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ANALYTICAL REPORT

PREPARED FOR

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City & County of Honolulu
630 South Beretania Street
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Honolulu, Hawaii 96843

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JOB DESCRIPTION

RED-HILL [SUBCONTRACT]
625, 8015

JOB NUMBER

380-80217-2

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

See page two for job notes and contact information.

Eurofins Eaton Analytical Pomona

Job Notes

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

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

Compliance Statement

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

Authorization

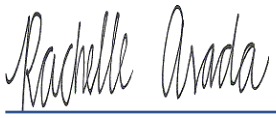

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Table of Contents

Definitions/Glossary

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

Job ID: 380-80217-2
SDG: 625, 8015

Qualifiers

GC 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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 380-80217-2 — Eurofins Eaton Analytical Pomona

Job Narrative
380-80217-2

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 1/25/2024 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.4°C and 0.9°C.

Subcontract Work
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.

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

GC Semi VOA
Method 8015B_DRO_LL_CS: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-405534. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

Method 8015B_DRO_LL_CS: A portion of the following sample was used for analysis, rather than testing the entire sample amount in the original container, due to the sample was prepared using an exact volume as opposed to the volume received: AIEA WELLS P2 (260) (380-80217-1). As such, the required solvent rinse of the original container could not be performed.

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 [SUBCONTRACT]

Job ID: 380-80217-2
SDG: 625, 8015

Client Sample ID: AIEA WELLS P2 (260) — Lab Sample ID: 380-80217-1

No Detections.

Client Sample ID: TB: AIEA WELLS P2 (260) — Lab Sample ID: 380-80217-2

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: AIEA WELLS P2 (260)

Date Collected: 01/24/24 08:30
Date Received: 01/25/24 10:00

Lab Sample ID: 380-80217-1

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	<10		10		ug/L			01/29/24 18:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*38 - 134*		*01/29/24 18:03*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<25		25		ug/L		01/29/24 14:05	02/13/24 18:00	1
Motor Oil Range Organics [C24-C36]	<25		25		ug/L		01/29/24 14:05	02/13/24 18:00	1
C8-C18	<25		25		ug/L		01/29/24 14:05	02/13/24 18:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane (Surr)	*85*		*60 - 130*	*01/29/24 14:05*	*02/13/24 18:00*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	<0.10		0.10		mg/L			02/07/24 23:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Hexafluoro 2 propanol (Surr)	*108*		*54 - 120*		*02/07/24 23 35*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/11/24 06:08	1
1-Methylphenanthrene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/11/24 06:08	1
2,3,5-Trimethylnaphthalene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/11/24 06:08	1
2,4,5-Trichlorophenol	ND		0.1	0.05	µg/L		01/31/24 00:00	03/11/24 06:08	1
2,4,6-Trichlorophenol	ND		0.1	0.05	µg/L		01/31/24 00:00	03/11/24 06:08	1
2,4-Dichlorophenol	ND		0.1	0.05	µg/L		01/31/24 00:00	03/11/24 06:08	1
2,4-Dinitrophenol	ND		0.2	0.1	µg/L		01/31/24 00:00	03/11/24 06:08	1
2,6-Dichlorophenol	ND		0.1	0.05	µg/L		01/31/24 00:00	03/11/24 06:08	1
2,6-Dimethylnaphthalene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/11/24 06:08	1
2,6-Di-tert-butyl-4-methylphenol	ND		0.1	0.05	µg/L		01/31/24 00:00	03/11/24 06:08	1
2,6-Di-tert-butylphenol	ND		0.1	0.05	µg/L		01/31/24 00:00	03/11/24 06:08	1
2-Chloronaphthalene	ND		0.1	0.05	µg/L		01/31/24 00:00	03/11/24 06:08	1
2-Chlorophenol	ND		0.1	0.05	µg/L		01/31/24 00:00	03/11/24 06:08	1
2-Methyl-4,6-dinitrophenol	ND		0.2	0.1	µg/L		01/31/24 00:00	03/11/24 06:08	1
2-Methylnaphthalene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/11/24 06:08	1
2-Methylphenol	ND		0.2	0.1	µg/L		01/31/24 00:00	03/11/24 06:08	1
2-Nitroaniline	ND		0.1	0.05	µg/L		01/31/24 00:00	03/11/24 06:08	1
2-Nitrophenol	ND		0.2	0.1	µg/L		01/31/24 00:00	03/11/24 06:08	1
3+4-Methylphenol	ND		0.2	0.1	µg/L		01/31/24 00:00	03/11/24 06:08	1
3-Nitroaniline	ND		0.1	0.05	µg/L		01/31/24 00:00	03/11/24 06:08	1
4-Bromophenylphenyl ether	ND		0.1	0.05	µg/L		01/31/24 00:00	03/11/24 06:08	1
4-Chloro-3-methylphenol	ND		0.2	0.1	µg/L		01/31/24 00:00	03/11/24 06:08	1
4-Chloroaniline	ND		0.1	0.05	µg/L		01/31/24 00:00	03/11/24 06:08	1
4-Chlorophenylphenyl ether	ND		0.1	0.05	µg/L		01/31/24 00:00	03/11/24 06:08	1
4-Nitroaniline	ND		0.1	0.05	µg/L		01/31/24 00:00	03/11/24 06:08	1
4-Nitrophenol	ND		0.2	0.1	µg/L		01/31/24 00:00	03/11/24 06:08	1
6-tert-butyl-2,4-dimethylphenol	ND		0.1	0.05	µg/L		01/31/24 00:00	03/11/24 06:08	1
Acenaphthene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/11/24 06:08	1

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

Job ID: 380-80217-2
SDG: 625, 8015

Client Sample ID: AIEA WELLS P2 (260)
Date Collected: 01/24/24 08:30
Date Received: 01/25/24 10:00

Lab Sample ID: 380-80217-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/11/24 06:08	1
Aniline	ND		0.1	0.05	µg/L		01/31/24 00:00	03/11/24 06:08	1
Anthracene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/11/24 06:08	1
Benz[a]anthracene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/11/24 06:08	1
Benzidine	ND		0.1	0.05	µg/L		01/31/24 00:00	03/11/24 06:08	1
Benzo[a]pyrene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/11/24 06:08	1
Benzo[b]fluoranthene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/11/24 06:08	1
Benzo[e]pyrene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/11/24 06:08	1
Benzo[g,h,i]perylene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/11/24 06:08	1
Benzo[k]fluoranthene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/11/24 06:08	1
Benzoic Acid	ND		0.2	0.1	µg/L		01/31/24 00:00	03/11/24 06:08	1
Benzyl Alcohol	ND		0.2	0.1	µg/L		01/31/24 00:00	03/11/24 06:08	1
Biphenyl	ND		0.005	0.001	µg/L		01/31/24 00:00	03/11/24 06:08	1
Bis(2-Chloroethoxy) methane	ND		0.1	0.05	µg/L		01/31/24 00:00	03/11/24 06:08	1
Bis(2-Chloroethyl) ether	ND		0.1	0.05	µg/L		01/31/24 00:00	03/11/24 06:08	1
Bis(2-Chloroisopropyl) ether	ND		0.1	0.05	µg/L		01/31/24 00:00	03/11/24 06:08	1
Chrysene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/11/24 06:08	1
Dibenz[a,h]anthracene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/11/24 06:08	1
Dibenzo[a,l]pyrene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/11/24 06:08	1
Dibenzofuran	ND		0.1	0.05	µg/L		01/31/24 00:00	03/11/24 06:08	1
Dibenzothiophene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/11/24 06:08	1
Disalicylidenepropanediamine	ND		0.1	0.05	µg/L		01/31/24 00:00	03/11/24 06:08	1
Fluoranthene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/11/24 06:08	1
Fluorene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/11/24 06:08	1
Hexachloroethane	ND		0.1	0.05	µg/L		01/31/24 00:00	03/11/24 06:08	1
Indeno[1,2,3-cd]pyrene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/11/24 06:08	1
Naphthalene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/11/24 06:08	1
Nitrobenzene	ND		0.1	0.05	µg/L		01/31/24 00:00	03/11/24 06:08	1
N-Nitrosodi-n-propylamine	ND		0.1	0.05	µg/L		01/31/24 00:00	03/11/24 06:08	1
N-Nitrosodiphenylamine	ND		0.1	0.05	µg/L		01/31/24 00:00	03/11/24 06:08	1
Pentachlorophenol	ND		0.1	0.05	µg/L		01/31/24 00:00	03/11/24 06:08	1
Perylene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/11/24 06:08	1
Phenanthrene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/11/24 06:08	1
Phenol	ND		0.2	0.1	µg/L		01/31/24 00:00	03/11/24 06:08	1
p-tert-Butylphenol	ND		0.1	0.05	µg/L		01/31/24 00:00	03/11/24 06:08	1
Pyrene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/11/24 06:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
(2,4,6-Tribromophenol)	*137*		*31 - 143*	*01/31/24 00:00*	*03/11/24 06:08*	*1*
(d10-Acenaphthene)	*115*		*27 - 133*	*01/31/24 00:00*	*03/11/24 06:08*	*1*
(d10-Phenanthrene)	*114*		*43 - 129*	*01/31/24 00:00*	*03/11/24 06:08*	*1*
(d12-Chrysene)	*102*		*52 - 144*	*01/31/24 00:00*	*03/11/24 06:08*	*1*
(d12-Perylene)	*96*		*36 - 161*	*01/31/24 00:00*	*03/11/24 06:08*	*1*
(d5-Phenol)	*120*		*0 - 85*	*01/31/24 00:00*	*03/11/24 06:08*	*1*
(d8-Naphthalene)	*143*		*25 - 125*	*01/31/24 00:00*	*03/11/24 06:08*	*1*

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

Job ID: 380-80217-2
SDG: 625, 8015

Client Sample ID: TB: AIEA WELLS P2 (260)

Date Collected: 01/24/24 08:30
Date Received: 01/25/24 10:00

Lab Sample ID: 380-80217-2

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	<10		10		ug/L			01/29/24 16:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*38 - 134*		*01/29/24 16:19*	*1*

Surrogate Summary

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

Job ID: 380-80217-2
SDG: 625, 8015

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

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

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	BFB1 (38-134)
380-80217-1	AIEA WELLS P2 (260)	87
380-80217-1 MS	AIEA WELLS P2 (260)	103
380-80217-1 MSD	AIEA WELLS P2 (260)	99
380-80217-2	TB: AIEA WELLS P2 (260)	91
LCS 570-405394/4	Lab Control Sample	97
LCSD 570-405394/5	Lab Control Sample Dup	94
MB 570-405394/7	Method Blank	63
MRL 570-405394/6	Lab Control Sample	89

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	OTCSN1 (60-130)
380-80217-1	AIEA WELLS P2 (260)	85
LCS 570-405534/2-A	Lab Control Sample	111
LCSD 570-405534/3-A	Lab Control Sample Dup	101
MB 570-405534/1-A	Method Blank	122
MRL 570-405534/4-A	Lab Control Sample	112

Surrogate Legend

OTCSN = n-Octacosane (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	HF2PP1 (54-120)
380-80217-1	AIEA WELLS P2 (260)	108
LCS 570-408667/4	Lab Control Sample	110
LCSD 570-408667/5	Lab Control Sample Dup	116
MB 570-408667/3	Method Blank	109
MRL 570-408667/13	Lab Control Sample	80

Surrogate Legend

HF2PP = Hexafluoro-2-propanol (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	Acenapht (27-133)	Phenanth (43-129)	CRY (52-144)	NPT (25-125)	PHL (0-130)	PRY (36-161)	TBP (30-130)
115096-B1	Method Blank	112	115	99	118	97	100	45
115096-BS1	Lab Control Sample	107	111	101	116	88	90	45
115096-BS2	Lab Control Sample Dup	103	110	100	118	66	90	50

Surrogate Legend

Surrogate Summary

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

Job ID: 380-80217-2
SDG: 625, 8015

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)						
		Acenapht	Phenanth	CRY	NPT	PHL	PRY	TBP
Lab Sample ID	Client Sample ID	(27-133)	(43-129)	(52-144)	(25-125)	(0-85)	(36-161)	(31-143)
380-80217-1	AIEA WELLS P2 (260)	115	114	102	143	120	96	137

Surrogate Legend

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

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

Lab Sample ID: MB 570-405394/7

Matrix: Water
Analysis Batch: 405394

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	<10		10		ug/L			01/29/24 13:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*63*		*38 - 134*		*01/29/24 13:54*	*1*

Lab Sample ID: LCS 570-405394/4

Matrix: Water
Analysis Batch: 405394

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (C4-C13)			400	363		ug/L		91	78 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*38 - 134*

Lab Sample ID: LCSD 570-405394/5

Matrix: Water
Analysis Batch: 405394

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (C4-C13)			400	349		ug/L		87	78 - 120	4	10

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

Lab Sample ID: MRL 570-405394/6

Matrix: Water
Analysis Batch: 405394

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (C4-C13)			10.0	11.1		ug/L		111	50 - 150		

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*38 - 134*

Lab Sample ID: 380-80217-1 MS

Matrix: Water
Analysis Batch: 405394

Client Sample ID: AIEA WELLS P2 (260)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (C4-C13)	<10		400	367		ug/L		92	68 - 122		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*38 - 134*

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

Lab Sample ID: 380-80217-1 MSD
Matrix: Water
Analysis Batch: 405394

Client Sample ID: AIEA WELLS P2 (260)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (C4-C13)	<10		400	356		ug/L		89	68 - 122	3	18

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

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

Lab Sample ID: MB 570-405534/1-A
Matrix: Water
Analysis Batch: 410073

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 405534

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<25		25		ug/L		01/29/24 14:05	02/13/24 12:39	1
Motor Oil Range Organics [C24-C36]	<25		25		ug/L		01/29/24 14:05	02/13/24 12:39	1
C8-C18	<25		25		ug/L		01/29/24 14:05	02/13/24 12:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane (Surr)	*122*		*60 - 130*	*01/29/24 14:05*	*02/13/24 12:39*	*1*

Lab Sample ID: LCS 570-405534/2-A
Matrix: Water
Analysis Batch: 410073

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 405534

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
C10-C28			1600	1490		ug/L		93	56 - 127		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
n-Octacosane (Surr)	*111*		*60 - 130*

Lab Sample ID: LCSD 570-405534/3-A
Matrix: Water
Analysis Batch: 410073

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 405534

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28			1600	1250		ug/L		78	56 - 127	18	23

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
n-Octacosane (Surr)	*101*		*60 - 130*

Lab Sample ID: MRL 570-405534/4-A
Matrix: Water
Analysis Batch: 410073

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 405534

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
C10-C28			0.0200	0.0247	J	mg/L		124	50 - 150		

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

Lab Sample ID: MRL 570-405534/4-A
Matrix: Water
Analysis Batch: 410073

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 405534

Surrogate	MRL %Recovery	MRL Qualifier	Limits
n-Octacosane (Surr)	112		60 - 130

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

Lab Sample ID: MB 570-408667/3
Matrix: Water
Analysis Batch: 408667

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	<0.10	^3+	0.10		mg/L			02/07/24 22:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Hexafluoro-2-propanol (Surr)	109		54 - 120		02/07/24 22:52	1

Lab Sample ID: LCS 570-408667/4
Matrix: Water
Analysis Batch: 408667

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Ethanol			2.00	1.91	^3+	mg/L		95	78 - 131		

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

Lab Sample ID: LCSD 570-408667/5
Matrix: Water
Analysis Batch: 408667

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ethanol			2.00	1.99	^3+	mg/L		100	78 - 131	5	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Hexafluoro-2-propanol (Surr)	116		54 - 120

Lab Sample ID: MRL 570-408667/13
Matrix: Water
Analysis Batch: 408667

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

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Ethanol			0.200	0.199		mg/L		100	50 - 150		

Surrogate	MRL %Recovery	MRL Qualifier	Limits
Hexafluoro-2-propanol (Surr)	80		54 - 120

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

Lab Sample ID: 115096-B1
Matrix: BlankMatrix
Analysis Batch: O-44100

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: O-44100_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/10/24 22:56	1
1-Methylphenanthrene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/10/24 22:56	1
2,3,5-Trimethylnaphthalene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/10/24 22:56	1
2,4,5-Trichlorophenol	ND		0.1	0.05	µg/L		01/31/24 00:00	03/10/24 22:56	1
2,4,6-Trichlorophenol	ND		0.1	0.05	µg/L		01/31/24 00:00	03/10/24 22:56	1
2,4-Dichlorophenol	ND		0.1	0.05	µg/L		01/31/24 00:00	03/10/24 22:56	1
2,4-Dinitrophenol	ND		0.2	0.1	µg/L		01/31/24 00:00	03/10/24 22:56	1
2,6-Dichlorophenol	ND		0.1	0.05	µg/L		01/31/24 00:00	03/10/24 22:56	1
2,6-Dimethylnaphthalene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/10/24 22:56	1
2,6-Di-tert-butyl-4-methylphenol	ND		0.1	0.05	µg/L		01/31/24 00:00	03/10/24 22:56	1
2,6-Di-tert-butylphenol	ND		0.1	0.05	µg/L		01/31/24 00:00	03/10/24 22:56	1
2-Chloronaphthalene	ND		0.1	0.05	µg/L		01/31/24 00:00	03/10/24 22:56	1
2-Chlorophenol	ND		0.1	0.05	µg/L		01/31/24 00:00	03/10/24 22:56	1
2-Methyl-4,6-dinitrophenol	ND		0.2	0.1	µg/L		01/31/24 00:00	03/10/24 22:56	1
2-Methylnaphthalene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/10/24 22:56	1
2-Methylphenol	ND		0.2	0.1	µg/L		01/31/24 00:00	03/10/24 22:56	1
2-Nitroaniline	ND		0.1	0.05	µg/L		01/31/24 00:00	03/10/24 22:56	1
2-Nitrophenol	ND		0.2	0.1	µg/L		01/31/24 00:00	03/10/24 22:56	1
3+4-Methylphenol	ND		0.2	0.1	µg/L		01/31/24 00:00	03/10/24 22:56	1
3-Nitroaniline	ND		0.1	0.05	µg/L		01/31/24 00:00	03/10/24 22:56	1
4-Bromophenylphenyl ether	ND		0.1	0.05	µg/L		01/31/24 00:00	03/10/24 22:56	1
4-Chloro-3-methylphenol	ND		0.2	0.1	µg/L		01/31/24 00:00	03/10/24 22:56	1
4-Chloroaniline	ND		0.1	0.05	µg/L		01/31/24 00:00	03/10/24 22:56	1
4-Chlorophenylphenyl ether	ND		0.1	0.05	µg/L		01/31/24 00:00	03/10/24 22:56	1
4-Nitroaniline	ND		0.1	0.05	µg/L		01/31/24 00:00	03/10/24 22:56	1
4-Nitrophenol	ND		0.2	0.1	µg/L		01/31/24 00:00	03/10/24 22:56	1
6-tert-butyl-2,4-dimethylphenol	ND		0.1	0.05	µg/L		01/31/24 00:00	03/10/24 22:56	1
Acenaphthene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/10/24 22:56	1
Acenaphthylene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/10/24 22:56	1
Aniline	ND		0.1	0.05	µg/L		01/31/24 00:00	03/10/24 22:56	1
Anthracene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/10/24 22:56	1
Benz[a]anthracene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/10/24 22:56	1
Benzidine	ND		0.1	0.05	µg/L		01/31/24 00:00	03/10/24 22:56	1
Benzo[a]pyrene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/10/24 22:56	1
Benzo[b]fluoranthene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/10/24 22:56	1
Benzo[e]pyrene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/10/24 22:56	1
Benzo[g,h,i]perylene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/10/24 22:56	1
Benzo[k]fluoranthene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/10/24 22:56	1
Benzoic Acid	ND		0.2	0.1	µg/L		01/31/24 00:00	03/10/24 22:56	1
Benzyl Alcohol	ND		0.2	0.1	µg/L		01/31/24 00:00	03/10/24 22:56	1
Biphenyl	ND		0.005	0.001	µg/L		01/31/24 00:00	03/10/24 22:56	1
Bis(2-Chloroethoxy) methane	ND		0.1	0.05	µg/L		01/31/24 00:00	03/10/24 22:56	1
Bis(2-Chloroethyl) ether	ND		0.1	0.05	µg/L		01/31/24 00:00	03/10/24 22:56	1
Bis(2-Chloroisopropyl) ether	ND		0.1	0.05	µg/L		01/31/24 00:00	03/10/24 22:56	1
Chrysene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/10/24 22:56	1
Dibenz[a,h]anthracene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/10/24 22:56	1
Dibenzo[a,l]pyrene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/10/24 22:56	1
Dibenzofuran	ND		0.1	0.05	µg/L		01/31/24 00:00	03/10/24 22:56	1

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

Lab Sample ID: 115096-B1
Matrix: BlankMatrix
Analysis Batch: O-44100

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: O-44100_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzothiophene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/10/24 22:56	1
Disalicylidenepropanediamine	ND		0.1	0.05	µg/L		01/31/24 00:00	03/10/24 22:56	1
Fluoranthene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/10/24 22:56	1
Fluorene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/10/24 22:56	1
Hexachloroethane	ND		0.1	0.05	µg/L		01/31/24 00:00	03/10/24 22:56	1
Indeno[1,2,3-cd]pyrene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/10/24 22:56	1
Naphthalene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/10/24 22:56	1
Nitrobenzene	ND		0.1	0.05	µg/L		01/31/24 00:00	03/10/24 22:56	1
N-Nitrosodi-n-propylamine	ND		0.1	0.05	µg/L		01/31/24 00:00	03/10/24 22:56	1
N-Nitrosodiphenylamine	ND		0.1	0.05	µg/L		01/31/24 00:00	03/10/24 22:56	1
Pentachlorophenol	ND		0.1	0.05	µg/L		01/31/24 00:00	03/10/24 22:56	1
Perylene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/10/24 22:56	1
Phenanthrene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/10/24 22:56	1
Phenol	ND		0.2	0.1	µg/L		01/31/24 00:00	03/10/24 22:56	1
p-tert-Butylphenol	ND		0.1	0.05	µg/L		01/31/24 00:00	03/10/24 22:56	1
Pyrene	ND		0.005	0.001	µg/L		01/31/24 00:00	03/10/24 22:56	1

Surrogate	*Blank %Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
(2,4,6-Tribromophenol)	*45*		*30 - 130*	*01/31/24 00:00*	*03/10/24 22:56*	*1*
(d10-Acenaphthene)	*112*		*27 - 133*	*01/31/24 00:00*	*03/10/24 22:56*	*1*
(d10-Phenanthrene)	*115*		*43 - 129*	*01/31/24 00:00*	*03/10/24 22:56*	*1*
(d12-Chrysene)	*99*		*52 - 144*	*01/31/24 00:00*	*03/10/24 22:56*	*1*
(d12-Perylene)	*100*		*36 - 161*	*01/31/24 00:00*	*03/10/24 22:56*	*1*
(d5-Phenol)	*97*		*0 - 130*	*01/31/24 00:00*	*03/10/24 22:56*	*1*
(d8-Naphthalene)	*118*		*25 - 125*	*01/31/24 00:00*	*03/10/24 22:56*	*1*

Lab Sample ID: 115096-BS1
Matrix: BlankMatrix
Analysis Batch: O-44100

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: O-44100_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	0.5	0.516		µg/L		103	31 - 128
1-Methylphenanthrene	0.5	0.468		µg/L		94	66 - 127
2,3,5-Trimethylnaphthalene	0.5	0.493		µg/L		99	55 - 122
2,4,5-Trichlorophenol	1	1.02		µg/L		102	30 - 130
2,4,6-Trichlorophenol	1	0.93		µg/L		93	30 - 130
2,4-Dichlorophenol	1	1.17		µg/L		117	51 - 117
2,4-Dinitrophenol	1	0.806		µg/L		81	0 - 152
2,6-Dichlorophenol	0.5	0.571		µg/L		114	30 - 130
2,6-Dimethylnaphthalene	0.5	0.498		µg/L		100	48 - 120
2,6-Di-tert-butyl-4-methylphenol	1.5	1.54		µg/L		103	50 - 150
2,6-Di-tert-butylphenol	1.5	1.97		µg/L		131	50 - 150
2-Chloronaphthalene	1	0.927		µg/L		93	53 - 130
2-Chlorophenol	1	1.05		µg/L		105	41 - 120
2-Methyl-4,6-dinitrophenol	1	1.19		µg/L		119	0 - 141
2-Methylnaphthalene	1.5	1.48		µg/L		99	47 - 130
2-Methylphenol	1	1.09		µg/L		109	40 - 117
2-Nitroaniline	1	1.14		µg/L		114	69 - 114

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

Lab Sample ID: 115096-BS1
Matrix: BlankMatrix
Analysis Batch: O-44100

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: O-44100_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Nitrophenol	1	0.902		µg/L		90	40 - 117
3+4-Methylphenol	1	1.3		µg/L		130	0 - 130
3-Nitroaniline	1	1.2		µg/L		120	23 - 137
4-Bromophenylphenyl ether	1	0.757		µg/L		76	61 - 132
4-Chloro-3-methylphenol	1	1.13		µg/L		113	51 - 128
4-Chloroaniline	1	0.834		µg/L		83	50 - 150
4-Chlorophenylphenyl ether	1	0.845		µg/L		85	63 - 130
4-Nitroaniline	1	1.4		µg/L		140	10 - 159
4-Nitrophenol	1	0.858		µg/L		86	10 - 164
6-tert-butyl-2,4-dimethylphenol	1.5	1.79		µg/L		119	50 - 150
Acenaphthene	1.5	1.61		µg/L		107	53 - 131
Acenaphthylene	1.5	1.66		µg/L		111	43 - 140
Aniline	1	0.525		µg/L		52	50 - 150
Anthracene	1.5	1.42		µg/L		95	58 - 135
Benz[a]anthracene	1.5	1.4		µg/L		93	55 - 145
Benzidine	1	1.25		µg/L		125	0 - 125
Benzo[a]pyrene	1.5	1.3		µg/L		87	51 - 143
Benzo[b]fluoranthene	1.5	1.41		µg/L		94	46 - 165
Benzo[e]pyrene	0.5	0.423		µg/L		85	42 - 152
Benzo[g,h,i]perylene	1.5	1.36		µg/L		91	63 - 133
Benzo[k]fluoranthene	1.5	1.27		µg/L		85	56 - 145
Benzoic Acid	1	1.31		µg/L		131	2 - 145
Benzyl Alcohol	1	1.32		µg/L		132	43 - 148
Biphenyl	0.5	0.548		µg/L		110	56 - 119
Bis(2-Chloroethoxy) methane	1	1.16		µg/L		116	66 - 122
Bis(2-Chloroethyl) ether	1	1.27		µg/L		127	43 - 127
Bis(2-Chloroisopropyl) ether	1	1.28		µg/L		128	49 - 128
Chrysene	1.5	1.08		µg/L		72	56 - 141
Dibenz[a,h]anthracene	1.5	1.61		µg/L		107	55 - 150
Dibenzo[a,l]pyrene	1	0.81		µg/L		81	50 - 150
Dibenzofuran	1	0.967		µg/L		97	50 - 150
Dibenzothiophene	0.5	0.528		µg/L		106	46 - 126
Disalicylidenepropanediamine	50	49		µg/L		98	50 - 150
Fluoranthene	1.5	1.43		µg/L		95	60 - 146
Fluorene	1.5	1.79		µg/L		119	58 - 131
Hexachloroethane	1	0.528		µg/L		53	27 - 130
Indeno[1,2,3-cd]pyrene	1.5	1.65		µg/L		110	50 - 151
Naphthalene	1.5	1.82		µg/L		121	41 - 126
Nitrobenzene	1	1.03		µg/L		103	54 - 111
N-Nitrosodi-n-propylamine	1	1.32		µg/L		132	61 - 152
N-Nitrosodiphenylamine	1	0.968		µg/L		97	49 - 142
Pentachlorophenol	1	1.03		µg/L		103	36 - 111
Perylene	0.5	0.498		µg/L		100	48 - 141
Phenanthrene	1.5	1.58		µg/L		105	67 - 127
Phenol	1	1.14		µg/L		114	29 - 114
p-tert-Butylphenol	1	1.26		µg/L		84	50 - 150
Pyrene	1.5	1.37		µg/L		91	54 - 156

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

Lab Sample ID: 115096-BS1
Matrix: BlankMatrix
Analysis Batch: O-44100

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: O-44100_P

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
(2,4,6-Tribromophenol)	*45*		*30 - 130*
(d10-Acenaphthene)	*107*		*27 - 133*
(d10-Phenanthrene)	*111*		*43 - 129*
(d12-Chrysene)	*101*		*52 - 144*
(d12-Perylene)	*90*		*36 - 161*
(d5-Phenol)	*88*		*0 - 130*
(d8-Naphthalene)	*116*		*25 - 125*

Lab Sample ID: 115096-BS2
Matrix: BlankMatrix
Analysis Batch: O-44100

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: O-44100_P

Analyte			Spike Added	LCS DUP Result	LCS DUP Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene			0.5	0.529		µg/L		106	31 - 128	3	30
1-Methylphenanthrene			0.5	0.492		µg/L		98	66 - 127	4	30
2,3,5-Trimethylnaphthalene			0.5	0.488		µg/L		98	55 - 122	1	30
2,4,5-Trichlorophenol			1	1.02		µg/L		102	30 - 130	0	30
2,4,6-Trichlorophenol			1	0.89		µg/L		89	30 - 130	4	30
2,4-Dichlorophenol			1	1.15		µg/L		115	51 - 117	3	30
2,4-Dinitrophenol			1	0.658		µg/L		66	0 - 152	20	30
2,6-Dichlorophenol			0.5	0.553		µg/L		111	30 - 130	3	30
2,6-Dimethylnaphthalene			0.5	0.484		µg/L		97	48 - 120	3	30
2,6-Di-tert-butyl-4-methylphenol			1.5	1.68		µg/L		112	50 - 150	8	30
2,6-Di-tert-butylphenol			1.5	1.99		µg/L		133	50 - 150	2	30
2-Chloronaphthalene			1	0.999		µg/L		100	53 - 130	7	30
2-Chlorophenol			1	1.01		µg/L		101	41 - 120	4	30
2-Methyl-4,6-dinitrophenol			1	1.29		µg/L		129	0 - 141	8	30
2-Methylnaphthalene			1.5	1.46		µg/L		97	47 - 130	2	30
2-Methylphenol			1	1.12		µg/L		112	40 - 117	3	30
2-Nitroaniline			1	1.05		µg/L		105	69 - 114	8	30
2-Nitrophenol			1	0.94		µg/L		94	40 - 117	4	30
3+4-Methylphenol			1	1.18		µg/L		118	0 - 130	10	30
3-Nitroaniline			1	1.11		µg/L		111	23 - 137	8	30
4-Bromophenylphenyl ether			1	0.709		µg/L		71	61 - 132	7	30
4-Chloro-3-methylphenol			1	1.09		µg/L		109	51 - 128	4	30
4-Chloroaniline			1	0.724		µg/L		72	50 - 150	14	30
4-Chlorophenylphenyl ether			1	0.773		µg/L		77	63 - 130	9	30
4-Nitroaniline			1	1.33		µg/L		133	10 - 159	5	30
4-Nitrophenol			1	0.903		µg/L		90	10 - 164	5	30
6-tert-butyl-2,4-dimethylphenol			1.5	1.82		µg/L		121	50 - 150	2	30
Acenaphthene			1.5	1.58		µg/L		105	53 - 131	2	30
Acenaphthylene			1.5	1.63		µg/L		109	43 - 140	2	30
Aniline			1	0.547		µg/L		55	50 - 150	6	30
Anthracene			1.5	1.35		µg/L		90	58 - 135	5	30
Benz[a]anthracene			1.5	1.59		µg/L		106	55 - 145	13	30
Benzidine			1	1.17		µg/L		117	0 - 125	7	30
Benzo[a]pyrene			1.5	1.32		µg/L		88	51 - 143	1	30
Benzo[b]fluoranthene			1.5	1.66		µg/L		111	46 - 165	17	30

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

Lab Sample ID: 115096-BS2
Matrix: BlankMatrix
Analysis Batch: O-44100

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: O-44100_P

Analyte			Spike Added	LCS DUP Result	LCS DUP Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzo[e]pyrene			0.5	0.441		µg/L		88	42 - 152	3	30
Benzo[g,h,i]perylene			1.5	1.39		µg/L		93	63 - 133	2	30
Benzo[k]fluoranthene			1.5	1.46		µg/L		97	56 - 145	13	30
Benzoic Acid			1	1.07		µg/L		107	2 - 145	20	30
Benzyl Alcohol			1	1.07		µg/L		107	43 - 148	21	30
Biphenyl			0.5	0.536		µg/L		107	56 - 119	3	30
Bis(2-Chloroethoxy) methane			1	1.14		µg/L		114	66 - 122	2	30
Bis(2-Chloroethyl) ether			1	1.26		µg/L		126	43 - 127	1	30
Bis(2-Chloroisopropyl) ether			1	1.05		µg/L		105	49 - 128	20	30
Chrysene			1.5	1.24		µg/L		83	56 - 141	14	30
Dibenz[a,h]anthracene			1.5	1.63		µg/L		109	55 - 150	2	30
Dibenzo[a,l]pyrene			1	0.769		µg/L		77	50 - 150	5	30
Dibenzofuran			1	0.891		µg/L		89	50 - 150	9	30
Dibenzothiophene			0.5	0.526		µg/L		105	46 - 126	1	30
Disalicylidenepropanediamine			50	47.6		µg/L		95	50 - 150	3	30
Fluoranthene			1.5	1.49		µg/L		99	60 - 146	4	30
Fluorene			1.5	1.74		µg/L		116	58 - 131	3	30
Hexachloroethane			1	0.511		µg/L		51	27 - 130	4	30
Indeno[1,2,3-cd]pyrene			1.5	1.68		µg/L		112	50 - 151	2	30
Naphthalene			1.5	1.71		µg/L		114	41 - 126	6	30
Nitrobenzene			1	1.11		µg/L		111	54 - 111	7	30
N-Nitrosodi-n-propylamine			1	1.09		µg/L		109	61 - 152	19	30
N-Nitrosodiphenylamine			1	0.895		µg/L		89	49 - 142	7	30
Pentachlorophenol			1	0.89		µg/L		89	36 - 111	15	30
Perylene			0.5	0.49		µg/L		98	48 - 141	2	30
Phenanthrene			1.5	1.57		µg/L		105	67 - 127	0	30
Phenol			1	1.11		µg/L		111	29 - 114	3	30
p-tert-Butylphenol			1	1.33		µg/L		89	50 - 150	6	30
Pyrene			1.5	1.41		µg/L		94	54 - 156	3	30

Surrogate	*LCS DUP %Recovery*	*LCS DUP Qualifier*	*Limits*
(2,4,6-Tribromophenol)	*50*		*30 - 130*
(d10-Acenaphthene)	*103*		*27 - 133*
(d10-Phenanthrene)	*110*		*43 - 129*
(d12-Chrysene)	*100*		*52 - 144*
(d12-Perylene)	*90*		*36 - 161*
(d5-Phenol)	*66*		*0 - 130*
(d8-Naphthalene)	*118*		*25 - 125*

QC Association Summary

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

Job ID: 380-80217-2
SDG: 625, 8015

GC VOA

Analysis Batch: 405394

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-80217-1	AIEA WELLS P2 (260)	Total/NA	Water	8015B GRO LL	
380-80217-2	TB: AIEA WELLS P2 (260)	Total/NA	Water	8015B GRO LL	
MB 570-405394/7	Method Blank	Total/NA	Water	8015B GRO LL	
LCS 570-405394/4	Lab Control Sample	Total/NA	Water	8015B GRO LL	
LCSD 570-405394/5	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	
MRL 570-405394/6	Lab Control Sample	Total/NA	Water	8015B GRO LL	
380-80217-1 MS	AIEA WELLS P2 (260)	Total/NA	Water	8015B GRO LL	
380-80217-1 MSD	AIEA WELLS P2 (260)	Total/NA	Water	8015B GRO LL	

GC Semi VOA

Prep Batch: 405534

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-80217-1	AIEA WELLS P2 (260)	Total/NA	Water	3510C	
MB 570-405534/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-405534/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-405534/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MRL 570-405534/4-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 408667

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-80217-1	AIEA WELLS P2 (260)	Total/NA	Water	8015B	
MB 570-408667/3	Method Blank	Total/NA	Water	8015B	
LCS 570-408667/4	Lab Control Sample	Total/NA	Water	8015B	
LCSD 570-408667/5	Lab Control Sample Dup	Total/NA	Water	8015B	
MRL 570-408667/13	Lab Control Sample	Total/NA	Water	8015B	

Analysis Batch: 410073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-80217-1	AIEA WELLS P2 (260)	Total/NA	Water	8015B	405534
MB 570-405534/1-A	Method Blank	Total/NA	Water	8015B	405534
LCS 570-405534/2-A	Lab Control Sample	Total/NA	Water	8015B	405534
LCSD 570-405534/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	405534
MRL 570-405534/4-A	Lab Control Sample	Total/NA	Water	8015B	405534

Subcontract

Analysis Batch: O-44100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-80217-1	AIEA WELLS P2 (260)	Total/NA	Water	625 Acid/Base/PAH + TICs	O-44100_P
115096-B1	Method Blank	Total/NA	BlankMatrix	625 Acid/Base/PAH + TICs	O-44100_P
115096-BS1	Lab Control Sample	Total/NA	BlankMatrix	625 Acid/Base/PAH + TICs	O-44100_P
115096-BS2	Lab Control Sample Dup	Total/NA	BlankMatrix	625 Acid/Base/PAH + TICs	O-44100_P

QC Association Summary

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

Job ID: 380-80217-2
SDG: 625, 8015

Subcontract

Prep Batch: O-44100_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-80217-1	AIEA WELLS P2 (260)	Total/NA	Water	EPA_625	
115096-B1	Method Blank	Total/NA	BlankMatrix	EPA_625	
115096-BS1	Lab Control Sample	Total/NA	BlankMatrix	EPA_625	
115096-BS2	Lab Control Sample Dup	Total/NA	BlankMatrix	EPA_625	

Lab Chronicle

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

Job ID: 380-80217-2
SDG: 625, 8015

Client Sample ID: AIEA WELLS P2 (260)

Date Collected: 01/24/24 08:30
Date Received: 01/25/24 10:00

Lab Sample ID: 380-80217-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015B GRO LL		1	405394	A9VE	EET CAL 4	01/29/24 18:03
Total/NA	Prep	3510C			405534	JC	EET CAL 4	01/29/24 14:05
Total/NA	Analysis	8015B		1	410073	SP9M	EET CAL 4	02/13/24 18:00
Total/NA	Analysis	8015B		1	408667	J7WE	EET CAL 4	02/07/24 23:35
Total/NA	Prep	EPA_625		1	O-44100_P			01/31/24 00:00
Total/NA	Analysis	625 Acid/Base/PAH + TICs		1	O-44100	YC		03/11/24 06:08

Client Sample ID: TB: AIEA WELLS P2 (260)

Date Collected: 01/24/24 08:30
Date Received: 01/25/24 10:00

Lab Sample ID: 380-80217-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015B GRO LL		1	405394	A9VE	EET CAL 4	01/29/24 16:19

Laboratory References:

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

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

Accreditation/Certification Summary

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

Job ID: 380-80217-2
SDG: 625, 8015

Laboratory: Eurofins Calscience

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0830	11-16-24
California	Los Angeles County Sanitation Districts	10109	08-01-24
California	State	3082	07-31-24
Kansas	NELAP	E-10420	08-01-24
Nevada	State	CA00111	07-31-24
Oregon	NELAP	4175	02-03-25
USDA	US Federal Programs	P330-22-00059	06-08-26
Washington	State	C916-18	10-11-24

Method Summary

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

Job ID: 380-80217-2
SDG: 625, 8015

Method	Method Description	Protocol	Laboratory
8015B GRO LL	Gasoline Range Organics - (GC)	SW846	EET CAL 4
8015B	Diesel Range Organics (DRO) (GC) Low Level	SW846	EET CAL 4
8015B	Nonhalogenated Organic Compounds - Direct Injection (GC)	SW846	EET CAL 4
625	EPA 625 Base/Neutral and Acid Organics i	EPA	
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET CAL 4
5030C	Purge and Trap	SW846	EET CAL 4

Protocol References:

EPA = US Environmental Protection Agency

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

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

Sample Summary

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

Job ID: 380-80217-2
SDG: 625, 8015

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
380-80217-1	AIEA WELLS P2 (260)	Water	01/24/24 08:30	01/25/24 10:00
380-80217-2	TB: AIEA WELLS P2 (260)	Water	01/24/24 08:30	01/25/24 10:00

March 26, 2024

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

Project Name: RED-HILL Project # 38001111 Job # 380-80217-1
Physis Project ID: 1407003-480

Dear Rachelle,

Enclosed are the analytical results for the sample submitted to PHYSIS Environmental Laboratories, Inc. (PHYSIS) on 1/26/2024. A total of 1 sample was received for analysis in accordance with the attached chain of custody (COC). Per the COC, the sample was analyzed for:

Organics
Polynuclear Aromatic Hydrocarbons by EPA 625.1
Disalicylidenepropanediamine by EPA 625.1
Dibenzo [a,l] Pyrene w/ PAHs by EPA 625.1
Base/Neutral Extractable Compounds by EPA 625.1
Acid Extractable Compounds w/ PAHs by EPA 625.1
6-tert-Butyl-2,4-dimethylphenol by EPA 625.1
2,6-Di-tert-butylphenol by EPA 625.1
2,6-Di-tert-butyl-4-methylphenol by EPA 625.1
p-tert-Butylphenol by EPA 625.1

Analytical results in this report apply only to samples submitted to PHYSIS in accordance with the COC and are intended to be considered in their entirety.

Please feel free to contact me at any time with any questions. PHYSIS appreciates the opportunity to provide you with our analytical and support services.

Regards,
Rachel Hansen
Rachel Hansen
714 602-5320
Extension 203
rachelhansen@physislabs.com

PROJECT SAMPLE LIST

Eurofins Eaton Analytical

PHYSIS Project ID: 1407003-480

RED-HILL Project # 38001111 Job # 380-80217-1

Total Samples: 1

PHYSIS ID	Sample ID	Description	Date	Time	Matrix	Sample Type
115097	AIEA WELLS P2 (260)	380-80217-1	1/24/2024	8:30	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: 1407003-480
Client: Eurofins Eaton Analytical
Project: RED-HILL Project # 38001111 Job # 380-80217-1

Acid Extractable Compounds

ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 115097-R1	**AIEA WELLS P2 (260) 380-80217-1**	**Matrix: Samplewater**					**Sampled:**	**24-Jan-24**	**8:30**	**Received:**	**26-Jan-24**
(2,4,6-Tribromophenol)	EPA 625.1	% Recovery	137	1			Total		O-44100	31-Jan-24	11-Mar-24
(d5-Phenol)	EPA 625.1	% Recovery	120	1			Total		O-44100	31-Jan-24	11-Mar-24
2,4,5-Trichlorophenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-44100	31-Jan-24	11-Mar-24
2,4,6-Trichlorophenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-44100	31-Jan-24	11-Mar-24
2,4-Dichlorophenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-44100	31-Jan-24	11-Mar-24
2,4-Dinitrophenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-44100	31-Jan-24	11-Mar-24
2,6-Dichlorophenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-44100	31-Jan-24	11-Mar-24
2,6-Di-tert-butyl-4-methylphenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-44100	31-Jan-24	11-Mar-24
2,6-Di-tert-butylphenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-44100	31-Jan-24	11-Mar-24
2-Chlorophenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-44100	31-Jan-24	11-Mar-24
2-Methyl-4,6-dinitrophenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-44100	31-Jan-24	11-Mar-24
2-Methylphenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-44100	31-Jan-24	11-Mar-24
2-Nitrophenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-44100	31-Jan-24	11-Mar-24
3+4-Methylphenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-44100	31-Jan-24	11-Mar-24
4-Chloro-3-methylphenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-44100	31-Jan-24	11-Mar-24
4-Nitrophenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-44100	31-Jan-24	11-Mar-24
6-tert-butyl-2,4-dimethylphenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-44100	31-Jan-24	11-Mar-24
Benzoic Acid	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-44100	31-Jan-24	11-Mar-24
Benzyl Alcohol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-44100	31-Jan-24	11-Mar-24
Pentachlorophenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-44100	31-Jan-24	11-Mar-24
Phenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total		O-44100	31-Jan-24	11-Mar-24
p-tert-Butylphenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-44100	31-Jan-24	11-Mar-24

Base/Neutral Extractable Compounds

ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 115097-R1	**AIEA WELLS P2 (260) 380-80217-1**		**Matrix: Samplewater**				**Sampled:**	**24-Jan-24**	**8:30**	**Received:**	**26-Jan-24**
2-Chloronaphthalene	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-44100	31-Jan-24	11-Mar-24
2-Nitroaniline	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-44100	31-Jan-24	11-Mar-24
3-Nitroaniline	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-44100	31-Jan-24	11-Mar-24
4-Bromophenylphenyl ether	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-44100	31-Jan-24	11-Mar-24
4-Chloroaniline	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-44100	31-Jan-24	11-Mar-24
4-Chlorophenylphenyl ether	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-44100	31-Jan-24	11-Mar-24
4-Nitroaniline	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-44100	31-Jan-24	11-Mar-24
Aniline	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-44100	31-Jan-24	11-Mar-24
Benzidine	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-44100	31-Jan-24	11-Mar-24
Bis(2-Chloroethoxy) methane	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-44100	31-Jan-24	11-Mar-24
Bis(2-Chloroethyl) ether	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-44100	31-Jan-24	11-Mar-24
Bis(2-Chloroisopropyl) ether	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-44100	31-Jan-24	11-Mar-24
Dibenzofuran	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-44100	31-Jan-24	11-Mar-24
Disalicylidenepropanediamine	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-44100	31-Jan-24	11-Mar-24
Hexachloroethane	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-44100	31-Jan-24	11-Mar-24
Nitrobenzene	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-44100	31-Jan-24	11-Mar-24
N-Nitrosodi-n-propylamine	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-44100	31-Jan-24	11-Mar-24
N-Nitrosodiphenylamine	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-44100	31-Jan-24	11-Mar-24

Polynuclear Aromatic Hydrocarbons

ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 115097-R1	**AIEA WELLS P2 (260) 380-80217-1**	**Matrix: Samplewater**					**Sampled:**	**24-Jan-24**	**8:30**	**Received:**	**26-Jan-24**
(d10-Acenaphthene)	EPA 625.1	% Recovery	115	1			Total		O-44100	31-Jan-24	11-Mar-24
(d10-Phenanthrene)	EPA 625.1	% Recovery	114	1			Total		O-44100	31-Jan-24	11-Mar-24
(d12-Chrysene)	EPA 625.1	% Recovery	102	1			Total		O-44100	31-Jan-24	11-Mar-24
(d12-Perylene)	EPA 625.1	% Recovery	96	1			Total		O-44100	31-Jan-24	11-Mar-24
(d8-Naphthalene)	EPA 625.1	% Recovery	143	1			Total		O-44100	31-Jan-24	11-Mar-24
1-Methylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-44100	31-Jan-24	11-Mar-24
1-Methylphenanthrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-44100	31-Jan-24	11-Mar-24
2,3,5-Trimethylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-44100	31-Jan-24	11-Mar-24
2,6-Dimethylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-44100	31-Jan-24	11-Mar-24
2-Methylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-44100	31-Jan-24	11-Mar-24
Acenaphthene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-44100	31-Jan-24	11-Mar-24
Acenaphthylene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-44100	31-Jan-24	11-Mar-24
Anthracene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-44100	31-Jan-24	11-Mar-24
Benz[a]anthracene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-44100	31-Jan-24	11-Mar-24
Benzo[a]pyrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-44100	31-Jan-24	11-Mar-24
Benzo[b]fluoranthene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-44100	31-Jan-24	11-Mar-24
Benzo[e]pyrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-44100	31-Jan-24	11-Mar-24
Benzo[g,h,i]perylene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-44100	31-Jan-24	11-Mar-24
Benzo[k]fluoranthene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-44100	31-Jan-24	11-Mar-24
Biphenyl	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-44100	31-Jan-24	11-Mar-24
Chrysene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-44100	31-Jan-24	11-Mar-24
Dibenz[a,h]anthracene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-44100	31-Jan-24	11-Mar-24
Dibenzo[a,l]pyrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-44100	31-Jan-24	11-Mar-24
Dibenzothiophene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-44100	31-Jan-24	11-Mar-24

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-44100	31-Jan-24	11-Mar-24
Fluorene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-44100	31-Jan-24	11-Mar-24
Indeno[1,2,3-cd]pyrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-44100	31-Jan-24	11-Mar-24
Naphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-44100	31-Jan-24	11-Mar-24
Perylene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-44100	31-Jan-24	11-Mar-24
Phenanthrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-44100	31-Jan-24	11-Mar-24
Pyrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-44100	31-Jan-24	11-Mar-24

QUALITY CONTROL REPORT

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: 115096-B1	**QAQC Procedural Blank**					**Matrix: BlankMatrix**		**Sampled:**				**Received:**	
	Method: EPA 625.1					Batch ID: O-44100		Prepared: 31-Jan-24				Analyzed: 10-Mar-24	
(2,4,6-Tribromophenol)	Total	45	1			% Recovery	100	45		30 - 130%		PASS	
(d5-Phenol)	Total	97	1			% Recovery	100	97		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: 115096-BS1	**QAQC Procedural Blank**					**Matrix: BlankMatrix**		**Sampled:**				**Received:**	
	Method: EPA 625.1					Batch ID: O-44100		Prepared: 31-Jan-24				Analyzed: 11-Mar-24	
(2,4,6-Tribromophenol)	Total	45	1			% Recovery	100	0	45	30 - 130%	PASS		
(d5-Phenol)	Total	88	1			% Recovery	100	0	88	0 - 130%	PASS		
2,4,5-Trichlorophenol	Total	1.02	1	0.05	0.1	µg/L	1	0	102	30 - 130%	PASS		
2,4,6-Trichlorophenol	Total	0.93	1	0.05	0.1	µg/L	1	0	93	56 - 118%	PASS		
2,4-Dichlorophenol	Total	1.17	1	0.05	0.1	µg/L	1	0	117	51 - 117%	PASS		
2,4-Dinitrophenol	Total	0.806	1	0.1	0.2	µg/L	1	0	81	0 - 152%	PASS		
2,6-Dichlorophenol	Total	0.571	1	0.05	0.1	µg/L	0.5	0	114	30 - 130%	PASS		
2,6-Di-tert-butyl-4-methylphenol	Total	1.54	1	0.05	0.1	µg/L	1.5	0	103	50 - 150%	PASS		
2,6-Di-tert-butylphenol	Total	1.97	1	0.05	0.1	µg/L	1.5	0	131	50 - 150%	PASS		
2-Chlorophenol	Total	1.05	1	0.05	0.1	µg/L	1	0	105	41 - 110%	PASS		
2-Methyl-4,6-dinitrophenol	Total	1.19	1	0.1	0.2	µg/L	1	0	119	0 - 141%	PASS		
2-Methylphenol	Total	1.09	1	0.1	0.2	µg/L	1	0	109	40 - 117%	PASS		
2-Nitrophenol	Total	0.902	1	0.1	0.2	µg/L	1	0	90	40 - 117%	PASS		
3+4-Methylphenol	Total	1.3	1	0.1	0.2	µg/L	1	0	130	0 - 130%	PASS		
4-Chloro-3-methylphenol	Total	1.13	1	0.1	0.2	µg/L	1	0	113	51 - 128%	PASS		
4-Nitrophenol	Total	0.858	1	0.1	0.2	µg/L	1	0	86	10 - 164%	PASS		
6-tert-butyl-2,4-dimethylphenol	Total	1.79	1	0.05	0.1	µg/L	1.5	0	119	50 - 150%	PASS		
Benzoic Acid	Total	1.31	1	0.1	0.2	µg/L	1	0	131	2 - 145%	PASS		
Benzyl Alcohol	Total	1.32	1	0.1	0.2	µg/L	1	0	132	43 - 148%	PASS		
Pentachlorophenol	Total	1.03	1	0.05	0.1	µg/L	1	0	103	36 - 111%	PASS		
Phenol	Total	1.14	1	0.1	0.2	µg/L	1	0	114	29 - 114%	PASS		
p-tert-Butylphenol	Total	1.26	1	0.05	0.1	µg/L	1	0	84	50 - 150%	PASS		

Acid Extractable Compounds — QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	ACCURACY LIMITS		PRECISION %	PRECISION LIMITS	QA CODEc
Sample ID: 115096-BS2	**QAQC Procedural Blank**					**Matrix: BlankMatrix**		**Sampled:**			**Received:**			
		Method: EPA 625.1				Batch ID: O-44100		Prepared: 31-Jan-24			Analyzed: 11-Mar-24			
(2,4,6-Tribromophenol)	Total	50	1			% Recovery	100	0	50	30 - 130%	PASS	11	30	PASS
(d5-Phenol)	Total	66	1			% Recovery	100	0	66	0 - 130%	PASS	29	30	PASS
2,4,5-Trichlorophenol	Total	1.02	1	0.05	0.1	µg/L	1	0	102	30 - 130%	PASS	0	30	PASS
2,4,6-Trichlorophenol	Total	0.89	1	0.05	0.1	µg/L	1	0	89	56 - 118%	PASS	4	30	PASS
2,4-Dichlorophenol	Total	1.15	1	0.05	0.1	µg/L	1	0	115	51 - 117%	PASS	3	30	PASS
2,4-Dinitrophenol	Total	0.658	1	0.1	0.2	µg/L	1	0	66	0 - 152%	PASS	20	30	PASS
2,6-Dichlorophenol	Total	0.553	1	0.05	0.1	µg/L	0.5	0	111	30 - 130%	PASS	3	30	PASS
2,6-Di-tert-butyl-4-methylphenol	Total	1.68	1	0.05	0.1	µg/L	1.5	0	112	50 - 150%	PASS	8	30	PASS
2,6-Di-tert-butylphenol	Total	1.99	1	0.05	0.1	µg/L	1.5	0	133	50 - 150%	PASS	2	30	PASS
2-Chlorophenol	Total	1.01	1	0.05	0.1	µg/L	1	0	101	41 - 110%	PASS	4	30	PASS
2-Methyl-4,6-dinitrophenol	Total	1.29	1	0.1	0.2	µg/L	1	0	129	0 - 141%	PASS	8	30	PASS
2-Methylphenol	Total	1.12	1	0.1	0.2	µg/L	1	0	112	40 - 117%	PASS	3	30	PASS
2-Nitrophenol	Total	0.94	1	0.1	0.2	µg/L	1	0	94	40 - 117%	PASS	4	30	PASS
3+4-Methylphenol	Total	1.18	1	0.1	0.2	µg/L	1	0	118	0 - 130%	PASS	10	30	PASS
4-Chloro-3-methylphenol	Total	1.09	1	0.1	0.2	µg/L	1	0	109	51 - 128%	PASS	4	30	PASS
4-Nitrophenol	Total	0.903	1	0.1	0.2	µg/L	1	0	90	10 - 164%	PASS	5	30	PASS
6-tert-butyl-2,4-dimethylphenol	Total	1.82	1	0.05	0.1	µg/L	1.5	0	121	50 - 150%	PASS	2	30	PASS
Benzoic Acid	Total	1.07	1	0.1	0.2	µg/L	1	0	107	2 - 145%	PASS	20	30	PASS
Benzyl Alcohol	Total	1.07	1	0.1	0.2	µg/L	1	0	107	43 - 148%	PASS	21	30	PASS
Pentachlorophenol	Total	0.89	1	0.05	0.1	µg/L	1	0	89	36 - 111%	PASS	15	30	PASS
Phenol	Total	1.11	1	0.1	0.2	µg/L	1	0	111	29 - 114%	PASS	3	30	PASS
p-tert-Butylphenol	Total	1.33	1	0.05	0.1	µg/L	1	0	89	50 - 150%	PASS	6	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: 115096-B1	**QAQC Procedural Blank**					**Matrix: BlankMatrix**	**Sampled:**					**Received:**	
	Method: EPA 625.1					Batch ID: O-44100	Prepared: 31-Jan-24					Analyzed: 10-Mar-24	
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 e	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: 115096-BS1	**QAQC Procedural Blank**					**Matrix: BlankMatrix**	**Sampled:**					**Received:**	
	Method: EPA 625.1					Batch ID: O-44100		Prepared: 31-Jan-24				Analyzed: 11-Mar-24	
2-Chloronaphthalene	Total	0.927	1	0.05	0.1	µg/L	1	0	93	53 - 130%	PASS		
2-Nitroaniline	Total	1.14	1	0.05	0.1	µg/L	1	0	114	69 - 114%	PASS		
3-Nitroaniline	Total	1.2	1	0.05	0.1	µg/L	1	0	120	23 - 137%	PASS		
4-Bromophenylphenyl ether	Total	0.757	1	0.05	0.1	µg/L	1	0	76	61 - 132%	PASS		
4-Chloroaniline	Total	0.834	1	0.05	0.1	µg/L	1	0	83	50 - 150%	PASS		
4-Chlorophenylphenyl ether	Total	0.845	1	0.05	0.1	µg/L	1	0	85	63 - 130%	PASS		
4-Nitroaniline	Total	1.4	1	0.05	0.1	µg/L	1	0	140	10 - 159%	PASS		
Aniline	Total	0.525	1	0.05	0.1	µg/L	1	0	52	50 - 150%	PASS		
Benzidine	Total	1.25	1	0.05	0.1	µg/L	1	0	125	0 - 125%	PASS		
Bis(2-Chloroethoxy) methane	Total	1.16	1	0.05	0.1	µg/L	1	0	116	66 - 122%	PASS		
Bis(2-Chloroethyl) ether	Total	1.27	1	0.05	0.1	µg/L	1	0	127	43 - 127%	PASS		
Bis(2-Chloroisopropyl) ether	Total	1.28	1	0.05	0.1	µg/L	1	0	128	49 - 128%	PASS		
Dibenzofuran	Total	0.967	1	0.05	0.1	µg/L	1	0	97	50 - 150%	PASS		
Disalicylidenepropanediamin	Total	49	1	0.05	0.1	µg/L	50	0	98	50 - 150%	PASS		
Hexachloroethane	Total	0.528	1	0.05	0.1	µg/L	1	0	53	27 - 130%	PASS		
Nitrobenzene	Total	1.03	1	0.05	0.1	µg/L	1	0	103	54 - 111%	PASS		
N-Nitrosodi-n-propylamine	Total	1.32	1	0.05	0.1	µg/L	1	0	132	61 - 152%	PASS		
N-Nitrosodiphenylamine	Total	0.968	1	0.05	0.1	µg/L	1	0	97	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: 115096-BS2	**QAQC Procedural Blank**					**Matrix: BlankMatrix**	**Sampled:**				**Received:**			
		Method: EPA 625.1				Batch ID: O-44100			Prepared: 31-Jan-24			Analyzed: 11-Mar-24		
2-Chloronaphthalene	Total	0.999	1	0.05	0.1	µg/L	1	0	100	53 - 130%	PASS	7	30	PASS
2-Nitroaniline	Total	1.05	1	0.05	0.1	µg/L	1	0	105	69 - 114%	PASS	8	30	PASS
3-Nitroaniline	Total	1.11	1	0.05	0.1	µg/L	1	0	111	23 - 137%	PASS	8	30	PASS
4-Bromophenylphenyl ether	Total	0.709	1	0.05	0.1	µg/L	1	0	71	61 - 132%	PASS	7	30	PASS
4-Chloroaniline	Total	0.724	1	0.05	0.1	µg/L	1	0	72	50 - 150%	PASS	14	30	PASS
4-Chlorophenylphenyl ether	Total	0.773	1	0.05	0.1	µg/L	1	0	77	63 - 130%	PASS	9	30	PASS
4-Nitroaniline	Total	1.33	1	0.05	0.1	µg/L	1	0	133	10 - 159%	PASS	5	30	PASS
Aniline	Total	0.547	1	0.05	0.1	µg/L	1	0	55	50 - 150%	PASS	6	30	PASS
Benzidine	Total	1.17	1	0.05	0.1	µg/L	1	0	117	0 - 125%	PASS	7	30	PASS
Bis(2-Chloroethoxy) methane	Total	1.14	1	0.05	0.1	µg/L	1	0	114	66 - 122%	PASS	2	30	PASS
Bis(2-Chloroethyl) ether	Total	1.26	1	0.05	0.1	µg/L	1	0	126	43 - 127%	PASS	1	30	PASS
Bis(2-Chloroisopropyl) ether	Total	1.05	1	0.05	0.1	µg/L	1	0	105	49 - 128%	PASS	20	30	PASS
Dibenzofuran	Total	0.891	1	0.05	0.1	µg/L	1	0	89	50 - 150%	PASS	9	30	PASS
Disalicylidenepropanediamin e	Total	47.6	1	0.05	0.1	µg/L	50	0	95	50 - 150%	PASS	3	30	PASS
Hexachloroethane	Total	0.511	1	0.05	0.1	µg/L	1	0	51	27 - 130%	PASS	4	30	PASS
Nitrobenzene	Total	1.11	1	0.05	0.1	µg/L	1	0	111	54 - 111%	PASS	7	30	PASS
N-Nitrosodi-n-propylamine	Total	1.09	1	0.05	0.1	µg/L	1	0	109	61 - 152%	PASS	19	30	PASS
N-Nitrosodiphenylamine	Total	0.895	1	0.05	0.1	µg/L	1	0	89	49 - 142%	PASS	7	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: 115096-B1	**QAQC Procedural Blank**					**Matrix: BlankMatrix**		**Sampled:**				**Received:**	
		Method: EPA 625.1				Batch ID: O-44100		Prepared: 31-Jan-24				Analyzed: 10-Mar-24	
(d10-Acenaphthene)	Total	112	1			% Recovery	100	112	27 - 133%	PASS			
(d10-Phenanthrene)	Total	115	1			% Recovery	100	115	43 - 129%	PASS			
(d12-Chrysene)	Total	99	1			% Recovery	100	99	52 - 144%	PASS			
(d12-Perylene)	Total	100	1			% Recovery	100	100	36 - 161%	PASS			
(d8-Naphthalene)	Total	118	1			% Recovery	100	118	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							

Polynuclear Aromatic Hydrocarbons QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	ACCURACY LIMITS	PRECISION %	PRECISION LIMITS	QA CODEc
Dibenzothiophene	Total	ND	1	0.001	0.005	µg/L							
Fluoranthene	Total	ND	1	0.001	0.005	µg/L							
Fluorene	Total	ND	1	0.001	0.005	µg/L							
Indeno[1,2,3-cd]pyrene	Total	ND	1	0.001	0.005	µg/L							
Naphthalene	Total	ND	1	0.001	0.005	µg/L							
Perylene	Total	ND	1	0.001	0.005	µg/L							
Phenanthrene	Total	ND	1	0.001	0.005	µg/L							
Pyrene	Total	ND	1	0.001	0.005	µg/L							

Polynuclear Aromatic Hydrocarbons QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	ACCURACY LIMITS	PRECISION %	PRECISION LIMITS	QA CODEc
Sample ID: 115096-BS1	**QAQC Procedural Blank**					**Matrix: BlankMatrix**		**Sampled:**				**Received:**	
		Method: EPA 625.1				Batch ID: O-44100		Prepared: 31-Jan-24				Analyzed: 11-Mar-24	
(d10-Acenaphthene)	Total	107	1			% Recovery	100	0	107	27 - 133%	PASS		
(d10-Phenanthrene)	Total	111	1			% Recovery	100	0	111	43 - 129%	PASS		
(d12-Chrysene)	Total	101	1			% Recovery	100	0	101	52 - 144%	PASS		
(d12-Perylene)	Total	90	1			% Recovery	100	0	90	36 - 161%	PASS		
(d8-Naphthalene)	Total	116	1			% Recovery	100	0	116	25 - 125%	PASS		
1-Methylnaphthalene	Total	0.516	1	0.001	0.005	µg/L	0.5	0	103	31 - 128%	PASS		
1-Methylphenanthrene	Total	0.468	1	0.001	0.005	µg/L	0.5	0	94	66 - 127%	PASS		
2,3,5-Trimethylnaphthalene	Total	0.493	1	0.001	0.005	µg/L	0.5	0	99	55 - 122%	PASS		
2,6-Dimethylnaphthalene	Total	0.498	1	0.001	0.005	µg/L	0.5	0	100	48 - 120%	PASS		
2-Methylnaphthalene	Total	1.48	1	0.001	0.005	µg/L	1.5	0	99	47 - 130%	PASS		
Acenaphthene	Total	1.61	1	0.001	0.005	µg/L	1.5	0	107	53 - 131%	PASS		
Acenaphthylene	Total	1.66	1	0.001	0.005	µg/L	1.5	0	111	43 - 140%	PASS		
Anthracene	Total	1.42	1	0.001	0.005	µg/L	1.5	0	95	58 - 135%	PASS		
Benz[a]anthracene	Total	1.4	1	0.001	0.005	µg/L	1.5	0	93	55 - 145%	PASS		
Benzo[a]pyrene	Total	1.3	1	0.001	0.005	µg/L	1.5	0	87	51 - 143%	PASS		
Benzo[b]fluoranthene	Total	1.41	1	0.001	0.005	µg/L	1.5	0	94	46 - 165%	PASS		
Benzo[e]pyrene	Total	0.423	1	0.001	0.005	µg/L	0.5	0	85	42 - 152%	PASS		
Benzo[g,h,i]perylene	Total	1.36	1	0.001	0.005	µg/L	1.5	0	91	63 - 133%	PASS		
Benzo[k]fluoranthene	Total	1.27	1	0.001	0.005	µg/L	1.5	0	85	56 - 145%	PASS		
Biphenyl	Total	0.548	1	0.001	0.005	µg/L	0.5	0	110	56 - 119%	PASS		
Chrysene	Total	1.08	1	0.001	0.005	µg/L	1.5	0	72	56 - 141%	PASS		
Dibenz[a,h]anthracene	Total	1.61	1	0.001	0.005	µg/L	1.5	0	107	55 - 150%	PASS		
Dibenzo[a,l]pyrene	Total	0.81	1	0.001	0.005	µg/L	1	0	81	50 - 150%	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
Dibenzothiophene	Total	0.528	1	0.001	0.005	µg/L	0.5	0	106	46 - 126%	PASS			
Fluoranthene	Total	1.43	1	0.001	0.005	µg/L	1.5	0	95	60 - 146%	PASS			
Fluorene	Total	1.79	1	0.001	0.005	µg/L	1.5	0	119	58 - 131%	PASS			
Indeno[1,2,3-cd]pyrene	Total	1.65	1	0.001	0.005	µg/L	1.5	0	110	50 - 151%	PASS			
Naphthalene	Total	1.82	1	0.001	0.005	µg/L	1.5	0	121	41 - 126%	PASS			
Perylene	Total	0.498	1	0.001	0.005	µg/L	0.5	0	100	48 - 141%	PASS			
Phenanthrene	Total	1.58	1	0.001	0.005	µg/L	1.5	0	105	67 - 127%	PASS			
Pyrene	Total	1.37	1	0.001	0.005	µg/L	1.5	0	91	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: 115096-BS2	**QAQC Procedural Blank**					**Matrix: BlankMatrix**		**Sampled:**					**Received:**		
		Method: EPA 625.1				Batch ID: O-44100		Prepared: 31-Jan-24				Analyzed: 11-Mar-24			
(d10-Acenaphthene)	Total	103	1			% Recovery	100	0	103	27 - 133%	PASS	4	30	PASS	
(d10-Phenanthrene)	Total	110	1			% Recovery	100	0	110	43 - 129%	PASS	1	30	PASS	
(d12-Chrysene)	Total	100	1			% Recovery	100	0	100	52 - 144%	PASS	1	30	PASS	
(d12-Perylene)	Total	90	1			% Recovery	100	0	90	36 - 161%	PASS	0	30	PASS	
(d8-Naphthalene)	Total	118	1			% Recovery	100	0	118	25 - 125%	PASS	2	30	PASS	
1-Methylnaphthalene	Total	0.529	1	0.001	0.005	µg/L	0.5	0	106	31 - 128%	PASS	3	30	PASS	
1-Methylphenanthrene	Total	0.492	1	0.001	0.005	µg/L	0.5	0	98	66 - 127%	PASS	4	30	PASS	
2,3,5-Trimethylnaphthalene	Total	0.488	1	0.001	0.005	µg/L	0.5	0	98	55 - 122%	PASS	1	30	PASS	
2,6-Dimethylnaphthalene	Total	0.484	1	0.001	0.005	µg/L	0.5	0	97	48 - 120%	PASS	3	30	PASS	
2-Methylnaphthalene	Total	1.46	1	0.001	0.005	µg/L	1.5	0	97	47 - 130%	PASS	2	30	PASS	
Acenaphthene	Total	1.58	1	0.001	0.005	µg/L	1.5	0	105	53 - 131%	PASS	2	30	PASS	
Acenaphthylene	Total	1.63	1	0.001	0.005	µg/L	1.5	0	109	43 - 140%	PASS	2	30	PASS	
Anthracene	Total	1.35	1	0.001	0.005	µg/L	1.5	0	90	58 - 135%	PASS	5	30	PASS	
Benz[a]anthracene	Total	1.59	1	0.001	0.005	µg/L	1.5	0	106	55 - 145%	PASS	13	30	PASS	
Benzo[a]pyrene	Total	1.32	1	0.001	0.005	µg/L	1.5	0	88	51 - 143%	PASS	1	30	PASS	
Benzo[b]fluoranthene	Total	1.66	1	0.001	0.005	µg/L	1.5	0	111	46 - 165%	PASS	17	30	PASS	
Benzo[e]pyrene	Total	0.441	1	0.001	0.005	µg/L	0.5	0	88	42 - 152%	PASS	3	30	PASS	
Benzo[g,h,i]perylene	Total	1.39	1	0.001	0.005	µg/L	1.5	0	93	63 - 133%	PASS	2	30	PASS	
Benzo[k]fluoranthene	Total	1.46	1	0.001	0.005	µg/L	1.5	0	97	56 - 145%	PASS	13	30	PASS	
Biphenyl	Total	0.536	1	0.001	0.005	µg/L	0.5	0	107	56 - 119%	PASS	3	30	PASS	
Chrysene	Total	1.24	1	0.001	0.005	µg/L	1.5	0	83	56 - 141%	PASS	14	30	PASS	
Dibenz[a,h]anthracene	Total	1.63	1	0.001	0.005	µg/L	1.5	0	109	55 - 150%	PASS	2	30	PASS	
Dibenzo[a,l]pyrene	Total	0.769	1	0.001	0.005	µg/L	1	0	77	50 - 150%	PASS	5	30	PASS	

PHYSIS Project ID: 1407003-480
Client: Eurofins Eaton Analytical
Project: RED-HILL Project # 38001111 Job # 380-80217-1

Polynuclear Aromatic Hydrocarbons QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	ACCURACY LIMITS		PRECISION %	PRECISION LIMITS		QA CODEc
Dibenzothiophene	Total	0.526	1	0.001	0.005	µg/L	0.5	0	105	46 - 126%	PASS	1	30	PASS	
Fluoranthene	Total	1.49	1	0.001	0.005	µg/L	1.5	0	99	60 - 146%	PASS	4	30	PASS	
Fluorene	Total	1.74	1	0.001	0.005	µg/L	1.5	0	116	58 - 131%	PASS	3	30	PASS	
Indeno[1,2,3-cd]pyrene	Total	1.68	1	0.001	0.005	µg/L	1.5	0	112	50 - 151%	PASS	2	30	PASS	
Naphthalene	Total	1.71	1	0.001	0.005	µg/L	1.5	0	114	41 - 126%	PASS	6	30	PASS	
Perylene	Total	0.49	1	0.001	0.005	µg/L	0.5	0	98	48 - 141%	PASS	2	30	PASS	
Phenanthrene	Total	1.57	1	0.001	0.005	µg/L	1.5	0	105	67 - 127%	PASS	0	30	PASS	
Pyrene	Total	1.41	1	0.001	0.005	µg/L	1.5	0	94	54 - 156%	PASS	3	30	PASS	

TENTATIVELY IDENTIFIED COMPOUNDS

Sample ID: Lab Blank B1_44100

Retention Time	Area (% of total)	Concentration (ng/L)	Library/ID	Cas Number	Match Quality (%)
35.7316	2.7439	1111	Anthracene-D10	1517-22-2	97
10.8716	0.9162	371	Oxalic acid, cyclohexyl pentyl ester	1000309-30-6	84
10.9830	0.5796	235	1H-1,2,4-Triazol-5-amine, 1-methyl-	15795-39-8	81
10.1224	0.3141	127	Propanoic acid, 2-methyl-, anhydride	97-72-3	85
25.5115	0.2689	109	Benzoic acid, 4-ethoxy-, ethyl ester	23676-09-7	93
10.6256	0.2350	95	Ethanone, 1-(3-methyloxiranyl)-	17257-79-3	85

Concentration estimated using the response for Anthracene-d10

Sample ID: 115097

Retention Time	Area (% of total)	Concentration (ng/L)	Library/ID	Cas Number	Match Quality (%)
35.7343	2.8157	1111	Anthracene-D10	1517-22-2	96
63.7706	1.0760	425	Heneicosane	629-94-7	92
63.7702	1.0732	424	Hexacosane	630-01-3	93
66.6726	0.8586	339	Eicosane	112-95-8	90
66.6727	0.8023	317	Heptadecane	629-78-7	92
57.6339	0.6213	245	Octadecane	593-45-3	91
69.4723	0.5693	225	Hexadecane, 2,6,10,14-tetramethyl-	638-36-8	85
32.8097	0.5428	214	Benzoic acid, 2-ethylhexyl ester	5444-75-7	94
69.4706	0.5181	204	Pentacosane	629-99-2	88
20.1982	0.4593	181	Propanoic acid, 2-methyl-, 3-hydroxy-2,2,4-trimethylpentyl ester	77-68-9	86
10.2132	0.3287	130	Cyclopentane, 1,2,3,4,5-pentamethyl-	1000152-79-7	83
20.2047	0.3218	127	Propanoic acid, 2-methyl-, butyl ester	97-87-0	87
19.5495	0.2949	116	2,2,4-Trimethyl-1,3-pentanediol diisobutyrate	6846-50-0	85
25.5231	0.2723	107	Benzoic acid, 4-ethoxy-, ethyl ester	23676-09-7	94
54.3981	0.2220	88	Hexadecane	544-76-3	83

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

4/15/2024

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Arada, Rachelle	Carrier Tracking No(s):	COC No: 380-103206.1
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 #: 380-80217-1
Address: 1904 Wright Circle, ,	Due Date Requested: 2/6/2024			
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 WELLS P2 (260) (380-80217-1)	1/24/24	08:30 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
[signature]	1/26/24 1055	EEA	B. Hopkins	1/26/24 10:55	Physis
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:

Ver: 06/08/2021

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

PHYSIS
ENVIRONMENTAL LABORATORIES, INC.
Innovative Solutions for Nature

Project Iteration ID: 1407003-480
Client Name: Eurofins Eaton Analytical
Project Name: RED-HILL Project # 38001111 Job # 380-80217-1
COC Page Number: 2 of 2
Bottle Label Color: NA

Sample Receipt Summary

Receiving Info

1. Initials Received By: BH
2. Date Received: 1/26/24
3. Time Received: 10:55
4. Client Name: Eurofins
5. Courier Information: (Please circle)
   - (Client) • UPS • Area Fast • DRS
   - FedEx • GSO/GLS • Ontrac • PAMS
   - PHYSIS Driver:
     - i. Start Time:_____ iii. Total Mileage: _____
     - ii. End Time:_____ iv. Number of Pickups:_____
6. Container Information: (Please put the # of containers or circle none)
   - 1 Cooler • ___ Styrofoam Cooler • ___ Boxes • None
   - ___ Carboy(s) • ___ Carboy Trash Can(s) • ___ Carboy Cap(s) • Other _____
7. What type of ice was used: (Please circle any that apply)
   - (Wet Ice) • Blue Ice • Dry Ice • Water • None
8. Randomly Selected Samples Temperature (°C): 2.1 Used I/R Thermometer # 1-2

Inspection Info

1. Initials Inspected By: RGH

Sample Integrity Upon Receipt:

1. COC(s) included and completely filled out..... (Yes) / No
2. All sample containers arrived intact..... (Yes) / No
3. All samples listed on COC(s) are present..... (Yes) / No
4. Information on containers consistent with information on COC(s)..... (Yes) / No
5. Correct containers and volume for all analyses indicated..... (Yes) / No
6. All samples received within method holding time..... (Yes) / No
7. Correct preservation used for all analyses indicated..... (Yes) / No
8. Name of sampler included on COC(s)..... Yes / (No)

Notes:

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

Chain of Custody Record

eurofins
Environment Testing

Client Information	Sampler: Olef Lappe	Lab PM: Arada, Rachelle	Carrier Tracking No(s):	COC No: 380-21931-1845 1
Client Contact: Dr. Ron Fenstemacher	Phone: 808 748 5840	E-Mail: Rachelle.Arada@et.eurofinsus.com	State of Origin	Page: Page 1 of 2
Company: City & County of Honolulu	PWSID			Job #:

Address: 630 South Beretania Street Chemistry Lab	Due Date Requested:
City: Honolulu	TAT Requested (days):
State, Zip: HI, 96843	Compliance Project: Δ Yes Δ No
Phone: 808-748-5091(Tel)	PO #: C20525101 exp 05312023
Email: RFENSTEMACHER@hbws.org	WO #:
Project Name: RED-HILL	Project #: 38001111
Site: Hawaii	SSOW#:

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	504.1_PREC, 505_LL_PREC	2320B, 2510B, SM4500_H+	200.7, 200.8	2540C_Calcd - Total Dissolved Solids (TDS)	SM4500_S2_D - Sulfide, Total	524.2_Pres_PREC, 524.2_SIM_PREC	525.2_PREC - 525plus Plus TICs	300_OF_28D_B, 300_OF_28D_PREC, 300_OF_48H_PREC, 4500_F_C	245.1 - Local Method	SUBCONTRACT - 8015 Jet Fuel 8 (JP8)	SUBCONTRACT - 8015 Jet Fuel 5 (JP5)	SUBCONTRACT - 8015 Diesel LL (EAL) and Motor Oil	SUBCONTRACT - 8015 Gas (Purgeable) LL (EAL)	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	R	N	D	N	CB	HA		N	D	RA	RA	RA	R	X	
KAAMILO WELLS				Water																	
AIEA GULCH WELLS PUMP 2				Water																	
AIEA WELLS P 2 (260)	1-24-24	0830	G	Water			6	1	1	1	1	6	3	2	1	2	2	2			
HALAWA WELLS UNITS 1 & 2				Water																	
MOANALUA WELLS				Water																	
TB. KAAMILO WELLS				Water																	
TB: AIEA GULCH WELLS PUMP 2				Water			3					6							2		
TB: AIEA WELLS PUMPS1&2(260)				Water																	
TB: HALAWA WELLS UNITS 1 & 2				Water																	
TB: MOANALUA WELLS				Water																	

380-80217 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

FED EX (1) 7749 2795 5426
Method of Shipment: (2) 7749 2795 5437

Empty Kit Relinquished by:	Date:	Time:

Relinquished by: [redacted]	Date/Time: 1-24-24 1100	Company	Received by: G.REITMER	Date/Time: 01/25/2024 10:00	Company: BEAP
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: (751A) (1) 1.0°-0.1°=0.9° (2) 0.5°-0.1°=0.4° GEL-FROZEN

Ver: 06/08/2021

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

Chain of Custody Record

eurofins
Environment Testing

Client Information	Sampler	Lab PM	Carrier Tracking No(s)	COC No
		Arada, Rachelle		380-21931-1845.2
Client Contact: Dr. Ron Fenstemacher	Phone: 808 748 5840	E-Mail: Rachelle.Arada@et.eurofinsus.com	State of Origin	Page: Page 2 of 2
Company: City & County of Honolulu	PWSID:			Job #:

Address: 630 South Beretania Street Chemistry Lab	Due Date Requested:	Analysis Requested	Preservation Codes:
City: Honolulu	TAT Requested (days):		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)
State, Zip: HI, 96843	Compliance Project: Δ Yes Δ No		
Phone: 808-748-5091(Tel)	PO #: C20525101 exp 05312023		Other:
Email: RFENSTEMACHER@hbws.org	WO #:		
Project Name: RED-HILL	Project #: 38001111		
Site: Hawaii	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:		X	X	N	R	R	R	RA	R	X	
KAAMILO WELLS				Water										
AIEA GULCH WELLS PUMP 2				Water										
AIEA WELLS P_2 (260)	1-24-24	0930	G	Water			3	2	2	2	3			
HALAWA WELLS UNITS 1 & 2				Water										
MOANALUA WELLS				Water										
TB: KAAMILO WELLS				Water										
TB: AIEA GULCH WELLS PUMP 2				Water										
TB: AIEA WELLS PUMPS1&2(260)				Water										
TB: HALAWA WELLS UNITS 1 & 2				Water										
TB: MOANALUA WELLS				Water										

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

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

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

Special Instructions/QC Requirements:

Method of Shipment: FED EX ① 7749 2795 5426 ② 7749 2795 5437

Empty Kit Relinquished by:	Date:	Time:

Relinquished by	Date/Time	Company	Received by	Date/Time:	Company
	1-24-24 1100		G. REITNER	01/25/2024 10:00	EEAP
Relinquished by	Date/Time	Company	Received by	Date/Time:	Company
Relinquished by	Date/Time	Company	Received by	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
		751A ① 1.0°-0.1°=0.9° ② 0.5°-0.1°=0.4° GEL-FROZEN

Ver: 06/08/2021

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

Chain of Custody Record

eurofins | Environ

Loc: 380
80217

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Arada, Rachelle	Carrier Tracking No(s):	COC No: 380-103192.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Rachelle.Arada@et.eurofinsus.com	State of Origin: Hawaii	Page: Page 1 of 1
Company: Eurofins Environment Testing Southwest,		Accreditations Required (See note): State - Hawaii		Job #: 380-80217-1
Address: 2841 Dow Avenue, Suite 100, ,	Due Date Requested: 2/14/2024			
City: Tustin	TAT Requested (days):			
State, Zip: CA, 92780				
Phone: 714-895-5494(Tel)	PO #:			
Email:	WO #:			
Project Name: RED-HILL	Project #: 38001111			
Site: Honolulu BWS Sites	SSOW#:			

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:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015B_GRO_LL/5030C (MOD) GRO	8015B_DAI/ Ethanol	8015B_DRO_LL_CS/3510C_LL HNL Ranges: C10-C24/C24-C36/C8-C18	8015B_GRO_LL/5030C GRO	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
AIEA WELLS P2 (260) (380-80217-1)	1/24/24	08:30 Hawaiian		Water			X	X	X		12	MRLs are needed., initial volume (500ml) and final volume (2ml). MRLs are needed.
TB: AIEA WELLS P2 (260) (380-80217-2)	1/24/24	08:30 Hawaiian		Water						X	2	MRLs are needed.

380-80217 Chain of Custody

Note: Since laboratory accreditations are subject to change, Eurofins Eaton Analytical, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Eaton Analytical, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Eaton Analytical, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Eaton Analytical, LLC.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Xm	1/26/24 1125	EEA		1/26/24 11:25	EC
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:	1.4 / 1.6 SC14

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-80217-2
SDG Number: 625, 8015

Login Number: 80217
List Number: 1
Creator: Elyas, Matthew

List Source: Eurofins Eaton Analytical Pomona

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	False	Headspace exists in all 524 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: 380-80217-2
SDG Number: 625, 8015

Login Number: 80217
List Number: 2
Creator: Khana, Piyush

List Source: Eurofins Calscience
List Creation: 01/26/24 02:10 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	