09/23 23:54	1

Client Sample ID: Halawa Wells Units 1&2 P1

Lab Sample ID: 380-65446-2
Date Collected: 10/03/23 09:59
Matrix: Water
Date Received: 10/04/23 10:40

Method: EPA 200.8 - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.50		0.50		ug/L		10/09/23 08:54	10/09/23 23:54	1
Chromium	**2.2**		1.0		ug/L		10/09/23 08:54	10/09/23 23:54	1
Copper	<2.0		2.0		ug/L		10/09/23 08:54	10/09/23 23:54	1
Lead	<0.50		0.50		ug/L		10/09/23 08:54	10/09/23 23:54	1
Nickel	<5.0		5.0		ug/L		10/09/23 08:54	10/09/23 23:54	1
Selenium	<5.0		5.0		ug/L		10/09/23 08:54	10/09/23 23:54	1
Silver	<0.50		0.50		ug/L		10/09/23 08:54	10/09/23 23:54	1
Thallium	<1.0		1.0		ug/L		10/09/23 08:54	10/09/23 23:54	1
Zinc	<20		20		ug/L		10/09/23 08:54	10/09/23 23:54	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.10		ug/L		10/09/23 13:26	10/09/23 19:59	1

General Chemistry

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity (SM 2320B)	**67**		2.0		mg/L			10/06/23 23:32	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	**67**		2.0		mg/L			10/06/23 23:32	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<2.0		2.0		mg/L			10/06/23 23:32	1
Specific Conductance (SM 2510B)	**860**		2.0		umhos/cm			10/06/23 23:32	1
Total Dissolved Solids (SM 2540C)	**460**		20		mg/L			10/05/23 18:53	1
Fluoride (SM 4500 F C)	**0.050**		0.050		mg/L			10/06/23 17:38	1
pH (SM 4500 H+ B)	**7.8**	**HF**			SU			10/06/23 23:32	1
Sulfide (SM 4500 S2 D)	<0.050		0.050		mg/L			10/05/23 14:35	1

Client Sample ID: TB Aiea Gulch Wells Pump 2

Lab Sample ID: 380-65446-3
Date Collected: 10/03/23 10:57
Matrix: Water
Date Received: 10/04/23 10:40

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			10/10/23 17:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*70 - 130*		*10/10/23 17:04*	*1*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*		*10/10/23 17:04*	*1*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*		*10/10/23 17:04*	*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	<0.021		0.021		ug/L		10/06/23 14:15	10/06/23 23:08	1
1,2-Dibromo-3-Chloropropane	<0.010		0.010		ug/L		10/06/23 14:15	10/06/23 23:08	1
1,2-Dibromoethane	<0.010		0.010		ug/L		10/06/23 14:15	10/06/23 23:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane (Surr)	*105*		*60 - 140*	*10/06/23 14:15*	*10/06/23 23:08*	*1*

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

Job ID: 380-65446-1

Client Sample ID: TB Halawa Wells Units 1&2 P1

Date Collected: 10/03/23 09:59
Date Received: 10/04/23 10:40

Lab Sample ID: 380-65446-4

Matrix: Water

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			10/10/23 17:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*70 - 130*		*10/10/23 17:27*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*10/10/23 17:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*119*		*70 - 130*		*10/10/23 17:27*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.50		0.50		ug/L			10/09/23 05:42	1
1,1,1-Trichloroethane	<0.50		0.50		ug/L			10/09/23 05:42	1
1,1,2,2-Tetrachloroethane	<0.50		0.50		ug/L			10/09/23 05:42	1
1,1,2-Trichloroethane	<0.50		0.50		ug/L			10/09/23 05:42	1
1,1-Dichloroethane	<0.50		0.50		ug/L			10/09/23 05:42	1
1,1-Dichlorethylene	<0.50		0.50		ug/L			10/09/23 05:42	1
1,1-Dichloropropene	<0.50		0.50		ug/L			10/09/23 05:42	1
1,2,3-Trichlorobenzene	<0.50		0.50		ug/L			10/09/23 05:42	1
1,2,3-Trichloropropane	<0.50		0.50		ug/L			10/09/23 05:42	1
1,2,4-Trichlorobenzene	<0.50	*+ *1	0.50		ug/L			10/09/23 05:42	1
1,2,4-Trimethylbenzene	<0.50		0.50		ug/L			10/09/23 05:42	1
1,2-Dichloroethane	<0.50		0.50		ug/L			10/09/23 05:42	1
1,2-Dichloropropane	<0.50		0.50		ug/L			10/09/23 05:42	1
1,3,5-Trimethylbenzene	<0.50		0.50		ug/L			10/09/23 05:42	1
1,3-Dichloropropane	<0.50		0.50		ug/L			10/09/23 05:42	1
2,2-Dichloropropane	<0.50		0.50		ug/L			10/09/23 05:42	1
2-Butanone (MEK)	<5.0		5.0		ug/L			10/09/23 05:42	1
4-Methyl-2-pentanone (MIBK)	<5.0		5.0		ug/L			10/09/23 05:42	1
Acetone	<500		500		ug/L			10/09/23 05:42	1
Benzene	<0.50		0.50		ug/L			10/09/23 05:42	1
Bromobenzene	<0.50		0.50		ug/L			10/09/23 05:42	1
Bromochloromethane	<0.50		0.50		ug/L			10/09/23 05:42	1
Bromodichloromethane	<0.50		0.50		ug/L			10/09/23 05:42	1
Bromoform	<0.50		0.50		ug/L			10/09/23 05:42	1
Bromomethane (Methyl Bromide)	<0.50		0.50		ug/L			10/09/23 05:42	1
Carbon disulfide	<0.50		0.50		ug/L			10/09/23 05:42	1
Carbon tetrachloride	<0.50		0.50		ug/L			10/09/23 05:42	1
Chlorobenzene	<0.50		0.50		ug/L			10/09/23 05:42	1
Chlorodibromomethane	<0.50		0.50		ug/L			10/09/23 05:42	1
Chloroethane	<0.50		0.50		ug/L			10/09/23 05:42	1
Chloroform (Trichloromethane)	<0.50		0.50		ug/L			10/09/23 05:42	1
Dichloromethane	<0.50		0.50		ug/L			10/09/23 05:42	1
cis-1,2-Dichloroethylene	<0.50		0.50		ug/L			10/09/23 05:42	1
cis-1,3-Dichloropropene	<0.50		0.50		ug/L			10/09/23 05:42	1
Dibromomethane	<0.50		0.50		ug/L			10/09/23 05:42	1
Dichlorodifluoromethane	<0.50		0.50		ug/L			10/09/23 05:42	1
Ethylbenzene	<0.50		0.50		ug/L			10/09/23 05:42	1
Hexachlorobutadiene	<0.50		0.50		ug/L			10/09/23 05:42	1
Isopropylbenzene	<0.50		0.50		ug/L			10/09/23 05:42	1
m,p-Xylenes	<0.50		0.50		ug/L			10/09/23 05:42	1
m-Dichlorobenzene (1,3-DCB)	<0.50		0.50		ug/L			10/09/23 05:42	1

Client Sample ID: TB Halawa Wells Units 1&2 P1

Date Collected: 10/03/23 09:59
Date Received: 10/04/23 10:40

Lab Sample ID: 380-65446-4

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Methyl-tert-butyl Ether (MTBE)	<0.50		0.50		ug/L			10/09/23 05:42	1
Naphthalene	<0.50		0.50		ug/L			10/09/23 05:42	1
n-Butylbenzene	<0.50		0.50		ug/L			10/09/23 05:42	1
N-Propylbenzene	<0.50		0.50		ug/L			10/09/23 05:42	1
o-Dichlorobenzene (1,2-DCB)	<0.50		0.50		ug/L			10/09/23 05:42	1
o-Chlorotoluene	<0.50		0.50		ug/L			10/09/23 05:42	1
o-Xylene	<0.50		0.50		ug/L			10/09/23 05:42	1
p-Chlorotoluene	<0.50		0.50		ug/L			10/09/23 05:42	1
p-Dichlorobenzene (1,4-DCB)	<0.50		0.50		ug/L			10/09/23 05:42	1
p-Isopropyltoluene	<0.50		0.50		ug/L			10/09/23 05:42	1
sec-Butylbenzene	<0.50		0.50		ug/L			10/09/23 05:42	1
Styrene	<0.50		0.50		ug/L			10/09/23 05:42	1
Tert-amyl methyl ether	<3.0		3.0		ug/L			10/09/23 05:42	1
Tert-butyl ethyl ether	<3.0		3.0		ug/L			10/09/23 05:42	1
tert-Butylbenzene	<0.50		0.50		ug/L			10/09/23 05:42	1
Tetrachloroethene (PCE)	<0.50		0.50		ug/L			10/09/23 05:42	1
Toluene	<0.50		0.50		ug/L			10/09/23 05:42	1
1,3-Dichloropropene, Total	<0.50		0.50		ug/L			10/09/23 05:42	1
Xylenes, Total	<0.50		0.50		ug/L			10/09/23 05:42	1
trans-1,2-Dichloroethylene	<0.50		0.50		ug/L			10/09/23 05:42	1
trans-1,3-Dichloropropene	<0.50		0.50		ug/L			10/09/23 05:42	1
Trichloroethylene (TCE)	<0.50		0.50		ug/L			10/09/23 05:42	1
Trichlorofluoromethane (Freon 11)	<0.50		0.50		ug/L			10/09/23 05:42	1
Vinyl Chloride (VC)	<0.30		0.30		ug/L			10/09/23 05:42	1
Trichlorotrifluoroethane	<0.50		0.50		ug/L			10/09/23 05:42	1
Bromoethane	<0.50		0.50		ug/L			10/09/23 05:42	1
Chloromethane (methyl chloride)	<0.50		0.50		ug/L			10/09/23 05:42	1
Diisopropyl ether	<3.0		3.0		ug/L			10/09/23 05:42	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*0.71*	*T J*	*ug/L*		*9.50*	*N/A*		*10/09/23 05:42*	*1*
Unknown	*13*	*T J*	*ug/L*		*9.58*	*N/A*		*10/09/23 05:42*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*10/09/23 05:42*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*10/09/23 05:42*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*10/09/23 05:42*	*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		10/06/23 14:15	10/06/23 23:42	1
1,2-Dibromo-3-Chloropropane	<0.010		0.010		ug/L		10/06/23 14:15	10/06/23 23:42	1
1,2-Dibromoethane	<0.010		0.010		ug/L		10/06/23 14:15	10/06/23 23:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane (Surr)	*98*		*60 - 140*	*10/06/23 14:15*	*10/06/23 23:42*	*1*

Action Limit Summary

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

Job ID: 380-65446-1

Client Sample ID: Aiea Gulch Wells Pump 2 — Lab Sample ID: 380-65446-1

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
Alachlor	<0.049		ug/L		2		525.2	Total/NA
Atrazine	<0.049		ug/L		3		525.2	Total/NA
Benzo[a]pyrene	<0.019		ug/L		0.2		525.2	Total/NA
Bis(2-ethylhexyl) phthalate	<0.58		ug/L		6		525.2	Total/NA
Di(2-ethylhexyl)adipate	<0.58		ug/L		400		525.2	Total/NA
Endrin	<0.097		ug/L		2		525.2	Total/NA
gamma-BHC (Lindane)	<0.039		ug/L		0.2		525.2	Total/NA
Heptachlor	<0.039		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	<0.097		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-Dibromo-3-Chloropropane	<0.0099		ug/L		0.2		504.1	Total/NA
1,2-Dibromoethane	<0.0099		ug/L		0.05		504.1	Total/NA
Toxaphene	<0.50		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	94	F1	mg/L			250	300.0	Total/NA
Nitrate as N	0.56		mg/L		10		300.0	Total/NA
Nitrite as N	<0.050		mg/L		1		300.0	Total/NA
Sulfate	14		mg/L			250	300.0	Total/NA
Mercury	<0.10		ug/L		2		245.1	Total/NA
Total Dissolved Solids	240		mg/L			500	SM 2540C	Total/NA
Fluoride	<0.050		mg/L		4	2	SM 4500 F C	Total/NA

Client Sample ID: Halawa Wells Units 1&2 P1 — Lab Sample ID: 380-65446-2

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	EPAMCLS Limit	Method	Prep Type
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	*+ *1	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

Action Limit Summary

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

Job ID: 380-65446-1

Client Sample ID: Halawa Wells Units 1&2 P1 (Continued) — Lab Sample ID: 380-65446-2

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	EPAMCLS Limit	Method	Prep Type
Carbon tetrachloride	<0.50		ug/L	5.000	5		524.2	Total/NA
Chlorobenzene	<0.50		ug/L	100.0	100		524.2	Total/NA
cis-1,2-Dichloroethylene	<0.50		ug/L	70.00	70		524.2	Total/NA
Dichloromethane	<0.50		ug/L	5.000	5		524.2	Total/NA
Ethylbenzene	<0.50		ug/L	700.0	700		524.2	Total/NA
o-Dichlorobenzene (1,2-DCB)	<0.50		ug/L	600.0	600		524.2	Total/NA
p-Dichlorobenzene (1,4-DCB)	<0.50		ug/L	75.000	75		524.2	Total/NA
Styrene	<0.50		ug/L	100.0	100		524.2	Total/NA
Tetrachloroethene (PCE)	<0.50		ug/L	5.000	5		524.2	Total/NA
Toluene	<0.50		ug/L	1000	1000		524.2	Total/NA
trans-1,2-Dichloroethylene	<0.50		ug/L	100.0	100		524.2	Total/NA
Trichloroethylene (TCE)	<0.50		ug/L	5.000	5		524.2	Total/NA
Vinyl Chloride (VC)	<0.30		ug/L	2.000	2		524.2	Total/NA
Xylenes, Total	<0.50		ug/L	10000	10000		524.2	Total/NA
Alachlor	<0.049		ug/L		2		525.2	Total/NA
Atrazine	<0.049		ug/L		3		525.2	Total/NA
Benzo[a]pyrene	<0.019		ug/L		0.2		525.2	Total/NA
Bis(2-ethylhexyl) phthalate	<0.58		ug/L		6		525.2	Total/NA
Di(2-ethylhexyl)adipate	<0.58		ug/L		400		525.2	Total/NA
Endrin	<0.097		ug/L		2		525.2	Total/NA
gamma-BHC (Lindane)	<0.039		ug/L		0.2		525.2	Total/NA
Heptachlor	<0.039		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	<0.097		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-Dibromo-3-Chloropropane	<0.0099		ug/L		0.2		504.1	Total/NA
1,2-Dibromoethane	<0.0099		ug/L		0.05		504.1	Total/NA
Toxaphene	<0.50		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	0.018		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	210		mg/L			250	300.0	Total/NA
Nitrate as N	1.5		mg/L		10		300.0	Total/NA
Nitrite as N	<0.10	F1	mg/L		1		300.0	Total/NA
Sulfate	44		mg/L			250	300.0	Total/NA
Mercury	<0.10		ug/L		2		245.1	Total/NA
Total Dissolved Solids	460		mg/L			500	SM 2540C	Total/NA
Fluoride	0.050		mg/L		4	2	SM 4500 F C	Total/NA

Action Limit Summary

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

Job ID: 380-65446-1

Client Sample ID: TB Aiea Gulch Wells Pump 2 — Lab Sample ID: 380-65446-3

Compliance Check

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

Analyte	Result	Qualifier	Unit	HI Org Limit	EPAMCL Limit	RL	Method	Prep Type
1,2,3-Trichloropropane	<0.021		ug/L	0.6000		0.021	504.1	Total/NA
1,2-Dibromo-3-Chloropropane	<0.010		ug/L		0.2	0.010	504.1	Total/NA
1,2-Dibromoethane	<0.010		ug/L		0.05	0.010	504.1	Total/NA

Client Sample ID: TB Halawa Wells Units 1&2 P1 — Lab Sample ID: 380-65446-4

Compliance Check

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

Analyte	Result	Qualifier	Unit	HI Org Limit	EPAMCL Limit	RL	Method	Prep Type
1,1,1-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	*+ *1	ug/L	70.00	70	0.50	524.2	Total/NA
1,2-Dichloroethane	<0.50		ug/L	5.000	5	0.50	524.2	Total/NA
1,2-Dichloropropane	<0.50		ug/L	5.000	5	0.50	524.2	Total/NA
Benzene	<0.50		ug/L	5.000	5	0.50	524.2	Total/NA
Carbon tetrachloride	<0.50		ug/L	5.000	5	0.50	524.2	Total/NA
Chlorobenzene	<0.50		ug/L	100.0	100	0.50	524.2	Total/NA
Dichloromethane	<0.50		ug/L	5.000	5	0.50	524.2	Total/NA
cis-1,2-Dichloroethylene	<0.50		ug/L	70.00	70	0.50	524.2	Total/NA
Ethylbenzene	<0.50		ug/L	700.0	700	0.50	524.2	Total/NA
o-Dichlorobenzene (1,2-DCB)	<0.50		ug/L	600.0	600	0.50	524.2	Total/NA
p-Dichlorobenzene (1,4-DCB)	<0.50		ug/L	75.000	75	0.50	524.2	Total/NA
Styrene	<0.50		ug/L	100.0	100	0.50	524.2	Total/NA
Tetrachloroethene (PCE)	<0.50		ug/L	5.000	5	0.50	524.2	Total/NA
Toluene	<0.50		ug/L	1000	1000	0.50	524.2	Total/NA
Xylenes, Total	<0.50		ug/L	10000	10000	0.50	524.2	Total/NA
trans-1,2-Dichloroethylene	<0.50		ug/L	100.0	100	0.50	524.2	Total/NA
Trichloroethylene (TCE)	<0.50		ug/L	5.000	5	0.50	524.2	Total/NA
Vinyl Chloride (VC)	<0.30		ug/L	2.000	2	0.30	524.2	Total/NA
1,2,3-Trichloropropane	<0.020		ug/L	0.6000		0.020	504.1	Total/NA
1,2-Dibromo-3-Chloropropane	<0.010		ug/L		0.2	0.010	504.1	Total/NA
1,2-Dibromoethane	<0.010		ug/L		0.05	0.010	504.1	Total/NA

Surrogate Summary

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

Job ID: 380-65446-1

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)
380-65446-1	Aiea Gulch Wells Pump 2	99	99	118
380-65446-2	Halawa Wells Units 1&2 P1	95	100	107
380-65446-3	TB Aiea Gulch Wells Pump 2	94	86	113
380-65446-4	TB Halawa Wells Units 1&2 P1	98	95	119
LCS 380-58700/2	Lab Control Sample	98	95	114
LCSD 380-58700/3	Lab Control Sample Dup	101	99	115
MB 380-58700/5	Method Blank	98	101	112

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 380-58700/4	Lab Control Sample	100	96	115

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)
380-65446-2	Halawa Wells Units 1&2 P1	106	97	104
380-65446-4	TB Halawa Wells Units 1&2 P1	107	97	100
LCS 380-58458/5	Lab Control Sample	99	97	101
LCS 380-58476/3	Lab Control Sample	104	101	102
LCSD 380-58458/6	Lab Control Sample Dup	104	97	106
LCSD 380-58476/4	Lab Control Sample Dup	101	98	109
MB 380-58458/8	Method Blank	101	95	104
MB 380-58476/5	Method Blank	104	102	103
MRL 380-58458/3	Lab Control Sample	105	91	106
MRL 380-58458/4	Lab Control Sample	98	97	99

Surrogate Legend

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

Surrogate Summary

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

Job ID: 380-65446-1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) 2NMX (70-130)	PRY (70-130)	TPP (70-130)
380-65446-1	Aiea Gulch Wells Pump 2	94	92	115
380-65446-2	Halawa Wells Units 1&2 P1	95	96	116
380-65441-AG-1-A MS	Matrix Spike	93	98	125
380-65448-AF-1-A DU	Duplicate	98	96	122
LCS 380-58278/23-A	Lab Control Sample	95	99	130
LCSD 380-58278/24-A	Lab Control Sample Dup	93	97	116
MB 380-58278/21-A	Method Blank	95	87	117
MRL 380-58278/22-A	Lab Control Sample	95	79	121

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) DBPP1 (60-140)
380-65284-U-1-A MS	Matrix Spike	109
380-65288-G-1-A DU	Duplicate	102
380-65332-H-1-A MS	Matrix Spike	86
380-65337-I-1-A DU	Duplicate	89
380-65446-1	Aiea Gulch Wells Pump 2	91
380-65446-2	Halawa Wells Units 1&2 P1	88
380-65446-3	TB Aiea Gulch Wells Pump 2	105
380-65446-4	TB Halawa Wells Units 1&2 P1	98
LCS 380-58189/38-A	Lab Control Sample	85
LCS 380-58319/29-A	Lab Control Sample	105
MBL 380-58189/13-A	Method Blank	86
MBL 380-58319/4-A	Method Blank	88
MRL 380-58189/11-A	Lab Control Sample	91
MRL 380-58189/12-A	Lab Control Sample	84
MRL 380-58319/2-A	Lab Control Sample	107
MRL 380-58319/3-A	Lab Control Sample	108

Surrogate Legend

DBPP = 1,2-Dibromopropane (Surr)

Method: 505 - Organochlorine Pesticides/PCBs (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) TCX1 (70-130)
380-65354-B-1-A MS	Matrix Spike	100
380-65354-D-1-A MS	Matrix Spike	100
380-65356-B-1-A MS	Matrix Spike	95
380-65356-D-1-A MS	Matrix Spike	94
380-65446-1	Aiea Gulch Wells Pump 2	94
380-65446-2	Halawa Wells Units 1&2 P1	94

Surrogate Summary

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

Job ID: 380-65446-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)									
		TCX1									
Lab Sample ID	Client Sample ID	(70-130)									
380-65571-B-1-A MS	Matrix Spike	96									
380-65571-B-2-A MS	Matrix Spike	89									
380-65571-D-1-A MS	Matrix Spike	104									
380-65571-D-2-A MS	Matrix Spike	93									
MB 380-58284/4-A	Method Blank	94									
MB 380-58554/4-A	Method Blank	101									
MRL 380-58284/2-A	Lab Control Sample	99									
MRL 380-58284/3-A	Lab Control Sample	89									
MRL 380-58554/2-A	Lab Control Sample	102									
MRL 380-58554/3-A	Lab Control Sample	92									

Surrogate Legend

TCX = Tetrachloro-m-xylene

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

Lab Sample ID: MB 380-58458/8
Matrix: Water
Analysis Batch: 58458

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			10/08/23 14:33	1
1,1,1-Trichloroethane	<0.50		0.50		ug/L			10/08/23 14:33	1
1,1,2,2-Tetrachloroethane	<0.50		0.50		ug/L			10/08/23 14:33	1
1,1,2-Trichloroethane	<0.50		0.50		ug/L			10/08/23 14:33	1
1,1-Dichloroethane	<0.50		0.50		ug/L			10/08/23 14:33	1
1,1-Dichlorethylene	<0.50		0.50		ug/L			10/08/23 14:33	1
1,1-Dichloropropene	<0.50		0.50		ug/L			10/08/23 14:33	1
1,2,3-Trichlorobenzene	<0.50		0.50		ug/L			10/08/23 14:33	1
1,2,3-Trichloropropane	<0.50		0.50		ug/L			10/08/23 14:33	1
1,2,4-Trichlorobenzene	<0.50		0.50		ug/L			10/08/23 14:33	1
1,2,4-Trimethylbenzene	<0.50		0.50		ug/L			10/08/23 14:33	1
1,2-Dichloroethane	<0.50		0.50		ug/L			10/08/23 14:33	1
1,2-Dichloropropane	<0.50		0.50		ug/L			10/08/23 14:33	1
1,3,5-Trimethylbenzene	<0.50		0.50		ug/L			10/08/23 14:33	1
1,3-Dichloropropane	<0.50		0.50		ug/L			10/08/23 14:33	1
2,2-Dichloropropane	<0.50		0.50		ug/L			10/08/23 14:33	1
2-Butanone (MEK)	<5.0		5.0		ug/L			10/08/23 14:33	1
4-Methyl-2-pentanone (MIBK)	<5.0		5.0		ug/L			10/08/23 14:33	1
Acetone	<500		500		ug/L			10/08/23 14:33	1
Benzene	<0.50		0.50		ug/L			10/08/23 14:33	1
Bromobenzene	<0.50		0.50		ug/L			10/08/23 14:33	1
Bromochloromethane	<0.50		0.50		ug/L			10/08/23 14:33	1
Bromodichloromethane	<0.50		0.50		ug/L			10/08/23 14:33	1
Bromoform	<0.50		0.50		ug/L			10/08/23 14:33	1
Bromomethane (Methyl Bromide)	<0.50		0.50		ug/L			10/08/23 14:33	1
Carbon disulfide	<0.50		0.50		ug/L			10/08/23 14:33	1
Carbon tetrachloride	<0.50		0.50		ug/L			10/08/23 14:33	1
Chlorobenzene	<0.50		0.50		ug/L			10/08/23 14:33	1
Chlorodibromomethane	<0.50		0.50		ug/L			10/08/23 14:33	1
Chloroethane	<0.50		0.50		ug/L			10/08/23 14:33	1
Chloroform (Trichloromethane)	<0.50		0.50		ug/L			10/08/23 14:33	1
cis-1,2-Dichloroethylene	<0.50		0.50		ug/L			10/08/23 14:33	1
cis-1,3-Dichloropropene	<0.50		0.50		ug/L			10/08/23 14:33	1
Dibromomethane	<0.50		0.50		ug/L			10/08/23 14:33	1
Dichlorodifluoromethane	<0.50		0.50		ug/L			10/08/23 14:33	1
Dichloromethane	<0.50		0.50		ug/L			10/08/23 14:33	1
Ethylbenzene	<0.50		0.50		ug/L			10/08/23 14:33	1
Hexachlorobutadiene	<0.50		0.50		ug/L			10/08/23 14:33	1
Isopropylbenzene	<0.50		0.50		ug/L			10/08/23 14:33	1
m,p-Xylenes	<0.50		0.50		ug/L			10/08/23 14:33	1
m-Dichlorobenzene (1,3-DCB)	<0.50		0.50		ug/L			10/08/23 14:33	1
Methyl-tert-butyl Ether (MTBE)	<0.50		0.50		ug/L			10/08/23 14:33	1
Naphthalene	<0.50		0.50		ug/L			10/08/23 14:33	1
n-Butylbenzene	<0.50		0.50		ug/L			10/08/23 14:33	1
N-Propylbenzene	<0.50		0.50		ug/L			10/08/23 14:33	1
o-Chlorotoluene	<0.50		0.50		ug/L			10/08/23 14:33	1
o-Dichlorobenzene (1,2-DCB)	<0.50		0.50		ug/L			10/08/23 14:33	1
o-Xylene	<0.50		0.50		ug/L			10/08/23 14:33	1

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

Lab Sample ID: MB 380-58458/8
Matrix: Water
Analysis Batch: 58458

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			10/08/23 14:33	1
p-Dichlorobenzene (1,4-DCB)	<0.50		0.50		ug/L			10/08/23 14:33	1
p-Isopropyltoluene	<0.50		0.50		ug/L			10/08/23 14:33	1
sec-Butylbenzene	<0.50		0.50		ug/L			10/08/23 14:33	1
Styrene	<0.50		0.50		ug/L			10/08/23 14:33	1
Tert-amyl methyl ether	<3.0		3.0		ug/L			10/08/23 14:33	1
1,3-Dichloropropene, Total	<0.50		0.50		ug/L			10/08/23 14:33	1
Tert-butyl ethyl ether	<3.0		3.0		ug/L			10/08/23 14:33	1
tert-Butylbenzene	<0.50		0.50		ug/L			10/08/23 14:33	1
Tetrachloroethene (PCE)	<0.50		0.50		ug/L			10/08/23 14:33	1
Toluene	<0.50		0.50		ug/L			10/08/23 14:33	1
trans-1,2-Dichloroethylene	<0.50		0.50		ug/L			10/08/23 14:33	1
trans-1,3-Dichloropropene	<0.50		0.50		ug/L			10/08/23 14:33	1
Trichloroethylene (TCE)	<0.50		0.50		ug/L			10/08/23 14:33	1
Bromoethane	<0.50		0.50		ug/L			10/08/23 14:33	1
Trichlorofluoromethane (Freon 11)	<0.50		0.50		ug/L			10/08/23 14:33	1
Chloromethane (methyl chloride)	<0.50		0.50		ug/L			10/08/23 14:33	1
Trichlorotrifluoroethane	<0.50		0.50		ug/L			10/08/23 14:33	1
Diisopropyl ether	<3.0		3.0		ug/L			10/08/23 14:33	1
Vinyl Chloride (VC)	<0.30		0.30		ug/L			10/08/23 14:33	1
Xylenes, Total	<0.50		0.50		ug/L			10/08/23 14:33	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*		*10/08/23 14:33*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*10/08/23 14:33*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*10/08/23 14:33*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*10/08/23 14:33*	*1*

Lab Sample ID: LCS 380-58458/5
Matrix: Water
Analysis Batch: 58458

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	5.00	4.64		ug/L		93	70 - 130
1,1,1-Trichloroethane	5.00	4.96		ug/L		99	70 - 130
1,1,2,2-Tetrachloroethane	5.00	5.08		ug/L		102	70 - 130
1,1,2-Trichloroethane	5.00	4.92		ug/L		98	70 - 130
1,1-Dichloroethane	5.00	4.99		ug/L		100	70 - 130
1,1-Dichlorethylene	5.00	4.80		ug/L		96	70 - 130
1,1-Dichloropropene	5.00	4.65		ug/L		93	70 - 130
1,2,3-Trichlorobenzene	5.00	4.87		ug/L		97	70 - 130
1,2,3-Trichloropropane	5.00	5.01		ug/L		100	70 - 130
1,2,4-Trichlorobenzene	5.00	6.35		ug/L		127	70 - 130
1,2,4-Trimethylbenzene	5.00	4.81		ug/L		96	70 - 130
1,2-Dichloroethane	5.00	5.05		ug/L		101	70 - 130
1,2-Dichloropropane	5.00	4.89		ug/L		98	70 - 130

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

Lab Sample ID: LCS 380-58458/5
Matrix: Water
Analysis Batch: 58458

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,3,5-Trimethylbenzene	5.00	4.93		ug/L		99	70 - 130
1,3-Dichloropropane	5.00	4.92		ug/L		98	70 - 130
2,2-Dichloropropane	5.00	4.60		ug/L		92	70 - 130
2-Butanone (MEK)	50.0	47.4		ug/L		95	70 - 130
4-Methyl-2-pentanone (MIBK)	50.0	53.0		ug/L		106	70 - 130
Acetone	50.0	50.1	J	ug/L		100	70 - 130
Benzene	5.00	4.98		ug/L		100	70 - 130
Bromobenzene	5.00	4.85		ug/L		97	70 - 130
Bromochloromethane	5.00	4.81		ug/L		96	70 - 130
Bromodichloromethane	5.00	4.33		ug/L		87	70 - 130
Bromoform	5.00	4.25		ug/L		85	70 - 130
Bromomethane (Methyl Bromide)	5.00	5.47		ug/L		109	70 - 130
Carbon disulfide	5.00	4.59		ug/L		92	70 - 130
Carbon tetrachloride	5.00	4.43		ug/L		89	70 - 130
Chlorobenzene	5.00	5.02		ug/L		100	70 - 130
Chlorodibromomethane	5.00	4.30		ug/L		86	70 - 130
cis-1,3-Dichloropropene	5.00	4.48		ug/L		90	70 - 130
Dichloromethane	5.00	4.70		ug/L		94	70 - 130
Ethylbenzene	5.00	5.07		ug/L		101	70 - 130
Hexachlorobutadiene	5.00	5.16		ug/L		103	70 - 130
Isopropylbenzene	5.00	5.05		ug/L		101	70 - 130
m,p-Xylenes	10.0	10.0		ug/L		100	70 - 130
m-Dichlorobenzene (1,3-DCB)	5.00	4.95		ug/L		99	70 - 130
Methyl-tert-butyl Ether (MTBE)	5.00	4.86		ug/L		97	70 - 130
Naphthalene	5.00	4.79		ug/L		96	70 - 130
n-Butylbenzene	5.00	5.07		ug/L		101	70 - 130
N-Propylbenzene	5.00	5.12		ug/L		102	70 - 130
o-Chlorotoluene	5.00	5.08		ug/L		102	70 - 130
o-Dichlorobenzene (1,2-DCB)	5.00	4.97		ug/L		99	70 - 130
o-Xylene	5.00	4.90		ug/L		98	70 - 130
p-Chlorotoluene	5.00	5.01		ug/L		100	70 - 130
p-Dichlorobenzene (1,4-DCB)	5.00	5.24		ug/L		105	70 - 130
p-Isopropyltoluene	5.00	5.28		ug/L		106	70 - 130
sec-Butylbenzene	5.00	4.99		ug/L		100	70 - 130
Styrene	5.00	4.86		ug/L		97	70 - 130
Tert-amyl methyl ether	5.00	4.98		ug/L		100	70 - 130
1,3-Dichloropropene, Total	10.0	8.54		ug/L		85	70 - 130
Tert-butyl ethyl ether	5.00	4.85		ug/L		97	70 - 130
tert-Butylbenzene	5.00	5.41		ug/L		108	70 - 130
Tetrachloroethene (PCE)	5.00	5.02		ug/L		100	70 - 130
Toluene	5.00	4.80		ug/L		96	70 - 130
trans-1,2-Dichloroethylene	5.00	4.81		ug/L		96	70 - 130
trans-1,3-Dichloropropene	5.00	4.06		ug/L		81	70 - 130
Trichloroethylene (TCE)	5.00	5.00		ug/L		100	70 - 130
Bromoethane	5.00	4.90		ug/L		98	70 - 130
Trichlorofluoromethane (Freon 11)	5.00	5.07		ug/L		101	70 - 130
Trichlorotrifluoroethane	5.00	4.75		ug/L		95	70 - 130
Diisopropyl ether	5.00	4.90		ug/L		98	70 - 130

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

Lab Sample ID: LCS 380-58458/5
Matrix: Water
Analysis Batch: 58458

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl Chloride (VC)	5.00	4.90		ug/L		98	70 - 130
Xylenes, Total	15.0	14.9		ug/L		99	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 380-58458/6
Matrix: Water
Analysis Batch: 58458

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	5.01		ug/L		100	70 - 130	8	20
1,1,1-Trichloroethane	5.00	5.07		ug/L		101	70 - 130	2	20
1,1,2,2-Tetrachloroethane	5.00	5.17		ug/L		103	70 - 130	2	20
1,1,2-Trichloroethane	5.00	5.12		ug/L		102	70 - 130	4	20
1,1-Dichloroethane	5.00	5.15		ug/L		103	70 - 130	3	20
1,1-Dichlorethylene	5.00	5.08		ug/L		102	70 - 130	6	20
1,1-Dichloropropene	5.00	4.87		ug/L		97	70 - 130	5	20
1,2,3-Trichlorobenzene	5.00	5.87		ug/L		117	70 - 130	19	20
1,2,3-Trichloropropane	5.00	4.67		ug/L		93	70 - 130	7	20
1,2,4-Trichlorobenzene	5.00	5.34		ug/L		107	70 - 130	17	20
1,2,4-Trimethylbenzene	5.00	4.90		ug/L		98	70 - 130	2	20
1,2-Dichloroethane	5.00	5.15		ug/L		103	70 - 130	2	20
1,2-Dichloropropane	5.00	4.91		ug/L		98	70 - 130	0	20
1,3,5-Trimethylbenzene	5.00	4.91		ug/L		98	70 - 130	0	20
1,3-Dichloropropane	5.00	5.15		ug/L		103	70 - 130	5	20
2,2-Dichloropropane	5.00	4.59		ug/L		92	70 - 130	0	20
2-Butanone (MEK)	50.0	46.2		ug/L		92	70 - 130	3	20
4-Methyl-2-pentanone (MIBK)	50.0	55.0		ug/L		110	70 - 130	4	20
Acetone	50.0	54.5	J	ug/L		109	70 - 130	9	20
Benzene	5.00	5.12		ug/L		102	70 - 130	3	20
Bromobenzene	5.00	4.78		ug/L		96	70 - 130	2	20
Bromochloromethane	5.00	4.96		ug/L		99	70 - 130	3	20
Bromodichloromethane	5.00	4.59		ug/L		92	70 - 130	6	20
Bromoform	5.00	4.19		ug/L		84	70 - 130	1	20
Bromomethane (Methyl Bromide)	5.00	5.47		ug/L		109	70 - 130	0	20
Carbon disulfide	5.00	4.61		ug/L		92	70 - 130	0	20
Carbon tetrachloride	5.00	4.59		ug/L		92	70 - 130	4	20
Chlorobenzene	5.00	5.21		ug/L		104	70 - 130	4	20
Chlorodibromomethane	5.00	4.64		ug/L		93	70 - 130	8	20
cis-1,3-Dichloropropene	5.00	4.71		ug/L		94	70 - 130	5	20
Dichloromethane	5.00	4.92		ug/L		98	70 - 130	5	20
Ethylbenzene	5.00	5.33		ug/L		107	70 - 130	5	20
Hexachlorobutadiene	5.00	5.43		ug/L		109	70 - 130	5	20
Isopropylbenzene	5.00	5.15		ug/L		103	70 - 130	2	20
m,p-Xylenes	10.0	10.8		ug/L		108	70 - 130	8	20

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

Lab Sample ID: LCSD 380-58458/6
Matrix: Water
Analysis Batch: 58458

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-Dichlorobenzene (1,3-DCB)	5.00	4.99		ug/L		100	70 - 130	1	20
Methyl-tert-butyl Ether (MTBE)	5.00	5.05		ug/L		101	70 - 130	4	20
Naphthalene	5.00	4.91		ug/L		98	70 - 130	3	20
n-Butylbenzene	5.00	5.31		ug/L		106	70 - 130	5	20
N-Propylbenzene	5.00	5.36		ug/L		107	70 - 130	5	20
o-Chlorotoluene	5.00	5.35		ug/L		107	70 - 130	5	20
o-Dichlorobenzene (1,2-DCB)	5.00	5.18		ug/L		104	70 - 130	4	20
o-Xylene	5.00	5.22		ug/L		104	70 - 130	6	20
p-Chlorotoluene	5.00	5.07		ug/L		101	70 - 130	1	20
p-Dichlorobenzene (1,4-DCB)	5.00	5.24		ug/L		105	70 - 130	0	20
p-Isopropyltoluene	5.00	5.22		ug/L		104	70 - 130	1	20
sec-Butylbenzene	5.00	5.19		ug/L		104	70 - 130	4	20
Styrene	5.00	5.06		ug/L		101	70 - 130	4	20
Tert-amyl methyl ether	5.00	5.15		ug/L		103	70 - 130	3	20
1,3-Dichloropropene, Total	10.0	9.05		ug/L		91	70 - 130	6	20
Tert-butyl ethyl ether	5.00	5.20		ug/L		104	70 - 130	7	20
tert-Butylbenzene	5.00	5.41		ug/L		108	70 - 130	0	20
Tetrachloroethene (PCE)	5.00	5.10		ug/L		102	70 - 130	2	20
Toluene	5.00	5.08		ug/L		102	70 - 130	6	20
trans-1,2-Dichloroethylene	5.00	5.02		ug/L		100	70 - 130	4	20
trans-1,3-Dichloropropene	5.00	4.34		ug/L		87	70 - 130	7	20
Trichloroethylene (TCE)	5.00	4.97		ug/L		99	70 - 130	1	20
Bromoethane	5.00	4.92		ug/L		98	70 - 130	0	20
Trichlorofluoromethane (Freon 11)	5.00	5.06		ug/L		101	70 - 130	0	20
Trichlorotrifluoroethane	5.00	5.10		ug/L		102	70 - 130	7	20
Diisopropyl ether	5.00	5.07		ug/L		101	70 - 130	4	20
Vinyl Chloride (VC)	5.00	5.31		ug/L		106	70 - 130	8	20
Xylenes, Total	15.0	16.0		ug/L		107	70 - 130	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*106*		*70 - 130*

Lab Sample ID: MRL 380-58458/3
Matrix: Water
Analysis Batch: 58458

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	0.641		ug/L		128	50 - 150
Vinyl Chloride (VC)	0.250	0.331		ug/L		132	50 - 150

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*
Toluene-d8 (Surr)	*106*		*70 - 130*

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

Lab Sample ID: MRL 380-58458/4
Matrix: Water
Analysis Batch: 58458

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	0.499	J	ug/L		100	50 - 150
1,1,1-Trichloroethane	0.500	0.543		ug/L		109	50 - 150
1,1,2,2-Tetrachloroethane	0.500	0.606		ug/L		121	50 - 150
1,1,2-Trichloroethane	0.500	0.502		ug/L		100	50 - 150
1,1-Dichloroethane	0.500	0.527		ug/L		105	50 - 150
1,1-Dichlorethylene	0.500	0.548		ug/L		110	50 - 150
1,1-Dichloropropene	0.500	0.496	J	ug/L		99	50 - 150
1,2,3-Trichlorobenzene	0.500	0.676		ug/L		135	50 - 150
1,2,3-Trichloropropane	0.500	0.608		ug/L		122	50 - 150
1,2,4-Trichlorobenzene	0.500	0.595		ug/L		119	50 - 150
1,2,4-Trimethylbenzene	0.500	0.543		ug/L		109	50 - 150
1,2-Dichloroethane	0.500	0.518		ug/L		104	50 - 150
1,2-Dichloropropane	0.500	0.558		ug/L		112	50 - 150
1,3,5-Trimethylbenzene	0.500	0.517		ug/L		103	50 - 150
1,3-Dichloropropane	0.500	0.535		ug/L		107	50 - 150
2,2-Dichloropropane	0.500	0.481	J	ug/L		96	50 - 150
2-Butanone (MEK)	5.00	5.28		ug/L		106	50 - 150
4-Methyl-2-pentanone (MIBK)	5.00	5.64		ug/L		113	50 - 150
Acetone	5.00	4.43	J	ug/L		89	50 - 150
Benzene	0.500	0.547		ug/L		109	50 - 150
Bromobenzene	0.500	0.552		ug/L		110	50 - 150
Bromochloromethane	0.500	0.589		ug/L		118	50 - 150
Bromodichloromethane	0.500	0.389	J	ug/L		78	50 - 150
Bromoform	0.500	0.717		ug/L		143	50 - 150
Bromomethane (Methyl Bromide)	0.500	0.448	J	ug/L		90	50 - 150
Carbon disulfide	0.500	0.718		ug/L		144	50 - 150
Carbon tetrachloride	0.500	0.429	J	ug/L		86	50 - 150
Chlorobenzene	0.500	0.540		ug/L		108	50 - 150
Chlorodibromomethane	0.500	0.446	J	ug/L		89	50 - 150
cis-1,3-Dichloropropene	0.500	0.399	J	ug/L		80	50 - 150
Dichloromethane	0.500	0.498	J	ug/L		100	50 - 150
Ethylbenzene	0.500	0.521		ug/L		104	50 - 150
Hexachlorobutadiene	0.500	0.568		ug/L		114	50 - 150
Isopropylbenzene	0.500	0.563		ug/L		113	50 - 150
m,p-Xylenes	1.00	1.12		ug/L		112	50 - 150
m-Dichlorobenzene (1,3-DCB)	0.500	0.548		ug/L		110	50 - 150
Methyl-tert-butyl Ether (MTBE)	0.500	0.533		ug/L		107	50 - 150
Naphthalene	0.500	0.532		ug/L		106	50 - 150
n-Butylbenzene	0.500	0.521		ug/L		104	50 - 150
N-Propylbenzene	0.500	0.534		ug/L		107	50 - 150
o-Chlorotoluene	0.500	0.569		ug/L		114	50 - 150
o-Dichlorobenzene (1,2-DCB)	0.500	0.560		ug/L		112	50 - 150
o-Xylene	0.500	0.523		ug/L		105	50 - 150
p-Chlorotoluene	0.500	0.539		ug/L		108	50 - 150
p-Dichlorobenzene (1,4-DCB)	0.500	0.476	J	ug/L		95	50 - 150
p-Isopropyltoluene	0.500	0.548		ug/L		110	50 - 150
sec-Butylbenzene	0.500	0.568		ug/L		114	50 - 150
Styrene	0.500	0.494	J	ug/L		99	50 - 150

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

Lab Sample ID: MRL 380-58458/4
Matrix: Water
Analysis Batch: 58458

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	0.550	J	ug/L		110	50 - 150
1,3-Dichloropropene, Total	1.00	0.762		ug/L		76	50 - 150
Tert-butyl ethyl ether	0.500	0.556	J	ug/L		111	50 - 150
tert-Butylbenzene	0.500	0.566		ug/L		113	50 - 150
Tetrachloroethene (PCE)	0.500	0.504		ug/L		101	50 - 150
Toluene	0.500	0.552		ug/L		110	50 - 150
trans-1,2-Dichloroethylene	0.500	0.565		ug/L		113	50 - 150
trans-1,3-Dichloropropene	0.500	0.363	J	ug/L		73	50 - 150
Trichloroethylene (TCE)	0.500	0.503		ug/L		101	50 - 150
Bromoethane	0.500	0.565		ug/L		113	50 - 150
Trichlorofluoromethane (Freon 11)	0.500	0.475	J	ug/L		95	50 - 150
Trichlorotrifluoroethane	0.500	0.504		ug/L		101	50 - 150
Diisopropyl ether	0.500	0.548	J	ug/L		110	50 - 150
Vinyl Chloride (VC)	0.500	0.533		ug/L		107	50 - 150
Xylenes, Total	1.50	1.64		ug/L		109	50 - 150

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Lab Sample ID: MB 380-58476/5
Matrix: Water
Analysis Batch: 58476

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			10/09/23 01:27	1
1,1,1-Trichloroethane	<0.50		0.50		ug/L			10/09/23 01:27	1
1,1,2,2-Tetrachloroethane	<0.50		0.50		ug/L			10/09/23 01:27	1
1,1,2-Trichloroethane	<0.50		0.50		ug/L			10/09/23 01:27	1
1,1-Dichloroethane	<0.50		0.50		ug/L			10/09/23 01:27	1
1,1-Dichlorethylene	<0.50		0.50		ug/L			10/09/23 01:27	1
1,1-Dichloropropene	<0.50		0.50		ug/L			10/09/23 01:27	1
1,2,3-Trichlorobenzene	<0.50		0.50		ug/L			10/09/23 01:27	1
1,2,3-Trichloropropane	<0.50		0.50		ug/L			10/09/23 01:27	1
1,2,4-Trichlorobenzene	<0.50		0.50		ug/L			10/09/23 01:27	1
1,2,4-Trimethylbenzene	<0.50		0.50		ug/L			10/09/23 01:27	1
1,2-Dichloroethane	<0.50		0.50		ug/L			10/09/23 01:27	1
1,2-Dichloropropane	<0.50		0.50		ug/L			10/09/23 01:27	1
1,3,5-Trimethylbenzene	<0.50		0.50		ug/L			10/09/23 01:27	1
1,3-Dichloropropane	<0.50		0.50		ug/L			10/09/23 01:27	1
2,2-Dichloropropane	<0.50		0.50		ug/L			10/09/23 01:27	1
2-Butanone (MEK)	<5.0		5.0		ug/L			10/09/23 01:27	1
4-Methyl-2-pentanone (MIBK)	<5.0		5.0		ug/L			10/09/23 01:27	1
Acetone	<500		500		ug/L			10/09/23 01:27	1
Benzene	<0.50		0.50		ug/L			10/09/23 01:27	1
Bromobenzene	<0.50		0.50		ug/L			10/09/23 01:27	1
Bromochloromethane	<0.50		0.50		ug/L			10/09/23 01:27	1

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

Lab Sample ID: MB 380-58476/5
Matrix: Water
Analysis Batch: 58476

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			10/09/23 01:27	1
Bromoform	<0.50		0.50		ug/L			10/09/23 01:27	1
Bromomethane (Methyl Bromide)	<0.50		0.50		ug/L			10/09/23 01:27	1
Carbon disulfide	<0.50		0.50		ug/L			10/09/23 01:27	1
Carbon tetrachloride	<0.50		0.50		ug/L			10/09/23 01:27	1
Chlorobenzene	<0.50		0.50		ug/L			10/09/23 01:27	1
Chlorodibromomethane	<0.50		0.50		ug/L			10/09/23 01:27	1
Chloroethane	<0.50		0.50		ug/L			10/09/23 01:27	1
Chloroform (Trichloromethane)	<0.50		0.50		ug/L			10/09/23 01:27	1
cis-1,2-Dichloroethylene	<0.50		0.50		ug/L			10/09/23 01:27	1
cis-1,3-Dichloropropene	<0.50		0.50		ug/L			10/09/23 01:27	1
Dibromomethane	<0.50		0.50		ug/L			10/09/23 01:27	1
Dichlorodifluoromethane	<0.50		0.50		ug/L			10/09/23 01:27	1
Dichloromethane	<0.50		0.50		ug/L			10/09/23 01:27	1
Ethylbenzene	<0.50		0.50		ug/L			10/09/23 01:27	1
Hexachlorobutadiene	<0.50		0.50		ug/L			10/09/23 01:27	1
Isopropylbenzene	<0.50		0.50		ug/L			10/09/23 01:27	1
m,p-Xylenes	<0.50		0.50		ug/L			10/09/23 01:27	1
m-Dichlorobenzene (1,3-DCB)	<0.50		0.50		ug/L			10/09/23 01:27	1
Methyl-tert-butyl Ether (MTBE)	<0.50		0.50		ug/L			10/09/23 01:27	1
Naphthalene	<0.50		0.50		ug/L			10/09/23 01:27	1
n-Butylbenzene	<0.50		0.50		ug/L			10/09/23 01:27	1
N-Propylbenzene	<0.50		0.50		ug/L			10/09/23 01:27	1
o-Chlorotoluene	<0.50		0.50		ug/L			10/09/23 01:27	1
o-Dichlorobenzene (1,2-DCB)	<0.50		0.50		ug/L			10/09/23 01:27	1
o-Xylene	<0.50		0.50		ug/L			10/09/23 01:27	1
p-Chlorotoluene	<0.50		0.50		ug/L			10/09/23 01:27	1
p-Dichlorobenzene (1,4-DCB)	<0.50		0.50		ug/L			10/09/23 01:27	1
p-Isopropyltoluene	<0.50		0.50		ug/L			10/09/23 01:27	1
sec-Butylbenzene	<0.50		0.50		ug/L			10/09/23 01:27	1
Styrene	<0.50		0.50		ug/L			10/09/23 01:27	1
Tert-amyl methyl ether	<3.0		3.0		ug/L			10/09/23 01:27	1
1,3-Dichloropropene, Total	<0.50		0.50		ug/L			10/09/23 01:27	1
Tert-butyl ethyl ether	<3.0		3.0		ug/L			10/09/23 01:27	1
tert-Butylbenzene	<0.50		0.50		ug/L			10/09/23 01:27	1
Tetrachloroethene (PCE)	<0.50		0.50		ug/L			10/09/23 01:27	1
Toluene	<0.50		0.50		ug/L			10/09/23 01:27	1
trans-1,2-Dichloroethylene	<0.50		0.50		ug/L			10/09/23 01:27	1
trans-1,3-Dichloropropene	<0.50		0.50		ug/L			10/09/23 01:27	1
Trichloroethylene (TCE)	<0.50		0.50		ug/L			10/09/23 01:27	1
Bromoethane	<0.50		0.50		ug/L			10/09/23 01:27	1
Trichlorofluoromethane (Freon 11)	<0.50		0.50		ug/L			10/09/23 01:27	1
Chloromethane (methyl chloride)	<0.50		0.50		ug/L			10/09/23 01:27	1
Trichlorotrifluoroethane	<0.50		0.50		ug/L			10/09/23 01:27	1
Diisopropyl ether	<3.0		3.0		ug/L			10/09/23 01:27	1
Vinyl Chloride (VC)	<0.30		0.30		ug/L			10/09/23 01:27	1
Xylenes, Total	<0.50		0.50		ug/L			10/09/23 01:27	1

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

Lab Sample ID: MB 380-58476/5
Matrix: Water
Analysis Batch: 58476

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

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A		10/09/23 01:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		70 - 130		10/09/23 01:27	1
4-Bromofluorobenzene (Surr)	102		70 - 130		10/09/23 01:27	1
Toluene-d8 (Surr)	103		70 - 130		10/09/23 01:27	1

Lab Sample ID: LCS 380-58476/3
Matrix: Water
Analysis Batch: 58476

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	5.00	4.77		ug/L		95	70 - 130
1,1,1-Trichloroethane	5.00	4.13		ug/L		83	70 - 130
1,1,2,2-Tetrachloroethane	5.00	5.52		ug/L		110	70 - 130
1,1,2-Trichloroethane	5.00	5.08		ug/L		102	70 - 130
1,1-Dichloroethane	5.00	5.18		ug/L		104	70 - 130
1,1-Dichlorethylene	5.00	5.11		ug/L		102	70 - 130
1,1-Dichloropropene	5.00	4.98		ug/L		100	70 - 130
1,2,3-Trichlorobenzene	5.00	3.81		ug/L		76	70 - 130
1,2,3-Trichloropropane	5.00	4.93		ug/L		99	70 - 130
1,2,4-Trichlorobenzene	5.00	5.07		ug/L		101	70 - 130
1,2,4-Trimethylbenzene	5.00	5.27		ug/L		105	70 - 130
1,2-Dichloroethane	5.00	4.79		ug/L		96	70 - 130
1,2-Dichloropropane	5.00	4.86		ug/L		97	70 - 130
1,3,5-Trimethylbenzene	5.00	5.31		ug/L		106	70 - 130
1,3-Dichloropropane	5.00	5.15		ug/L		103	70 - 130
2,2-Dichloropropane	5.00	4.03		ug/L		81	70 - 130
2-Butanone (MEK)	50.0	47.6		ug/L		95	70 - 130
4-Methyl-2-pentanone (MIBK)	50.0	52.5		ug/L		105	70 - 130
Acetone	50.0	51.6	J	ug/L		103	70 - 130
Benzene	5.00	5.26		ug/L		105	70 - 130
Bromobenzene	5.00	5.02		ug/L		100	70 - 130
Bromochloromethane	5.00	4.98		ug/L		100	70 - 130
Bromodichloromethane	5.00	4.28		ug/L		86	70 - 130
Bromoform	5.00	4.09		ug/L		82	70 - 130
Bromomethane (Methyl Bromide)	5.00	5.21		ug/L		104	70 - 130
Carbon disulfide	5.00	3.93		ug/L		79	70 - 130
Carbon tetrachloride	5.00	4.49		ug/L		90	70 - 130
Chlorobenzene	5.00	5.22		ug/L		104	70 - 130
Chlorodibromomethane	5.00	4.48		ug/L		90	70 - 130
cis-1,3-Dichloropropene	5.00	4.05		ug/L		81	70 - 130
Dichloromethane	5.00	4.99		ug/L		100	70 - 130
Ethylbenzene	5.00	5.33		ug/L		107	70 - 130
Hexachlorobutadiene	5.00	5.48		ug/L		110	70 - 130
Isopropylbenzene	5.00	5.21		ug/L		104	70 - 130
m,p-Xylenes	10.0	10.7		ug/L		107	70 - 130
m-Dichlorobenzene (1,3-DCB)	5.00	5.31		ug/L		106	70 - 130

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

Lab Sample ID: LCS 380-58476/3
Matrix: Water
Analysis Batch: 58476

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methyl-tert-butyl Ether (MTBE)	5.00	5.10		ug/L		102	70 - 130
Naphthalene	5.00	5.05		ug/L		101	70 - 130
n-Butylbenzene	5.00	5.06		ug/L		101	70 - 130
N-Propylbenzene	5.00	5.32		ug/L		106	70 - 130
o-Chlorotoluene	5.00	5.16		ug/L		103	70 - 130
o-Dichlorobenzene (1,2-DCB)	5.00	4.91		ug/L		98	70 - 130
o-Xylene	5.00	5.08		ug/L		102	70 - 130
p-Chlorotoluene	5.00	5.11		ug/L		102	70 - 130
p-Dichlorobenzene (1,4-DCB)	5.00	5.14		ug/L		103	70 - 130
p-Isopropyltoluene	5.00	5.37		ug/L		107	70 - 130
sec-Butylbenzene	5.00	5.50		ug/L		110	70 - 130
Styrene	5.00	5.11		ug/L		102	70 - 130
Tert-amyl methyl ether	5.00	5.03		ug/L		101	70 - 130
1,3-Dichloropropene, Total	10.0	8.03		ug/L		80	70 - 130
Tert-butyl ethyl ether	5.00	5.08		ug/L		102	70 - 130
tert-Butylbenzene	5.00	5.51		ug/L		110	70 - 130
Tetrachloroethene (PCE)	5.00	5.16		ug/L		103	70 - 130
Toluene	5.00	4.99		ug/L		100	70 - 130
trans-1,2-Dichloroethylene	5.00	5.06		ug/L		101	70 - 130
trans-1,3-Dichloropropene	5.00	3.98		ug/L		80	70 - 130
Trichloroethylene (TCE)	5.00	5.01		ug/L		100	70 - 130
Bromoethane	5.00	5.17		ug/L		103	70 - 130
Trichlorofluoromethane (Freon 11)	5.00	5.26		ug/L		105	70 - 130
Trichlorotrifluoroethane	5.00	5.07		ug/L		101	70 - 130
Diisopropyl ether	5.00	5.16		ug/L		103	70 - 130
Vinyl Chloride (VC)	5.00	5.09		ug/L		102	70 - 130
Xylenes, Total	15.0	15.8		ug/L		105	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 380-58476/4
Matrix: Water
Analysis Batch: 58476

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	4.83		ug/L		97	70 - 130	1	20
1,1,1-Trichloroethane	5.00	4.23		ug/L		85	70 - 130	2	20
1,1,2,2-Tetrachloroethane	5.00	5.53		ug/L		111	70 - 130	0	20
1,1,2-Trichloroethane	5.00	4.87		ug/L		97	70 - 130	4	20
1,1-Dichloroethane	5.00	5.01		ug/L		100	70 - 130	3	20
1,1-Dichlorethylene	5.00	5.11		ug/L		102	70 - 130	0	20
1,1-Dichloropropene	5.00	4.82		ug/L		96	70 - 130	3	20
1,2,3-Trichlorobenzene	5.00	4.04		ug/L		81	70 - 130	6	20
1,2,3-Trichloropropane	5.00	5.12		ug/L		102	70 - 130	4	20
1,2,4-Trichlorobenzene	5.00	6.62	*+ *1	ug/L		132	70 - 130	27	20

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

Lab Sample ID: LCSD 380-58476/4
Matrix: Water
Analysis Batch: 58476

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,4-Trimethylbenzene	5.00	5.08		ug/L		102	70 - 130	4	20
1,2-Dichloroethane	5.00	4.92		ug/L		98	70 - 130	3	20
1,2-Dichloropropane	5.00	4.79		ug/L		96	70 - 130	1	20
1,3,5-Trimethylbenzene	5.00	4.93		ug/L		99	70 - 130	7	20
1,3-Dichloropropane	5.00	5.08		ug/L		102	70 - 130	1	20
2,2-Dichloropropane	5.00	3.88		ug/L		78	70 - 130	4	20
2-Butanone (MEK)	50.0	46.7		ug/L		93	70 - 130	2	20
4-Methyl-2-pentanone (MIBK)	50.0	54.6		ug/L		109	70 - 130	4	20
Acetone	50.0	53.5	J	ug/L		107	70 - 130	4	20
Benzene	5.00	4.96		ug/L		99	70 - 130	6	20
Bromobenzene	5.00	4.77		ug/L		95	70 - 130	5	20
Bromochloromethane	5.00	4.97		ug/L		99	70 - 130	0	20
Bromodichloromethane	5.00	4.52		ug/L		90	70 - 130	5	20
Bromoform	5.00	4.17		ug/L		83	70 - 130	2	20
Bromomethane (Methyl Bromide)	5.00	4.68		ug/L		94	70 - 130	11	20
Carbon disulfide	5.00	3.96		ug/L		79	70 - 130	1	20
Carbon tetrachloride	5.00	4.41		ug/L		88	70 - 130	2	20
Chlorobenzene	5.00	4.99		ug/L		100	70 - 130	4	20
Chlorodibromomethane	5.00	4.32		ug/L		86	70 - 130	4	20
cis-1,3-Dichloropropene	5.00	4.35		ug/L		87	70 - 130	7	20
Dichloromethane	5.00	4.84		ug/L		97	70 - 130	3	20
Ethylbenzene	5.00	5.21		ug/L		104	70 - 130	2	20
Hexachlorobutadiene	5.00	5.21		ug/L		104	70 - 130	5	20
Isopropylbenzene	5.00	5.07		ug/L		101	70 - 130	3	20
m,p-Xylenes	10.0	10.4		ug/L		104	70 - 130	3	20
m-Dichlorobenzene (1,3-DCB)	5.00	5.05		ug/L		101	70 - 130	5	20
Methyl-tert-butyl Ether (MTBE)	5.00	5.06		ug/L		101	70 - 130	1	20
Naphthalene	5.00	4.70		ug/L		94	70 - 130	7	20
n-Butylbenzene	5.00	5.21		ug/L		104	70 - 130	3	20
N-Propylbenzene	5.00	5.10		ug/L		102	70 - 130	4	20
o-Chlorotoluene	5.00	5.08		ug/L		102	70 - 130	2	20
o-Dichlorobenzene (1,2-DCB)	5.00	5.17		ug/L		103	70 - 130	5	20
o-Xylene	5.00	5.04		ug/L		101	70 - 130	1	20
p-Chlorotoluene	5.00	4.86		ug/L		97	70 - 130	5	20
p-Dichlorobenzene (1,4-DCB)	5.00	5.14		ug/L		103	70 - 130	0	20
p-Isopropyltoluene	5.00	5.24		ug/L		105	70 - 130	2	20
sec-Butylbenzene	5.00	5.07		ug/L		101	70 - 130	8	20
Styrene	5.00	5.04		ug/L		101	70 - 130	1	20
Tert-amyl methyl ether	5.00	5.11		ug/L		102	70 - 130	1	20
1,3-Dichloropropene, Total	10.0	7.89		ug/L		79	70 - 130	2	20
Tert-butyl ethyl ether	5.00	5.05		ug/L		101	70 - 130	1	20
tert-Butylbenzene	5.00	5.40		ug/L		108	70 - 130	2	20
Tetrachloroethene (PCE)	5.00	5.10		ug/L		102	70 - 130	1	20
Toluene	5.00	4.84		ug/L		97	70 - 130	3	20
trans-1,2-Dichloroethylene	5.00	4.92		ug/L		98	70 - 130	3	20
trans-1,3-Dichloropropene	5.00	3.54		ug/L		71	70 - 130	12	20
Trichloroethylene (TCE)	5.00	4.76		ug/L		95	70 - 130	5	20
Bromoethane	5.00	4.93		ug/L		99	70 - 130	5	20

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

Lab Sample ID: LCSD 380-58476/4
Matrix: Water
Analysis Batch: 58476

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	4.99		ug/L		100	70 - 130	5	20
Trichlorotrifluoroethane	5.00	4.82		ug/L		96	70 - 130	5	20
Diisopropyl ether	5.00	5.06		ug/L		101	70 - 130	2	20
Vinyl Chloride (VC)	5.00	5.03		ug/L		101	70 - 130	1	20
Xylenes, Total	15.0	15.5		ug/L		103	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*109*		*70 - 130*

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

Lab Sample ID: MB 380-58700/5
Matrix: Water
Analysis Batch: 58700

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			10/10/23 15:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*70 - 130*		*10/10/23 15:07*	*1*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*10/10/23 15:07*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*		*10/10/23 15:07*	*1*

Lab Sample ID: LCS 380-58700/2
Matrix: Water
Analysis Batch: 58700

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	5.17		ug/L		103	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*98*		*70 - 130*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*

Lab Sample ID: LCSD 380-58700/3
Matrix: Water
Analysis Batch: 58700

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	5.58		ug/L		112	70 - 130	8	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*101*		*70 - 130*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*

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

Lab Sample ID: LCSD 380-58700/3
Matrix: Water
Analysis Batch: 58700

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

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 130*

Lab Sample ID: MRL 380-58700/4
Matrix: Water
Analysis Batch: 58700

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	2.24		ug/L		112	50 - 150		

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
Toluene-d8 (Surr)	*100*		*50 - 150*
4-Bromofluorobenzene (Surr)	*96*		*50 - 150*
1,2-Dichloroethane-d4 (Surr)	*115*		*50 - 150*

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

Lab Sample ID: MB 380-58278/21-A
Matrix: Water
Analysis Batch: 58459

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 58278

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2,4'-DDD	<0.099		0.099		ug/L		10/06/23 13:45	10/08/23 17:12	1
2,4'-DDE	<0.099		0.099		ug/L		10/06/23 13:45	10/08/23 17:12	1
2,4'-DDT	<0.099		0.099		ug/L		10/06/23 13:45	10/08/23 17:12	1
2,4-Dinitrotoluene	<0.099		0.099		ug/L		10/06/23 13:45	10/08/23 17:12	1
2,6-Dinitrotoluene	<0.099		0.099		ug/L		10/06/23 13:45	10/08/23 17:12	1
4,4'-DDD	<0.099		0.099		ug/L		10/06/23 13:45	10/08/23 17:12	1
4,4'-DDE	<0.099		0.099		ug/L		10/06/23 13:45	10/08/23 17:12	1
4,4'-DDT	<0.099		0.099		ug/L		10/06/23 13:45	10/08/23 17:12	1
Acenaphthene	<0.099		0.099		ug/L		10/06/23 13:45	10/08/23 17:12	1
Acenaphthylene	<0.099		0.099		ug/L		10/06/23 13:45	10/08/23 17:12	1
Acetochlor	<0.099		0.099		ug/L		10/06/23 13:45	10/08/23 17:12	1
Alachlor	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 17:12	1
alpha-BHC	<0.099		0.099		ug/L		10/06/23 13:45	10/08/23 17:12	1
alpha-Chlordane	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 17:12	1
Anthracene	<0.020		0.020		ug/L		10/06/23 13:45	10/08/23 17:12	1
Atrazine	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 17:12	1
Benz(a)anthracene	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 17:12	1
Benzo[a]pyrene	<0.020		0.020		ug/L		10/06/23 13:45	10/08/23 17:12	1
Benzo[b]fluoranthene	<0.020		0.020		ug/L		10/06/23 13:45	10/08/23 17:12	1
Benzo[g,h,i]perylene	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 17:12	1
Benzo[k]fluoranthene	<0.020		0.020		ug/L		10/06/23 13:45	10/08/23 17:12	1
beta-BHC	<0.099		0.099		ug/L		10/06/23 13:45	10/08/23 17:12	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59		ug/L		10/06/23 13:45	10/08/23 17:12	1
Bromacil	<0.099		0.099		ug/L		10/06/23 13:45	10/08/23 17:12	1
Butachlor	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 17:12	1
Butylbenzylphthalate	<0.49		0.49		ug/L		10/06/23 13:45	10/08/23 17:12	1
Chlorobenzilate	<0.099		0.099		ug/L		10/06/23 13:45	10/08/23 17:12	1

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

Lab Sample ID: MB 380-58278/21-A
Matrix: Water
Analysis Batch: 58459

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 58278

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloroneb	<0.099		0.099		ug/L		10/06/23 13:45	10/08/23 17:12	1
Chlorothalonil (Draconil, Bravo)	<0.099		0.099		ug/L		10/06/23 13:45	10/08/23 17:12	1
Chlorpyrifos	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 17:12	1
Chrysene	<0.020		0.020		ug/L		10/06/23 13:45	10/08/23 17:12	1
delta-BHC	<0.099		0.099		ug/L		10/06/23 13:45	10/08/23 17:12	1
Di(2-ethylhexyl)adipate	<0.59		0.59		ug/L		10/06/23 13:45	10/08/23 17:12	1
Dibenz(a,h)anthracene	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 17:12	1
Diclorvos (DDVP)	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 17:12	1
Dieldrin	<0.20		0.20		ug/L		10/06/23 13:45	10/08/23 17:12	1
Diethylphthalate	<0.49		0.49		ug/L		10/06/23 13:45	10/08/23 17:12	1
Dimethylphthalate	<0.49		0.49		ug/L		10/06/23 13:45	10/08/23 17:12	1
Di-n-butyl phthalate	<0.99		0.99		ug/L		10/06/23 13:45	10/08/23 17:12	1
Di-n-octyl phthalate	<0.099		0.099		ug/L		10/06/23 13:45	10/08/23 17:12	1
Endosulfan I (Alpha)	<0.099		0.099		ug/L		10/06/23 13:45	10/08/23 17:12	1
Endosulfan II (Beta)	<0.099		0.099		ug/L		10/06/23 13:45	10/08/23 17:12	1
Endosulfan sulfate	<0.099		0.099		ug/L		10/06/23 13:45	10/08/23 17:12	1
Endrin	<0.099		0.099		ug/L		10/06/23 13:45	10/08/23 17:12	1
Endrin aldehyde	<0.099		0.099		ug/L		10/06/23 13:45	10/08/23 17:12	1
EPTC	<0.099		0.099		ug/L		10/06/23 13:45	10/08/23 17:12	1
Fluoranthene	<0.099		0.099		ug/L		10/06/23 13:45	10/08/23 17:12	1
Fluorene	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 17:12	1
gamma-BHC (Lindane)	<0.039		0.039		ug/L		10/06/23 13:45	10/08/23 17:12	1
gamma-Chlordane	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 17:12	1
Heptachlor	<0.039		0.039		ug/L		10/06/23 13:45	10/08/23 17:12	1
Heptachlor epoxide (isomer B)	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 17:12	1
Hexachlorobenzene	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 17:12	1
Hexachlorocyclopentadiene	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 17:12	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 17:12	1
Isophorone	<0.49		0.49		ug/L		10/06/23 13:45	10/08/23 17:12	1
Malathion	<0.099		0.099		ug/L		10/06/23 13:45	10/08/23 17:12	1
Methoxychlor	<0.099		0.099		ug/L		10/06/23 13:45	10/08/23 17:12	1
Metolachlor	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 17:12	1
Molinate	<0.099		0.099		ug/L		10/06/23 13:45	10/08/23 17:12	1
Naphthalene	<0.30		0.30		ug/L		10/06/23 13:45	10/08/23 17:12	1
Parathion	<0.099		0.099		ug/L		10/06/23 13:45	10/08/23 17:12	1
Pendimethalin (Penoxaline)	<0.099		0.099		ug/L		10/06/23 13:45	10/08/23 17:12	1
Phenanthrene	<0.039		0.039		ug/L		10/06/23 13:45	10/08/23 17:12	1
Propachlor	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 17:12	1
Pyrene	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 17:12	1
Simazine	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 17:12	1
Terbacil	<0.099		0.099		ug/L		10/06/23 13:45	10/08/23 17:12	1
Terbuthylazine	<0.099		0.099		ug/L		10/06/23 13:45	10/08/23 17:12	1
Thiobencarb	<0.20		0.20		ug/L		10/06/23 13:45	10/08/23 17:12	1
Total Permethrin (mixed isomers)	<0.20		0.20		ug/L		10/06/23 13:45	10/08/23 17:12	1
trans-Nonachlor	<0.049		0.049		ug/L		10/06/23 13:45	10/08/23 17:12	1
Trifluralin	<0.099		0.099		ug/L		10/06/23 13:45	10/08/23 17:12	1
1-Methylnaphthalene	<0.099		0.099		ug/L		10/06/23 13:45	10/08/23 17:12	1
2-Methylnaphthalene	<0.099		0.099		ug/L		10/06/23 13:45	10/08/23 17:12	1

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

Lab Sample ID: MB 380-58278/21-A
Matrix: Water
Analysis Batch: 58459

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 58278

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
n-Hexadecanoic acid	0.632	T J N	ug/L		5.79	57-10-3	10/06/23 13:45	10/08/23 17:12	1
9-Octadecenamide, (Z)-	0.525	T J N	ug/L		7.44	301-02-0	10/06/23 13:45	10/08/23 17:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	95		70 - 130	10/06/23 13:45	10/08/23 17:12	1
Perylene-d12	87		70 - 130	10/06/23 13:45	10/08/23 17:12	1
Triphenylphosphate	117		70 - 130	10/06/23 13:45	10/08/23 17:12	1

Lab Sample ID: LCS 380-58278/23-A
Matrix: Water
Analysis Batch: 58459

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 58278

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4'-DDD	1.98	2.23		ug/L		113	70 - 130
2,4'-DDE	1.98	2.13		ug/L		108	70 - 130
2,4'-DDT	1.98	2.29		ug/L		116	70 - 130
2,4-Dinitrotoluene	1.98	2.05		ug/L		104	70 - 130
2,6-Dinitrotoluene	1.98	2.14		ug/L		108	70 - 130
4,4'-DDD	1.98	2.13		ug/L		108	70 - 130
4,4'-DDE	1.98	2.12		ug/L		107	70 - 130
4,4'-DDT	1.98	2.36		ug/L		120	70 - 130
Acenaphthene	1.98	1.84		ug/L		93	70 - 130
Acenaphthylene	1.98	1.92		ug/L		97	70 - 130
Acetochlor	1.98	2.44		ug/L		123	70 - 130
Alachlor	1.98	2.24		ug/L		114	70 - 130
alpha-BHC	1.98	1.92		ug/L		97	70 - 130
alpha-Chlordane	1.98	2.21		ug/L		112	70 - 130
Anthracene	1.98	1.85		ug/L		94	70 - 130
Atrazine	1.98	2.08		ug/L		105	70 - 130
Benz(a)anthracene	1.98	2.32		ug/L		118	70 - 130
Benzo[a]pyrene	1.98	2.15		ug/L		109	70 - 130
Benzo[b]fluoranthene	1.98	2.20		ug/L		111	70 - 130
Benzo[g,h,i]perylene	1.98	2.27		ug/L		115	70 - 130
Benzo[k]fluoranthene	1.98	2.32		ug/L		118	70 - 130
beta-BHC	1.98	1.94		ug/L		98	70 - 130
Bis(2-ethylhexyl) phthalate	1.98	1.63		ug/L		83	70 - 130
Bromacil	1.98	2.18		ug/L		110	70 - 130
Butachlor	1.98	2.46		ug/L		125	70 - 130
Butylbenzylphthalate	1.98	2.03		ug/L		103	70 - 130
Chlorobenzilate	1.98	2.21		ug/L		112	70 - 130
Chloroneb	1.98	1.95		ug/L		99	70 - 130
Chlorothalonil (Draconil, Bravo)	1.98	2.10		ug/L		106	70 - 130
Chlorpyrifos	1.98	2.33		ug/L		118	70 - 130
Chrysene	1.98	2.01		ug/L		102	70 - 130
delta-BHC	1.98	1.89		ug/L		96	70 - 130
Di(2-ethylhexyl)adipate	1.98	2.03		ug/L		103	70 - 130
Dibenz(a,h)anthracene	1.98	2.40		ug/L		121	70 - 130
Diclorvos (DDVP)	1.98	2.54		ug/L		129	70 - 130

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

Lab Sample ID: LCS 380-58278/23-A
Matrix: Water
Analysis Batch: 58459

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 58278

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dieldrin	1.98	2.28		ug/L		116	70 - 130
Diethylphthalate	1.98	2.00		ug/L		101	70 - 130
Dimethylphthalate	1.98	1.99		ug/L		101	70 - 130
Di-n-butyl phthalate	3.95	4.52		ug/L		114	70 - 130
Di-n-octyl phthalate	1.98	1.59		ug/L		80	70 - 130
Endosulfan I (Alpha)	1.98	1.80		ug/L		91	70 - 130
Endosulfan II (Beta)	1.98	2.10		ug/L		106	70 - 130
Endosulfan sulfate	1.98	2.44		ug/L		124	70 - 130
Endrin	1.98	2.49		ug/L		126	70 - 130
Endrin aldehyde	1.98	2.03		ug/L		103	70 - 130
EPTC	1.98	2.03		ug/L		103	70 - 130
Fluoranthene	1.98	2.09		ug/L		106	70 - 130
Fluorene	1.98	2.04		ug/L		103	70 - 130
gamma-BHC (Lindane)	1.98	1.92		ug/L		97	70 - 130
gamma-Chlordane	1.98	2.28		ug/L		115	70 - 130
Heptachlor	1.98	2.14		ug/L		108	70 - 130
Heptachlor epoxide (isomer B)	1.98	2.30		ug/L		117	70 - 130
Hexachlorobenzene	1.98	2.15		ug/L		109	70 - 130
Hexachlorocyclopentadiene	1.98	2.38		ug/L		121	70 - 130
Indeno[1,2,3-cd]pyrene	1.98	2.27		ug/L		115	70 - 130
Isophorone	1.98	2.02		ug/L		102	70 - 130
Malathion	1.98	2.20		ug/L		111	70 - 130
Methoxychlor	1.98	2.23		ug/L		113	70 - 130
Metolachlor	1.98	2.44		ug/L		124	70 - 130
Molinate	1.98	2.11		ug/L		107	70 - 130
Naphthalene	1.98	1.81		ug/L		92	70 - 130
Parathion	1.98	2.51		ug/L		127	70 - 130
Pendimethalin (Penoxaline)	1.98	2.47		ug/L		125	70 - 130
Phenanthrene	1.98	1.82		ug/L		92	70 - 130
Propachlor	1.98	2.11		ug/L		107	70 - 130
Pyrene	1.98	2.14		ug/L		109	70 - 130
Simazine	1.98	2.06		ug/L		104	70 - 130
Terbacil	1.98	2.24		ug/L		113	70 - 130
Terbuthylazine	1.98	2.22		ug/L		112	70 - 130
Thiobencarb	1.98	2.09		ug/L		106	70 - 130
trans-Nonachlor	1.98	2.36		ug/L		119	70 - 130
Trifluralin	1.98	2.27		ug/L		115	70 - 130
1-Methylnaphthalene	1.98	1.93		ug/L		98	70 - 130
2-Methylnaphthalene	1.98	1.96		ug/L		99	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Nitro-m-xylene	*95*		*70 - 130*
Perylene-d12	*99*		*70 - 130*
Triphenylphosphate	*130*		*70 - 130*

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

Lab Sample ID: LCSD 380-58278/24-A
Matrix: Water
Analysis Batch: 58459

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 58278

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4'-DDD			1.97	2.13		ug/L		108	70 - 130	5	20
2,4'-DDE			1.97	2.05		ug/L		104	70 - 130	4	20
2,4'-DDT			1.97	2.16		ug/L		110	70 - 130	6	20
2,4-Dinitrotoluene			1.97	2.15		ug/L		109	70 - 130	5	20
2,6-Dinitrotoluene			1.97	2.13		ug/L		108	70 - 130	0	20
4,4'-DDD			1.97	2.04		ug/L		103	70 - 130	5	20
4,4'-DDE			1.97	2.02		ug/L		103	70 - 130	5	20
4,4'-DDT			1.97	2.16		ug/L		109	70 - 130	9	20
Acenaphthene			1.97	1.78		ug/L		90	70 - 130	3	20
Acenaphthylene			1.97	1.88		ug/L		95	70 - 130	2	20
Acetochlor			1.97	2.39		ug/L		121	70 - 130	2	20
Alachlor			1.97	2.16		ug/L		110	70 - 130	4	20
alpha-BHC			1.97	1.89		ug/L		96	70 - 130	2	20
alpha-Chlordane			1.97	2.12		ug/L		107	70 - 130	5	20
Anthracene			1.97	1.85		ug/L		94	70 - 130	0	20
Atrazine			1.97	2.10		ug/L		106	70 - 130	1	20
Benz(a)anthracene			1.97	2.16		ug/L		110	70 - 130	7	20
Benzo[a]pyrene			1.97	2.13		ug/L		108	70 - 130	1	20
Benzo[b]fluoranthene			1.97	2.25		ug/L		114	70 - 130	2	20
Benzo[g,h,i]perylene			1.97	2.20		ug/L		111	70 - 130	3	20
Benzo[k]fluoranthene			1.97	2.25		ug/L		114	70 - 130	3	20
beta-BHC			1.97	1.90		ug/L		96	70 - 130	2	20
Bis(2-ethylhexyl) phthalate			1.97	1.51		ug/L		77	70 - 130	8	20
Bromacil			1.97	2.14		ug/L		108	70 - 130	2	20
Butachlor			1.97	2.36		ug/L		119	70 - 130	4	20
Butylbenzylphthalate			1.97	1.98		ug/L		101	70 - 130	2	20
Chlorobenzilate			1.97	2.09		ug/L		106	70 - 130	6	20
Chloroneb			1.97	1.95		ug/L		99	70 - 130	0	20
Chlorothalonil (Draconil, Bravo)			1.97	2.06		ug/L		105	70 - 130	2	20
Chlorpyrifos			1.97	2.19		ug/L		111	70 - 130	6	20
Chrysene			1.97	2.04		ug/L		103	70 - 130	1	20
delta-BHC			1.97	1.87		ug/L		95	70 - 130	1	20
Di(2-ethylhexyl)adipate			1.97	1.87		ug/L		95	70 - 130	8	20
Dibenz(a,h)anthracene			1.97	2.23		ug/L		113	70 - 130	7	20
Diclorvos (DDVP)			1.97	2.52		ug/L		128	70 - 130	1	20
Dieldrin			1.97	2.18		ug/L		110	70 - 130	5	20
Diethylphthalate			1.97	1.94		ug/L		98	70 - 130	3	20
Dimethylphthalate			1.97	1.99		ug/L		101	70 - 130	0	20
Di-n-butyl phthalate			3.94	4.28		ug/L		108	70 - 130	5	20
Di-n-octyl phthalate			1.97	1.52		ug/L		77	70 - 130	5	20
Endosulfan I (Alpha)			1.97	1.69		ug/L		86	70 - 130	6	20
Endosulfan II (Beta)			1.97	2.04		ug/L		103	70 - 130	3	20
Endosulfan sulfate			1.97	2.35		ug/L		119	70 - 130	4	20
Endrin			1.97	2.45		ug/L		124	70 - 130	1	20
Endrin aldehyde			1.97	1.92		ug/L		97	70 - 130	6	20
EPTC			1.97	2.00		ug/L		102	70 - 130	1	20
Fluoranthene			1.97	2.05		ug/L		104	70 - 130	2	20
Fluorene			1.97	2.06		ug/L		105	70 - 130	1	20

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

Lab Sample ID: LCSD 380-58278/24-A
Matrix: Water
Analysis Batch: 58459

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 58278

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
gamma-BHC (Lindane)	1.97	1.90		ug/L		96	70 - 130	1	20
gamma-Chlordane	1.97	2.15		ug/L		109	70 - 130	6	20
Heptachlor	1.97	2.07		ug/L		105	70 - 130	3	20
Heptachlor epoxide (isomer B)	1.97	2.21		ug/L		112	70 - 130	4	20
Hexachlorobenzene	1.97	2.10		ug/L		107	70 - 130	2	20
Hexachlorocyclopentadiene	1.97	2.28		ug/L		115	70 - 130	4	20
Indeno[1,2,3-cd]pyrene	1.97	2.25		ug/L		114	70 - 130	1	20
Isophorone	1.97	1.97		ug/L		100	70 - 130	2	20
Malathion	1.97	2.13		ug/L		108	70 - 130	3	20
Methoxychlor	1.97	2.20		ug/L		111	70 - 130	2	20
Metolachlor	1.97	2.35		ug/L		119	70 - 130	4	20
Molinate	1.97	1.98		ug/L		100	70 - 130	6	20
Naphthalene	1.97	1.74		ug/L		88	70 - 130	4	20
Parathion	1.97	2.45		ug/L		124	70 - 130	3	20
Pendimethalin (Penoxaline)	1.97	2.42		ug/L		123	70 - 130	2	20
Phenanthrene	1.97	1.81		ug/L		92	70 - 130	0	20
Propachlor	1.97	2.07		ug/L		105	70 - 130	2	20
Pyrene	1.97	2.10		ug/L		106	70 - 130	2	20
Simazine	1.97	2.14		ug/L		109	70 - 130	4	20
Terbacil	1.97	2.21		ug/L		112	70 - 130	1	20
Terbuthylazine	1.97	2.21		ug/L		112	70 - 130	1	20
Thiobencarb	1.97	2.02		ug/L		102	70 - 130	4	20
trans-Nonachlor	1.97	2.29		ug/L		116	70 - 130	3	20
Trifluralin	1.97	2.22		ug/L		112	70 - 130	2	20
1-Methylnaphthalene	1.97	1.88		ug/L		95	70 - 130	3	20
2-Methylnaphthalene	1.97	1.90		ug/L		96	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Nitro-m-xylene	*93*		*70 - 130*
Perylene-d12	*97*		*70 - 130*
Triphenylphosphate	*116*		*70 - 130*

Lab Sample ID: MRL 380-58278/22-A
Matrix: Water
Analysis Batch: 58459

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 58278

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
2,4'-DDD	0.0987	0.129		ug/L		130	50 - 150
2,4'-DDE	0.0987	0.100		ug/L		101	50 - 150
2,4'-DDT	0.0987	0.115		ug/L		116	50 - 150
2,4-Dinitrotoluene	0.0987	0.123		ug/L		124	50 - 150
2,6-Dinitrotoluene	0.0987	0.114		ug/L		115	50 - 150
4,4'-DDD	0.0987	0.111		ug/L		112	50 - 150
4,4'-DDE	0.0987	0.120		ug/L		122	50 - 150
4,4'-DDT	0.0987	0.129		ug/L		131	50 - 150
Acenaphthene	0.0987	0.0921	J	ug/L		93	50 - 150
Acenaphthylene	0.0987	0.0827	J	ug/L		84	50 - 150
Acetochlor	0.0493	0.0490	J	ug/L		99	50 - 150

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

Lab Sample ID: MRL 380-58278/22-A
Matrix: Water
Analysis Batch: 58459

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 58278

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Alachlor	0.0493	0.0541		ug/L		110	50 - 150
alpha-BHC	0.0987	0.108		ug/L		110	50 - 150
alpha-Chlordane	0.0247	<0.029		ug/L		113	50 - 150
Anthracene	0.0197	0.0190	J	ug/L		96	50 - 150
Atrazine	0.0493	0.0607		ug/L		123	50 - 150
Benz(a)anthracene	0.0493	0.0491		ug/L		100	50 - 150
Benzo[a]pyrene	0.0197	0.0148	J	ug/L		75	50 - 150
Benzo[b]fluoranthene	0.0197	0.0210		ug/L		106	50 - 150
Benzo[g,h,i]perylene	0.0493	0.0448	J	ug/L		91	50 - 150
Benzo[k]fluoranthene	0.0197	0.0194	J	ug/L		98	50 - 150
beta-BHC	0.0987	0.0991		ug/L		100	50 - 150
Bis(2-ethylhexyl) phthalate	0.592	0.525	J	ug/L		89	50 - 150
Bromacil	0.0987	0.131		ug/L		133	50 - 150
Butachlor	0.0493	0.0619		ug/L		126	50 - 150
Butylbenzylphthalate	0.148	0.182	J	ug/L		123	50 - 150
Chlorobenzilate	0.0987	0.102		ug/L		103	50 - 150
Chloroneb	0.0987	0.0965	J	ug/L		98	50 - 150
Chlorothalonil (Draconil, Bravo)	0.0987	0.130		ug/L		132	50 - 150
Chlorpyrifos	0.0493	0.0508		ug/L		103	50 - 150
Chrysene	0.0197	0.0202		ug/L		102	50 - 150
delta-BHC	0.0987	0.111		ug/L		113	50 - 150
Di(2-ethylhexyl)adipate	0.296	0.358	J	ug/L		121	50 - 150
Dibenz(a,h)anthracene	0.0493	0.0475	J	ug/L		96	50 - 150
Diclorvos (DDVP)	0.0493	0.0843	^3+	ug/L		171	50 - 150
Dieldrin	0.0987	0.0991	J	ug/L		100	50 - 150
Diethylphthalate	0.148	0.163	J	ug/L		110	50 - 150
Dimethylphthalate	0.296	0.296	J	ug/L		100	50 - 150
Di-n-butyl phthalate	0.296	0.361	J	ug/L		122	49 - 243
Di-n-octyl phthalate	0.0987	0.112		ug/L		113	50 - 150
Endosulfan I (Alpha)	0.0987	0.0831	J	ug/L		84	50 - 150
Endosulfan II (Beta)	0.0987	0.109		ug/L		110	50 - 150
Endosulfan sulfate	0.0987	0.126		ug/L		127	50 - 150
Endrin	0.0987	0.117		ug/L		119	50 - 150
Endrin aldehyde	0.0987	0.121		ug/L		123	50 - 150
EPTC	0.0987	0.0978	J	ug/L		99	50 - 150
Fluoranthene	0.0493	0.0529	J	ug/L		107	50 - 150
Fluorene	0.0493	<0.049		ug/L		99	50 - 150
gamma-BHC (Lindane)	0.0395	0.0374	J	ug/L		95	50 - 150
gamma-Chlordane	0.0247	0.0284	J	ug/L		115	50 - 150
Heptachlor	0.0395	0.0465		ug/L		118	50 - 150
Heptachlor epoxide (isomer B)	0.0493	0.0578		ug/L		117	50 - 150
Hexachlorobenzene	0.0493	0.0550		ug/L		111	50 - 150
Hexachlorocyclopentadiene	0.0493	0.0536		ug/L		109	50 - 150
Indeno[1,2,3-cd]pyrene	0.0493	0.0446	J	ug/L		90	50 - 150
Isophorone	0.0987	0.106	J	ug/L		107	50 - 150
Malathion	0.0987	0.124		ug/L		126	50 - 150
Methoxychlor	0.0987	0.131		ug/L		132	50 - 150
Metolachlor	0.0493	0.0595		ug/L		121	50 - 150
Molinate	0.0987	0.101		ug/L		103	50 - 150

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

Lab Sample ID: MRL 380-58278/22-A
Matrix: Water
Analysis Batch: 58459

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 58278

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Naphthalene	0.0987	0.105	J	ug/L		107	50 - 150
Parathion	0.0987	0.139		ug/L		141	50 - 150
Pendimethalin (Penoxaline)	0.0987	0.122		ug/L		124	50 - 150
Phenanthrene	0.0197	0.0226	J	ug/L		114	50 - 150
Propachlor	0.0493	0.0504		ug/L		102	50 - 150
Pyrene	0.0493	0.0525		ug/L		106	50 - 150
Simazine	0.0493	0.0633		ug/L		128	50 - 150
Terbacil	0.0987	0.116		ug/L		118	50 - 150
Terbuthylazine	0.0987	0.103		ug/L		105	50 - 150
Thiobencarb	0.0987	0.111	J	ug/L		113	50 - 150
trans-Nonachlor	0.0247	0.0310	J	ug/L		126	50 - 150
Trifluralin	0.0987	0.126		ug/L		127	50 - 150
1-Methylnaphthalene	0.0987	0.101		ug/L		102	50 - 150
2-Methylnaphthalene	0.0987	0.104		ug/L		105	50 - 150

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
2-Nitro-m-xylene	*95*		*70 - 130*
Perylene-d12	*79*		*70 - 130*
Triphenylphosphate	*121*		*70 - 130*

Lab Sample ID: 380-65441-AG-1-A MS
Matrix: Water
Analysis Batch: 58459

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 58278

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2,4'-DDD	<0.098		1.96	2.08		ug/L		107	70 - 130
2,4'-DDE	<0.098		1.96	2.03		ug/L		104	70 - 130
2,4'-DDT	<0.098		1.96	2.13		ug/L		109	70 - 130
2,4-Dinitrotoluene	<0.098		1.96	2.16		ug/L		111	70 - 130
2,6-Dinitrotoluene	<0.098		1.96	2.16		ug/L		110	70 - 130
4,4'-DDD	<0.098		1.96	2.03		ug/L		104	70 - 130
4,4'-DDE	<0.098		1.96	1.97		ug/L		101	70 - 130
4,4'-DDT	<0.098		1.96	2.16		ug/L		110	70 - 130
Acenaphthene	<0.098		1.96	1.76		ug/L		90	70 - 130
Acenaphthylene	<0.098		1.96	1.90		ug/L		97	70 - 130
Acetochlor	<0.098		1.96	2.34		ug/L		120	70 - 130
Alachlor	<0.049		1.96	2.17		ug/L		111	70 - 130
alpha-BHC	<0.098		1.96	1.88		ug/L		96	70 - 130
alpha-Chlordane	<0.049		1.96	2.11		ug/L		108	70 - 130
Anthracene	<0.020		1.96	1.58		ug/L		81	70 - 130
Atrazine	<0.049		1.96	2.11		ug/L		108	70 - 130
Benz(a)anthracene	<0.049		1.96	2.04		ug/L		104	70 - 130
Benzo[a]pyrene	<0.020		1.96	2.02		ug/L		103	70 - 130
Benzo[b]fluoranthene	<0.020		1.96	2.29		ug/L		117	70 - 130
Benzo[g,h,i]perylene	<0.049		1.96	2.19		ug/L		112	70 - 130
Benzo[k]fluoranthene	<0.020		1.96	2.28		ug/L		117	70 - 130
beta-BHC	<0.098		1.96	1.89		ug/L		97	70 - 130
Bis(2-ethylhexyl) phthalate	<0.59		1.96	1.73		ug/L		89	70 - 130

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

Lab Sample ID: 380-65441-AG-1-A MS
Matrix: Water
Analysis Batch: 58459

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 58278

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Bromacil	<0.098		1.96	2.18		ug/L		111	70 - 130
Butachlor	<0.049		1.96	2.33		ug/L		119	70 - 130
Butylbenzylphthalate	<0.49		1.96	1.90		ug/L		97	70 - 130
Chlorobenzilate	<0.098		1.96	1.83		ug/L		94	70 - 130
Chloroneb	<0.098		1.96	1.88		ug/L		96	70 - 130
Chlorothalonil (Draconil, Bravo)	<0.098		1.96	2.09		ug/L		107	70 - 130
Chlorpyrifos	<0.049		1.96	2.23		ug/L		114	70 - 130
Chrysene	<0.020		1.96	2.00		ug/L		102	70 - 130
delta-BHC	<0.098		1.96	1.85		ug/L		94	70 - 130
Di(2-ethylhexyl)adipate	<0.59		1.96	1.80		ug/L		88	70 - 130
Dibenz(a,h)anthracene	<0.049		1.96	2.29		ug/L		117	70 - 130
Diclorvos (DDVP)	<0.049	^3+	1.96	2.48		ug/L		127	70 - 130
Dieldrin	<0.20		1.96	2.07		ug/L		106	70 - 130
Diethylphthalate	<0.49		1.96	1.99		ug/L		102	70 - 130
Dimethylphthalate	<0.49		1.96	1.98		ug/L		101	70 - 130
Di-n-butyl phthalate	<0.98		3.91	4.31		ug/L		107	70 - 130
Di-n-octyl phthalate	<0.098		1.96	1.76		ug/L		90	70 - 130
Endosulfan I (Alpha)	<0.098		1.96	1.71		ug/L		87	70 - 130
Endosulfan II (Beta)	<0.098		1.96	1.95		ug/L		99	70 - 130
Endosulfan sulfate	<0.098		1.96	2.27		ug/L		116	70 - 130
Endrin	<0.098		1.96	2.25		ug/L		115	70 - 130
Endrin aldehyde	<0.098		1.96	1.82		ug/L		93	70 - 130
EPTC	<0.098		1.96	2.03		ug/L		104	70 - 130
Fluoranthene	<0.098		1.96	2.06		ug/L		105	70 - 130
Fluorene	<0.049		1.96	1.98		ug/L		101	70 - 130
gamma-BHC (Lindane)	<0.039		1.96	1.90		ug/L		97	70 - 130
gamma-Chlordane	<0.049		1.96	2.16		ug/L		110	70 - 130
Heptachlor	<0.039		1.96	2.04		ug/L		104	70 - 130
Heptachlor epoxide (isomer B)	<0.049		1.96	2.21		ug/L		113	70 - 130
Hexachlorobenzene	<0.049		1.96	2.11		ug/L		108	70 - 130
Hexachlorocyclopentadiene	<0.049		1.96	2.19		ug/L		112	70 - 130
Indeno[1,2,3-cd]pyrene	<0.049		1.96	2.26		ug/L		115	70 - 130
Isophorone	<0.49		1.96	1.94		ug/L		99	70 - 130
Malathion	<0.098		1.96	2.14		ug/L		109	70 - 130
Methoxychlor	<0.098		1.96	2.48		ug/L		127	70 - 130
Metolachlor	<0.049		1.96	2.33		ug/L		119	70 - 130
Molinate	<0.098		1.96	2.12		ug/L		108	70 - 130
Naphthalene	<0.29		1.96	1.73		ug/L		88	70 - 130
Parathion	<0.098		1.96	2.45		ug/L		125	70 - 130
Pendimethalin (Penoxaline)	<0.098		1.96	2.47		ug/L		126	70 - 130
Phenanthrene	<0.039		1.96	1.80		ug/L		92	70 - 130
Propachlor	<0.049		1.96	2.09		ug/L		107	70 - 130
Pyrene	<0.049		1.96	2.10		ug/L		107	70 - 130
Simazine	<0.049		1.96	2.09		ug/L		107	70 - 130
Terbacil	<0.098		1.96	2.25		ug/L		115	70 - 130
Terbuthylazine	<0.098		1.96	2.19		ug/L		112	70 - 130
Thiobencarb	<0.20		1.96	2.02		ug/L		103	70 - 130
trans-Nonachlor	<0.049		1.96	2.28		ug/L		117	70 - 130
Trifluralin	<0.098		1.96	2.22		ug/L		113	70 - 130

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

Lab Sample ID: 380-65441-AG-1-A MS
Matrix: Water
Analysis Batch: 58459

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 58278

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	<0.098		1.96	1.86		ug/L		95	70 - 130
2-Methylnaphthalene	<0.098		1.96	1.86		ug/L		95	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Nitro-m-xylene	*93*		*70 - 130*
Perylene-d12	*98*		*70 - 130*
Triphenylphosphate	*125*		*70 - 130*

Lab Sample ID: 380-65448-AF-1-A DU
Matrix: Water
Analysis Batch: 58459

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 58278

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
2,4'-DDD	<0.098		<0.098		ug/L		NC	20
2,4'-DDE	<0.098		<0.098		ug/L		NC	20
2,4'-DDT	<0.098		<0.098		ug/L		NC	20
2,4-Dinitrotoluene	<0.098		<0.098		ug/L		NC	20
2,6-Dinitrotoluene	<0.098		<0.098		ug/L		NC	20
4,4'-DDD	<0.098		<0.098		ug/L		NC	20
4,4'-DDE	<0.098		<0.098		ug/L		NC	20
4,4'-DDT	<0.098		<0.098		ug/L		NC	20
Acenaphthene	<0.098		<0.098		ug/L		NC	20
Acenaphthylene	<0.098		<0.098		ug/L		NC	20
Acetochlor	<0.098		<0.098		ug/L		NC	20
Alachlor	<0.049		<0.049		ug/L		NC	20
alpha-BHC	<0.098		<0.098		ug/L		NC	20
alpha-Chlordane	<0.049		<0.049		ug/L		NC	20
Anthracene	<0.020		<0.020		ug/L		NC	20
Atrazine	<0.049		<0.049		ug/L		NC	20
Benz(a)anthracene	<0.049		<0.049		ug/L		NC	20
Benzo[a]pyrene	<0.020		<0.020		ug/L		NC	20
Benzo[b]fluoranthene	<0.020		<0.020		ug/L		NC	20
Benzo[g,h,i]perylene	<0.049		<0.049		ug/L		NC	20
Benzo[k]fluoranthene	<0.020		<0.020		ug/L		NC	20
beta-BHC	<0.098		<0.098		ug/L		NC	20
Bis(2-ethylhexyl) phthalate	<0.59		<0.59		ug/L		NC	20
Bromacil	<0.098		<0.098		ug/L		NC	20
Butachlor	<0.049		<0.049		ug/L		NC	20
Butylbenzylphthalate	<0.49		<0.49		ug/L		NC	20
Chlorobenzilate	<0.098		<0.098		ug/L		NC	20
Chloroneb	<0.098		<0.098		ug/L		NC	20
Chlorothalonil (Draconil, Bravo)	<0.098		<0.098		ug/L		NC	20
Chlorpyrifos	<0.049		<0.049		ug/L		NC	20
Chrysene	<0.020		<0.020		ug/L		NC	20
delta-BHC	<0.098		<0.098		ug/L		NC	20
Di(2-ethylhexyl)adipate	<0.59		<0.59		ug/L		NC	20
Dibenz(a,h)anthracene	<0.049		<0.049		ug/L		NC	20
Diclorvos (DDVP)	<0.049	^3+	<0.049		ug/L		NC	20

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

Lab Sample ID: 380-65448-AF-1-A DU
Matrix: Water
Analysis Batch: 58459

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 58278

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Dieldrin	<0.20			<0.20		ug/L				NC	20
Diethylphthalate	<0.49			<0.49		ug/L				NC	20
Dimethylphthalate	<0.49			<0.49		ug/L				NC	20
Di-n-butyl phthalate	<0.98			<0.98		ug/L				NC	20
Di-n-octyl phthalate	<0.098			<0.098		ug/L				NC	20
Endosulfan I (Alpha)	<0.098			<0.098		ug/L				NC	20
Endosulfan II (Beta)	<0.098			<0.098		ug/L				NC	20
Endosulfan sulfate	<0.098			<0.098		ug/L				NC	20
Endrin	<0.098			<0.098		ug/L				NC	20
Endrin aldehyde	<0.098			<0.098		ug/L				NC	20
EPTC	<0.098			<0.098		ug/L				NC	20
Fluoranthene	<0.098			<0.098		ug/L				NC	20
Fluorene	<0.049			<0.049		ug/L				NC	20
gamma-BHC (Lindane)	<0.039			<0.039		ug/L				NC	20
gamma-Chlordane	<0.049			<0.049		ug/L				NC	20
Heptachlor	<0.039			<0.039		ug/L				NC	20
Heptachlor epoxide (isomer B)	<0.049			<0.049		ug/L				NC	20
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	<0.098			<0.098		ug/L				NC	20
Methoxychlor	<0.098			<0.098		ug/L				NC	20
Metolachlor	<0.049			<0.049		ug/L				NC	20
Molinate	<0.098			<0.098		ug/L				NC	20
Naphthalene	<0.29			<0.29		ug/L				NC	20
Parathion	<0.098			<0.098		ug/L				NC	20
Pendimethalin (Penoxaline)	<0.098			<0.098		ug/L				NC	20
Phenanthrene	<0.039			<0.039		ug/L				NC	20
Propachlor	<0.049			<0.049		ug/L				NC	20
Pyrene	<0.049			<0.049		ug/L				NC	20
Simazine	<0.049			<0.049		ug/L				NC	20
Terbacil	<0.098			<0.098		ug/L				NC	20
Terbuthylazine	<0.098			<0.098		ug/L				NC	20
Thiobencarb	<0.20			<0.20		ug/L				NC	20
Total Permethrin (mixed isomers)	<0.20			<0.20		ug/L				NC	20
trans-Nonachlor	<0.049			<0.049		ug/L				NC	20
Trifluralin	<0.098			<0.098		ug/L				NC	20
1-Methylnaphthalene	<0.098			<0.098		ug/L				NC	20
2-Methylnaphthalene	<0.098			<0.098		ug/L				NC	20

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
2-Nitro-m-xylene	*98*		*70 - 130*
Perylene-d12	*96*		*70 - 130*
Triphenylphosphate	*122*		*70 - 130*

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

Lab Sample ID: MBL 380-58189/13-A
Matrix: Water
Analysis Batch: 58395

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 58189

Analyte	MBL Result	MBL Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	<0.0040		0.020		ug/L		10/06/23 11:50	10/06/23 15:56	1
1,2-Dibromo-3-Chloropropane	<0.0020		0.010		ug/L		10/06/23 11:50	10/06/23 15:56	1
1,2-Dibromoethane	<0.0040		0.010		ug/L		10/06/23 11:50	10/06/23 15:56	1

Surrogate	*MBL %Recovery*	*MBL Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane (Surr)	*86*		*60 - 140*	*10/06/23 11:50*	*10/06/23 15:56*	*1*

Lab Sample ID: LCS 380-58189/38-A
Matrix: Water
Analysis Batch: 58395

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 58189

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2,3-Trichloropropane			0.200	0.213		ug/L		107	70 - 130		
1,2-Dibromo-3-Chloropropane			0.200	0.180		ug/L		90	70 - 130		
1,2-Dibromoethane			0.200	0.197		ug/L		99	70 - 130		

Surrogate			*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dibromopropane (Surr)			*85*		*60 - 140*

Lab Sample ID: MRL 380-58189/11-A
Matrix: Water
Analysis Batch: 58395

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 58189

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
1,2,3-Trichloropropane			0.0200	0.0183	J	ug/L		92	60 - 140		

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

Lab Sample ID: MRL 380-58189/12-A
Matrix: Water
Analysis Batch: 58395

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 58189

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
1,2,3-Trichloropropane			0.0500	0.0483		ug/L		97	60 - 140		
1,2-Dibromo-3-Chloropropane			0.0100	0.0103		ug/L		103	60 - 140		
1,2-Dibromoethane			0.0100	0.00911	J	ug/L		91	60 - 140		

Surrogate			*MRL %Recovery*	*MRL Qualifier*	*Limits*
1,2-Dibromopropane (Surr)			*84*		*60 - 140*

Lab Sample ID: 380-65332-H-1-A MS
Matrix: Water
Analysis Batch: 58395

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 58189

Analyte		Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2,3-Trichloropropane		<0.020		1.27	1.24		ug/L		98	65 - 135		

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

Lab Sample ID: 380-65332-H-1-A MS
Matrix: Water
Analysis Batch: 58395

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 58189

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromo-3-Chloropropane	<0.010		0.254	0.236		ug/L		93	65 - 135
1,2-Dibromoethane	<0.010		0.254	0.239		ug/L		94	65 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dibromopropane (Surr)	*86*		*60 - 140*

Lab Sample ID: 380-65337-I-1-A DU
Matrix: Water
Analysis Batch: 58395

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 58189

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

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
1,2-Dibromopropane (Surr)	*89*		*60 - 140*

Lab Sample ID: MBL 380-58319/4-A
Matrix: Water
Analysis Batch: 58583

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 58319

Analyte	MBL Result	MBL Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	<0.0040		0.020		ug/L		10/06/23 14:15	10/06/23 18:32	1
1,2-Dibromo-3-Chloropropane	<0.0020		0.010		ug/L		10/06/23 14:15	10/06/23 18:32	1
1,2-Dibromoethane	<0.0040		0.010		ug/L		10/06/23 14:15	10/06/23 18:32	1

Surrogate	*MBL %Recovery*	*MBL Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dibromopropane (Surr)	*88*		*60 - 140*	*10/06/23 14:15*	*10/06/23 18:32*	*1*

Lab Sample ID: LCS 380-58319/29-A
Matrix: Water
Analysis Batch: 58583

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 58319

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane			0.200	0.212		ug/L		106	70 - 130
1,2-Dibromo-3-Chloropropane			0.200	0.197		ug/L		98	70 - 130
1,2-Dibromoethane			0.200	0.231		ug/L		115	70 - 130

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

Lab Sample ID: MRL 380-58319/2-A
Matrix: Water
Analysis Batch: 58583

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 58319

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

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

Surrogate	MRL %Recovery	MRL Qualifier	Limits
1,2-Dibromopropane (Surr)	*107*		*60 - 140*

Lab Sample ID: MRL 380-58319/3-A
Matrix: Water
Analysis Batch: 58583

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 58319

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	0.0500	0.0558		ug/L		112	60 - 140
1,2-Dibromo-3-Chloropropane	0.0100	0.0111		ug/L		111	60 - 140
1,2-Dibromoethane	0.0100	0.0124		ug/L		124	60 - 140

Surrogate	MRL %Recovery	MRL Qualifier	Limits
1,2-Dibromopropane (Surr)	*108*		*60 - 140*

Lab Sample ID: 380-65284-U-1-A MS
Matrix: Water
Analysis Batch: 58583

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 58319

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	<0.020		1.25	1.28		ug/L		103	65 - 135
1,2-Dibromo-3-Chloropropane	<0.010		0.249	0.251		ug/L		100	65 - 135
1,2-Dibromoethane	<0.010		0.249	0.264		ug/L		106	65 - 135

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dibromopropane (Surr)	*109*		*60 - 140*

Lab Sample ID: 380-65288-G-1-A DU
Matrix: Water
Analysis Batch: 58583

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 58319

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

Surrogate	DU %Recovery	DU Qualifier	Limits
1,2-Dibromopropane (Surr)	*102*		*60 - 140*

Method: 505 - Organochlorine Pesticides/PCBs (GC)

Lab Sample ID: MB 380-58284/4-A
Matrix: Water
Analysis Batch: 58573

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 58284

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.010		0.010	ug/L		10/06/23 13:40	10/07/23 02:58	1
Dieldrin	<0.010		0.010	ug/L		10/06/23 13:40	10/07/23 02:58	1
Toxaphene	<0.50		0.50	ug/L		10/06/23 13:40	10/07/23 02:58	1
Alachlor	<0.10		0.10	ug/L		10/06/23 13:40	10/07/23 02:58	1
Chlordane (n.o.s.)	<0.10		0.10	ug/L		10/06/23 13:40	10/07/23 02:58	1
Endrin	<0.010		0.010	ug/L		10/06/23 13:40	10/07/23 02:58	1

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

Lab Sample ID: MB 380-58284/4-A
Matrix: Water
Analysis Batch: 58573

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 58284

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Heptachlor	<0.010		0.010		ug/L		10/06/23 13:40	10/07/23 02:58	1
Heptachlor epoxide	<0.010		0.010		ug/L		10/06/23 13:40	10/07/23 02:58	1
gamma-BHC (Lindane)	<0.010		0.010		ug/L		10/06/23 13:40	10/07/23 02:58	1
Methoxychlor	<0.050		0.050		ug/L		10/06/23 13:40	10/07/23 02:58	1
PCB-1016	<0.070		0.070		ug/L		10/06/23 13:40	10/07/23 02:58	1
PCB-1221	<0.10		0.10		ug/L		10/06/23 13:40	10/07/23 02:58	1
PCB-1232	<0.10		0.10		ug/L		10/06/23 13:40	10/07/23 02:58	1
PCB-1242	<0.10		0.10		ug/L		10/06/23 13:40	10/07/23 02:58	1
PCB-1248	<0.10		0.10		ug/L		10/06/23 13:40	10/07/23 02:58	1
PCB-1254	<0.10		0.10		ug/L		10/06/23 13:40	10/07/23 02:58	1
PCB-1260	<0.070		0.070		ug/L		10/06/23 13:40	10/07/23 02:58	1
Polychlorinated biphenyls, Total	<0.10		0.10		ug/L		10/06/23 13:40	10/07/23 02:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*94*		*70 - 130*	*10/06/23 13:40*	*10/07/23 02:58*	*1*

Lab Sample ID: MRL 380-58284/2-A
Matrix: Water
Analysis Batch: 58573

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 58284

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Aldrin			0.0100	0.00883	J	ug/L		88	50 - 150		
Dieldrin			0.0100	0.0111		ug/L		111	50 - 150		
Alachlor			0.100	0.0979	J	ug/L		98	50 - 150		
Endrin			0.0100	0.00895	J	ug/L		90	50 - 150		
Heptachlor			0.0100	0.00692	J	ug/L		69	50 - 150		
Heptachlor epoxide			0.0100	0.0124		ug/L		124	50 - 150		
gamma-BHC (Lindane)			0.0100	0.00985	J	ug/L		99	50 - 150		
Methoxychlor			0.0500	0.0380	J	ug/L		76	50 - 150		

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

Lab Sample ID: MRL 380-58284/3-A
Matrix: Water
Analysis Batch: 58573

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 58284

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Toxaphene			0.500	0.375	J	ug/L		75	50 - 150		

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
Tetrachloro-m-xylene	*89*		*70 - 130*

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

Lab Sample ID: 380-65354-B-1-A MS
Matrix: Water
Analysis Batch: 58573

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 58284

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aldrin	<0.010		0.0201	0.0186		ug/L		93	65 - 135
Dieldrin	<0.010		0.0201	0.0201		ug/L		100	65 - 135
Alachlor	<0.10		0.201	0.196		ug/L		98	65 - 135
Endrin	<0.010		0.0201	0.0175		ug/L		87	65 - 135
Heptachlor	<0.010		0.0201	0.0169		ug/L		84	65 - 135
Heptachlor epoxide	<0.010		0.0201	0.0202		ug/L		101	65 - 135
gamma-BHC (Lindane)	<0.010		0.0201	0.0190		ug/L		95	65 - 135
Methoxychlor	<0.050		0.100	0.0764		ug/L		76	65 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*100*		*70 - 130*

Lab Sample ID: 380-65354-D-1-A MS
Matrix: Water
Analysis Batch: 58573

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 58284

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Toxaphene	<0.50		2.50	2.19		ug/L		88	65 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*100*		*70 - 130*

Lab Sample ID: 380-65356-B-1-A MS
Matrix: Water
Analysis Batch: 58573

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 58284

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aldrin	<0.010		0.100	0.0947		ug/L		94	65 - 135
Dieldrin	<0.010		0.100	0.0968		ug/L		97	65 - 135
Alachlor	<0.10		1.00	0.945		ug/L		94	65 - 135
Endrin	<0.010		0.100	0.0835		ug/L		83	65 - 135
Heptachlor	<0.010		0.100	0.0842		ug/L		84	65 - 135
Heptachlor epoxide	<0.010		0.100	0.0963		ug/L		96	65 - 135
gamma-BHC (Lindane)	<0.010		0.100	0.0936		ug/L		93	65 - 135
Methoxychlor	<0.050		0.501	0.400		ug/L		80	65 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*95*		*70 - 130*

Lab Sample ID: 380-65356-D-1-A MS
Matrix: Water
Analysis Batch: 58573

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 58284

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Toxaphene	<0.50		2.52	2.10		ug/L		83	65 - 135

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

Lab Sample ID: 380-65356-D-1-A MS
Matrix: Water
Analysis Batch: 58573

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 58284

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene	94		70 - 130

Lab Sample ID: MB 380-58554/4-A
Matrix: Water
Analysis Batch: 58759

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 58554

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	<0.010		0.010		ug/L		10/09/23 11:49	10/09/23 14:39	1
Dieldrin	<0.010		0.010		ug/L		10/09/23 11:49	10/09/23 14:39	1
Toxaphene	<0.50		0.50		ug/L		10/09/23 11:49	10/09/23 14:39	1
Alachlor	<0.10		0.10		ug/L		10/09/23 11:49	10/09/23 14:39	1
Chlordane (n.o.s.)	<0.10		0.10		ug/L		10/09/23 11:49	10/09/23 14:39	1
Endrin	<0.010		0.010		ug/L		10/09/23 11:49	10/09/23 14:39	1
Heptachlor	<0.010		0.010		ug/L		10/09/23 11:49	10/09/23 14:39	1
Heptachlor epoxide	<0.010		0.010		ug/L		10/09/23 11:49	10/09/23 14:39	1
gamma-BHC (Lindane)	<0.010		0.010		ug/L		10/09/23 11:49	10/09/23 14:39	1
Methoxychlor	<0.050		0.050		ug/L		10/09/23 11:49	10/09/23 14:39	1
PCB-1016	<0.070		0.070		ug/L		10/09/23 11:49	10/09/23 14:39	1
PCB-1221	<0.10		0.10		ug/L		10/09/23 11:49	10/09/23 14:39	1
PCB-1232	<0.10		0.10		ug/L		10/09/23 11:49	10/09/23 14:39	1
PCB-1242	<0.10		0.10		ug/L		10/09/23 11:49	10/09/23 14:39	1
PCB-1248	<0.10		0.10		ug/L		10/09/23 11:49	10/09/23 14:39	1
PCB-1254	<0.10		0.10		ug/L		10/09/23 11:49	10/09/23 14:39	1
PCB-1260	<0.070		0.070		ug/L		10/09/23 11:49	10/09/23 14:39	1
Polychlorinated biphenyls, Total	<0.10		0.10		ug/L		10/09/23 11:49	10/09/23 14:39	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	101		70 - 130	10/09/23 11:49	10/09/23 14:39	1

Lab Sample ID: MRL 380-58554/2-A
Matrix: Water
Analysis Batch: 58759

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 58554

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Aldrin			0.0100	0.00972	J	ug/L		97	50 - 150		
Dieldrin			0.0100	0.0122		ug/L		122	50 - 150		
Alachlor			0.100	0.105		ug/L		105	50 - 150		
Endrin			0.0100	0.0111		ug/L		111	50 - 150		
Heptachlor			0.0100	0.00907	J	ug/L		91	50 - 150		
Heptachlor epoxide			0.0100	0.0111		ug/L		111	50 - 150		
gamma-BHC (Lindane)			0.0100	0.0107		ug/L		107	50 - 150		
Methoxychlor			0.0500	0.0661		ug/L		132	50 - 150		

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

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

Lab Sample ID: MRL 380-58554/3-A
Matrix: Water
Analysis Batch: 58759

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 58554

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Chlordane (n.o.s.)			0.100	0.0959	J	ug/L		96	50 - 150		

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

Lab Sample ID: 380-65571-B-1-A MS
Matrix: Water
Analysis Batch: 58759

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 58554

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Aldrin	<0.010		0.0199	0.0190		ug/L		95	65 - 135		
Dieldrin	<0.010		0.0199	0.0218		ug/L		110	65 - 135		
Alachlor	<0.10		0.199	0.215		ug/L		108	65 - 135		
Endrin	<0.010		0.0199	0.0198		ug/L		99	65 - 135		
Heptachlor	<0.010		0.0199	0.0192		ug/L		96	65 - 135		
Heptachlor epoxide	<0.010		0.0199	0.0212		ug/L		106	65 - 135		
gamma-BHC (Lindane)	<0.010		0.0199	0.0203		ug/L		102	65 - 135		
Methoxychlor	<0.050		0.0997	0.120		ug/L		120	65 - 135		

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

Lab Sample ID: 380-65571-B-2-A MS
Matrix: Water
Analysis Batch: 58759

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 58554

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Aldrin	<0.0099		0.0997	0.101		ug/L		101	65 - 135		
Dieldrin	<0.0099		0.0997	0.107		ug/L		107	65 - 135		
Alachlor	<0.099		0.997	1.09		ug/L		109	65 - 135		
Endrin	<0.0099		0.0997	0.102		ug/L		102	65 - 135		
Heptachlor	<0.0099		0.0997	0.101		ug/L		101	65 - 135		
Heptachlor epoxide	<0.0099		0.0997	0.104		ug/L		105	65 - 135		
gamma-BHC (Lindane)	<0.0099		0.0997	0.104		ug/L		105	65 - 135		
Methoxychlor	<0.049		0.499	0.524		ug/L		105	65 - 135		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*89*		*70 - 130*

Lab Sample ID: 380-65571-D-1-A MS
Matrix: Water
Analysis Batch: 58759

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 58554

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chlordane (n.o.s.)	<0.10		0.500	0.507		ug/L		101	65 - 135		

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

Lab Sample ID: 380-65571-D-1-A MS
Matrix: Water
Analysis Batch: 58759

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 58554

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene	104		70 - 130

Lab Sample ID: 380-65571-D-2-A MS
Matrix: Water
Analysis Batch: 58759

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 58554

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chlordane (n.o.s.)	<0.099		0.496	0.488		ug/L		98	65 - 135

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene	93		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 380-58026/4
Matrix: Water
Analysis Batch: 58026

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			10/04/23 18:23	1
Nitrite as N	<0.050		0.050		mg/L			10/04/23 18:23	1

Lab Sample ID: LCS 380-58026/8
Matrix: Water
Analysis Batch: 58026

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	2.52		mg/L		101	90 - 110
Nitrite as N			1.00	0.979		mg/L		98	90 - 110

Lab Sample ID: LCSD 380-58026/9
Matrix: Water
Analysis Batch: 58026

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	2.50		mg/L		100	90 - 110	1	20
Nitrite as N			1.00	0.976		mg/L		98	90 - 110	0	20

Lab Sample ID: MRL 380-58026/5
Matrix: Water
Analysis Batch: 58026

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	0.00694	J	mg/L		56	50 - 150
Nitrite as N			0.0125	0.0106	J	mg/L		84	50 - 150

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MRL 380-58026/6
Matrix: Water
Analysis Batch: 58026

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	0.0371	J	mg/L		74	50 - 150		
Nitrite as N			0.0500	0.0410	J	mg/L		82	50 - 150		

Lab Sample ID: 380-65446-2 MS
Matrix: Water
Analysis Batch: 58026

Client Sample ID: Halawa Wells Units 1&2 P1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Nitrate as N	1.5		2.50	4.00		mg/L		99	80 - 120		
Nitrite as N	<0.10	F1	1.00	0.779	F1	mg/L		78	80 - 120		

Lab Sample ID: 380-65446-2 MSD
Matrix: Water
Analysis Batch: 58026

Client Sample ID: Halawa Wells Units 1&2 P1
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	1.5		2.50	4.01		mg/L		100	80 - 120	0	20
Nitrite as N	<0.10	F1	1.00	0.780	F1	mg/L		78	80 - 120	0	20

Lab Sample ID: MB 380-58027/4
Matrix: Water
Analysis Batch: 58027

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			10/04/23 18:23	1
Sulfate	<0.25		0.25		mg/L			10/04/23 18:23	1

Lab Sample ID: LCS 380-58027/8
Matrix: Water
Analysis Batch: 58027

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			25.0	25.4		mg/L		101	90 - 110		
Sulfate			50.0	51.1		mg/L		102	90 - 110		

Lab Sample ID: LCSD 380-58027/9
Matrix: Water
Analysis Batch: 58027

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			25.0	25.3		mg/L		101	90 - 110	0	20
Sulfate			50.0	50.9		mg/L		102	90 - 110	0	20

Lab Sample ID: MRL 380-58027/5
Matrix: Water
Analysis Batch: 58027

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	0.105	J	mg/L		84	50 - 150		
Sulfate			0.250	0.188	J	mg/L		75	50 - 150		

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MRL 380-58027/6
Matrix: Water
Analysis Batch: 58027

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	0.413	J	mg/L		83	50 - 150
Sulfate	1.00	0.757		mg/L		76	50 - 150

Lab Sample ID: 380-65446-2 MS
Matrix: Water
Analysis Batch: 58027

Client Sample ID: Halawa Wells Units 1&2 P1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	180	E	25.0	191	E 4	mg/L		48	80 - 120
Sulfate	44		50.0	96.9		mg/L		105	80 - 120

Lab Sample ID: 380-65446-2 MSD
Matrix: Water
Analysis Batch: 58027

Client Sample ID: Halawa Wells Units 1&2 P1
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	E	25.0	192	E 4	mg/L		50	80 - 120	0	20
Sulfate	44		50.0	97.4		mg/L		106	80 - 120	1	20

Lab Sample ID: MB 380-58032/39
Matrix: Water
Analysis Batch: 58032

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			10/04/23 23:36	1
Nitrite as N	<0.050		0.050		mg/L			10/04/23 23:36	1

Lab Sample ID: LCS 380-58032/42
Matrix: Water
Analysis Batch: 58032

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	2.59		mg/L		104	90 - 110
Nitrite as N	1.00	1.04		mg/L		104	90 - 110

Lab Sample ID: LCSD 380-58032/43
Matrix: Water
Analysis Batch: 58032

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	2.58		mg/L		103	90 - 110	0	20
Nitrite as N	1.00	1.05		mg/L		105	90 - 110	1	20

Lab Sample ID: MRL 380-58032/40
Matrix: Water
Analysis Batch: 58032

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	0.00836	J	mg/L		67	50 - 150
Nitrite as N	0.0125	0.00809	J	mg/L		65	50 - 150

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MRL 380-58032/41
Matrix: Water
Analysis Batch: 58032

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	0.0468	J	mg/L		94	50 - 150
Nitrite as N	0.0500	0.0400	J	mg/L		80	50 - 150

Lab Sample ID: 380-65299-B-2 MS
Matrix: Water
Analysis Batch: 58032

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	0.31		1.25	1.63		mg/L		105	80 - 120
Nitrite as N	<0.050		0.500	0.527		mg/L		105	80 - 120

Lab Sample ID: 380-65299-B-2 MSD
Matrix: Water
Analysis Batch: 58032

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	0.31		1.25	1.64		mg/L		106	80 - 120	1	20
Nitrite as N	<0.050		0.500	0.524		mg/L		105	80 - 120	1	20

Lab Sample ID: 380-65354-N-1 MS
Matrix: Water
Analysis Batch: 58032

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	0.88		2.50	3.50		mg/L		105	80 - 120
Nitrite as N	<0.10		1.00	0.992		mg/L		99	80 - 120

Lab Sample ID: 380-65354-N-1 MSD
Matrix: Water
Analysis Batch: 58032

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	0.88		2.50	3.51		mg/L		105	80 - 120	0	20
Nitrite as N	<0.10		1.00	1.04		mg/L		104	80 - 120	5	20

Lab Sample ID: MB 380-58033/39
Matrix: Water
Analysis Batch: 58033

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			10/04/23 23:36	1
Sulfate	<0.25		0.25	mg/L			10/04/23 23:36	1

Lab Sample ID: LCS 380-58033/42
Matrix: Water
Analysis Batch: 58033

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	26.8		mg/L		107	90 - 110
Sulfate	50.0	53.1		mg/L		106	90 - 110

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCSD 380-58033/43
Matrix: Water
Analysis Batch: 58033

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	26.8		mg/L		107	90 - 110	0	20
Sulfate			50.0	52.8		mg/L		106	90 - 110	1	20

Lab Sample ID: MRL 380-58033/40
Matrix: Water
Analysis Batch: 58033

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	0.132	J	mg/L		105	50 - 150		
Sulfate			0.250	0.243	J	mg/L		97	50 - 150		

Lab Sample ID: MRL 380-58033/41
Matrix: Water
Analysis Batch: 58033

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	0.438	J	mg/L		88	50 - 150		
Sulfate			1.00	0.939		mg/L		94	50 - 150		

Lab Sample ID: 380-65354-N-1 MS
Matrix: Water
Analysis Batch: 58033

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	21		25.0	49.0		mg/L		114	80 - 120		
Sulfate	4.3		50.0	58.0		mg/L		108	80 - 120		

Lab Sample ID: 380-65354-N-1 MSD
Matrix: Water
Analysis Batch: 58033

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	21		25.0	49.3		mg/L		115	80 - 120	0	20
Sulfate	4.3		50.0	58.0		mg/L		107	80 - 120	0	20

Lab Sample ID: MB 380-58034/4
Matrix: Water
Analysis Batch: 58034

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			10/04/23 19:45	1
Nitrite as N	<0.050		0.050		mg/L			10/04/23 19:45	1

Lab Sample ID: LCS 380-58034/7
Matrix: Water
Analysis Batch: 58034

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	2.56		mg/L		102	90 - 110		
Nitrite as N			1.00	1.02		mg/L		102	90 - 110		

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCSD 380-58034/8
Matrix: Water
Analysis Batch: 58034

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	2.55		mg/L		102	90 - 110	0	20
Nitrite as N	1.00	1.02		mg/L		102	90 - 110	0	20

Lab Sample ID: MRL 380-58034/5
Matrix: Water
Analysis Batch: 58034

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	0.00853	J	mg/L		68	50 - 150
Nitrite as N	0.0125	0.00693	J	mg/L		55	50 - 150

Lab Sample ID: MRL 380-58034/6
Matrix: Water
Analysis Batch: 58034

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	0.0418	J	mg/L		84	50 - 150
Nitrite as N	0.0500	0.0391	J	mg/L		78	50 - 150

Lab Sample ID: 380-65446-1 MS
Matrix: Water
Analysis Batch: 58034

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
Nitrate as N	0.51		2.50	3.00		mg/L		100	80 - 120
Nitrite as N	<0.10		1.00	0.918		mg/L		92	80 - 120

Lab Sample ID: 380-65446-1 MSD
Matrix: Water
Analysis Batch: 58034

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
Nitrate as N	0.51		2.50	3.01		mg/L		100	80 - 120	0	20
Nitrite as N	<0.10		1.00	0.925		mg/L		92	80 - 120	1	20

Lab Sample ID: MB 380-58035/4
Matrix: Water
Analysis Batch: 58035

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			10/04/23 19:45	1
Sulfate	<0.25		0.25	mg/L			10/04/23 19:45	1

Lab Sample ID: LCS 380-58035/7
Matrix: Water
Analysis Batch: 58035

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	25.0	25.6		mg/L		103	90 - 110
Sulfate	50.0	51.8		mg/L		104	90 - 110

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCSD 380-58035/8
Matrix: Water
Analysis Batch: 58035

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			25.0	25.6		mg/L		102	90 - 110	0	20
Sulfate			50.0	51.7		mg/L		103	90 - 110	0	20

Lab Sample ID: MRL 380-58035/5
Matrix: Water
Analysis Batch: 58035

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	0.109	J	mg/L		87	50 - 150		
Sulfate			0.250	0.216	J	mg/L		86	50 - 150		

Lab Sample ID: MRL 380-58035/6
Matrix: Water
Analysis Batch: 58035

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	0.428	J	mg/L		86	50 - 150		
Sulfate			1.00	0.850		mg/L		85	50 - 150		

Lab Sample ID: 380-65446-1 MS
Matrix: Water
Analysis Batch: 58035

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		
Chloride	94	F1	25.0	114	E F1	mg/L		77	80 - 120		
Sulfate	13		50.0	65.7		mg/L		105	80 - 120		

Lab Sample ID: 380-65446-1 MSD
Matrix: Water
Analysis Batch: 58035

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
Chloride	94	F1	25.0	114	E F1	mg/L		78	80 - 120	0	20
Sulfate	13		50.0	65.9		mg/L		106	80 - 120	0	20

Lab Sample ID: MB 380-58149/6
Matrix: Water
Analysis Batch: 58149

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			10/05/23 15:28	1

Lab Sample ID: LCS 380-58149/7
Matrix: Water
Analysis Batch: 58149

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

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

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 380-58149/8
Matrix: Water
Analysis Batch: 58149

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	101		ug/L		101	90 - 110	1	10

Lab Sample ID: MRL 380-58149/5
Matrix: Water
Analysis Batch: 58149

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	4.71	J	ug/L		94	75 - 125		

Lab Sample ID: 380-65383-A-2 MS
Matrix: Water
Analysis Batch: 58149

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Bromide	<5.0		50.0	50.1		ug/L		100	80 - 120		

Lab Sample ID: 380-65383-A-2 MSD
Matrix: Water
Analysis Batch: 58149

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bromide	<5.0		50.0	49.7		ug/L		99	80 - 120	1	20

Lab Sample ID: MB 380-59112/4
Matrix: Water
Analysis Batch: 59112

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			10/11/23 15:07	1

Lab Sample ID: LCS 380-59112/5
Matrix: Water
Analysis Batch: 59112

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Bromide			100	101		ug/L		101	90 - 110		

Lab Sample ID: LCSD 380-59112/6
Matrix: Water
Analysis Batch: 59112

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	103		ug/L		103	90 - 110	2	10

Lab Sample ID: MRL 380-59112/3
Matrix: Water
Analysis Batch: 59112

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	5.01		ug/L		100	75 - 125		

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 380-66045-A-1 MS
Matrix: Water
Analysis Batch: 59112

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	<5.0		50.0	50.1		ug/L		100	80 - 120

Lab Sample ID: 380-66045-A-1 MSD
Matrix: Water
Analysis Batch: 59112

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bromide	<5.0		50.0	50.4		ug/L		101	80 - 120	1	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 380-59160/18
Matrix: Water
Analysis Batch: 59160

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			10/12/23 12:17	1
Magnesium	<0.10		0.10		mg/L			10/12/23 12:17	1
Potassium	<1.0		1.0		mg/L			10/12/23 12:17	1
Sodium	<1.0		1.0		mg/L			10/12/23 12:17	1

Lab Sample ID: LCS 380-59160/20
Matrix: Water
Analysis Batch: 59160

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	50.9		mg/L		102	85 - 115
Magnesium			20.0	20.1		mg/L		101	85 - 115
Potassium			20.0	20.2		mg/L		101	85 - 115
Sodium			50.0	49.8		mg/L		100	85 - 115

Lab Sample ID: LCSD 380-59160/21
Matrix: Water
Analysis Batch: 59160

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	49.8		mg/L		100	85 - 115	2	20
Magnesium			20.0	19.7		mg/L		98	85 - 115	2	20
Potassium			20.0	19.8		mg/L		99	85 - 115	2	20
Sodium			50.0	48.6		mg/L		97	85 - 115	2	20

Lab Sample ID: LLCS 380-59160/19
Matrix: Water
Analysis Batch: 59160

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	1.03		mg/L		103	50 - 150
Magnesium			0.100	0.0978	J	mg/L		98	50 - 150
Potassium			1.00	0.748	J	mg/L		75	50 - 150
Sodium			1.00	1.06		mg/L		106	50 - 150

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: 380-64208-A-8 MS
Matrix: Water
Analysis Batch: 59160

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	<1.0		50.0	49.0		mg/L		98	70 - 130
Magnesium	<0.10		20.0	19.5		mg/L		97	70 - 130
Potassium	<1.0		20.0	19.8		mg/L		99	70 - 130
Sodium	<1.0		50.0	47.8		mg/L		96	70 - 130

Lab Sample ID: 380-64208-A-8 MSD
Matrix: Water
Analysis Batch: 59160

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	<1.0		50.0	49.4		mg/L		99	70 - 130	1	20
Magnesium	<0.10		20.0	19.6		mg/L		98	70 - 130	1	20
Potassium	<1.0		20.0	20.0		mg/L		100	70 - 130	1	20
Sodium	<1.0		50.0	47.9		mg/L		96	70 - 130	0	20

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 380-58521/1-A
Matrix: Water
Analysis Batch: 58627

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 58521

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0		ug/L		10/09/23 08:54	10/09/23 23:10	1
Arsenic	<1.0		1.0		ug/L		10/09/23 08:54	10/09/23 23:10	1
Beryllium	<1.0		1.0		ug/L		10/09/23 08:54	10/09/23 23:10	1
Cadmium	<0.50		0.50		ug/L		10/09/23 08:54	10/09/23 23:10	1
Chromium	<1.0		1.0		ug/L		10/09/23 08:54	10/09/23 23:10	1
Copper	<2.0		2.0		ug/L		10/09/23 08:54	10/09/23 23:10	1
Lead	<0.50		0.50		ug/L		10/09/23 08:54	10/09/23 23:10	1
Nickel	<5.0		5.0		ug/L		10/09/23 08:54	10/09/23 23:10	1
Selenium	<5.0		5.0		ug/L		10/09/23 08:54	10/09/23 23:10	1
Silver	<0.50		0.50		ug/L		10/09/23 08:54	10/09/23 23:10	1
Thallium	<1.0		1.0		ug/L		10/09/23 08:54	10/09/23 23:10	1
Zinc	<20		20		ug/L		10/09/23 08:54	10/09/23 23:10	1

Lab Sample ID: LCS 380-58521/3-A
Matrix: Water
Analysis Batch: 58627

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 58521

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	50.0	52.1		ug/L		104	85 - 115
Arsenic	50.0	52.5		ug/L		105	85 - 115
Beryllium	25.0	25.5		ug/L		102	85 - 115
Cadmium	25.0	27.0		ug/L		108	85 - 115
Chromium	50.0	49.5		ug/L		99	85 - 115
Copper	50.0	51.0		ug/L		102	85 - 115
Lead	50.0	51.1		ug/L		102	85 - 115
Nickel	50.0	49.7		ug/L		99	85 - 115
Selenium	50.0	53.1		ug/L		106	85 - 115

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

Lab Sample ID: LCS 380-58521/3-A
Matrix: Water
Analysis Batch: 58627

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 58521

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	25.0	24.1		ug/L		97	85 - 115
Thallium	50.0	50.5		ug/L		101	85 - 115
Zinc	50.0	52.7		ug/L		105	85 - 115

Lab Sample ID: LCSD 380-58521/4-A
Matrix: Water
Analysis Batch: 58627

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 58521

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	50.0	48.4		ug/L		97	85 - 115	7	20
Arsenic	50.0	49.7		ug/L		99	85 - 115	6	20
Beryllium	25.0	24.6		ug/L		98	85 - 115	4	20
Cadmium	25.0	24.7		ug/L		99	85 - 115	9	20
Chromium	50.0	46.2		ug/L		92	85 - 115	7	20
Copper	50.0	47.6		ug/L		95	85 - 115	7	20
Lead	50.0	47.3		ug/L		95	85 - 115	8	20
Nickel	50.0	46.5		ug/L		93	85 - 115	7	20
Selenium	50.0	51.3		ug/L		103	85 - 115	3	20
Silver	25.0	22.5		ug/L		90	85 - 115	7	20
Thallium	50.0	46.4		ug/L		93	85 - 115	8	20
Zinc	50.0	48.1		ug/L		96	85 - 115	9	20

Lab Sample ID: LLCS 380-58521/2-A
Matrix: Water
Analysis Batch: 58627

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 58521

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	1.00	1.05		ug/L		105	50 - 150
Arsenic	1.00	1.09		ug/L		109	50 - 150
Beryllium	1.00	0.990	J	ug/L		99	50 - 150
Cadmium	0.500	0.535		ug/L		107	50 - 150
Chromium	1.00	0.899	J	ug/L		90	50 - 150
Copper	2.00	2.00		ug/L		100	50 - 150
Lead	0.500	0.507		ug/L		101	50 - 150
Nickel	5.00	4.94	J	ug/L		99	50 - 150
Selenium	5.00	5.39		ug/L		108	50 - 150
Silver	0.500	0.297	J	ug/L		59	50 - 150
Thallium	1.00	0.926	J	ug/L		93	50 - 150
Zinc	20.0	20.8		ug/L		104	50 - 150

Lab Sample ID: 380-65446-1 MS
Matrix: Water
Analysis Batch: 58627

Client Sample ID: Aiea Gulch Wells Pump 2
Prep Type: Total Recoverable
Prep Batch: 58521

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	<1.0		50.0	47.8		ug/L		96	70 - 130
Arsenic	<1.0		50.0	50.5		ug/L		99	70 - 130
Beryllium	<1.0		25.0	25.3		ug/L		101	70 - 130
Cadmium	<0.50		25.0	24.3		ug/L		97	70 - 130

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

Lab Sample ID: 380-65446-1 MS
Matrix: Water
Analysis Batch: 58627

Client Sample ID: Aiea Gulch Wells Pump 2
Prep Type: Total Recoverable
Prep Batch: 58521

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chromium	1.6		50.0	48.3		ug/L		93	70 - 130
Copper	2.6		50.0	48.7		ug/L		92	70 - 130
Lead	<0.50		50.0	45.6		ug/L		91	70 - 130
Nickel	<5.0		50.0	45.8		ug/L		92	70 - 130
Selenium	<5.0		50.0	50.6		ug/L		101	70 - 130
Silver	<0.50		25.0	21.5		ug/L		86	70 - 130
Thallium	<1.0		50.0	45.1		ug/L		90	70 - 130
Zinc	<20		50.0	49.6		ug/L		99	70 - 130

Lab Sample ID: 380-65446-1 MSD
Matrix: Water
Analysis Batch: 58627

Client Sample ID: Aiea Gulch Wells Pump 2
Prep Type: Total Recoverable
Prep Batch: 58521

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	<1.0		50.0	50.8		ug/L		102	70 - 130	6	20
Arsenic	<1.0		50.0	52.2		ug/L		103	70 - 130	3	20
Beryllium	<1.0		25.0	25.9		ug/L		104	70 - 130	2	20
Cadmium	<0.50		25.0	25.4		ug/L		102	70 - 130	4	20
Chromium	1.6		50.0	50.1		ug/L		97	70 - 130	4	20
Copper	2.6		50.0	50.3		ug/L		95	70 - 130	3	20
Lead	<0.50		50.0	47.5		ug/L		95	70 - 130	4	20
Nickel	<5.0		50.0	47.5		ug/L		95	70 - 130	4	20
Selenium	<5.0		50.0	50.2		ug/L		100	70 - 130	1	20
Silver	<0.50		25.0	22.6		ug/L		90	70 - 130	5	20
Thallium	<1.0		50.0	46.9		ug/L		94	70 - 130	4	20
Zinc	<20		50.0	51.7		ug/L		103	70 - 130	4	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 810-76201/1-A
Matrix: Water
Analysis Batch: 76233

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 76201

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.10		ug/L		10/09/23 13:26	10/09/23 19:39	1

Lab Sample ID: LCS 810-76201/3-A
Matrix: Water
Analysis Batch: 76233

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 76201

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury			1.00	0.958		ug/L		96	85 - 115

Lab Sample ID: LLCS 810-76201/2-A
Matrix: Water
Analysis Batch: 76233

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 76201

Analyte			Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury			0.100	<0.086		ug/L		75	50 - 150

Method: 245.1 - Mercury (CVAA) (Continued)

Lab Sample ID: 810-79502-L-4-B MS
Matrix: Water
Analysis Batch: 76233

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 76201

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	<0.10		1.00	1.00		ug/L		100	70 - 130		

Lab Sample ID: 810-79502-L-4-C MSD
Matrix: Water
Analysis Batch: 76233

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 76201

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	<0.10		1.00	1.01		ug/L		101	70 - 130	1	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 380-58462/1
Matrix: Water
Analysis Batch: 58462

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	<2.0		2.0		mg/L			10/06/23 20:06	1
Bicarbonate Alkalinity as CaCO3	<2.0		2.0		mg/L			10/06/23 20:06	1
Carbonate Alkalinity as CaCO3	<2.0		2.0		mg/L			10/06/23 20:06	1

Lab Sample ID: LCS 380-58462/3
Matrix: Water
Analysis Batch: 58462

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Alkalinity			100	98.7		mg/L		99	90 - 110		

Lab Sample ID: LCSD 380-58462/18
Matrix: Water
Analysis Batch: 58462

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Alkalinity			100	98.4		mg/L		98	90 - 110	0	20

Lab Sample ID: LLCS 380-58462/4
Matrix: Water
Analysis Batch: 58462

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

Analyte			Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Alkalinity			20.0	19.2		mg/L		96	90 - 110		

Lab Sample ID: MRL 380-58462/2
Matrix: Water
Analysis Batch: 58462

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Alkalinity			2.00	1.99	J	mg/L		100	50 - 150		

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: 380-65226-L-1 MS
Matrix: Water
Analysis Batch: 58462

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Alkalinity	220	F1	100	273	F1	mg/L		48	80 - 120		

Lab Sample ID: 380-65226-L-1 MSD
Matrix: Water
Analysis Batch: 58462

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Alkalinity	220	F1	100	268	F1	mg/L		44	80 - 120	2	20

Lab Sample ID: 380-65226-X-3 MS
Matrix: Water
Analysis Batch: 58462

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Alkalinity	260	F1	100	320	F1	mg/L		59	80 - 120		

Lab Sample ID: 380-65226-X-3 MSD
Matrix: Water
Analysis Batch: 58462

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Alkalinity	260	F1	100	311	F1	mg/L		50	80 - 120	3	20

Lab Sample ID: 380-65226-L-1 DU
Matrix: Water
Analysis Batch: 58462

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Alkalinity	220	F1		225		mg/L				0.3	20
Bicarbonate Alkalinity as CaCO3	220			225		mg/L				0.3	20
Carbonate Alkalinity as CaCO3	<2.0			<2.0		mg/L				NC	20

Lab Sample ID: 380-65226-X-3 DU
Matrix: Water
Analysis Batch: 58462

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Alkalinity	260	F1		261		mg/L				0.1	20
Bicarbonate Alkalinity as CaCO3	260			261		mg/L				0.1	20
Carbonate Alkalinity as CaCO3	<2.0			<2.0		mg/L				NC	20

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 380-58465/2
Matrix: Water
Analysis Batch: 58465

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			10/06/23 20:06	1

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

Lab Sample ID: LCS 380-58465/4
Matrix: Water
Analysis Batch: 58465

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	995		umhos/cm		100	90 - 110		

Lab Sample ID: LCSD 380-58465/16
Matrix: Water
Analysis Batch: 58465

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	990		umhos/cm		99	90 - 110	1	10

Lab Sample ID: MRL 380-58465/3
Matrix: Water
Analysis Batch: 58465

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	2.20		umhos/cm		110	50 - 150		

Lab Sample ID: 380-65226-L-1 DU
Matrix: Water
Analysis Batch: 58465

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Specific Conductance	800			805		umhos/cm				0.05	20

Lab Sample ID: 380-65226-X-3 DU
Matrix: Water
Analysis Batch: 58465

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Specific Conductance	770			775		umhos/cm				0.1	20

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

Lab Sample ID: MB 380-58207/1
Matrix: Water
Analysis Batch: 58207

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			10/05/23 18:53	1

Lab Sample ID: HLCS 380-58207/5
Matrix: Water
Analysis Batch: 58207

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	666		mg/L		95	80 - 114		

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

Lab Sample ID: LCS 380-58207/4
Matrix: Water
Analysis Batch: 58207

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	168		mg/L		96	80 - 114

Lab Sample ID: MRL 380-58207/2
Matrix: Water
Analysis Batch: 58207

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

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

Lab Sample ID: MRL 380-58207/3
Matrix: Water
Analysis Batch: 58207

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	7.00	J	mg/L		70	50 - 150

Lab Sample ID: 380-65429-N-5 DU
Matrix: Water
Analysis Batch: 58207

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	120		118		mg/L		2	10

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 380-58460/10
Matrix: Water
Analysis Batch: 58460

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			10/06/23 16:19	1

Lab Sample ID: MB 380-58460/44
Matrix: Water
Analysis Batch: 58460

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			10/06/23 18:55	1

Lab Sample ID: LCS 380-58460/12
Matrix: Water
Analysis Batch: 58460

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	0.970		mg/L		97	90 - 110

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: LCS 380-58460/46
Matrix: Water
Analysis Batch: 58460

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	0.917		mg/L		92	90 - 110

Lab Sample ID: LCSD 380-58460/13
Matrix: Water
Analysis Batch: 58460

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	0.980		mg/L		98	90 - 110	1	10

Lab Sample ID: LCSD 380-58460/47
Matrix: Water
Analysis Batch: 58460

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	0.908		mg/L		91	90 - 110	1	10

Lab Sample ID: MRL 380-58460/11
Matrix: Water
Analysis Batch: 58460

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	0.0471	J	mg/L		94	50 - 150

Lab Sample ID: MRL 380-58460/45
Matrix: Water
Analysis Batch: 58460

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	0.0454	J	mg/L		91	50 - 150

Lab Sample ID: 380-65446-2 MS
Matrix: Water
Analysis Batch: 58460

Client Sample ID: Halawa Wells Units 1&2 P1
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	1.01		mg/L		96	80 - 120

Lab Sample ID: 380-65446-2 MSD
Matrix: Water
Analysis Batch: 58460

Client Sample ID: Halawa Wells Units 1&2 P1
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	1.01		mg/L		96	80 - 120	1	20

Method: SM 4500 H+ B - pH

Lab Sample ID: MB 380-58467/4
Matrix: Water
Analysis Batch: 58467

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			10/06/23 20:06	1

Lab Sample ID: LCS 380-58467/5
Matrix: Water
Analysis Batch: 58467

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		101	98 - 102		

Lab Sample ID: LCSD 380-58467/17
Matrix: Water
Analysis Batch: 58467

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		101	98 - 102	0	2

Lab Sample ID: 380-65226-L-1 DU
Matrix: Water
Analysis Batch: 58467

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			8.0		SU				0.1	2

Lab Sample ID: 380-65226-X-3 DU
Matrix: Water
Analysis Batch: 58467

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			8.0		SU				0.6	2

Method: SM 4500 S2 D - Sulfide, Total

Lab Sample ID: MB 380-58171/1
Matrix: Water
Analysis Batch: 58171

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			10/05/23 14:35	1

Lab Sample ID: LCS 380-58171/4
Matrix: Water
Analysis Batch: 58171

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	0.227		mg/L		91	90 - 110		

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

Lab Sample ID: LCSD 380-58171/24
Matrix: Water
Analysis Batch: 58171

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	0.252		mg/L		101	90 - 110	10	20

Lab Sample ID: MRL 380-58171/17
Matrix: Water
Analysis Batch: 58171

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	0.0450	J	mg/L		90	50 - 150		

Lab Sample ID: MRL 380-58171/2
Matrix: Water
Analysis Batch: 58171

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	0.0440	J	mg/L		88	50 - 150		

Lab Sample ID: 380-65252-J-1 MS
Matrix: Water
Analysis Batch: 58171

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Sulfide	<0.050	F1	0.250	0.176	F1	mg/L		70	80 - 120		

Lab Sample ID: 380-65252-J-1 MSD
Matrix: Water
Analysis Batch: 58171

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfide	<0.050	F1	0.250	0.181	F1	mg/L		72	80 - 120	3	20

QC Association Summary

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

Job ID: 380-65446-1

GC/MS VOA

Analysis Batch: 58458

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 380-58458/8	Method Blank	Total/NA	Water	524.2	
LCS 380-58458/5	Lab Control Sample	Total/NA	Water	524.2	
LCSD 380-58458/6	Lab Control Sample Dup	Total/NA	Water	524.2	
MRL 380-58458/3	Lab Control Sample	Total/NA	Water	524.2	
MRL 380-58458/4	Lab Control Sample	Total/NA	Water	524.2	

Analysis Batch: 58476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-65446-2	Halawa Wells Units 1&2 P1	Total/NA	Water	524.2	
380-65446-4	TB Halawa Wells Units 1&2 P1	Total/NA	Water	524.2	
MB 380-58476/5	Method Blank	Total/NA	Water	524.2	
LCS 380-58476/3	Lab Control Sample	Total/NA	Water	524.2	
LCSD 380-58476/4	Lab Control Sample Dup	Total/NA	Water	524.2	

Analysis Batch: 58700

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-65446-1	Aiea Gulch Wells Pump 2	Total/NA	Water	524.2	
380-65446-2	Halawa Wells Units 1&2 P1	Total/NA	Water	524.2	
380-65446-3	TB Aiea Gulch Wells Pump 2	Total/NA	Water	524.2	
380-65446-4	TB Halawa Wells Units 1&2 P1	Total/NA	Water	524.2	
MB 380-58700/5	Method Blank	Total/NA	Water	524.2	
LCS 380-58700/2	Lab Control Sample	Total/NA	Water	524.2	
LCSD 380-58700/3	Lab Control Sample Dup	Total/NA	Water	524.2	
MRL 380-58700/4	Lab Control Sample	Total/NA	Water	524.2	

GC/MS Semi VOA

Prep Batch: 58278

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-65446-1	Aiea Gulch Wells Pump 2	Total/NA	Water	525.2	
380-65446-2	Halawa Wells Units 1&2 P1	Total/NA	Water	525.2	
MB 380-58278/21-A	Method Blank	Total/NA	Water	525.2	
LCS 380-58278/23-A	Lab Control Sample	Total/NA	Water	525.2	
LCSD 380-58278/24-A	Lab Control Sample Dup	Total/NA	Water	525.2	
MRL 380-58278/22-A	Lab Control Sample	Total/NA	Water	525.2	
380-65441-AG-1-A MS	Matrix Spike	Total/NA	Water	525.2	
380-65448-AF-1-A DU	Duplicate	Total/NA	Water	525.2	

Analysis Batch: 58459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-65446-1	Aiea Gulch Wells Pump 2	Total/NA	Water	525.2	58278
380-65446-2	Halawa Wells Units 1&2 P1	Total/NA	Water	525.2	58278
MB 380-58278/21-A	Method Blank	Total/NA	Water	525.2	58278
LCS 380-58278/23-A	Lab Control Sample	Total/NA	Water	525.2	58278
LCSD 380-58278/24-A	Lab Control Sample Dup	Total/NA	Water	525.2	58278
MRL 380-58278/22-A	Lab Control Sample	Total/NA	Water	525.2	58278
380-65441-AG-1-A MS	Matrix Spike	Total/NA	Water	525.2	58278
380-65448-AF-1-A DU	Duplicate	Total/NA	Water	525.2	58278

GC Semi VOA

Prep Batch: 58189

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-65446-1	Aiea Gulch Wells Pump 2	Total/NA	Water	504.1	
380-65446-2	Halawa Wells Units 1&2 P1	Total/NA	Water	504.1	
MBL 380-58189/13-A	Method Blank	Total/NA	Water	504.1	
LCS 380-58189/38-A	Lab Control Sample	Total/NA	Water	504.1	
MRL 380-58189/11-A	Lab Control Sample	Total/NA	Water	504.1	
MRL 380-58189/12-A	Lab Control Sample	Total/NA	Water	504.1	
380-65332-H-1-A MS	Matrix Spike	Total/NA	Water	504.1	
380-65337-I-1-A DU	Duplicate	Total/NA	Water	504.1	

Prep Batch: 58284

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-65446-1	Aiea Gulch Wells Pump 2	Total/NA	Water	505	
380-65446-2	Halawa Wells Units 1&2 P1	Total/NA	Water	505	
MB 380-58284/4-A	Method Blank	Total/NA	Water	505	
MRL 380-58284/2-A	Lab Control Sample	Total/NA	Water	505	
MRL 380-58284/3-A	Lab Control Sample	Total/NA	Water	505	
380-65354-B-1-A MS	Matrix Spike	Total/NA	Water	505	
380-65354-D-1-A MS	Matrix Spike	Total/NA	Water	505	
380-65356-B-1-A MS	Matrix Spike	Total/NA	Water	505	
380-65356-D-1-A MS	Matrix Spike	Total/NA	Water	505	

Prep Batch: 58319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-65446-3	TB Aiea Gulch Wells Pump 2	Total/NA	Water	504.1	
380-65446-4	TB Halawa Wells Units 1&2 P1	Total/NA	Water	504.1	
MBL 380-58319/4-A	Method Blank	Total/NA	Water	504.1	
LCS 380-58319/29-A	Lab Control Sample	Total/NA	Water	504.1	
MRL 380-58319/2-A	Lab Control Sample	Total/NA	Water	504.1	
MRL 380-58319/3-A	Lab Control Sample	Total/NA	Water	504.1	
380-65284-U-1-A MS	Matrix Spike	Total/NA	Water	504.1	
380-65288-G-1-A DU	Duplicate	Total/NA	Water	504.1	

Analysis Batch: 58395

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-65446-1	Aiea Gulch Wells Pump 2	Total/NA	Water	504.1	58189
380-65446-2	Halawa Wells Units 1&2 P1	Total/NA	Water	504.1	58189
MBL 380-58189/13-A	Method Blank	Total/NA	Water	504.1	58189
LCS 380-58189/38-A	Lab Control Sample	Total/NA	Water	504.1	58189
MRL 380-58189/11-A	Lab Control Sample	Total/NA	Water	504.1	58189
MRL 380-58189/12-A	Lab Control Sample	Total/NA	Water	504.1	58189
380-65332-H-1-A MS	Matrix Spike	Total/NA	Water	504.1	58189
380-65337-I-1-A DU	Duplicate	Total/NA	Water	504.1	58189

Prep Batch: 58554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-65446-2	Halawa Wells Units 1&2 P1	Total/NA	Water	505	
MB 380-58554/4-A	Method Blank	Total/NA	Water	505	
MRL 380-58554/2-A	Lab Control Sample	Total/NA	Water	505	
MRL 380-58554/3-A	Lab Control Sample	Total/NA	Water	505	
380-65571-B-1-A MS	Matrix Spike	Total/NA	Water	505	
380-65571-B-2-A MS	Matrix Spike	Total/NA	Water	505	

GC Semi VOA (Continued)

Prep Batch: 58554 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-65571-D-1-A MS	Matrix Spike	Total/NA	Water	505	
380-65571-D-2-A MS	Matrix Spike	Total/NA	Water	505	

Analysis Batch: 58573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-65446-1	Aiea Gulch Wells Pump 2	Total/NA	Water	505	58284
380-65446-2	Halawa Wells Units 1&2 P1	Total/NA	Water	505	58284
MB 380-58284/4-A	Method Blank	Total/NA	Water	505	58284
MRL 380-58284/2-A	Lab Control Sample	Total/NA	Water	505	58284
MRL 380-58284/3-A	Lab Control Sample	Total/NA	Water	505	58284
380-65354-B-1-A MS	Matrix Spike	Total/NA	Water	505	58284
380-65354-D-1-A MS	Matrix Spike	Total/NA	Water	505	58284
380-65356-B-1-A MS	Matrix Spike	Total/NA	Water	505	58284
380-65356-D-1-A MS	Matrix Spike	Total/NA	Water	505	58284

Analysis Batch: 58583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-65446-3	TB Aiea Gulch Wells Pump 2	Total/NA	Water	504.1	58319
380-65446-4	TB Halawa Wells Units 1&2 P1	Total/NA	Water	504.1	58319
MBL 380-58319/4-A	Method Blank	Total/NA	Water	504.1	58319
LCS 380-58319/29-A	Lab Control Sample	Total/NA	Water	504.1	58319
MRL 380-58319/2-A	Lab Control Sample	Total/NA	Water	504.1	58319
MRL 380-58319/3-A	Lab Control Sample	Total/NA	Water	504.1	58319
380-65284-U-1-A MS	Matrix Spike	Total/NA	Water	504.1	58319
380-65288-G-1-A DU	Duplicate	Total/NA	Water	504.1	58319

Analysis Batch: 58759

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-65446-2	Halawa Wells Units 1&2 P1	Total/NA	Water	505	58554
MB 380-58554/4-A	Method Blank	Total/NA	Water	505	58554
MRL 380-58554/2-A	Lab Control Sample	Total/NA	Water	505	58554
MRL 380-58554/3-A	Lab Control Sample	Total/NA	Water	505	58554
380-65571-B-1-A MS	Matrix Spike	Total/NA	Water	505	58554
380-65571-B-2-A MS	Matrix Spike	Total/NA	Water	505	58554
380-65571-D-1-A MS	Matrix Spike	Total/NA	Water	505	58554
380-65571-D-2-A MS	Matrix Spike	Total/NA	Water	505	58554

HPLC/IC

Analysis Batch: 58026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-65446-2	Halawa Wells Units 1&2 P1	Total/NA	Water	300.0	
MB 380-58026/4	Method Blank	Total/NA	Water	300.0	
LCS 380-58026/8	Lab Control Sample	Total/NA	Water	300.0	
LCSD 380-58026/9	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 380-58026/5	Lab Control Sample	Total/NA	Water	300.0	
MRL 380-58026/6	Lab Control Sample	Total/NA	Water	300.0	
380-65446-2 MS	Halawa Wells Units 1&2 P1	Total/NA	Water	300.0	
380-65446-2 MSD	Halawa Wells Units 1&2 P1	Total/NA	Water	300.0	

HPLC/IC

Analysis Batch: 58027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-65446-2	Halawa Wells Units 1&2 P1	Total/NA	Water	300.0	
380-65446-2	Halawa Wells Units 1&2 P1	Total/NA	Water	300.0	
MB 380-58027/4	Method Blank	Total/NA	Water	300.0	
LCS 380-58027/8	Lab Control Sample	Total/NA	Water	300.0	
LCSD 380-58027/9	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 380-58027/5	Lab Control Sample	Total/NA	Water	300.0	
MRL 380-58027/6	Lab Control Sample	Total/NA	Water	300.0	
380-65446-2 MS	Halawa Wells Units 1&2 P1	Total/NA	Water	300.0	
380-65446-2 MSD	Halawa Wells Units 1&2 P1	Total/NA	Water	300.0	

Analysis Batch: 58032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-65446-1	Aiea Gulch Wells Pump 2	Total/NA	Water	300.0	
MB 380-58032/39	Method Blank	Total/NA	Water	300.0	
LCS 380-58032/42	Lab Control Sample	Total/NA	Water	300.0	
LCSD 380-58032/43	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 380-58032/40	Lab Control Sample	Total/NA	Water	300.0	
MRL 380-58032/41	Lab Control Sample	Total/NA	Water	300.0	
380-65299-B-2 MS	Matrix Spike	Total/NA	Water	300.0	
380-65299-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
380-65354-N-1 MS	Matrix Spike	Total/NA	Water	300.0	
380-65354-N-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 58033

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-65446-1	Aiea Gulch Wells Pump 2	Total/NA	Water	300.0	
MB 380-58033/39	Method Blank	Total/NA	Water	300.0	
LCS 380-58033/42	Lab Control Sample	Total/NA	Water	300.0	
LCSD 380-58033/43	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 380-58033/40	Lab Control Sample	Total/NA	Water	300.0	
MRL 380-58033/41	Lab Control Sample	Total/NA	Water	300.0	
380-65354-N-1 MS	Matrix Spike	Total/NA	Water	300.0	
380-65354-N-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 58034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 380-58034/4	Method Blank	Total/NA	Water	300.0	
LCS 380-58034/7	Lab Control Sample	Total/NA	Water	300.0	
LCSD 380-58034/8	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 380-58034/5	Lab Control Sample	Total/NA	Water	300.0	
MRL 380-58034/6	Lab Control Sample	Total/NA	Water	300.0	
380-65446-1 MS	Aiea Gulch Wells Pump 2	Total/NA	Water	300.0	
380-65446-1 MSD	Aiea Gulch Wells Pump 2	Total/NA	Water	300.0	

Analysis Batch: 58035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-65446-1	Aiea Gulch Wells Pump 2	Total/NA	Water	300.0	
MB 380-58035/4	Method Blank	Total/NA	Water	300.0	
LCS 380-58035/7	Lab Control Sample	Total/NA	Water	300.0	
LCSD 380-58035/8	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 380-58035/5	Lab Control Sample	Total/NA	Water	300.0	

HPLC/IC (Continued)

Analysis Batch: 58035 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MRL 380-58035/6	Lab Control Sample	Total/NA	Water	300.0	
380-65446-1 MS	Aiea Gulch Wells Pump 2	Total/NA	Water	300.0	
380-65446-1 MSD	Aiea Gulch Wells Pump 2	Total/NA	Water	300.0	

Analysis Batch: 58149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-65446-1	Aiea Gulch Wells Pump 2	Total/NA	Water	300.0	
MB 380-58149/6	Method Blank	Total/NA	Water	300.0	
LCS 380-58149/7	Lab Control Sample	Total/NA	Water	300.0	
LCSD 380-58149/8	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 380-58149/5	Lab Control Sample	Total/NA	Water	300.0	
380-65383-A-2 MS	Matrix Spike	Total/NA	Water	300.0	
380-65383-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 59112

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-65446-2	Halawa Wells Units 1&2 P1	Total/NA	Water	300.0	
MB 380-59112/4	Method Blank	Total/NA	Water	300.0	
LCS 380-59112/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 380-59112/6	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 380-59112/3	Lab Control Sample	Total/NA	Water	300.0	
380-66045-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
380-66045-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Metals

Prep Batch: 58521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-65446-1	Aiea Gulch Wells Pump 2	Total Recoverable	Water	200.8	
380-65446-2	Halawa Wells Units 1&2 P1	Total Recoverable	Water	200.8	
MB 380-58521/1-A	Method Blank	Total Recoverable	Water	200.8	
LCS 380-58521/3-A	Lab Control Sample	Total Recoverable	Water	200.8	
LCSD 380-58521/4-A	Lab Control Sample Dup	Total Recoverable	Water	200.8	
LLCS 380-58521/2-A	Lab Control Sample	Total Recoverable	Water	200.8	
380-65446-1 MS	Aiea Gulch Wells Pump 2	Total Recoverable	Water	200.8	
380-65446-1 MSD	Aiea Gulch Wells Pump 2	Total Recoverable	Water	200.8	

Analysis Batch: 58627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-65446-1	Aiea Gulch Wells Pump 2	Total Recoverable	Water	200.8	58521
380-65446-2	Halawa Wells Units 1&2 P1	Total Recoverable	Water	200.8	58521
MB 380-58521/1-A	Method Blank	Total Recoverable	Water	200.8	58521
LCS 380-58521/3-A	Lab Control Sample	Total Recoverable	Water	200.8	58521
LCSD 380-58521/4-A	Lab Control Sample Dup	Total Recoverable	Water	200.8	58521
LLCS 380-58521/2-A	Lab Control Sample	Total Recoverable	Water	200.8	58521
380-65446-1 MS	Aiea Gulch Wells Pump 2	Total Recoverable	Water	200.8	58521
380-65446-1 MSD	Aiea Gulch Wells Pump 2	Total Recoverable	Water	200.8	58521

Analysis Batch: 59160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-65446-1	Aiea Gulch Wells Pump 2	Total/NA	Water	200.7 Rev 4.4	

Metals (Continued)

Analysis Batch: 59160 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-65446-2	Halawa Wells Units 1&2 P1	Total/NA	Water	200.7 Rev 4.4	
MB 380-59160/18	Method Blank	Total/NA	Water	200.7 Rev 4.4	
LCS 380-59160/20	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	
LCSD 380-59160/21	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	
LLCS 380-59160/19	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	
380-64208-A-8 MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	
380-64208-A-8 MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	

Prep Batch: 76201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-65446-1	Aiea Gulch Wells Pump 2	Total/NA	Water	245.1	
380-65446-2	Halawa Wells Units 1&2 P1	Total/NA	Water	245.1	
MB 810-76201/1-A	Method Blank	Total/NA	Water	245.1	
LCS 810-76201/3-A	Lab Control Sample	Total/NA	Water	245.1	
LLCS 810-76201/2-A	Lab Control Sample	Total/NA	Water	245.1	
810-79502-L-4-B MS	Matrix Spike	Total/NA	Water	245.1	
810-79502-L-4-C MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	

Analysis Batch: 76233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-65446-1	Aiea Gulch Wells Pump 2	Total/NA	Water	245.1	76201
380-65446-2	Halawa Wells Units 1&2 P1	Total/NA	Water	245.1	76201
MB 810-76201/1-A	Method Blank	Total/NA	Water	245.1	76201
LCS 810-76201/3-A	Lab Control Sample	Total/NA	Water	245.1	76201
LLCS 810-76201/2-A	Lab Control Sample	Total/NA	Water	245.1	76201
810-79502-L-4-B MS	Matrix Spike	Total/NA	Water	245.1	76201
810-79502-L-4-C MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	76201

General Chemistry

Analysis Batch: 58171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-65446-1	Aiea Gulch Wells Pump 2	Total/NA	Water	SM 4500 S2 D	
380-65446-2	Halawa Wells Units 1&2 P1	Total/NA	Water	SM 4500 S2 D	
MB 380-58171/1	Method Blank	Total/NA	Water	SM 4500 S2 D	
LCS 380-58171/4	Lab Control Sample	Total/NA	Water	SM 4500 S2 D	
LCSD 380-58171/24	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 D	
MRL 380-58171/17	Lab Control Sample	Total/NA	Water	SM 4500 S2 D	
MRL 380-58171/2	Lab Control Sample	Total/NA	Water	SM 4500 S2 D	
380-65252-J-1 MS	Matrix Spike	Total/NA	Water	SM 4500 S2 D	
380-65252-J-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 S2 D	

Analysis Batch: 58207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-65446-1	Aiea Gulch Wells Pump 2	Total/NA	Water	SM 2540C	
380-65446-2	Halawa Wells Units 1&2 P1	Total/NA	Water	SM 2540C	
MB 380-58207/1	Method Blank	Total/NA	Water	SM 2540C	
HLCS 380-58207/5	Lab Control Sample	Total/NA	Water	SM 2540C	
LCS 380-58207/4	Lab Control Sample	Total/NA	Water	SM 2540C	
MRL 380-58207/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MRL 380-58207/3	Lab Control Sample	Total/NA	Water	SM 2540C	

General Chemistry (Continued)

Analysis Batch: 58207 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-65429-N-5 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 58460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-65446-1	Aiea Gulch Wells Pump 2	Total/NA	Water	SM 4500 F C	
380-65446-2	Halawa Wells Units 1&2 P1	Total/NA	Water	SM 4500 F C	
MB 380-58460/10	Method Blank	Total/NA	Water	SM 4500 F C	
MB 380-58460/44	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 380-58460/12	Lab Control Sample	Total/NA	Water	SM 4500 F C	
LCS 380-58460/46	Lab Control Sample	Total/NA	Water	SM 4500 F C	
LCSD 380-58460/13	Lab Control Sample Dup	Total/NA	Water	SM 4500 F C	
LCSD 380-58460/47	Lab Control Sample Dup	Total/NA	Water	SM 4500 F C	
MRL 380-58460/11	Lab Control Sample	Total/NA	Water	SM 4500 F C	
MRL 380-58460/45	Lab Control Sample	Total/NA	Water	SM 4500 F C	
380-65446-2 MS	Halawa Wells Units 1&2 P1	Total/NA	Water	SM 4500 F C	
380-65446-2 MSD	Halawa Wells Units 1&2 P1	Total/NA	Water	SM 4500 F C	

Analysis Batch: 58462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-65446-1	Aiea Gulch Wells Pump 2	Total/NA	Water	SM 2320B	
380-65446-2	Halawa Wells Units 1&2 P1	Total/NA	Water	SM 2320B	
MB 380-58462/1	Method Blank	Total/NA	Water	SM 2320B	
LCS 380-58462/3	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 380-58462/18	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
LLCS 380-58462/4	Lab Control Sample	Total/NA	Water	SM 2320B	
MRL 380-58462/2	Lab Control Sample	Total/NA	Water	SM 2320B	
380-65226-L-1 MS	Matrix Spike	Total/NA	Water	SM 2320B	
380-65226-L-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 2320B	
380-65226-X-3 MS	Matrix Spike	Total/NA	Water	SM 2320B	
380-65226-X-3 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 2320B	
380-65226-L-1 DU	Duplicate	Total/NA	Water	SM 2320B	
380-65226-X-3 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 58465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-65446-1	Aiea Gulch Wells Pump 2	Total/NA	Water	SM 2510B	
380-65446-2	Halawa Wells Units 1&2 P1	Total/NA	Water	SM 2510B	
MB 380-58465/2	Method Blank	Total/NA	Water	SM 2510B	
LCS 380-58465/4	Lab Control Sample	Total/NA	Water	SM 2510B	
LCSD 380-58465/16	Lab Control Sample Dup	Total/NA	Water	SM 2510B	
MRL 380-58465/3	Lab Control Sample	Total/NA	Water	SM 2510B	
380-65226-L-1 DU	Duplicate	Total/NA	Water	SM 2510B	
380-65226-X-3 DU	Duplicate	Total/NA	Water	SM 2510B	

Analysis Batch: 58467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-65446-1	Aiea Gulch Wells Pump 2	Total/NA	Water	SM 4500 H+ B	
380-65446-2	Halawa Wells Units 1&2 P1	Total/NA	Water	SM 4500 H+ B	
MB 380-58467/4	Method Blank	Total/NA	Water	SM 4500 H+ B	
LCS 380-58467/5	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCSD 380-58467/17	Lab Control Sample Dup	Total/NA	Water	SM 4500 H+ B	

General Chemistry (Continued)

Analysis Batch: 58467 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-65226-L-1 DU	Duplicate	Total/NA	Water	SM 4500 H+ B	
380-65226-X-3 DU	Duplicate	Total/NA	Water	SM 4500 H+ B	

Lab Chronicle

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

Job ID: 380-65446-1

Client Sample ID: Aiea Gulch Wells Pump 2

Lab Sample ID: 380-65446-1

Date Collected: 10/03/23 10:57

Matrix: Water

Date Received: 10/04/23 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	524.2		1	58700	P3EE	EA POM	10/10/23 16:17
Total/NA	Prep	525.2			58278	N8NE	EA POM	10/06/23 13:45
Total/NA	Analysis	525.2		1	58459	Q8LA	EA POM	10/08/23 18:32
Total/NA	Prep	504.1			58189	LZ8Q	EA POM	10/06/23 11:50 - 10/06/23 13:00 [1]
Total/NA	Analysis	504.1		1	58395	LZ8Q	EA POM	10/06/23 21:50
Total/NA	Prep	505			58284	DR5R	EA POM	10/06/23 13:40 - 10/06/23 15:20 [1]
Total/NA	Analysis	505		1	58573	ULRL	EA POM	10/07/23 07:33
Total/NA	Analysis	300.0		1	58032	VB9B	EA POM	10/05/23 05:50
Total/NA	Analysis	300.0		1	58033	VB9B	EA POM	10/05/23 05:50
Total/NA	Analysis	300.0		1	58149	UNJR	EA POM	10/06/23 02:54
Total/NA	Analysis	300.0		2	58035	VB9B	EA POM	10/05/23 01:29
Total/NA	Analysis	200.7 Rev 4.4		1	59160	J9ZD	EA POM	10/12/23 12:26
Total Recoverable	Prep	200.8			58521	Z45W	EA POM	10/09/23 08:54
Total Recoverable	Analysis	200.8		1	58627	J9ZD	EA POM	10/09/23 23:40
Total/NA	Prep	245.1			76201	AC	EA SB	10/09/23 13:26
Total/NA	Analysis	245.1		1	76233	AC	EA SB	10/09/23 19:57
Total/NA	Analysis	SM 2320B		1	58462	D5MQ	EA POM	10/06/23 22:28
Total/NA	Analysis	SM 2510B		1	58465	D5MQ	EA POM	10/06/23 22:28
Total/NA	Analysis	SM 2540C		1	58207	UJRF	EA POM	10/05/23 18:53
Total/NA	Analysis	SM 4500 F C		1	58460	D5MQ	EA POM	10/06/23 20:29
Total/NA	Analysis	SM 4500 H+ B		1	58467	D5MQ	EA POM	10/06/23 22:28
Total/NA	Analysis	SM 4500 S2 D		1	58171	MH2L	EA POM	10/05/23 14:35

Client Sample ID: Halawa Wells Units 1&2 P1

Lab Sample ID: 380-65446-2

Date Collected: 10/03/23 09:59

Matrix: Water

Date Received: 10/04/23 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	524.2		1	58700	P3EE	EA POM	10/10/23 16:40
Total/NA	Analysis	524.2		1	58476	N4CJ	EA POM	10/09/23 04:09
Total/NA	Prep	525.2			58278	N8NE	EA POM	10/06/23 13:45
Total/NA	Analysis	525.2		1	58459	Q8LA	EA POM	10/08/23 18:52
Total/NA	Prep	504.1			58189	LZ8Q	EA POM	10/06/23 11:50 - 10/06/23 13:00 [1]
Total/NA	Analysis	504.1		1	58395	LZ8Q	EA POM	10/06/23 23:58
Total/NA	Prep	505			58284	DR5R	EA POM	10/06/23 13:40 - 10/06/23 15:20 [1]
Total/NA	Analysis	505		1	58573	ULRL	EA POM	10/07/23 07:54
Total/NA	Prep	505			58554	DR5R	EA POM	10/09/23 11:49 - 10/09/23 13:48 [1]
Total/NA	Analysis	505		1	58759	ULRL	EA POM	10/09/23 16:46
Total/NA	Analysis	300.0		2	58026	VB9B	EA POM	10/05/23 00:29
Total/NA	Analysis	300.0		2	58027	VB9B	EA POM	10/05/23 00:29
Total/NA	Analysis	300.0		5	58027	VB9B	EA POM	10/05/23 01:19
Total/NA	Analysis	300.0		5	59112	UNJR	EA POM	10/11/23 21:16

Lab Chronicle

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

Job ID: 380-65446-1

Client Sample ID: Halawa Wells Units 1&2 P1

Lab Sample ID: 380-65446-2

Date Collected: 10/03/23 09:59
Matrix: Water
Date Received: 10/04/23 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	200.7 Rev 4.4		1	59160	J9ZD	EA POM	10/12/23 12:27
Total Recoverable	Prep	200.8			58521	Z45W	EA POM	10/09/23 08:54
Total Recoverable	Analysis	200.8		1	58627	J9ZD	EA POM	10/09/23 23:54
Total/NA	Prep	245.1			76201	AC	EA SB	10/09/23 13:26
Total/NA	Analysis	245.1		1	76233	AC	EA SB	10/09/23 19:59
Total/NA	Analysis	SM 2320B		1	58462	D5MQ	EA POM	10/06/23 23:32
Total/NA	Analysis	SM 2510B		1	58465	D5MQ	EA POM	10/06/23 23:32
Total/NA	Analysis	SM 2540C		1	58207	UJRF	EA POM	10/05/23 18:53
Total/NA	Analysis	SM 4500 F C		1	58460	D5MQ	EA POM	10/06/23 17:38
Total/NA	Analysis	SM 4500 H+ B		1	58467	D5MQ	EA POM	10/06/23 23:32
Total/NA	Analysis	SM 4500 S2 D		1	58171	MH2L	EA POM	10/05/23 14:35

Client Sample ID: TB Aiea Gulch Wells Pump 2

Lab Sample ID: 380-65446-3

Date Collected: 10/03/23 10:57
Matrix: Water
Date Received: 10/04/23 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	524.2		1	58700	P3EE	EA POM	10/10/23 17:04
Total/NA	Prep	504.1			58319	K9GY	EA POM	10/06/23 14:15 - 10/06/23 15:12 [1]
Total/NA	Analysis	504.1		1	58583	K9GY	EA POM	10/06/23 23:08

Client Sample ID: TB Halawa Wells Units 1&2 P1

Lab Sample ID: 380-65446-4

Date Collected: 10/03/23 09:59
Matrix: Water
Date Received: 10/04/23 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	524.2		1	58700	P3EE	EA POM	10/10/23 17:27
Total/NA	Analysis	524.2		1	58476	N4CJ	EA POM	10/09/23 05:42
Total/NA	Prep	504.1			58319	K9GY	EA POM	10/06/23 14:15 - 10/06/23 15:12 [1]
Total/NA	Analysis	504.1		1	58583	K9GY	EA POM	10/06/23 23:42

[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 Quarterly

Job ID: 380-65446-1

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-Trimethylbenzene
524.2		Water	1,3,5-Trimethylbenzene
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,i]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

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	06-30-24
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 Summary

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

Job ID: 380-65446-1

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	06-30-24
Northern Mariana Islands (DW)	State	IN00035	06-30-24
Ohio	State	87775	06-30-24
Oklahoma	NELAP	D9508	08-31-24
Oregon	NELAP	4156	09-16-24
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	11-14-23
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	06-30-24

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

Method Summary

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

Job ID: 380-65446-1

Method	Method Description	Protocol	Laboratory
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 POM
245.1	Mercury (CVAA)	EPA	EA SB
SM 2320B	Alkalinity	SM	EA POM
SM 2510B	Conductivity, Specific Conductance	SM	EA POM
SM 2540C	Solids, Total Dissolved (TDS)	SM	EA POM
SM 4500 F C	Fluoride	SM	EA POM
SM 4500 H+ B	pH	SM	EA POM
SM 4500 S2 D	Sulfide, Total	SM	EA POM
625	EPA 625 Base/Neutral and Acid Organics i	EPA	
8015	8015 - TPH DRO/ORO	EPA	
8015B	SW846 8015B Gasoline Range Organics	SW846	
200.8	Preparation, Total Recoverable Metals	EPA	EA POM
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 Quarterly

Job ID: 380-65446-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
380-65446-1	Aiea Gulch Wells Pump 2	Water	10/03/23 10:57	10/04/23 10:40
380-65446-2	Halawa Wells Units 1&2 P1	Water	10/03/23 09:59	10/04/23 10:40
380-65446-3	TB Aiea Gulch Wells Pump 2	Water	10/03/23 10:57	10/04/23 10:40
380-65446-4	TB Halawa Wells Units 1&2 P1	Water	10/03/23 09:59	10/04/23 10:40

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

Date: 10-25-2023
EMAX Batch No.: 23J047

Attn: Jackie Contreras

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

Subject: Laboratory Report
Project: 380-65446

Enclosed is the Laboratory report for samples received on 10/05/23.
The data reported relate only to samples listed below :

Sample ID	Control #	Col Date	Matrix	Analysis
380-65446-1	J047-01	10/03/23	WATER	TPH GASOLINE
				TPH ETHANOL
380-65446-2	J047-02	10/03/23	WATER	TPH GASOLINE
				TPH ETHANOL
380-65446-3	J047-03	10/03/23	WATER	TPH GASOLINE
380-65446-4	J047-04	10/03/23	WATER	TPH GASOLINE
380-65446-1MS	J047-01M	10/03/23	WATER	TPH GASOLINE
				ETHANOL
				TPH JP-5
				TPH DIESEL
380-65446-1MSD	J047-01S	10/03/23	WATER	TPH GASOLINE
				ETHANOL
				TPH JP-5
				TPH DIESEL
380-65446-2MS	J047-02M	10/03/23	WATER	TPH JP-8
380-65446-2MSD	J047-02S	10/03/23	WATER	TPH JP-8

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 CA002912023-25
ANAB Accredited DoD ELAP and ISO/IEC 17025 Certificate Number L2278 Testing
California ELAP Accredited Certificate Number 2672

23J047

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

Chain of Custody Record

eurofins | Environment Testing

12/5/2023

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Arada, Rachelle	Carrier Tracking No(s):	COC No: 380-82578.1
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 #: 380-65446-1
Address: 3051 Fujita Street, ,	Due Date Requested: 10/16/2023			
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 (380-65446-1)	10/3/23	10:57 Hawaiian		Water			X	X	X	12	See Attached Instructions
2	Halawa Wells Units 1&2 P1 (380-65446-2)	10/3/23	09:59 Hawaiian		Water			X	X	X	12	See Attached Instructions
3	TB Aiea Gulch Wells Pump 2 (380-65446-3)	10/3/23	10:57 Hawaiian		Water				X		2	See Attached Instructions
4	TB Halawa Wells Units 1&2 P1 (380-65446-4)	10/3/23	09:59 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
	[signature]	10/5/23 1019	[illegible]	[signature]	10/5/23 1019	EMAX
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
		(1) 2.9 / 2.7 (2) 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 23J047
☐ Fedex ☐ UPS ☐ GSO ☐ Others		Recipient Derek Sholl
☐ EMAX Courier ☑ Client Delivery		Date 10/05/23 Time 1019

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: -0.2	☑ Bubble Pack	☐ Styrofoam	☐ Popcorn	☐ Sufficient	☐ _____
Temperatures (Cool, ≤6 °C but not frozen)	☑ Cooler 1 2.9/2.7 °C	☑ Cooler 2 2.0/1.8 °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:	*A - S/N* 221852768	*B - S/N* 221925379	*C - S/N* 230044897	*D - S/N* 210760237	

Comments: ☐ Temperature is out of range. PM was informed IMMEDIATELY.

Note:

DISCREPANCIES

LabSampleID	LabSampleContainerID	Code	ClientSample Label ID / Information	Corrective Action
2	20	D10		R8
3,4	25-28	D7	two dates on label: 9/26/23 & 10/3/23	R1

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

10/5/23

NB 10/9/23

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	
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	Informed Client
R9	
R10	
R11	
R12	

REVIEWS:

Sample Labeling Jocelyne Colis Rama 10/05/23 10/5/23

SRF 10/5/23

PM NB 10/9/23

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

380-65446

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

SDG#: 23J047

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 380-65446

SDG : 23J047

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

A total of four(4) water samples were received on 10/05/23 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. VG39J04B - 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. VG39J04L/VG39J04C 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 J032-01M/J032-01S. 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 : 380-65446

SDG NO. : 23J047
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	VG39J04B	1	NA	10/05/2313:03	10/05/2313:03	EJ05005A	EJ05004A	23VG39J04	Method Blank
LCS1W	VG39J04L	1	NA	10/05/2313:42	10/05/2313:42	EJ05006A	EJ05004A	23VG39J04	Lab Control Sample (LCS)
LCD1W	VG39J04C	1	NA	10/05/2314:20	10/05/2314:20	EJ05007A	EJ05004A	23VG39J04	LCS Duplicate
380-65446-1	J047-01	1	NA	10/05/2317:33	10/05/2317:33	EJ05012A	EJ05004A	23VG39J04	Field Sample
380-65446-2	J047-02	1	NA	10/05/2318:11	10/05/2318:11	EJ05013A	EJ05004A	23VG39J04	Field Sample
380-65446-3	J047-03	1	NA	10/05/2318:50	10/05/2318:50	EJ05014A	EJ05004A	23VG39J04	Field Sample
380-65446-4	J047-04	1	NA	10/05/2319:28	10/05/2319:28	EJ05015A	EJ05004A	23VG39J04	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:	10/03/23 10:57
Project	: 380-65446	Date Received:	10/05/23
Batch No.	: 23J047	Date Extracted:	10/05/23 17:33
Sample ID	: 380-65446-1	Date Analyzed:	10/05/23 17:33
Lab Samp ID:	J047-01	Dilution Factor:	1
Lab File ID:	EJ05012A	Matrix:	WATER
Ext Btch ID:	23VG39J04	% Moisture:	NA
Calib. Ref.:	EJ05004A	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	0.0346	0.0400	86	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:	10/03/23 09:59
Project	: 380-65446	Date Received:	10/05/23
Batch No.	: 23J047	Date Extracted:	10/05/23 18:11
Sample ID	: 380-65446-2	Date Analyzed:	10/05/23 18:11
Lab Samp ID:	J047-02	Dilution Factor:	1
Lab File ID:	EJ05013A	Matrix:	WATER
Ext Btch ID:	23VG39J04	% Moisture:	NA
Calib. Ref.:	EJ05004A	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	0.0341	0.0400	85	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:	10/03/23 10:57
Project	: 380-65446	Date Received:	10/05/23
Batch No.	: 23J047	Date Extracted:	10/05/23 18:50
Sample ID	: 380-65446-3	Date Analyzed:	10/05/23 18:50
Lab Samp ID:	J047-03	Dilution Factor:	1
Lab File ID:	EJ05014A	Matrix:	WATER
Ext Btch ID:	23VG39J04	% Moisture:	NA
Calib. Ref.:	EJ05004A	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	0.0333	0.0400	83	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:	10/03/23 09:59
Project	: 380-65446	Date Received:	10/05/23
Batch No.	: 23J047	Date Extracted:	10/05/23 19:28
Sample ID	: 380-65446-4	Date Analyzed:	10/05/23 19:28
Lab Samp ID:	J047-04	Dilution Factor:	1
Lab File ID:	EJ05015A	Matrix:	WATER
Ext Btch ID:	23VG39J04	% Moisture:	NA
Calib. Ref.:	EJ05004A	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	0.0345	0.0400	86	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:	10/05/23 13:03
Project	: 380-65446	Date Received:	10/05/23
Batch No.	: 23J047	Date Extracted:	10/05/23 13:03
Sample ID	: MBLK1W	Date Analyzed:	10/05/23 13:03
Lab Samp ID:	VG39J04B	Dilution Factor:	1
Lab File ID:	EJ05005A	Matrix:	WATER
Ext Btch ID:	23VG39J04	% Moisture:	NA
Calib. Ref.:	EJ05004A	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	0.0330	0.0400	82	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 : 380-65446
BATCH NO. : 23J047
METHOD : 5030B/8015B

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: MBLK1W	LCS1W	LCD1W
LAB SAMPLE ID	: VG39J04B	VG39J04L	VG39J04C
LAB FILE ID	: EJ05005A	EJ05006A	EJ05007A
DATE PREPARED	: 10/05/23 13:03	10/05/23 13:42	10/05/23 14:20
DATE ANALYZED	: 10/05/23 13:03	10/05/23 13:42	10/05/23 14:20
PREP BATCH	: 23VG39J04	23VG39J04	23VG39J04
CALIBRATION REF	: EJ05004A	EJ05004A	EJ05004A

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	0.472	94	0.500	0.485	97	3	60-130	30

SURROGATE PARAMETER	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	SpikeAmt (mg/L)	LCDResult (mg/L)	LCDRec (%)	QCLimit (%)
Bromofluorobenzene	0.0400	0.0453	113	0.0400	0.0454	114	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 : 380-65252
BATCH NO. : 23J032
METHOD : 5030B/8015B

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: 380-65252-1	380-65252-1MS	380-65252-1MSD
LAB SAMPLE ID	: J032-01	J032-01M	J032-01S
LAB FILE ID	: EJ05008A	EJ05009A	EJ05010A
DATE PREPARED	: 10/05/23 14:59	10/05/23 15:37	10/05/23 16:16
DATE ANALYZED	: 10/05/23 14:59	10/05/23 15:37	10/05/23 16:16
PREP BATCH	: 23VG39J04	23VG39J04	23VG39J04
CALIBRATION REF	: EJ05004A	EJ05004A	EJ05004A

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	0.425	85	0.500	0.485	97	13	50-130	30

SURROGATE PARAMETER	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromofluorobenzene	0.0400	0.0446	112	0.0400	0.0462	116	60-140

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

LABORATORY REPORT FOR

EUROFINS EATON ANALYTICAL

380-65446

METHOD 3520C / 8015B
TOTAL PERTROLEUM HYDROCARBONS BY EXTRACTION

SDG#: 23J047

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 380-65446

SDG : 23J047

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

A total of two(2) water samples were received on 10/05/23 to be analyzed for Total Petroleum Hydrocarbons by Extraction in accordance with Method 3520C/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. DSJ014WB - 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 DSJ014WL. 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 23J047-01M/23J047-01S. 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
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.

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 380-65446

SDG : 23J047

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

A total of two(2) water samples were received on 10/05/23 to be analyzed for Petroleum Hydrocarbons by Extraction in accordance with Method 3520C/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. DSJ014WB - 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 J5J014WL. 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 23J047-01M/23J047-01S. 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
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.

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 380-65446

SDG : 23J047

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

A total of two(2) water samples were received on 10/05/23 to be analyzed for Petroleum Hydrocarbons by Extraction in accordance with Method 3520C/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. DSJ014WB - 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 J8J014WL. 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 23J047-02M/23J047-02S. 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
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 EXTRACTION

Client : EUROFINS EATON ANALYTICAL
Project : 380-65446

SDG NO. : 23J047
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	DSJ014WB	1	NA	10/14/2310:29	10/13/2311:30	LJ13037A	LJ13034A	23DSJ014W	Method Blank
LCS1W	DSJ014WL	1	NA	10/14/2310:48	10/13/2311:30	LJ13038A	LJ13034A	23DSJ014W	Lab Control Sample (LCS)
380-65446-1	J047-01	1	NA	10/14/2311:44	10/13/2311:30	LJ13041A	LJ13034A	23DSJ014W	Field Sample
380-65446-1MS	J047-01M	1	NA	10/14/2312:02	10/13/2311:30	LJ13042A	LJ13034A	23DSJ014W	Matrix Spike Sample (MS)
380-65446-1MSD	J047-01S	1	NA	10/14/2312:21	10/13/2311:30	LJ13043A	LJ13034A	23DSJ014W	MS Duplicate (MSD)
380-65446-2	J047-02	1	NA	10/14/2313:17	10/13/2311:30	LJ13046A	LJ13034A	23DSJ014W	Field Sample

FN - Filename
% Moist - Percent Moisture

LAB CHRONICLE
PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATON ANALYTICAL
Project : 380-65446

SDG NO. : 23J047
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	DSJ014WB	1	NA	10/14/2310:29	10/13/2311:30	LJ13037A	LJ13035A	23DSJ014W	Method Blank
LCS1W	J5J014WL	1	NA	10/14/2311:06	10/13/2311:30	LJ13039A	LJ13035A	23DSJ014W	Lab Control Sample (LCS)
380-65446-1	J047-01	1	NA	10/14/2311:44	10/13/2311:30	LJ13041A	LJ13035A	23DSJ014W	Field Sample
380-65446-1MS	J047-01M	1	NA	10/14/2312:40	10/13/2311:30	LJ13044A	LJ13035A	23DSJ014W	Matrix Spike Sample (MS)
380-65446-1MSD	J047-01S	1	NA	10/14/2312:58	10/13/2311:30	LJ13045A	LJ13035A	23DSJ014W	MS Duplicate (MSD)
380-65446-2	J047-02	1	NA	10/14/2313:17	10/13/2311:30	LJ13046A	LJ13035A	23DSJ014W	Field Sample

FN - Filename
% Moist - Percent Moisture

LAB CHRONICLE
PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATON ANALYTICAL
Project : 380-65446

SDG NO. : 23J047
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	DSJ014WB	1	NA	10/14/2310:29	10/13/2311:30	LJ13037A	LJ13036A	23DSJ014W	Method Blank
LCS1W	J8J014WL	1	NA	10/14/2311:25	10/13/2311:30	LJ13040A	LJ13036A	23DSJ014W	Lab Control Sample (LCS)
380-65446-1	J047-01	1	NA	10/14/2311:44	10/13/2311:30	LJ13041A	LJ13036A	23DSJ014W	Field Sample
380-65446-2	J047-02	1	NA	10/14/2313:17	10/13/2311:30	LJ13046A	LJ13036A	23DSJ014W	Field Sample
380-65446-2MS	J047-02M	1	NA	10/14/2313:36	10/13/2311:30	LJ13047A	LJ13036A	23DSJ014W	Matrix Spike Sample (MS)
380-65446-2MSD	J047-02S	1	NA	10/14/2313:55	10/13/2311:30	LJ13048A	LJ13036A	23DSJ014W	MS Duplicate (MSD)

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	10/03/23 10:57
Project	: 380-65446	Date Received:	10/05/23
Batch No.	: 23J047	Date Extracted:	10/13/23 11:30
Sample ID	: 380-65446-1	Date Analyzed:	10/14/23 11:44
Lab Samp ID:	23J047-01	Dilution Factor:	1
Lab File ID:	LJ13041A	Matrix:	WATER
Ext Btch ID:	23DSJ014W	% Moisture:	NA
Calib. Ref.:	LJ13034A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Diesel	ND	0.028	0.014
Motor Oil	ND	0.056	0.028

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.399	0.555	72	60-130
Hexacosane	0.133	0.139	96	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	: 900ml	Final Volume	: 5ml
Prepared by	: RGalan	Analyzed by	: SDeeso

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	10/03/23 10:57
Project	: 380-65446	Date Received:	10/05/23
Batch No.	: 23J047	Date Extracted:	10/13/23 11:30
Sample ID	: 380-65446-1	Date Analyzed:	10/14/23 11:44
Lab Samp ID:	23J047-01	Dilution Factor:	1
Lab File ID:	LJ13041A	Matrix:	WATER
Ext Btch ID:	23DSJ014W	% Moisture:	NA
Calib. Ref.:	LJ13035A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
JP5	ND	0.056	0.028

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.399	0.555	72	60-130
Hexacosane	0.133	0.139	96	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 : 900ml Final Volume : 5ml
Prepared by : RGalan Analyzed by : SDeeso

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	10/03/23 10:57
Project	: 380-65446	Date Received:	10/05/23
Batch No.	: 23J047	Date Extracted:	10/13/23 11:30
Sample ID	: 380-65446-1	Date Analyzed:	10/14/23 11:44
Lab Samp ID:	23J047-01	Dilution Factor:	1
Lab File ID:	LJ13041A	Matrix:	WATER
Ext Btch ID:	23DSJ014W	% Moisture:	NA
Calib. Ref.:	LJ13036A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
JP8	ND	0.056	0.028

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.399	0.555	72	60-130
Hexacosane	0.133	0.139	96	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 : 900ml Final Volume : 5ml
Prepared by : RGalan Analyzed by : SDeeso

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	10/03/23 09:59
Project	: 380-65446	Date Received:	10/05/23
Batch No.	: 23J047	Date Extracted:	10/13/23 11:30
Sample ID	: 380-65446-2	Date Analyzed:	10/14/23 13:17
Lab Samp ID:	23J047-02	Dilution Factor:	1
Lab File ID:	LJ13046A	Matrix:	WATER
Ext Btch ID:	23DSJ014W	% Moisture:	NA
Calib. Ref.:	LJ13034A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Diesel	ND	0.025	0.013
Motor Oil	ND	0.051	0.025

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.343	0.510	67	60-130
Hexacosane	0.115	0.127	91	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	: 980ml	Final Volume :	5ml
Prepared by	: RGalan	Analyzed by :	SDeeso

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	10/03/23 09:59
Project	: 380-65446	Date Received:	10/05/23
Batch No.	: 23J047	Date Extracted:	10/13/23 11:30
Sample ID	: 380-65446-2	Date Analyzed:	10/14/23 13:17
Lab Samp ID:	23J047-02	Dilution Factor:	1
Lab File ID:	LJ13046A	Matrix:	WATER
Ext Btch ID:	23DSJ014W	% Moisture:	NA
Calib. Ref.:	LJ13035A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
JP5	ND	0.051	0.025

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.343	0.510	67	60-130
Hexacosane	0.115	0.127	91	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 : 980ml Final Volume : 5ml
Prepared by : RGalan Analyzed by : SDeeso

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	10/03/23 09:59
Project	: 380-65446	Date Received:	10/05/23
Batch No.	: 23J047	Date Extracted:	10/13/23 11:30
Sample ID	: 380-65446-2	Date Analyzed:	10/14/23 13:17
Lab Samp ID:	23J047-02	Dilution Factor:	1
Lab File ID:	LJ13046A	Matrix:	WATER
Ext Btch ID:	23DSJ014W	% Moisture:	NA
Calib. Ref.:	LJ13036A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
JP8	ND	0.051	0.025

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.343	0.510	67	60-130
Hexacosane	0.115	0.127	91	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 : 980ml 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:	10/13/23 11:30
Project	: 380-65446	Date Received:	10/13/23
Batch No.	: 23J047	Date Extracted:	10/13/23 11:30
Sample ID	: MBLK1W	Date Analyzed:	10/14/23 10:29
Lab Samp ID:	DSJ014WB	Dilution Factor:	1
Lab File ID:	LJ13037A	Matrix:	WATER
Ext Btch ID:	23DSJ014W	% Moisture:	NA
Calib. Ref.:	LJ13034A	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	0.336	0.500	67	60-130
Hexacosane	0.117	0.125	94	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 : 380-65446
BATCH NO. : 23J047
METHOD : 3520C/8015B

MATRIX	: WATER	% MOISTURE:NA
DILUTION FACTOR	: 1	1
SAMPLE ID	: MBLK1W	LCS1W
LAB SAMPLE ID	: DSJ014WB	DSJ014WL
LAB FILE ID	: LJ13037A	LJ13038A
DATE PREPARED	: 10/13/23 11:30	10/13/23 11:30
DATE ANALYZED	: 10/14/23 10:29	10/14/23 10:48
PREP BATCH	: 23DSJ014W	23DSJ014W
CALIBRATION REF	: LJ13034A	LJ13034A

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Diesel	ND	2.50	2.09	84	50-130

SURROGATE PARAMETERS	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Bromobenzene	0.500	0.339	68	60-130
Hexacosane	0.125	0.124	99	60-130

MB: Method Blank sample LCS: Lab Control Sample

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 380-65446
BATCH NO. : 23J047
METHOD : 3520C/8015B

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: 380-65446-1	380-65446-1MS	380-65446-1MSD
LAB SAMPLE ID	: 23J047-01	23J047-01M	23J047-01S
LAB FILE ID	: LJ13041A	LJ13042A	LJ13043A
DATE PREPARED	: 10/13/23 11:30	10/13/23 11:30	10/13/23 11:30
DATE ANALYZED	: 10/14/23 11:44	10/14/23 12:02	10/14/23 12:21
PREP BATCH	: 23DSJ014W	23DSJ014W	23DSJ014W
CALIBRATION REF	: LJ13034A	LJ13034A	LJ13034A

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
Diesel	ND	2.88	2.42	84	2.72	2.45	90	1	50-130	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromobenzene	0.575	0.352	61	0.545	0.395	72	60-130
Hexacosane	0.144	0.148	103	0.136	0.147	108	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:	10/13/23 11:30
Project	: 380-65446	Date Received:	10/13/23
Batch No.	: 23J047	Date Extracted:	10/13/23 11:30
Sample ID	: MBLK1W	Date Analyzed:	10/14/23 10:29
Lab Samp ID:	DSJ014WB	Dilution Factor:	1
Lab File ID:	LJ13037A	Matrix:	WATER
Ext Btch ID:	23DSJ014W	% Moisture:	NA
Calib. Ref.:	LJ13035A	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	0.336	0.500	67	60-130
Hexacosane	0.117	0.125	94	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 : 380-65446
BATCH NO. : 23J047
METHOD : 3520C/8015B

MATRIX	: WATER	% MOISTURE:NA
DILUTION FACTOR	: 1	1
SAMPLE ID	: MBLK1W	LCS1W
LAB SAMPLE ID	: DSJ014WB	J5J014WL
LAB FILE ID	: LJ13037A	LJ13039A
DATE PREPARED	: 10/13/23 11:30	10/13/23 11:30
DATE ANALYZED	: 10/14/23 10:29	10/14/23 11:06
PREP BATCH	: 23DSJ014W	23DSJ014W
CALIBRATION REF	: LJ13035A	LJ13035A

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
JP5	ND	2.50	1.54	62	30-160

SURROGATE PARAMETERS	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Bromobenzene	0.500	0.330	66	60-130
Hexacosane	0.125	0.121	97	60-130

MB: Method Blank sample LCS: Lab Control Sample

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 380-65446
BATCH NO. : 23J047
METHOD : 3520C/8015B

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: 380-65446-1	380-65446-1MS	380-65446-1MSD
LAB SAMPLE ID	: 23J047-01	23J047-01M	23J047-01S
LAB FILE ID	: LJ13041A	LJ13044A	LJ13045A
DATE PREPARED	: 10/13/23 11:30	10/13/23 11:30	10/13/23 11:30
DATE ANALYZED	: 10/14/23 11:44	10/14/23 12:40	10/14/23 12:58
PREP BATCH	: 23DSJ014W	23DSJ014W	23DSJ014W
CALIBRATION REF	: LJ13035A	LJ13035A	LJ13035A

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
JP5	ND	2.70	1.73	64	2.62	2.17	83	23	30-160	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromobenzene	0.540	0.352	65	0.525	0.404	77	60-130
Hexacosane	0.135	0.127	94	0.131	0.122	93	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:	10/13/23 11:30
Project	: 380-65446	Date Received:	10/13/23
Batch No.	: 23J047	Date Extracted:	10/13/23 11:30
Sample ID	: MBLK1W	Date Analyzed:	10/14/23 10:29
Lab Samp ID:	DSJ014WB	Dilution Factor:	1
Lab File ID:	LJ13037A	Matrix:	WATER
Ext Btch ID:	23DSJ014W	% Moisture:	NA
Calib. Ref.:	LJ13036A	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	0.336	0.500	67	60-130
Hexacosane	0.117	0.125	94	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 : 380-65446
BATCH NO. : 23J047
METHOD : 3520C/8015B

MATRIX	: WATER	% MOISTURE:NA
DILUTION FACTOR	: 1	1
SAMPLE ID	: MBLK1W	LCS1W
LAB SAMPLE ID	: DSJ014WB	J8J014WL
LAB FILE ID	: LJ13037A	LJ13040A
DATE PREPARED	: 10/13/23 11:30	10/13/23 11:30
DATE ANALYZED	: 10/14/23 10:29	10/14/23 11:25
PREP BATCH	: 23DSJ014W	23DSJ014W
CALIBRATION REF	: LJ13036A	LJ13036A

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
JP8	ND	2.50	1.78	71	30-160

SURROGATE PARAMETERS	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Bromobenzene	0.500	0.452	90	60-130
Hexacosane	0.125	0.127	102	60-130

MB: Method Blank sample LCS: Lab Control Sample

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 380-65446
BATCH NO. : 23J047
METHOD : 3520C/8015B

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: 380-65446-2	380-65446-2MS	380-65446-2MSD
LAB SAMPLE ID	: 23J047-02	23J047-02M	23J047-02S
LAB FILE ID	: LJ13046A	LJ13047A	LJ13048A
DATE PREPARED	: 10/13/23 11:30	10/13/23 11:30	10/13/23 11:30
DATE ANALYZED	: 10/14/23 13:17	10/14/23 13:36	10/14/23 13:55
PREP BATCH	: 23DSJ014W	23DSJ014W	23DSJ014W
CALIBRATION REF	: LJ13036A	LJ13036A	LJ13036A

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
JP8	ND	2.75	1.88	68	2.78	2.40	86	24	30-160	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromobenzene	0.550	0.393	71	0.555	0.503	91	60-130
Hexacosane	0.138	0.133	97	0.139	0.136	98	60-130

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

LABORATORY REPORT FOR

EUROFINS EATON ANALYTICAL

380-65446

METHOD SW8015C
ALCOHOLS BY GC

SDG#: 23J047

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 380-65446

SDG : 23J047

METHOD SW8015C
ALCOHOLS BY GC

A total of two(2) water samples were received on 10/05/23 to be analyzed for Alcohols by GC in accordance with Method SW8015C 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. MEJ001WB - 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. MEJ001WL/MEJ001WC 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 J032-01M/J032-01S. Refer to Matrix QC summary form 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
ALCOHOLS BY GC

Client : EUROFINS EATON ANALYTICAL
Project : 380-65446

SDG NO. : 23J047
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	MEJ001WB	1	NA	10/05/2310:51	NA	TJ05004A	TJ05002A	MEJ001W	Method Blank
LCS1W	MEJ001WL	1	NA	10/05/2311:08	NA	TJ05005A	TJ05002A	MEJ001W	Lab Control Sample (LCS)
LCD1W	MEJ001WC	1	NA	10/05/2311:29	NA	TJ05006A	TJ05002A	MEJ001W	LCS Duplicate
380-65446-1	J047-01	1	NA	10/05/2314:24	NA	TJ05014A	TJ05010A	MEJ001W	Field Sample
380-65446-2	J047-02	1	NA	10/05/2314:38	NA	TJ05015A	TJ05010A	MEJ001W	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD SW8015C
ALCOHOLS BY GC

Client : EUROFINS EATON ANALYTICAL	Date Collected: 10/03/23
Project : 380-65446	Date Received: 10/05/23
Batch No. : 23J047	Date Extracted: NA
Sample ID: 380-65446-1	Date Analyzed: 10/05/23 14:24
Lab Samp ID: J047-01	Dilution Factor: 1
Lab File ID: TJ05014A	Matrix : WATER
Ext Btch ID: MEJ001W	% Moisture : NA
Calib. Ref.: TJ05010A	Instrument ID : GCT050

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANOL	ND	2000	500

RL : Reporting Limit

METHOD SW8015C
ALCOHOLS BY GC

Client : EUROFINS EATON ANALYTICAL	Date Collected: 10/03/23
Project : 380-65446	Date Received: 10/05/23
Batch No. : 23J047	Date Extracted: NA
Sample ID: 380-65446-2	Date Analyzed: 10/05/23 14:38
Lab Samp ID: J047-02	Dilution Factor: 1
Lab File ID: TJ05015A	Matrix : WATER
Ext Btch ID: MEJ001W	% Moisture : NA
Calib. Ref.: TJ05010A	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 : 380-65446	Date Received: NA
Batch No. : 23J047	Date Extracted: NA
Sample ID: MBLK1W	Date Analyzed: 10/05/23 10:51
Lab Samp ID: MEJ001WB	Dilution Factor: 1
Lab File ID: TJ05004A	Matrix : WATER
Ext Btch ID: MEJ001W	% Moisture : NA
Calib. Ref.: TJ05002A	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: 380-65446
BATCH NO.: 23J047
METHOD: METHOD SW8015C

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	MEJ001WB	MEJ001WL	MEJ001WC		
LAB FILE ID:	TJ05004A	TJ05005A	TJ05006A		
DATE EXTRACTED:	NA	NA	NA	DATE COLLECTED:	NA
DATE ANALYZED:	10/05/2310:51	10/05/2311:08	10/05/2311:29	DATE RECEIVED:	NA
PREP. BATCH:	MEJ001W	MEJ001W	MEJ001W		
CALIB. REF:	TJ05002A	TJ05002A	TJ05002A		

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	11400	114	10000	10500	105	8	60-130	30

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT: EUROFINS EATON ANALYTICAL
PROJECT: 380-65252
BATCH NO.: 23J032
METHOD: METHOD SW8015C

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	380-65252-1				
LAB SAMP ID:	J032-01	J032-01M	J032-01S		
LAB FILE ID:	TJ05011A	TJ05012A	TJ05013A		
DATE EXTRACTED:	NA	NA	NA	DATE COLLECTED:	10/02/23
DATE ANALYZED:	10/05/2313:40	10/05/2313:56	10/05/2314:10	DATE RECEIVED:	10/04/23
PREP. BATCH:	MEJ001W	MEJ001W	MEJ001W		
CALIB. REF:	TJ05010A	TJ05010A	TJ05010A		

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	10600	106	10000	10700	107	1	60-130	30

November 16, 2023

Rachelle Arada
Eurofins Eaton Analytical
750 Royal Oaks Drive
Suite 100
Monrovia, CA 91016-

Project Name: RED-HILL Project # 38001111 Job # 380-65446-1
Physis Project ID: 1407003-450

Dear Rachelle,

Enclosed are the analytical results for samples submitted to PHYSIS Environmental Laboratories, Inc. (PHYSIS) on 10/5/2023. A total of 2 samples were received for analysis in accordance with the attached chain of custody (COC). Per the COC, the samples were 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,
misty mercier
Misty Mercier
714 602-5320
Extension 202
mistymercier@physislabs.com

PHYSIS
TERRA FAUNA FLORA AQUA AURA
ENVIRONMENTAL LABORATORIES, INC.
Innovative Solutions for Nature

PROJECT SAMPLE LIST

Eurofins Eaton Analytical

PHYSIS Project ID: 1407003-450

RED-HILL Project # 38001111 Job # 380-65446-1

Total Samples: 2

PHYSIS ID	Sample ID	Description	Date	Time	Matrix	Sample Type
111815	Aiea Gulch Wells Pump 2	380-65446-1	10/3/2023	10:57	Samplewater	Not Specified
111816	Halawa Wells Units 1&2 P1	380-65446-2	10/3/2023	9:59	Samplewater	Not Specified

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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

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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.

SURROGATES: A surrogate is a pure analyte unlikely to be found in any project sample, behaves similarly to

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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: 1407003-450
Client: Eurofins Eaton Analytical
Project: RED-HILL Project # 38001111 Job # 380-65446-1

Acid Extractable Compounds

ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 111815-R1	**Aiea Gulch Wells Pump 2 380-6544**	**Matrix: Samplewater**					**Sampled:**	**03-Oct-23 10:57**		**Received:**	**05-Oct-23**
(2,4,6-Tribromophenol)	EPA 625.1	% Recovery	54	1			Total		O-42134	10-Oct-23	09-Nov-23
(d5-Phenol)	EPA 625.1	% Recovery	33	1			Total		O-42134	10-Oct-23	09-Nov-23
2,4,5-Trichlorophenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
2,4,6-Trichlorophenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
2,4-Dichlorophenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
2,4-Dinitrophenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-42134	10-Oct-23	09-Nov-23
2,6-Dichlorophenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
2,6-Di-tert-butyl-4-methylphenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
2,6-Di-tert-butylphenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
2-Chlorophenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
2-Methyl-4,6-dinitrophenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-42134	10-Oct-23	09-Nov-23
2-Methylphenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-42134	10-Oct-23	09-Nov-23
2-Nitrophenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-42134	10-Oct-23	09-Nov-23
3+4-Methylphenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-42134	10-Oct-23	09-Nov-23
4-Chloro-3-methylphenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-42134	10-Oct-23	09-Nov-23
4-Nitrophenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-42134	10-Oct-23	09-Nov-23
6-tert-butyl-2,4-dimethylphenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
Benzoic Acid	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-42134	10-Oct-23	09-Nov-23
Benzyl Alcohol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-42134	10-Oct-23	09-Nov-23
Pentachlorophenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
Phenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-42134	10-Oct-23	09-Nov-23
p-tert-Butylphenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23

PHYSIS Project ID: 1407003-450
Client: Eurofins Eaton Analytical
Project: RED-HILL Project # 38001111 Job # 380-65446-1

Acid Extractable Compounds

ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 111816-R1	**Halawa Wells Units 1&2 P1 380-654**	**Matrix: Samplewater**					**Sampled:**	**03-Oct-23**	**9:59**	**Received:**	**05-Oct-23**
(2,4,6-Tribromophenol)	EPA 625.1	% Recovery	52	1			Total		O-42134	10-Oct-23	09-Nov-23
(d5-Phenol)	EPA 625.1	% Recovery	24	1			Total		O-42134	10-Oct-23	09-Nov-23
2,4,5-Trichlorophenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
2,4,6-Trichlorophenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
2,4-Dichlorophenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
2,4-Dinitrophenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-42134	10-Oct-23	09-Nov-23
2,6-Dichlorophenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
2,6-Di-tert-butyl-4-methylphenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
2,6-Di-tert-butylphenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
2-Chlorophenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
2-Methyl-4,6-dinitrophenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-42134	10-Oct-23	09-Nov-23
2-Methylphenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-42134	10-Oct-23	09-Nov-23
2-Nitrophenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-42134	10-Oct-23	09-Nov-23
3+4-Methylphenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-42134	10-Oct-23	09-Nov-23
4-Chloro-3-methylphenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-42134	10-Oct-23	09-Nov-23
4-Nitrophenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-42134	10-Oct-23	09-Nov-23
6-tert-butyl-2,4-dimethylphenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
Benzoic Acid	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-42134	10-Oct-23	09-Nov-23
Benzyl Alcohol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-42134	10-Oct-23	09-Nov-23
Pentachlorophenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
Phenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-42134	10-Oct-23	09-Nov-23
p-tert-Butylphenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23

Base/Neutral Extractable Compounds

ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 111815-R1	**Aiea Gulch Wells Pump 2 380-6544**	**Matrix: Samplewater**					**Sampled: 03-Oct-23 10:57**			**Received: 05-Oct-23**	
2-Chloronaphthalene	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
2-Nitroaniline	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
3-Nitroaniline	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
4-Bromophenylphenyl ether	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
4-Chloroaniline	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
4-Chlorophenylphenyl ether	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
4-Nitroaniline	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
Aniline	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
Benzidine	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
Bis(2-Chloroethoxy) methane	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
Bis(2-Chloroethyl) ether	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
Bis(2-Chloroisopropyl) ether	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
Dibenzofuran	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
Disalicylidenepropanediamine	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
Hexachloroethane	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
Nitrobenzene	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
N-Nitrosodi-n-propylamine	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
N-Nitrosodiphenylamine	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23

Base/Neutral Extractable Compounds

ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 111816-R1	**Halawa Wells Units 1&2 P1 380-654**	**Matrix: Samplewater**					**Sampled:**	**03-Oct-23**	**9:59**	**Received:**	**05-Oct-23**
2-Chloronaphthalene	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
2-Nitroaniline	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
3-Nitroaniline	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
4-Bromophenylphenyl ether	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
4-Chloroaniline	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
4-Chlorophenylphenyl ether	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
4-Nitroaniline	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
Aniline	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
Benzidine	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
Bis(2-Chloroethoxy) methane	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
Bis(2-Chloroethyl) ether	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
Bis(2-Chloroisopropyl) ether	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
Dibenzofuran	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
Disalicylidenepropanediamine	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
Hexachloroethane	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
Nitrobenzene	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
N-Nitrosodi-n-propylamine	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23
N-Nitrosodiphenylamine	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42134	10-Oct-23	09-Nov-23

Polynuclear Aromatic Hydrocarbons

ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 111815-R1	**Aiea Gulch Wells Pump 2 380-6544**	**Matrix: Samplewater**					**Sampled: 03-Oct-23 10:57**			**Received: 05-Oct-23**	
(d10-Acenaphthene)	EPA 625.1	% Recovery	104	1			Total		O-42134	10-Oct-23	09-Nov-23
(d10-Phenanthrene)	EPA 625.1	% Recovery	100	1			Total		O-42134	10-Oct-23	09-Nov-23
(d12-Chrysene)	EPA 625.1	% Recovery	102	1			Total		O-42134	10-Oct-23	09-Nov-23
(d12-Perylene)	EPA 625.1	% Recovery	98	1			Total		O-42134	10-Oct-23	09-Nov-23
(d8-Naphthalene)	EPA 625.1	% Recovery	100	1			Total		O-42134	10-Oct-23	09-Nov-23
1-Methylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
1-Methylphenanthrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
2,3,5-Trimethylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
2,6-Dimethylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
2-Methylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Acenaphthene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Acenaphthylene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Anthracene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Benz[a]anthracene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Benzo[a]pyrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Benzo[b]fluoranthene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Benzo[e]pyrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Benzo[g,h,i]perylene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Benzo[k]fluoranthene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Biphenyl	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Chrysene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Dibenz[a,h]anthracene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Dibenzo[a,l]pyrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Dibenzothiophene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23

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-42134	10-Oct-23	09-Nov-23
Fluorene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Indeno[1,2,3-cd]pyrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Naphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Perylene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Phenanthrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Pyrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23

PHYSIS Project ID: 1407003-450
Client: Eurofins Eaton Analytical
Project: RED-HILL Project # 38001111 Job # 380-65446-1

Polynuclear Aromatic Hydrocarbons

ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 111816-R1	**Halawa Wells Units 1&2 P1 380-654**	**Matrix: Samplewater**					**Sampled:**	**03-Oct-23 9:59**		**Received:**	**05-Oct-23**
(d10-Acenaphthene)	EPA 625.1	% Recovery	95	1			Total		O-42134	10-Oct-23	09-Nov-23
(d10-Phenanthrene)	EPA 625.1	% Recovery	96	1			Total		O-42134	10-Oct-23	09-Nov-23
(d12-Chrysene)	EPA 625.1	% Recovery	97	1			Total		O-42134	10-Oct-23	09-Nov-23
(d12-Perylene)	EPA 625.1	% Recovery	90	1			Total		O-42134	10-Oct-23	09-Nov-23
(d8-Naphthalene)	EPA 625.1	% Recovery	92	1			Total		O-42134	10-Oct-23	09-Nov-23
1-Methylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
1-Methylphenanthrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
2,3,5-Trimethylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
2,6-Dimethylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
2-Methylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Acenaphthene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Acenaphthylene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Anthracene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Benz[a]anthracene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Benzo[a]pyrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Benzo[b]fluoranthene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Benzo[e]pyrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Benzo[g,h,i]perylene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Benzo[k]fluoranthene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Biphenyl	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Chrysene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Dibenz[a,h]anthracene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Dibenzo[a,l]pyrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Dibenzothiophene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23

PHYSIS Project ID: 1407003-450
Client: Eurofins Eaton Analytical
Project: RED-HILL Project # 38001111 Job # 380-65446-1

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-42134	10-Oct-23	09-Nov-23
Fluorene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Indeno[1,2,3-cd]pyrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Naphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Perylene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Phenanthrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23
Pyrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-42134	10-Oct-23	09-Nov-23

QUALITY CONTROL REPORT

PHYSIS Project ID: 1407003-450
Client: Eurofins Eaton Analytical
Project: RED-HILL Project # 38001111 Job # 380-65446-1

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: 111814-B1	**QAQC Procedural Blank**					**Matrix: BlankMatrix**	**Sampled:**			**Received:**			
	Method: EPA 625.1					Batch ID: O-42134		Prepared: 09-Oct-23		Analyzed: 08-Nov-23			
(2,4,6-Tribromophenol)	Total	63	1			% Recovery	100	63	30 - 130%	PASS			
(d5-Phenol)	Total	109	1			% Recovery	100	109	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: 111814-BS1	**QAQC Procedural Blank**					**Matrix: BlankMatrix**	**Sampled:**					**Received:**	
	Method: EPA 625.1					Batch ID: O-42134		Prepared: 09-Oct-23				Analyzed: 08-Nov-23	
(2,4,6-Tribromophenol)	Total	70	1			% Recovery	100	0	70	30 - 130%	PASS		
(d5-Phenol)	Total	114	1			% Recovery	100	0	114	0 - 130%	PASS		
2,4,5-Trichlorophenol	Total	0.704	1	0.05	0.1	µg/L	1	0	70	30 - 130%	PASS		
2,4,6-Trichlorophenol	Total	0.654	1	0.05	0.1	µg/L	1	0	65	56 - 118%	PASS		
2,4-Dichlorophenol	Total	0.867	1	0.05	0.1	µg/L	1	0	87	51 - 117%	PASS		
2,4-Dinitrophenol	Total	0.0199	1	0.1	0.2	µg/L	1	0	2	0 - 152%	PASS		
2,6-Dichlorophenol	Total	0.428	1	0.05	0.1	µg/L	0.5	0	86	30 - 130%	PASS		
2,6-Di-tert-butyl-4-methylphenol	Total	0.848	1	0.05	0.1	µg/L	1	0	85	50 - 150%	PASS		
2,6-Di-tert-butylphenol	Total	0.858	1	0.05	0.1	µg/L	1	0	86	50 - 150%	PASS		
2-Chlorophenol	Total	0.861	1	0.05	0.1	µg/L	1	0	86	41 - 110%	PASS		
2-Methyl-4,6-dinitrophenol	Total	0.759	1	0.1	0.2	µg/L	1	0	76	0 - 141%	PASS		
2-Methylphenol	Total	0.889	1	0.1	0.2	µg/L	1	0	89	40 - 117%	PASS		
2-Nitrophenol	Total	0.948	1	0.1	0.2	µg/L	1	0	95	40 - 117%	PASS		
3+4-Methylphenol	Total	0.922	1	0.1	0.2	µg/L	1	0	92	0 - 130%	PASS		
4-Chloro-3-methylphenol	Total	0.989	1	0.1	0.2	µg/L	1	0	99	51 - 128%	PASS		
4-Nitrophenol	Total	2.19	1	0.1	0.2	µg/L	2	0	110	10 - 164%	PASS		
6-tert-butyl-2,4-dimethylphenol	Total	0.952	1	0.05	0.1	µg/L	1	0	95	50 - 150%	PASS		
Benzoic Acid	Total	0.132	1	0.1	0.2	µg/L	1	0	13	2 - 145%	PASS		
Benzyl Alcohol	Total	0.915	1	0.1	0.2	µg/L	1	0	92	43 - 148%	PASS		
Pentachlorophenol	Total	0.573	1	0.05	0.1	µg/L	1	0	57	36 - 111%	PASS		
Phenol	Total	0.868	1	0.1	0.2	µg/L	1	0	87	29 - 114%	PASS		
p-tert-Butylphenol	Total	1.33	1	0.05	0.1	µg/L	1	0	133	50 - 150%	PASS		

PHYSIS Project ID: 1407003-450
Client: Eurofins Eaton Analytical
Project: RED-HILL Project # 38001111 Job # 380-65446-1

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: 111814-BS2	**QAQC Procedural Blank**					**Matrix: BlankMatrix**		**Sampled:**					**Received:**		
		Method: EPA 625.1				Batch ID: O-42134		Prepared: 09-Oct-23					Analyzed: 08-Nov-23		
(2,4,6-Tribromophenol)	Total	65	1			% Recovery	100	0	65	30 - 130%	PASS	7	30	PASS	
(d5-Phenol)	Total	113	1			% Recovery	100	0	113	0 - 130%	PASS	1	30	PASS	
2,4,5-Trichlorophenol	Total	0.772	1	0.05	0.1	µg/L	1	0	77	30 - 130%	PASS	10	30	PASS	
2,4,6-Trichlorophenol	Total	0.52	1	0.05	0.1	µg/L	1	0	52	56 - 118%	PASS	22	30	PASS	
2,4-Dichlorophenol	Total	0.802	1	0.05	0.1	µg/L	1	0	80	51 - 117%	PASS	8	30	PASS	
2,4-Dinitrophenol	Total	0	1	0.1	0.2	µg/L	1	0	0	0 - 152%	PASS	181	30	FAIL	R
2,6-Dichlorophenol	Total	0.384	1	0.05	0.1	µg/L	0.5	0	77	30 - 130%	PASS	11	30	PASS	
2,6-Di-tert-butyl-4-methylphenol	Total	0.913	1	0.05	0.1	µg/L	1	0	91	50 - 150%	PASS	7	30	PASS	
2,6-Di-tert-butylphenol	Total	0.884	1	0.05	0.1	µg/L	1	0	88	50 - 150%	PASS	2	30	PASS	
2-Chlorophenol	Total	0.844	1	0.05	0.1	µg/L	1	0	84	41 - 110%	PASS	2	30	PASS	
2-Methyl-4,6-dinitrophenol	Total	0.685	1	0.1	0.2	µg/L	1	0	69	0 - 141%	PASS	11	30	PASS	
2-Methylphenol	Total	0.895	1	0.1	0.2	µg/L	1	0	89	40 - 117%	PASS	1	30	PASS	
2-Nitrophenol	Total	0.949	1	0.1	0.2	µg/L	1	0	95	40 - 117%	PASS	0	30	PASS	
3+4-Methylphenol	Total	0.931	1	0.1	0.2	µg/L	1	0	93	0 - 130%	PASS	1	30	PASS	
4-Chloro-3-methylphenol	Total	1.01	1	0.1	0.2	µg/L	1	0	101	51 - 128%	PASS	2	30	PASS	
4-Nitrophenol	Total	2.27	1	0.1	0.2	µg/L	2	0	113	10 - 164%	PASS	4	30	PASS	
6-tert-butyl-2,4-dimethylphenol	Total	1.01	1	0.05	0.1	µg/L	1	0	101	50 - 150%	PASS	6	30	PASS	
Benzoic Acid	Total	0.157	1	0.1	0.2	µg/L	1	0	16	2 - 145%	PASS	21	30	PASS	
Benzyl Alcohol	Total	0.937	1	0.1	0.2	µg/L	1	0	94	43 - 148%	PASS	2	30	PASS	
Pentachlorophenol	Total	0.738	1	0.05	0.1	µg/L	1	0	74	36 - 111%	PASS	26	30	PASS	
Phenol	Total	0.873	1	0.1	0.2	µg/L	1	0	87	29 - 114%	PASS	0	30	PASS	
p-tert-Butylphenol	Total	1.38	1	0.05	0.1	µg/L	1	0	138	50 - 150%	PASS	4	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: 111814-B1	**QAQC Procedural Blank**					**Matrix: BlankMatrix**	**Sampled:**				**Received:**		
	Method: EPA 625.1					Batch ID: O-42134	Prepared: 09-Oct-23				Analyzed: 08-Nov-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							
Disalicylidenepropanediamin	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: 111814-BS1	**QAQC Procedural Blank**					**Matrix: BlankMatrix**	**Sampled:**					**Received:**	
	Method: EPA 625.1					Batch ID: O-42134		Prepared: 09-Oct-23				Analyzed: 08-Nov-23	
2-Chloronaphthalene	Total	0.894	1	0.05	0.1	µg/L	1	0	89	53 - 130%	PASS		
2-Nitroaniline	Total	0.982	1	0.05	0.1	µg/L	1	0	98	69 - 114%	PASS		
3-Nitroaniline	Total	0.79	1	0.05	0.1	µg/L	1	0	79	23 - 137%	PASS		
4-Bromophenylphenyl ether	Total	0.826	1	0.05	0.1	µg/L	1	0	83	61 - 132%	PASS		
4-Chloroaniline	Total	0.533	1	0.05	0.1	µg/L	1	0	53	50 - 150%	PASS		
4-Chlorophenylphenyl ether	Total	0.855	1	0.05	0.1	µg/L	1	0	86	63 - 130%	PASS		
4-Nitroaniline	Total	1.05	1	0.05	0.1	µg/L	1	0	105	10 - 159%	PASS		
Aniline	Total	0.539	1	0.05	0.1	µg/L	1	0	54	50 - 150%	PASS		
Benzidine	Total	0.024	1	0.05	0.1	µg/L	1	0	2	0 - 125%	PASS		
Bis(2-Chloroethoxy) methane	Total	1.03	1	0.05	0.1	µg/L	1	0	103	66 - 122%	PASS		
Bis(2-Chloroethyl) ether	Total	0.934	1	0.05	0.1	µg/L	1	0	93	43 - 127%	PASS		
Bis(2-Chloroisopropyl) ether	Total	1.04	1	0.05	0.1	µg/L	1	0	104	49 - 128%	PASS		
Dibenzofuran	Total	1.05	1	0.05	0.1	µg/L	1	0	105	50 - 150%	PASS		
Disalicylidenepropanediamin	Total	7.01	1	0.05	0.1	µg/L	10	0	70	50 - 150%	PASS		
Hexachloroethane	Total	0.695	1	0.05	0.1	µg/L	1	0	69	27 - 130%	PASS		
Nitrobenzene	Total	0.876	1	0.05	0.1	µg/L	1	0	88	54 - 111%	PASS		
N-Nitrosodi-n-propylamine	Total	0.908	1	0.05	0.1	µg/L	1	0	91	61 - 152%	PASS		
N-Nitrosodiphenylamine	Total	0.881	1	0.05	0.1	µg/L	1	0	88	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: 111814-BS2	**QAQC Procedural Blank**					**Matrix: BlankMatrix**	**Sampled:**						**Received:**		
		Method: EPA 625.1				Batch ID: O-42134			Prepared: 09-Oct-23				Analyzed: 08-Nov-23		
2-Chloronaphthalene	Total	0.923	1	0.05	0.1	µg/L	1	0	92	53 - 130%	PASS	3	30	PASS	
2-Nitroaniline	Total	1.06	1	0.05	0.1	µg/L	1	0	106	69 - 114%	PASS	8	30	PASS	
3-Nitroaniline	Total	0.879	1	0.05	0.1	µg/L	1	0	88	23 - 137%	PASS	11	30	PASS	
4-Bromophenylphenyl ether	Total	0.869	1	0.05	0.1	µg/L	1	0	87	61 - 132%	PASS	5	30	PASS	
4-Chloroaniline	Total	0.579	1	0.05	0.1	µg/L	1	0	58	50 - 150%	PASS	9	30	PASS	
4-Chlorophenylphenyl ether	Total	0.895	1	0.05	0.1	µg/L	1	0	89	63 - 130%	PASS	5	30	PASS	
4-Nitroaniline	Total	1.11	1	0.05	0.1	µg/L	1	0	111	10 - 159%	PASS	6	30	PASS	
Aniline	Total	0.602	1	0.05	0.1	µg/L	1	0	60	50 - 150%	PASS	11	30	PASS	
Benzidine	Total	0.0213	1	0.05	0.1	µg/L	1	0	2	0 - 125%	PASS	0	30	PASS	
Bis(2-Chloroethoxy) methane	Total	1.06	1	0.05	0.1	µg/L	1	0	106	66 - 122%	PASS	3	30	PASS	
Bis(2-Chloroethyl) ether	Total	0.913	1	0.05	0.1	µg/L	1	0	91	43 - 127%	PASS	2	30	PASS	
Bis(2-Chloroisopropyl) ether	Total	1.03	1	0.05	0.1	µg/L	1	0	103	49 - 128%	PASS	1	30	PASS	
Dibenzofuran	Total	0.959	1	0.05	0.1	µg/L	1	0	96	50 - 150%	PASS	9	30	PASS	
Disalicylidenepropanediamin	Total	9.87	1	0.05	0.1	µg/L	10	0	99	50 - 150%	PASS	34	30	FAIL	R
Hexachloroethane	Total	0.72	1	0.05	0.1	µg/L	1	0	72	27 - 130%	PASS	3	30	PASS	
Nitrobenzene	Total	0.889	1	0.05	0.1	µg/L	1	0	89	54 - 111%	PASS	1	30	PASS	
N-Nitrosodi-n-propylamine	Total	0.937	1	0.05	0.1	µg/L	1	0	94	61 - 152%	PASS	3	30	PASS	
N-Nitrosodiphenylamine	Total	0.92	1	0.05	0.1	µg/L	1	0	92	49 - 142%	PASS	4	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: 111814-B1	**QAQC Procedural Blank**					**Matrix: BlankMatrix**	**Sampled:**					**Received:**	
	Method: EPA 625.1					Batch ID: O-42134		Prepared: 09-Oct-23				Analyzed: 08-Nov-23	
(d10-Acenaphthene)	Total	106	1			% Recovery	100	106	27 - 133%	PASS			
(d10-Phenanthrene)	Total	95	1			% Recovery	100	95	43 - 129%	PASS			
(d12-Chrysene)	Total	93	1			% Recovery	100	93	52 - 144%	PASS			
(d12-Perylene)	Total	85	1			% Recovery	100	85	36 - 161%	PASS			
(d8-Naphthalene)	Total	106	1			% Recovery	100	106	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							
Dibenzothiophene	Total	ND	1	0.001	0.005	µg/L							

PHYSIS Project ID: 1407003-450
Client: Eurofins Eaton Analytical
Project: RED-HILL Project # 38001111 Job # 380-65446-1

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
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: 111814-BS1	**QAQC Procedural Blank**					**Matrix: BlankMatrix**	**Sampled:**					**Received:**	
		Method: EPA 625.1				Batch ID: O-42134		Prepared: 09-Oct-23				Analyzed: 08-Nov-23	
(d10-Acenaphthene)	Total	102	1			% Recovery	100	0	102	27 - 133%	PASS		
(d10-Phenanthrene)	Total	92	1			% Recovery	100	0	92	43 - 129%	PASS		
(d12-Chrysene)	Total	95	1			% Recovery	100	0	95	52 - 144%	PASS		
(d12-Perylene)	Total	100	1			% Recovery	100	0	100	36 - 161%	PASS		
(d8-Naphthalene)	Total	102	1			% Recovery	100	0	102	25 - 125%	PASS		
1-Methylnaphthalene	Total	0.485	1	0.001	0.005	µg/L	0.5	0	97	31 - 128%	PASS		
1-Methylphenanthrene	Total	0.438	1	0.001	0.005	µg/L	0.5	0	88	66 - 127%	PASS		
2,3,5-Trimethylnaphthalene	Total	0.47	1	0.001	0.005	µg/L	0.5	0	94	55 - 122%	PASS		
2,6-Dimethylnaphthalene	Total	0.471	1	0.001	0.005	µg/L	0.5	0	94	48 - 120%	PASS		
2-Methylnaphthalene	Total	1.55	1	0.001	0.005	µg/L	1.5	0	103	47 - 130%	PASS		
Acenaphthene	Total	1.57	1	0.001	0.005	µg/L	1.5	0	105	53 - 131%	PASS		
Acenaphthylene	Total	1.58	1	0.001	0.005	µg/L	1.5	0	105	43 - 140%	PASS		
Anthracene	Total	1.4	1	0.001	0.005	µg/L	1.5	0	93	58 - 135%	PASS		
Benz[a]anthracene	Total	1.57	1	0.001	0.005	µg/L	1.5	0	105	55 - 145%	PASS		
Benzo[a]pyrene	Total	1.32	1	0.001	0.005	µg/L	1.5	0	88	51 - 143%	PASS		
Benzo[b]fluoranthene	Total	1.47	1	0.001	0.005	µg/L	1.5	0	98	46 - 165%	PASS		
Benzo[e]pyrene	Total	0.434	1	0.001	0.005	µg/L	0.5	0	87	42 - 152%	PASS		
Benzo[g,h,i]perylene	Total	1.38	1	0.001	0.005	µg/L	1.5	0	92	63 - 133%	PASS		
Benzo[k]fluoranthene	Total	1.4	1	0.001	0.005	µg/L	1.5	0	93	56 - 145%	PASS		
Biphenyl	Total	0.488	1	0.001	0.005	µg/L	0.5	0	98	56 - 119%	PASS		
Chrysene	Total	1.44	1	0.001	0.005	µg/L	1.5	0	96	56 - 141%	PASS		
Dibenz[a,h]anthracene	Total	1.25	1	0.001	0.005	µg/L	1.5	0	83	55 - 150%	PASS		
Dibenzo[a,l]pyrene	Total	0.701	1	0.001	0.005	µg/L	0.5	0	140	50 - 150%	PASS		
Dibenzothiophene	Total	0.461	1	0.001	0.005	µg/L	0.5	0	92	46 - 126%	PASS		

PHYSIS Project ID: 1407003-450
Client: Eurofins Eaton Analytical
Project: RED-HILL Project # 38001111 Job # 380-65446-1

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
Fluoranthene	Total	1.44	1	0.001	0.005	µg/L	1.5	0	96	60 - 146%	PASS			
Fluorene	Total	1.5	1	0.001	0.005	µg/L	1.5	0	100	58 - 131%	PASS			
Indeno[1,2,3-cd]pyrene	Total	1.21	1	0.001	0.005	µg/L	1.5	0	81	50 - 151%	PASS			
Naphthalene	Total	1.55	1	0.001	0.005	µg/L	1.5	0	103	41 - 126%	PASS			
Perylene	Total	0.477	1	0.001	0.005	µg/L	0.5	0	95	48 - 141%	PASS			
Phenanthrene	Total	1.44	1	0.001	0.005	µg/L	1.5	0	96	67 - 127%	PASS			
Pyrene	Total	1.44	1	0.001	0.005	µg/L	1.5	0	96	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: 111814-BS2	**QAQC Procedural Blank**					**Matrix: BlankMatrix**		**Sampled:**				**Received:**		
		Method: EPA 625.1				Batch ID: O-42134		Prepared: 09-Oct-23				Analyzed: 08-Nov-23		
(d10-Acenaphthene)	Total	104	1			% Recovery	100	0	104	27 - 133%	PASS	2	30	PASS
(d10-Phenanthrene)	Total	97	1			% Recovery	100	0	97	43 - 129%	PASS	5	30	PASS
(d12-Chrysene)	Total	93	1			% Recovery	100	0	93	52 - 144%	PASS	2	30	PASS
(d12-Perylene)	Total	88	1			% Recovery	100	0	88	36 - 161%	PASS	13	30	PASS
(d8-Naphthalene)	Total	103	1			% Recovery	100	0	103	25 - 125%	PASS	1	30	PASS
1-Methylnaphthalene	Total	0.486	1	0.001	0.005	µg/L	0.5	0	97	31 - 128%	PASS	0	30	PASS
1-Methylphenanthrene	Total	0.46	1	0.001	0.005	µg/L	0.5	0	92	66 - 127%	PASS	4	30	PASS
2,3,5-Trimethylnaphthalene	Total	0.485	1	0.001	0.005	µg/L	0.5	0	97	55 - 122%	PASS	3	30	PASS
2,6-Dimethylnaphthalene	Total	0.492	1	0.001	0.005	µg/L	0.5	0	98	48 - 120%	PASS	4	30	PASS
2-Methylnaphthalene	Total	1.58	1	0.001	0.005	µg/L	1.5	0	105	47 - 130%	PASS	2	30	PASS
Acenaphthene	Total	1.63	1	0.001	0.005	µg/L	1.5	0	109	53 - 131%	PASS	4	30	PASS
Acenaphthylene	Total	1.66	1	0.001	0.005	µg/L	1.5	0	111	43 - 140%	PASS	6	30	PASS
Anthracene	Total	1.51	1	0.001	0.005	µg/L	1.5	0	101	58 - 135%	PASS	8	30	PASS
Benz[a]anthracene	Total	1.54	1	0.001	0.005	µg/L	1.5	0	103	55 - 145%	PASS	2	30	PASS
Benzo[a]pyrene	Total	1.35	1	0.001	0.005	µg/L	1.5	0	90	51 - 143%	PASS	2	30	PASS
Benzo[b]fluoranthene	Total	1.5	1	0.001	0.005	µg/L	1.5	0	100	46 - 165%	PASS	2	30	PASS
Benzo[e]pyrene	Total	0.444	1	0.001	0.005	µg/L	0.5	0	89	42 - 152%	PASS	2	30	PASS
Benzo[g,h,i]perylene	Total	1.41	1	0.001	0.005	µg/L	1.5	0	94	63 - 133%	PASS	2	30	PASS
Benzo[k]fluoranthene	Total	1.51	1	0.001	0.005	µg/L	1.5	0	101	56 - 145%	PASS	8	30	PASS
Biphenyl	Total	0.497	1	0.001	0.005	µg/L	0.5	0	99	56 - 119%	PASS	1	30	PASS
Chrysene	Total	1.37	1	0.001	0.005	µg/L	1.5	0	91	56 - 141%	PASS	5	30	PASS
Dibenz[a,h]anthracene	Total	1.28	1	0.001	0.005	µg/L	1.5	0	85	55 - 150%	PASS	2	30	PASS
Dibenzo[a,l]pyrene	Total	0.724	1	0.001	0.005	µg/L	0.5	0	145	50 - 150%	PASS	4	30	PASS
Dibenzothiophene	Total	0.483	1	0.001	0.005	µg/L	0.5	0	97	46 - 126%	PASS	5	30	PASS

PHYSIS Project ID: 1407003-450
Client: Eurofins Eaton Analytical
Project: RED-HILL Project # 38001111 Job # 380-65446-1

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
Fluoranthene	Total	1.51	1	0.001	0.005	µg/L	1.5	0	101	60 - 146%	PASS	5	30	PASS	
Fluorene	Total	1.59	1	0.001	0.005	µg/L	1.5	0	106	58 - 131%	PASS	6	30	PASS	
Indeno[1,2,3-cd]pyrene	Total	1.26	1	0.001	0.005	µg/L	1.5	0	84	50 - 151%	PASS	4	30	PASS	
Naphthalene	Total	1.57	1	0.001	0.005	µg/L	1.5	0	105	41 - 126%	PASS	2	30	PASS	
Perylene	Total	0.474	1	0.001	0.005	µg/L	0.5	0	95	48 - 141%	PASS	0	30	PASS	
Phenanthrene	Total	1.51	1	0.001	0.005	µg/L	1.5	0	101	67 - 127%	PASS	5	30	PASS	
Pyrene	Total	1.51	1	0.001	0.005	µg/L	1.5	0	101	54 - 156%	PASS	5	30	PASS	

TENTATIVELY IDENTIFIED COMPOUNDS

Sample ID: 111815

Retention Time	Area (% of total)	Concentration (ng/L)	Library/ID	Cas Number	Match Quality (%)
35.3902	5.7266	1111	Anthracene-D10-	1719-06-8	96
10.6057	3.8722	751	Oxalic acid, cyclohexyl pentyl ester	1000309-30-6	90
44.8785	1.2550	243	Cyclic octaatomic sulfur	10544-50-0	97
32.1604	1.2470	242	Benzoic acid, 2-ethylhexyl ester	5444-75-7	98
29.9680	0.8621	167	Hexanoic acid, 3,5,5-trimethyl-, 2-ethylhexyl ester	1000406-82-2	98
10.3684	0.6425	125	Hydroperoxide, 1-methylpentyl	24254-55-5	93
10.9794	0.5896	114	1,4-Pentadien-3-ol	922-65-6	88
19.6372	0.5606	109	Propanoic acid, 2-methyl-, 3-hydroxy-2,2,4-trimethylpentyl ester	77-68-9	97

Concentration estimated using the response for Anthracene-d10

Sample ID: 111816

Retention Time	Area (% of total)	Concentration (ng/L)	Library/ID	Cas Number	Match Quality (%)
35.3898	5.4566	1111	Anthracene-D10-	1719-06-8	98
44.9312	3.7246	758	Cyclic octaatomic sulfur	10544-50-0	98
10.6073	3.4094	694	Cyclopropane, 2-bromo-1,1,3-trimethyl-	36617-00-2	90
32.1600	0.9306	189	Benzoic acid, 2-ethylhexyl ester	5444-75-7	98
10.3693	0.6743	137	Hydroperoxide, 1-methylpentyl	24254-55-5	93
29.9688	0.6428	131	Hexanoic acid, 3,5,5-trimethyl-, 2-ethylhexyl ester	1000406-82-2	97
10.2487	0.5241	107	Hydroperoxide, 1-ethylbutyl	24254-56-6	91
55.4070	0.5141	105	Benzyl butyl phthalate	85-68-7	96

Concentration estimated using the response for Anthracene-d10

Sample ID: Lab Blank B1_42134

Retention Time	Area (% of total)	Concentration (ng/L)	Library/ID	Cas Number	Match Quality (%)
35.3964	6.0784	1111	Anthracene-D10	1517-22-2	96
10.6068	3.6987	676	1,5-Heptadien-4-one, 3,3,6-trimethyl-	546-49-6	87
32.1633	1.1327	207	Benzoic acid, 2-ethylhexyl ester	5444-75-7	99
56.9306	1.0239	187	Hexanedioic acid, bis(2-ethylhexyl) ester	103-23-1	98
29.9720	0.8507	156	Hexanoic acid, 3,5,5-trimethyl-, 2-ethylhexyl ester	1000406-82-2	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

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Arada, Rachelle	Carrier Tracking No(s):	COC No: 380-82582.1
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 #: 380-65446-1
Address: 1904 Wright Circle,	Due Date Requested: 10/16/2023			
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 (380-65446-1)	10/3/23	10:57 Hawaiian		Water			X	6	See Attached Instructions
Halawa Wells Units 1&2 P1 (380-65446-2)	10/3/23	09:59 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	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	10/5/23 1111	EBA	[signature]	10/5/23 1112	Physis
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

PHYSIS
ENVIRONMENTAL LABORATORIES, INC.
Innovative Solutions for Nature

PHYSIS
ENVIRONMENTAL LABORATORIES, INC.
Innovative Solutions for Nature

Project Iteration ID: 1407003-450
Client Name: Eurofins Eaton Analytical
Project Name: RED-HILL Project # 38001111 Job # 380-65446-1
COC Page Number: 2 of 2
Bottle Label Color: NA

Sample Receipt Summary

Receiving Info

1. Initials Received By: RGH
2. Date Received: 10/5/23
3. Time Received: 1112
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)
   - 2 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): 0.1 Used I/R Thermometer # 1-2

Inspection Info

1. Initials Inspected By: AS

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:

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: BAILEY	Lab PM: Arada Rachelle	Carrier Tracking No(s):	COC No:
Client Contact: Dr Ron Fenstermacher	Phone: 808-748-5840	E-Mail: Rachelle.Arada@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: City & County of Honolulu	PWSID:			Job #:
Address: 630 South Beretania Street, Chemistry Lab	Due Date Requested:			
City: Honolulu	TAT Requested (days):			
State, Zip: HI, 96843	Compliance Project: Δ No			
Phone: 808-748-5091 (tel)	PO #: C20525101 exp 05312023			
Email: rfenstemacher@hbws.org	WO #:			
Project Name: RED-HILL	Project #: 38001111			
Site:	SSOW#:			

Analysis Requested

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, Other:
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)

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	504 1_PREC, 505_LL_PREC	2320B, 2510B, SM4500_H+	200 7, 200 8	2540C_Calcd - Total dissolved Solids (TDS)	SM4500_S2_D Sulfide, Total	5 24 2_Pres_PREC; 524 2_SIM_PREC	525 2_PREC - 525plus PLUS TICs	300_OF_28D_B, 300_OF_28D_PREC, 300_OF_48H_PREC, 4500_F_C	245 1 - Local Method	SUBCONTRACT - 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				R	N	D	N	CB	HA		N	D	RA	RA	RA	R		
Aiea Gulch Wells Pump 2	3-Oct-2023	1057	G	Water			6	1	1	1	1	6	3	2	1	2	2	2	3		①7736215114478-1.0-0.1-1.0'
Halawa Wells Units 1&2 P1	3-Oct-2023	0959	G	Water			6	1	1	1	1	6	3	2	1	2	2	2	3		②7736215114489-2.0-0.1 1.9'
Travel Blank	3-Oct-2023	0959					3					6							2		③7736215115515-1.8'-0.1=1.7'
																					④7736215115526-2.6'-0.1'=2.5'
																					⑤7736215115537-5.7'-0.1'=5.6'
																					⑥7736215115548-2.4'-0.1'=2.3'
																					1 OUT OF 6 "524.2" FOR
																					HALAWA ARRIVED BROKEN-GF

380-65446 COC

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

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

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

Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment: FED EX 6 COOLERS

Relinquished by:	Date/Time	Company	Received by	Date/Time	Company
BAILEY	3/OCT/2023 1400	HBWS	G REITNER	10/04/2023 10:40	EEAP
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks	
		(751A) -0.1° GEL FROZEN	

Ver 01/16/2019

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

Chain of Custody Record

eurofins

Client Information	Sampler	Lab PM	Carrier Tracking No(s)	COC No
		Arada, Rachelle		
Client Contact: Dr Ron Fenstermacher	Phone: 808-748-5840	E-Mail: Rachelle.Arada@et.eurofinsus.com	State of Origin	Page: Page 2 of 2
Company: City & County of Honolulu	PWSID			Job #:

Address	Due Date Requested	Analysis Requested	Preservation Codes
630 South Beretania Street, Chemistry Lab			A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Y - Trizma; Z - other (specify); Other:
City: Honolulu	TAT Requested (days)		
State, Zip: HI, 96843	Compliance Project: Δ No		
Phone: 808-748-5091 (tel)	PO #: C20525101 exp 05312023		
Email: rfenstemacher@hbws.org	WO #:		
Project Name: RED-HILL	Project #: 38001111		
Site	SSOW#:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUBCONTRACT - 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	3-Oct-2023	1057	G	Water			3	2	2	2				① 7736 2151 1478 - 1.1 - 0.1 = 1.0
Halawa Wells Units 1&2	3-Oct-2023	0959	G	Water			3	2	2	2				② 7736 2151 1489 - 2.0 - 0.1 = 1.9
														③ 7736 2151 1515 - 1.8 - 0.1 = 1.7
														④ 7736 2151 1526 - 2.6 - 0.1 = 2.5
														⑤ 7736 2151 1537 - 5.7 - 0.1 = 5.6
														⑥ 7736 2151 1548 - 2.4 - 0.8 = 2.3

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

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

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

Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment: FED EX 6 COOLERS

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
		HBWS	G.REITNER	10/04/2023 10:40	EEAP
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact. Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks
		751A -0.1° GEL FROZEN

Ver 01/16/2019

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: ***9/1/2023 11:59:00PM***
Lab Project Number: *38001111*
PWSID: *HI00000331*

Order Completion Information

Creator: *Michelle Do*
Filled by:
Sent Date:
Sent Via:
Tracking #:

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	Water	Normal		
					505_LL_PREC - (MOD) ML505 +505-EAL Aldrin Dieldrin Tox	Water	Normal		
5	1	5	Plastic 250ml - unpreserved	None	2320B - (MOD) Total Alkalinity	Water	Normal		
					SM4500_H+ - Local Method	Water	Normal		
					2510B - Conductivity	Water	Normal		
5	1	5	Plastic 500ml - with Nitric Acid	Nitric Acid	200.8 - Metals, Priority Pollutant by 200.8	Water	Normal		
					200.7 - (MOD) Custom	Water	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	Water	Normal		
					524.2_SIM_PREC - TBA by 524.2 SIM	Water	Normal		
5	3	15	Amber Glass 1 Liter- Sodium Sulfite/HCl	Sodium Sulfite w/HCl	525.2_PREC - 525plus Plus TICs	Water	Normal		
5	2	10	Plastic 125mL - unpreserved	None	300_OF_28D_B - Bromide	Water	Normal		
					4500_F_C - Fluoride	Water	Normal		
					300_OF_28D_PREC - Chloride and Sulfate	Water	Normal		
					300_OF_48H_PREC - Nitrite, Nitrate, and Nitrite+Nitrate	Water	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		
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		
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	2	10	VOA Vial 40mL - NaThiosulfate/HCL	Sodium Thiosulfate/Hydrochloric Acid	SUBCONTRACT - 8015 Gas (Purgeable) LL (EAL)	Water	Trip Blank		
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		

Please notify your PM immediately if an error is found in shipment. When returning samples, please return all provided QC samples.

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: BAILEY	Lab PM: Arada Rachelle	Carrier Tracking No(s):	COC No:
Client Contact: Dr Ron Fenstermacher	Phone: 808-748-5840	E-Mail: Rachelle Arada@et.euronisus com	State of Origin:	Page: Page 1 of 2
Company: City & County of Honolulu	PWSID:			Job #:
Address: 630 South Beretania Street, Chemistry Lab	Due Date Requested:			
City: Honolulu	TAT Requested (days):			
State Zip: HI, 96843	Compliance Project: Δ No			
Phone: 808-748-5091 (tel)	PO #: C20525101 exp 05312023			
Email: rfenstemacher@hbws org	WO #:			
Project Name: RED-HILL	Project #: 38001111			
Site:	SSOW#:			

Analysis Requested

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	5 24 2_Pres_PREC, 524 2_SIM_PREC	525 2_PREC - 525plus PLUS TICs	300_OF_28D_B, 300_OF_28D_PREC, 300_OF_48H_PREC, 4500_F_C	245 1 - Local Method	SUBCONTRACT - 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		X	X	R	N	D	N	CB	HA		N	D	RA	RA	RA	R	X	
Aiea Gulch Wells Pump 2	3-Oct-2023	1057	G	Water			6	1	1	1	1	6	3	2	1	2	2	2	3		① 7736 2151 1478 - 1.6° - 0.1° - 1.6°
Halawa Wells Units 1&2 P1	3-Oct-2023	0959	G	Water			6	1	1	1	1	6	3	2	1	2	2	2	3		② 7736 2151 1489 - 2.0 - 0.1 - 1.9°
Travel Blank	3-Oct-2023	0959					3					6							2		③ 7736 2151 1515 - 1.8° - 0.1 = 1.7°
																					④ 7736 2151 1526 - 2.6 - 0.1 = 2.5°
																					⑤ 7736 2151 1537 - 5.7 - 0.1 = 5.6°
																					⑥ 7736 2151 1548 - 2.4 - 0.1 - 2.3°
																					1 OUT OF 6 "524.2" FOR
																					HALAWA ARRIVED BROKEN -GP

380-65446 COC

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

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

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

Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment: FED EX 6 COOLERS		
Relinquished by: BAILEY	Date/Time: 3OCT2023 1400	Company: HBWS	Received by: G REITNER	Date/Time: 10/04/2023 10:40	Company: EEAP
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks: 751A -0.1° GEL-FROZEN

Ver 01/16/2019

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

Chain of Custody Record

eurofins

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

Analysis Requested

Preservation Codes

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUBCONTRACT - 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	3-Oct-2023	1057	G	Water			3	2	2	2											① 7736 2151 1478 - 1.1° - 0.1° = 1.0°
Halawa Wells Units 1&2	3-Oct-2023	0959	G	Water			3	2	2	2											② 7736 2151 1489 - 2.0° - 0.1 = 1.9°
																					③ 7736 2151 1515 - 1.8° - 0.1 = 1.7°
																					④ 7736 2151 1526 - 2.6° - 0.1° = 2.5°
																					⑤ 7736 2151 1537 - 5.7° - 0.1° = 5.6°
																					⑥ 7736 2151 1548 - 2.4° - 0.8 = 2.3°

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

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

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

Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment: FED EX 6 COOLERS

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
		HBWS	G.REITNER	10/04/2023 10:40	EEAP
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact. Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks
		751A -0.1° GEL FROZEN

Ver 01/16/2019

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: ***9/1/2023 11:59:00PM***
Lab Project Number: *38001111*
PWSID: *HI00000331*

Order Completion Information

Creator: *Michelle Do*
Filled by:
Sent Date:
Sent Via:
Tracking #:

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	Water	Normal		
					505_LL_PREC - (MOD) ML505 +505-EAL Aldrin Dieldrin Tox	Water	Normal		
5	1	5	Plastic 250ml - unpreserved	None	2320B - (MOD) Total Alkalinity	Water	Normal		
					SM4500_H+ - Local Method	Water	Normal		
					2510B - Conductivity	Water	Normal		
5	1	5	Plastic 500ml - with Nitric Acid	Nitric Acid	200.8 - Metals, Priority Pollutant by 200.8	Water	Normal		
					200.7 - (MOD) Custom	Water	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	Water	Normal		
					524.2_SIM_PREC - TBA by 524.2 SIM	Water	Normal		
5	3	15	Amber Glass 1 Liter- Sodium Sulfite/HCl	Sodium Sulfite w/HCl	525.2_PREC - 525plus Plus TICs	Water	Normal		
5	2	10	Plastic 125mL - unpreserved	None	300_OF_28D_B - Bromide	Water	Normal		
					4500_F_C - Fluoride	Water	Normal		
					300_OF_28D_PREC - Chloride and Sulfate	Water	Normal		
					300_OF_48H_PREC - Nitrite, Nitrate, and Nitrite+Nitrate	Water	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		
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		
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	2	10	VOA Vial 40mL - NaThiosulfate/HCL	Sodium Thiosulfate/Hydrochloric Acid	SUBCONTRACT - 8015 Gas (Purgeable) LL (EAL)	Water	Trip Blank		
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		

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: 380-82573.1
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 #: 380-65446-1
Address: 110 S Hill Street, ,	Due Date Requested: 10/24/2023			
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 (380-65446-1)	10/3/23	10:57 Hawaiian		Water			X	1	
Halawa Wells Units 1&2 P1 (380-65446-2)	10/3/23	09:59 Hawaiian		Water			X	1	

Initial Temp: 0.8
Corrected Temp: 0.4
IR Gun # 28 wet

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:	Company
1	Gwilson V	10.5.23 728		Penny Pebley Wright	10/06/23 0900	EEA
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.: Client Provided Sample Container	Cooler Temperature(s) °C and Other Remarks: pH Acceptable

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: 380-82573.1
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 #: 380-65446-1
Address: 110 S Hill Street, ,	Due Date Requested: 10/24/2023			
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 (380-65446-1)	10/3/23	10:57 Hawaiian		Water			X	1	
Halawa Wells Units 1&2 P1 (380-65446-2)	10/3/23	09:59 Hawaiian		Water			X	1	

Initial Temp: 0.8
Corrected Temp: 0.4
IR Gun # 28 wet

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:	Company
Gwilson V	10.5.23 728		Penny Pebley Wright	10/06/23 0900	EEA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.: Client Provided Sample Container	Cooler Temperature(s) °C and Other Remarks: pH Acceptable

Ver: 06/08/2021

12/5/2023

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-65446-1

Login Number: 65446
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.	False	One 524.2 vial from the second listed site arrived broken.
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").	False	Headspace exists in all 524.2 TB vials.
Samples do not require splitting or compositing.	True	
Container provided by EEA	True	

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-65446-1

Login Number: 65446
List Number: 2
Creator: Pehling-Wright, Penny

List Source: Eurofins Eaton Analytical South Bend
List Creation: 10/06/23 03:05 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