PREPARED FOR

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

Generated 11/22/2023 8:16:26 AM

JOB DESCRIPTION

RED-HILL

JOB NUMBER

380-61968-2

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

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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11/22/2023

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

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Definitions/Glossary

Client: City & County of Honolulu

Job ID: 380-61968-2 Project/Site: RED-HILL

Qualifiers

Subcontract

Qualifier **Qualifier Description**

This analyte was not detected.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery **CFL** Contains Free Liquid CFU Colony Forming Unit CNF Contains No Free Liquid

Duplicate Error Ratio (normalized absolute difference) **DER**

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)

Estimated Detection Limit (Dioxin) **EDL** 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 Method Quantitation Limit MQL

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**

Relative Error Ratio (Radiochemistry) **RER**

Reporting Limit or Requested Limit (Radiochemistry) RL

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin) **TEQ** Toxicity Equivalent Quotient (Dioxin)

Too Numerous To Count **TNTC**

Case Narrative

Client: City & County of Honolulu

Project/Site: RED-HILL

Job ID: 380-61968-2

Job ID: 380-61968-2

Laboratory: Eurofins Eaton Analytical Pomona

Narrative

Job Narrative 380-61968-2

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 9/7/2023 10:40 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.9°C and 2.4°C

Subcontract Work

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

Method 625 PAH Physis LL (EAL) + 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.

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Detection Summary

Project/Site: RED-HILL

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

No Detections.

Client Sample ID: AIEA GULCH WELLS PUMP 2

No Detections.

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

No Detections.

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

Lab Sample ID: 380-61968-5

No Detections.

Client Sample ID: TB:AIEA GULCH WELLS P2

Lab Sample ID: 380-61968-6

5

Job ID: 380-61968-2

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Client: City & County of Honolulu

No Detections.

Client: City & County of Honolulu

Project/Site: RED-HILL

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

Lab Sample ID: 380-61968-1 Date Collected: 09/05/23 11:13 **Matrix: Drinking Water**

Date Received: 09/07/23 10:40

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/15/23 02:53	1
1-Methylphenanthrene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/15/23 02:53	1
2,3,5-Trimethylnaphthalene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/15/23 02:53	1
2,6-Dimethylnaphthalene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/15/23 02:53	1
2-Methylnaphthalene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/15/23 02:53	1
Acenaphthene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/15/23 02:53	1
Acenaphthylene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/15/23 02:53	1
Anthracene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/15/23 02:53	1
Benz[a]anthracene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/15/23 02:53	1
Benzo[a]pyrene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/15/23 02:53	1
Benzo[b]fluoranthene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/15/23 02:53	1
Benzo[e]pyrene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/15/23 02:53	1
Benzo[g,h,i]perylene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/15/23 02:53	1
Benzo[k]fluoranthene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/15/23 02:53	1
Biphenyl	ND		0.005	0.001	μg/L		09/12/23 00:00	10/15/23 02:53	1
Chrysene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/15/23 02:53	1
Dibenz[a,h]anthracene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/15/23 02:53	1
Dibenzo[a,l]pyrene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/15/23 02:53	1
Dibenzothiophene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/15/23 02:53	1
Disalicylidenepropanediamine	ND		0.1	0.05	μg/L		09/12/23 00:00	10/15/23 02:53	1
Fluoranthene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/15/23 02:53	1
Fluorene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/15/23 02:53	1
Indeno[1,2,3-cd]pyrene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/15/23 02:53	1
Naphthalene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/15/23 02:53	1
Perylene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/15/23 02:53	1
Phenanthrene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/15/23 02:53	1
Pyrene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/15/23 02:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
(d10-Acenaphthene)	78		27 - 133				09/12/23 00:00	10/15/23 02:53	1
(d10-Phenanthrene)	84		43 - 129				09/12/23 00:00	10/15/23 02:53	1
(d12-Chrysene)	90		52 - 144				09/12/23 00:00	10/15/23 02:53	1
(d12-Perylene)	83		36 - 161				09/12/23 00:00	10/15/23 02:53	1
(d8-Naphthalene)	74		25 - 125				09/12/23 00:00	10/15/23 02:53	1
Method: 8015 Gas (Purgea	ble) LL (EAL) -	SW846 80	15B Gasolin	e Range	Organi	cs			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GASOLINE	ND	U	0.02		mg/L			09/11/23 14:27	1

Method: 8015 Gas (Purgeable	e) LL (EAL) -	SW846 80	15B Gasolin	e Range	Organi	cs			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GASOLINE	ND	U	0.02		mg/L			09/11/23 14:27	1
Surrogate BROMOFLUOROBENZENE	%Recovery	Qualifier	Limits 60 - 140			-	Prepared	Analyzed 09/11/23 14:27	Dil Fac

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DIESEL	ND	U	0.026		mg/L			09/20/23 18:48	1
JP5	ND	U	0.052		mg/L			09/20/23 18:48	1
JP8	ND	U	0.052		mg/L			09/20/23 18:48	1
MOTOR OIL	ND	U	0.052		mg/L			09/20/23 18:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
BROMOBENZENE	68		60 - 130					09/20/23 18:48	1

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Client Sample Results

Client: City & County of Honolulu

Date Received: 09/07/23 10:40

Project/Site: RED-HILL

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

Date Collected: 09/05/23 11:13

Lab Sample ID: 380-61968-1

Matrix: Drinking Water

Job ID: 380-61968-2

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

%Recovery Qualifier Limits Prepared Analyzed Dil Fac HEXACOSANE 98 60 - 130 09/20/23 18:48

Client Sample ID: AIEA GULCH WELLS PUMP 2 Lab Sample ID: 380-61968-2

Date Collected: 09/05/23 10:27 **Matrix: Drinking Water**

Date Received: 09/07/23 10:40

BROMOFLUOROBENZENE

Analyte	Result	Qualifier	RL	MDL	Unit D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.005	0.001	μg/L	09/12/23 00:00	10/15/23 04:40	1
1-Methylphenanthrene	ND		0.005	0.001	μg/L	09/12/23 00:00	10/15/23 04:40	1
2,3,5-Trimethylnaphthalene	ND		0.005	0.001	μg/L	09/12/23 00:00	10/15/23 04:40	1
2,6-Dimethylnaphthalene	ND		0.005	0.001	μg/L	09/12/23 00:00	10/15/23 04:40	1
2-Methylnaphthalene	ND		0.005	0.001	μg/L	09/12/23 00:00	10/15/23 04:40	1
Acenaphthene	ND		0.005	0.001	μg/L	09/12/23 00:00	10/15/23 04:40	1
Acenaphthylene	ND		0.005	0.001	μg/L	09/12/23 00:00	10/15/23 04:40	1
Anthracene	ND		0.005	0.001	μg/L	09/12/23 00:00	10/15/23 04:40	1
Benz[a]anthracene	ND		0.005	0.001	μg/L	09/12/23 00:00	10/15/23 04:40	1
Benzo[a]pyrene	ND		0.005	0.001	μg/L	09/12/23 00:00	10/15/23 04:40	1
Benzo[b]fluoranthene	ND		0.005	0.001	μg/L	09/12/23 00:00	10/15/23 04:40	1
Benzo[e]pyrene	ND		0.005	0.001	μg/L	09/12/23 00:00	10/15/23 04:40	1
Benzo[g,h,i]perylene	ND		0.005	0.001	μg/L	09/12/23 00:00	10/15/23 04:40	1
Benzo[k]fluoranthene	ND		0.005	0.001	μg/L	09/12/23 00:00	10/15/23 04:40	1
Biphenyl	ND		0.005	0.001	μg/L	09/12/23 00:00	10/15/23 04:40	1
Chrysene	ND		0.005	0.001	μg/L	09/12/23 00:00	10/15/23 04:40	1
Dibenz[a,h]anthracene	ND		0.005	0.001	μg/L	09/12/23 00:00	10/15/23 04:40	1
Dibenzo[a,l]pyrene	ND		0.005	0.001	μg/L	09/12/23 00:00	10/15/23 04:40	1
Dibenzothiophene	ND		0.005	0.001	μg/L	09/12/23 00:00	10/15/23 04:40	1
Disalicylidenepropanediamine	ND		0.1	0.05	μg/L	09/12/23 00:00	10/15/23 04:40	1
Fluoranthene	ND		0.005	0.001	μg/L	09/12/23 00:00	10/15/23 04:40	1
Fluorene	ND		0.005	0.001	μg/L	09/12/23 00:00	10/15/23 04:40	1
Indeno[1,2,3-cd]pyrene	ND		0.005	0.001	μg/L	09/12/23 00:00	10/15/23 04:40	1
Naphthalene	ND		0.005	0.001	μg/L	09/12/23 00:00	10/15/23 04:40	1
Perylene	ND		0.005	0.001	μg/L	09/12/23 00:00	10/15/23 04:40	1
Phenanthrene	ND		0.005	0.001	μg/L	09/12/23 00:00	10/15/23 04:40	1
Pyrene	ND		0.005	0.001	μg/L	09/12/23 00:00	10/15/23 04:40	1
Surrogate %I	Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
(d10-Acenaphthene)	65		27 - 133			09/12/23 00:00	10/15/23 04:40	1
(d10-Phenanthrene)	71		43 - 129			09/12/23 00:00	10/15/23 04:40	1
(d12-Chrysene)	82		52 - 144			09/12/23 00:00	10/15/23 04:40	1
(d12-Perylene)	83		36 - 161			09/12/23 00:00	10/15/23 04:40	1
(d8-Naphthalene)	59		25 - 125			09/12/23 00:00	10/15/23 04:40	1

Method: 8015 Gas (Purgeabl	le) LL (EAL) -	SW846 80	115B Gasolin	e Range	Organic	S			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GASOLINE	ND	U	0.02		mg/L			09/11/23 16:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

60 - 140

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09/11/23 16:19

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Client Sample Results

Client: City & County of Honolulu

Project/Site: RED-HILL

Client Sample ID: AIEA GULCH WELLS PUMP 2

Date Collected: 09/05/23 10:27 Date Received: 09/07/23 10:40

Lab Sample ID: 380-61968-2

Matrix: Drinking Water

Job ID: 380-61968-2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DIESEL	ND	U	0.027		mg/L			09/16/23 06:12	1
JP5	ND	U	0.053		mg/L			09/16/23 06:12	1
JP8	ND	U	0.053		mg/L			09/16/23 06:12	1
MOTOR OIL	ND	U	0.053		mg/L			09/16/23 06:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
BROMOBENZENE	76		60 - 130					09/16/23 06:12	1
HEXACOSANE	91		60 - 130					09/16/23 06:12	1

Client Sample ID: TB: AIEA WELLS PUMPS 1&2 (260) Lab Sample ID: 380-61968-5 Date Collected: 09/05/23 11:13 **Matrix: Water**

Date Received: 09/07/23 10:40

Method: 8015 Gas (Purgeable) LL (EAL) - SW846 8015B Gasoline Range Organics Analyte MDL Unit Result Qualifier RL D Analyzed Prepared Dil Fac GASOLINE ND U 0.02 mg/L 09/11/23 16:56 Surrogate %Recovery Qualifier Limits Analyzed Dil Fac Prepared BROMOFLUOROBENZENE 78 60 - 140 09/11/23 16:56

Client Sample ID: TB:AIEA GULCH WELLS P2 Lab Sample ID: 380-61968-6

Date Collected: 09/05/23 10:27

Date Received: 09/07/23 10:40

_ Method: 8015 Gas (Purgeable)	LL (EAL) -	SW846 80	15B Gasoline	e Range	Organi	cs			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GASOLINE	ND	U	0.02		mg/L			09/11/23 17:33	1
Surrogate BROMOFLUOROBENZENE	%Recovery	Qualifier	Limits 60 - 140				Prepared	Analyzed 09/11/23 17:33	Dil Fac

Matrix: Water

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

Matrix: BlankMatrix Prep Type: Total/NA

			Pe	rcent Surre	ogate Reco	very (Acce
		Acenapht	Phenanth	CRY	NPT	PRY
Lab Sample ID	Client Sample ID	(27-133)	(43-129)	(52-144)	(25-125)	(36-161)
110863-B1	Method Blank	85	89	88	85	94
110863-BS1	Lab Control Sample	89	96	93	83	90
110863-BS2	Lab Control Sample Dup	89	95	93	82	90
Surrogate Legend						

(d10-Acenaphthene) = (d10-Acenaphthene) (d10-Phenanthrene) = (d10-Phenanthrene)

CRY = (d12-Chrysene) NPT = (d8-Naphthalene)

PRY = (d12-Perylene)

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

Matrix: Drinking Water Prep Type: Total/NA

			Pe	rcent Surro	ogate Reco	very (Acce
		Acenapht	Phenanth	CRY	NPT	PRY
Lab Sample ID	Client Sample ID	(27-133)	(43-129)	(52-144)	(25-125)	(36-161)
380-61968-1	AIEA WELLS PUMPS 1&2 (260)	78	84	90	74	83
380-61968-2	AIEA GULCH WELLS PUMP 2	65	71	82	59	83

Surrogate Legend

(d10-Acenaphthene) = (d10-Acenaphthene) (d10-Phenanthrene) = (d10-Phenanthrene)

CRY = (d12-Chrysene) NPT = (d8-Naphthalene) PRY = (d12-Perylene)

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

Matrix: Drinking Water Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
	BFB	
ample ID	(60-140)	
LLS PUMPS 1&2 (260)	80	
LCH WELLS PUMP 2	78	
	LLS PUMPS 1&2 (260)	mple ID LLS PUMPS 1&2 (260) 80

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

Matrix: WATER Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
		BFB	
Lab Sample ID	Client Sample ID	(70-130)	
23VG39I07C	LCD	104	
23VG39I07L	Lab Control Sample	105	
Surrogate Legend			
BFB = BROMOFLU	JOROBENZENE		

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Client: City & County of Honolulu

Project/Site: RED-HILL

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

Matrix: Water Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Percent Surrogate Recovery (Acceptance Limits)

BFB (60-140)

380-61968-5 TB: AIEA WELLS PUMPS 1&2 (78 380-61968-6 TB:AIEA GULCH WELLS P2 79

Client Sample ID

Surrogate Legend

Lab Sample ID

BFB = BROMOFLUOROBENZENE

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

Matrix: WATER Prep Type: Total/NA

 Lab Sample ID
 Client Sample ID
 (60-140)

 23I050-01M
 Matrix Spike
 106

 23I050-01S
 Matrix Spike Duplicate
 107

Surrogate Legend

BFB = BROMOFLUOROBENZENE

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

Matrix: WATER Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)
BFB

Lab Sample IDClient Sample ID23VG39I07BMethod Blank

Surrogate Legend

BFB = BROMOFLUOROBENZENE

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

Matrix: Drinking Water Prep Type: Total/NA

Surrogate Legend

BB = BROMOBENZENE

HEXACOSANE = HEXACOSANE

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

Matrix: WATER Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

BB XACOSA

Lab Sample IDClient Sample ID23DSI023WBMethod Blank

Surrogate Legend

BB = BROMOBENZENE

HEXACOSANE = HEXACOSANE

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Job ID: 380-61968-2

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Surrogate Summary

Client: City & County of Honolulu Job ID: 380-61968-2

Project/Site: RED-HILL

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

Matrix: WATER Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)						
		ВВ	XACOSAI					
Lab Sample ID	Client Sample ID	(60-130)	(60-130)					
23DSI023WC	LCD	78	87					
23DSI023WL	Lab Control Sample	80	98					
23J5I023WC	LCD	77	82					
23J5I023WL	Lab Control Sample	73	92					
23J8I023WC	LCD	78	83					
23J8I023WL	Lab Control Sample	81	89					
Surrogate Legend								
BB = BROMOBENZE	NE							
HEXACOSANE = HE	XACOSANE							

Client: City & County of Honolulu Job ID: 380-61968-2

Project/Site: RED-HILL

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

Lab Sample ID: 110863-B1

Matrix: BlankMatrix

Analysis Batch: O-42086

Prep Batch: O-42086_P

	Blank	Blank							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/14/23 18:01	1
1-Methylphenanthrene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/14/23 18:01	1
2,3,5-Trimethylnaphthalene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/14/23 18:01	1
2,6-Dimethylnaphthalene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/14/23 18:01	1
2-Methylnaphthalene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/14/23 18:01	1
Acenaphthene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/14/23 18:01	1
Acenaphthylene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/14/23 18:01	1
Anthracene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/14/23 18:01	1
Benz[a]anthracene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/14/23 18:01	1
Benzo[a]pyrene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/14/23 18:01	1
Benzo[b]fluoranthene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/14/23 18:01	1
Benzo[e]pyrene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/14/23 18:01	1
Benzo[g,h,i]perylene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/14/23 18:01	1
Benzo[k]fluoranthene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/14/23 18:01	1
Biphenyl	ND		0.005	0.001	μg/L		09/12/23 00:00	10/14/23 18:01	1
Chrysene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/14/23 18:01	1
Dibenz[a,h]anthracene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/14/23 18:01	1
Dibenzo[a,l]pyrene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/14/23 18:01	1
Dibenzothiophene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/14/23 18:01	1
Disalicylidenepropanediamine	ND		0.1	0.05	μg/L		09/12/23 00:00	10/14/23 18:01	1
Fluoranthene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/14/23 18:01	1
Fluorene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/14/23 18:01	1
Indeno[1,2,3-cd]pyrene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/14/23 18:01	1
Naphthalene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/14/23 18:01	1
Perylene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/14/23 18:01	1
Phenanthrene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/14/23 18:01	1
Pyrene	ND		0.005	0.001	μg/L		09/12/23 00:00	10/14/23 18:01	1
					-				

	Blank	Blank				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
(d10-Acenaphthene)	85		27 - 133	09/12/23 00:00	10/14/23 18:01	1
(d10-Phenanthrene)	89		43 - 129	09/12/23 00:00	10/14/23 18:01	1
(d12-Chrysene)	88		52 - 144	09/12/23 00:00	10/14/23 18:01	1
(d12-Perylene)	94		36 - 161	09/12/23 00:00	10/14/23 18:01	1
(d8-Naphthalene)	85		25 - 125	09/12/23 00:00	10/14/23 18:01	1

Lab Sample ID: 110863-BS1 Matrix: BlankMatrix Analysis Batch: O-42086 Client Sample ID: Lab Control Sample Prep Type: Total/NA Prep Batch: O-42086_P

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1-Methylnaphthalene	0.5	0.447		μg/L		89	31 - 128	
1-Methylphenanthrene	0.5	0.45		μg/L		90	66 - 127	
2,3,5-Trimethylnaphthalene	0.5	0.446		μg/L		89	55 - 122	
2,6-Dimethylnaphthalene	0.5	0.442		μg/L		88	48 - 120	
2-Methylnaphthalene	0.5	0.427		μg/L		85	47 - 130	
Acenaphthene	0.5	0.45		μg/L		90	53 - 131	
Acenaphthylene	0.5	0.458		μg/L		92	43 - 140	
Anthracene	0.5	0.456		μg/L		91	58 - 135	

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

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

Lab Sample ID: 110863-BS1

Matrix: BlankMatrix

Analysis Batch: O-42086

Client Sample ID: Lab Control Sample Prep Type: Total/NA Prep Batch: O-42086_P

	Spike	LCS	LCS			%Rec	
Analyte	Added	Result	Qualifier	Unit	D %Rec	Limits	
Benz[a]anthracene	0.5	0.531		μg/L	106	55 - 145	
Benzo[a]pyrene	0.5	0.467		μg/L	93	51 - 143	
Benzo[b]fluoranthene	0.5	0.516		μg/L	103	46 - 165	
Benzo[e]pyrene	0.5	0.422		μg/L	84	42 - 152	
Benzo[g,h,i]perylene	0.5	0.473		μg/L	95	63 - 133	
Benzo[k]fluoranthene	0.5	0.46		μg/L	92	56 - 145	
Biphenyl	0.5	0.452		μg/L	90	56 - 119	
Chrysene	0.5	0.394		μg/L	79	56 - 141	
Dibenz[a,h]anthracene	0.5	0.531		μg/L	106	55 - 150	
Dibenzo[a,l]pyrene	0.5	0.29		μg/L	58	50 - 150	
Dibenzothiophene	0.5	0.468		μg/L	94	46 - 126	
Disalicylidenepropanediamine	50	43.5		μg/L	87	50 - 150	
Fluoranthene	0.5	0.454		μg/L	91	60 - 146	
Fluorene	0.5	0.451		μg/L	90	58 - 131	
Indeno[1,2,3-cd]pyrene	0.5	0.505		μg/L	101	50 - 151	
Naphthalene	0.5	0.42		μg/L	84	41 - 126	
Perylene	0.5	0.487		μg/L	97	48 - 141	
Phenanthrene	0.5	0.461		μg/L	92	67 - 127	
Pyrene	0.5	0.447		μg/L	89	54 - 156	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
(d10-Acenaphthene)	89		27 - 133
(d10-Phenanthrene)	96		43 - 129
(d12-Chrysene)	93		52 - 144
(d12-Perylene)	90		36 - 161
(d8-Naphthalene)	83		25 - 125

Lab Sample ID: 110863-BS2

Matrix: BlankMatrix

Analysis Batch: O-42086

Allalysis Datcil. 0-42000							ep Daten	. 0-420	,00 <u>_</u> i
	Spike	LCS DUP	LCS DUP				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1-Methylnaphthalene	0.5	0.408		μg/L		82	31 - 128	8	30
1-Methylphenanthrene	0.5	0.442		μg/L		88	66 - 127	2	30
2,3,5-Trimethylnaphthalene	0.5	0.441		μg/L		88	55 - 122	1	30
2,6-Dimethylnaphthalene	0.5	0.431		μg/L		86	48 - 120	2	30
2-Methylnaphthalene	0.5	0.417		μg/L		83	47 - 130	2	30
Acenaphthene	0.5	0.435		μg/L		87	53 - 131	3	30
Acenaphthylene	0.5	0.429		μg/L		86	43 - 140	7	30
Anthracene	0.5	0.437		μg/L		87	58 - 135	4	30
Benz[a]anthracene	0.5	0.529		μg/L		106	55 - 145	0	30
Benzo[a]pyrene	0.5	0.479		μg/L		96	51 - 143	3	30
Benzo[b]fluoranthene	0.5	0.517		μg/L		103	46 - 165	0	30
Benzo[e]pyrene	0.5	0.416		μg/L		83	42 - 152	1	30
Benzo[g,h,i]perylene	0.5	0.469		μg/L		94	63 - 133	1	30
Benzo[k]fluoranthene	0.5	0.453		μg/L		91	56 - 145	1	30
Biphenyl	0.5	0.443		μg/L		89	56 - 119	1	30
Chrysene	0.5	0.39		μg/L		78	56 - 141	1	30

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Client Sample ID: Lab Control Sample Dup

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on Analytical Pomona

Prep Type: Total/NA

Prep Batch: O-42086 P

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

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

Lab Sample ID: 110863-BS2 Client Sample ID: Lab Control Sample Dup **Matrix: BlankMatrix** Prep Type: Total/NA Prep Batch: O-42086 P **Analysis Batch: O-42086** LCS DUP LCS DUP %Rec **RPD** Spike Added Result Qualifier Unit %Rec Limits RPD Limit Dibenz[a,h]anthracene 0.5 0.53 106 55 - 150 0 30 µg/L Dibenzo[a,l]pyrene 0.5 0.298 µg/L 60 50 - 150 3 30 Dibenzothiophene 0.5 0.449 46 - 126 30 μg/L 90 Disalicylidenepropanediamine 50 47.6 µg/L 95 50 - 150 30 Fluoranthene 0.5 0.443 89 60 - 146 30 µg/L 0.5 Fluorene 0.444 µg/L 89 58 - 131 30 Indeno[1,2,3-cd]pyrene 0.5 0.501 µg/L 100 50 - 151 30 0.5 0.412 2 30 Naphthalene µg/L 82 41 - 126 0.5 0.484 97 30 Perylene µg/L 48 - 141 Phenanthrene 0.5 0.44 88 67 - 127 30 µg/L 4 Pyrene 0.5 0.442 88 54 - 156 30 µg/L

LCS DUP LCS DUP

Surrogate	%Recovery	Qualifier	Limits
(d10-Acenaphthene)	89		27 - 133
(d10-Phenanthrene)	95		43 - 129
(d12-Chrysene)	93		52 - 144
(d12-Perylene)	90		36 - 161
(d8-Naphthalene)	82		25 - 125

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

Lab Sample ID: 23VG39I07B **Client Sample ID: Method Blank Matrix: WATER** Prep Type: Total/NA

Analysis Batch: 23VG39I07

MB MB Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac GASOLINE 0.02 09/11/23 12:35 ND U mg/L MB MB Limits Dil Fac

Surrogate %Recovery Qualifier Prepared Analyzed **BROMOFLUOROBENZENE** 09/11/23 12:35

Lab Sample ID: 23VG39I07L **Client Sample ID: Lab Control Sample**

Matrix: WATER Prep Type: Total/NA

Analysis Batch: 23VG39I07

Spike LCS LCS **Analyte** Added Result Qualifier Unit %Rec Limits **GASOLINE** 0.5 0.461 mg/L 92 60 - 130

LCS LCS

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

Lab Sample ID: 231050-01M

Matrix: WATER

Analysis Batch: 23VG39I07

-	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
GASOLINE	ND		0.5	0.479		mg/L		96	50 - 130	

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Client: City & County of Honolulu

Project/Site: RED-HILL

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

0.5

Lab Sample ID: 23I050-01M **Client Sample ID: Matrix Spike** Prep Type: Total/NA

Matrix: WATER

Analysis Batch: 23VG39I07

MS MS

%Recovery Qualifier Surrogate Limits BROMOFLUOROBENZENE 106 60 - 140

Lab Sample ID: 231050-01S

Matrix: WATER

Analyte

GASOLINE

Analysis Batch: 23VG39I07

0.478

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

50 - 130

0

96

Spike MSD MSD %Rec **RPD** Added Limits RPD Result Qualifier Unit %Rec Limit

mg/L

ND MSD MSD

Sample Sample

Result Qualifier

Surrogate %Recovery Qualifier Limits BROMOFLUOROBENZENE 60 - 140 107

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

Lab Sample ID: 23DSI023WB Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: WATER

Analysis Batch: 23DSI023W

MB MB

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac DIESEL ND П 0.025 mg/L 09/16/23 03:43 JP5 ND U 0.05 mg/L 09/16/23 03:43 JP8 ND U 0.05 mg/L 09/16/23 03:43 MOTOR OIL ND U 0.05 mg/L 09/16/23 03:43

MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac **BROMOBENZENE** 09/16/23 03:43 **HEXACOSANE** 09/16/23 03:43

Lab Sample ID: 23DSI023WL **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: WATER

Analysis Batch: 23DSI023W

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit %Rec Limits DIESEL 2.5 2.37 mg/L 50 - 130

LCS LCS

%Recovery Qualifier Surrogate I imits BROMOBENZENE 60 - 130 80 **HEXACOSANE** 98 60 - 130

Lab Sample ID: 23J5I023WL **Client Sample ID: Lab Control Sample Prep Type: Total/NA**

Matrix: WATER

Analysis Batch: 23DSI023W

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
JP5	2.5	1.6		mg/L		64	30 - 160	

Eurofins Eaton Analytical Pomona

QC Sample Results

Client: City & County of Honolulu Job ID: 380-61968-2

Project/Site: RED-HILL

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

Lab Sample ID: 23J5I023WL **Client Sample ID: Lab Control Sample**

Matrix: WATER Prep Type: Total/NA

Analysis Batch: 23DSI023W

LCS LCS %Recovery Qualifier Surrogate Limits BROMOBENZENE 73 60 - 130 **HEXACOSANE** 92 60 - 130

Lab Sample ID: 23J8I023WL **Client Sample ID: Lab Control Sample**

Matrix: WATER Prep Type: Total/NA

Analysis Batch: 23DSI023W

%Rec Spike LCS LCS

Analyte Added Result Qualifier Unit %Rec Limits JP8 2.5 1.76 mg/L 70 30 - 160

LCS LCS Surrogate **%Recovery Qualifier** Limits BROMOBENZENE 81 60 - 130 **HEXACOSANE** 89 60 - 130

11/22/2023

QC Association Summary

Client: City & County of Honolulu Project/Site: RED-HILL Job ID: 380-61968-2

Subcontract

Analysis Batch: O-42086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-61968-1	AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Drinking Water	625 PAH Physis	O-42086_P
				LL (EAL) + TICs	
380-61968-2	AIEA GULCH WELLS PUMP 2	Total/NA	Drinking Water	625 PAH Physis	O-42086_P
				LL (EAL) + TICs	
110863-B1	Method Blank	Total/NA	BlankMatrix	625 PAH Physis	O-42086_P
				LL (EAL) + TICs	
110863-BS1	Lab Control Sample	Total/NA	BlankMatrix	625 PAH Physis	O-42086_P
				LL (EAL) + TICs	
110863-BS2	Lab Control Sample Dup	Total/NA	BlankMatrix	625 PAH Physis	O-42086_P
				LL (EAL) + TICs	

Analysis Batch: 23DSI023W

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-61968-1	AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Drinking Water	8015 LL	
				DRO/MRO/JP5/J	
				P8	
380-61968-2	AIEA GULCH WELLS PUMP 2	Total/NA	Drinking Water	8015 LL	
				DRO/MRO/JP5/J	
				P8	
23DSI023WB	Method Blank	Total/NA	WATER	8015 LL	
				DRO/MRO/JP5/J	
				P8	
23DSI023WL	Lab Control Sample	Total/NA	WATER	8015 LL	
				DRO/MRO/JP5/J	
				P8	
23J5I023WL	Lab Control Sample	Total/NA	WATER	8015 LL	
				DRO/MRO/JP5/J	
				P8	
23J8I023WL	Lab Control Sample	Total/NA	WATER	8015 LL	
				DRO/MRO/JP5/J	
				P8	

Analysis Batch: 23VG39I07

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-61968-1	AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Drinking Water	8015 Gas	
				(Purgeable) LL	
				(EAL)	
380-61968-2	AIEA GULCH WELLS PUMP 2	Total/NA	Drinking Water	8015 Gas	
				(Purgeable) LL	
				(EAL)	
380-61968-5	TB: AIEA WELLS PUMPS 1&2 (260)	Total/NA	Water	8015 Gas	
				(Purgeable) LL	
380-61968-6	TB:AIEA GULCH WELLS P2	Total/NA	Water	(EAL) 8015 Gas	
300-01900-0	TB.AIEA GULCH WELLS P2	IOIai/INA	vvalei	(Purgeable) LL	
				(EAL)	
23VG39I07B	Method Blank	Total/NA	WATER	8015 Gas	
201000010	Wethod Blank	10101/14/1	WITTER	(Purgeable) LL	
				(EAL)	
23VG39I07L	Lab Control Sample	Total/NA	WATER	8015 Gas	
	•			(Purgeable) LL	
				(EAL)	
23I050-01M	Matrix Spike	Total/NA	WATER	8015 Gas	
				(Purgeable) LL	
				(EAL)	
23I050-01S	Matrix Spike Duplicate	Total/NA	WATER	8015 Gas	
				(Purgeable) LL	
_				(EAL)	

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QC Association Summary

Client: City & County of Honolulu Project/Site: RED-HILL Job ID: 380-61968-2

Subcontract

Prep Batch: O-42086_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-61968-1	AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Drinking Water	EPA_625	
380-61968-2	AIEA GULCH WELLS PUMP 2	Total/NA	Drinking Water	EPA_625	
110863-B1	Method Blank	Total/NA	BlankMatrix	EPA_625	
110863-BS1	Lab Control Sample	Total/NA	BlankMatrix	EPA_625	
110863-BS2	Lab Control Sample Dup	Total/NA	BlankMatrix	EPA_625	

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Client: City & County of Honolulu

Project/Site: RED-HILL

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

Lab Sample ID: 380-61968-1 Date Collected: 09/05/23 11:13 **Matrix: Drinking Water**

Date Received: 09/07/23 10:40

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	EPA_625		1	O-42086_P			09/12/23 00:00
Total/NA	Analysis	625 PAH Physis LL (EAL) + TICs		1	O-42086	YC		10/15/23 02:53
Total/NA	Analysis	8015 Gas (Purgeable) LL (EAL)		1	23VG39I07	SCerva		09/11/23 14:27
Total/NA	Analysis	8015 LL DRO/MRO/JP5/JP8		1	23DSI023W	SDees		09/20/23 18:48

Client Sample ID: AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-61968-2 Date Collected: 09/05/23 10:27 **Matrix: Drinking Water**

Date Received: 09/07/23 10:40

_	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	EPA_625		1	O-42086_P			09/12/23 00:00
Total/NA	Analysis	625 PAH Physis LL (EAL) + TICs		1	O-42086	YC		10/15/23 04:40
Total/NA	Analysis	8015 Gas (Purgeable) LL (EAL)		1	23VG39I07	SCerva		09/11/23 16:19
Total/NA	Analysis	8015 LL DRO/MRO/JP5/JP8		1	23DSI023W	SDees		09/16/23 06:12

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

Lab Sample ID: 380-61968-5 Date Collected: 09/05/23 11:13 **Matrix: Water**

Date Received: 09/07/23 10:40

Batch Batch Dilution Batch Prepared **Number Analyst** Method or Analyzed **Prep Type** Type Run **Factor** Lab 09/11/23 16:56 Total/NA Analysis 8015 Gas 23VG39I07 SCerva (Purgeable) LL (EAL)

Client Sample ID: TB:AIEA GULCH WELLS P2

Lab Sample ID: 380-61968-6 Date Collected: 09/05/23 10:27 **Matrix: Water**

Date Received: 09/07/23 10:40

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	8015 Gas (Purgeable) I I (FAL)		1	23VG39I07	SCerva		09/11/23 17:33

Laboratory References:

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

Method Summary

Client: City & County of Honolulu

Project/Site: RED-HILL

Method **Method Description** Protoco 625 EPA 625 Base/Neutral and Acid Organics i EPA

ol	Laboratory	

EPA

SW846

Job ID: 380-61968-2

Protocol References:

8015

8015B

EPA = US Environmental Protection Agency

8015 - TPH DRO/ORO

SW846 8015B Gasoline Range Organics

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

Sample Summary

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

Job ID: 380-61968-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
380-61968-1	AIEA WELLS PUMPS 1&2 (260) P2	Drinking Water	09/05/23 11:13	09/07/23 10:40
380-61968-2	AIEA GULCH WELLS PUMP 2	Drinking Water	09/05/23 10:27	09/07/23 10:40
380-61968-5	TB: AIEA WELLS PUMPS 1&2 (260)	Water	09/05/23 11:13	09/07/23 10:40
380-61968-6	TB:AIEA GULCH WELLS P2	Water	09/05/23 10:27	09/07/23 10:40



3051 Fujita Street Torrance, CA 90505 Tel: (310)-618-8889

Date: 09-28-2023 EMAX Batch No.: 23I050

Attn: Jackie Contreras

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

Subject: Laboratory Report

Project: 380-61968

Enclosed is the Laboratory report for samples received on 09/08/23. The data reported relate only to samples listed below :

Sample ID	Control #	Col Date	Matrix	Analysis
*****	••••••			
380-61968-1	1050-01	09/05/23	WATER	TPH GASOLINE TPH
380-61968-2	1050-02	09/05/23	WATER	TPH GASOLINE TPH
380-61968-5	1050-03	09/05/23	WATER	TPH GASOLINE
380-61968-6	1050-04	09/05/23	WATER	TPH GASOLINE
380-61968-1MS	I050-01M	09/05/23	WATER	TPH GASOLINE
380-61968-1MSD	I050-01S	09/05/23	WATER	TPH GASOLINE

The results are summarized on the following pages.

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

Sincerely yours,

Caspar J. Pang Laboratory Director

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

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

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REPORT ID: 231050

Chain of Custody Record

Environment Testing

Page: 62/08/03/	Pa										ORT ID: 231050	REPO!
		0	Remarks: - / .0	°C and Other Remarks:	Cooler Temperature(s) °C	Cooler Te					Custody Seals Intact: Custody Seal No.:	Custody
Company		Date/Time:			by:	Received by:		Company		Date/Time:		Relinquished by:
Company		Date/Time:			by:	Received by:		Company	•	DaterTime		Relinquished by:
EMXX	14:005	09/08/23	1,	ly.	y si	Received by:	E C	Compagy	1005	9/8/23	X	Relinquished by:
		Method of Shipment:	Method of				Time:		Date:	ا ,	Empty Kit Relinquished by:	Empty Kit
	i		Į	C Requirements:	Special Instructions/QC	pecial Ins	S		le Rank: 2	Primary Deliverable Rank: 2	Deliverable Requested: I, II, III, IV, Other (specify)	Deliverable
Months			Disposal By Lab	1 4	Return To Client	Retu						Unconfirmed
4 month)	d longer than 1	moles are refaired	if, LLC.	Eaton Analytica	e to Eurofins	id complianc	testing to sai	hain of Custody at	etum the signed C	are current to date, n	on Analytical, LLC attention immediately. If all requested accreditations	Eurofins Eat
he laboratory does not atus should be brought to	hain-of-custody. If the stone of the stone o	nent is forwarded under cl be provided. Any change	This sample shipm her instructions will	ct laboratories.	our subcontra alytical, LLC I	liance upon o	tation compl to the Eurofi	, analyte & accredi	nership of method , the samples mus	al, LLC places the ow matrix being analyzed	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	Note: Since I currently mai
		5										
uctions	See Attached Instructions	2 8				×	Ψ.	Water	10:27 Hawaiian	9/5/23	TB:AIEA GULCH WELLS P2 (331-202-TP072) (380-61968-6)	TB:AIEA
uctions	See Attached Instructions	2 8				×	er.	Water	11:13 Hawaiian	9/5/23	TB: AIEA WELLS PUMPS 1&2 (260) (331-203-TP400) (380-6196	TB: AIEA
uctions	See Attached Instructions	5 S				×	<u>ц</u>	Water	10:27 Hawaiian	9/5/23	AIEA GULCH WELLS PUMP 2 (331-202-TP072) (380-61968-2)	AIEA GUL
uctions	See Attached Instructions	5 .				×	¥	Water	11:13 Hawaiian	9/5/23	AIEA WELLS PUMPS 1&2 (260) (331-203-TP400) (380-61968-1)	AIEA WEL
		X					i X					
Special Instructions/Note:	Special In	Total Numbe			DROIMROIJFS	Perform MS// SUB (8015 Gas (Purgeable) LL SUB (8015 LL DRO/MRO/JP5	Field Filtered	Sample Matrix Type (W-water, G=grab) BT-Tissue, A-Air	Sample (C=	Sample Date	Sample Identification - Client ID (Lab ID)	Sample Ic
	Omen	CONTRACTOR AND ADDRESS OF THE PARTY OF THE P			IJF8	(Purg (EAL) DRO/M	384 108 108 20			SSOW#:	Site: Sites	Site: Honolulu I
Y - Inzma Z - other (specify)	L-EDA	The second				eable) l	CONTRACTOR			Project #: 38001111		Project Name: RED-HILL
V-MCAA W-pH 4-5	J - Ice J - Di Water K - FDTA	ercent in				L (EAI	Last Grann E. N. Co.			WO#:	٧	Email:
S - HZSO4 T - TSP Dodecahydrate II - Acetone	G - Amchlor H - Ascorbic Acid					_))/ 80 ⁻ 8015 L	0)			P0 #:	0	Phone:
Q - Na2SO3 R - Na2S2O3	D - Nitric Acid E - NaHSO4 F - MeOH					5 Gas L					5	State, Zip: CA, 90505
N - None O - AsNaO2 P - Na2O4S	B - NaOH C - Zn Acetate								s):	TAT Requested (days):	1	City: Torrance
es: M - Hexane	Preservation Codes:	-	Requested	lysis	Ana					Due Date Requested: 9/19/2023	,	Address: 3051 Fujita Street,
	Job #: 380-61968-1	3		ote):	Accreditations Required (See note): State - Hawaii	Accreditations Re State - Hawaii	Accre State				Inc	Company: EMAX Lat
	Page: Page 1 of 1	777 70	State of Origin: Hawaii	s.com	E-Mail: Rachelle.Arada@et.eurofinsus.com	Arada@et	E-Mail: Rachelle			Phone:		Client Contact Shipping/Receiving
	380-76342.1		Carner Tracking No(s):	ļ		achelle	Lab PM: Arada, Rachelle			Sampler:	Client Information (Sub Contract Lab)	Client Ir
Environment Testing		050167		4.		ora	Xec.	Chain of Custody Record	nain of		·	Pomona, Phone: 62
	eurofins	; ;		٠.		<u>.</u>			r i)	Eurofins Eaton Analytical Pomona	Eurofir



Type of De	livery	Airbill / Ti	racking Number	ECN 231050	
☐ Fedex ☐ UPS ☐ GSO		``.		Recipient Maria Plue	ra
☐ EMAX Courier Client Deli				Date 9/8/23	Time 1005
LI ENIAX COUNCI DE CHERT DELL	, , , , , , , , , , , , , , , , , , , ,				
COC INSPECTION		Complem Name	Sampling Date/Time	Sample ID	Matrix
Client Name	Client PM/FC	☐ Sampler Name		Preservative (if any)	TAT
Address	Tel # / Fax #	Courier Signature		in the servative (it ally)	
Safety Issues (if any)	☐ High concentrations expe	ected	Site		
Note:					
	<u> </u>				
PACKAGING INSPECTION)N .				
Container	Cooler	□ Box	☐ Other		4
	Custody Seal	☐ Intact	☐ Damaged		
ANTIANTIAN !	Bubble Pack	☐ Styrofoam	□ Popcorn	☐ Sufficient	
Packaging factor: 0.	Cooler 1 1.11.0°C	□ Cooler 2 °C	□ Cooler 3°C	□ Cooler 4 "C	Cooler 5°C
Temperatures		☐ Cooler 7 °C	☐ Cooler 8°C	□ Cooler 9°C	☐ Cooler 10"C
(Cool, ≤6 "C but not frozen)	Cooler 6 "C	B S/N 14925319	C - S/N	D - S/N	
Thermometer:	A - S/N 221852768	()	C - 3/N		
Comments: 🛘 Temperature is ou	at of range. PM was informe	ed IMMEDIATELY.			
Note:					
		<u> </u>			
DISCREPANCIES					<u></u>
	LabSampleContainerID	Code ClientSam	ple Label ID / Information	Correctiv	e Action
LabSampleID	7	014	·	\mathcal{C}	Ч
<u> </u>	11 10 10 11 16	022 9/5/23 , 8/2	u112	R	1
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			21/1/18		
☐ pH holding time requireme	nt for water samples is 15 n	nins. Water samples for pF	I analysis are received Veyond 15	minutes from sampling time.	MS 9/12/23
					, , , , , , ,
NOTES/OBSERVATIONS					
SAMPLE MATRIX IS DRINKIN	IG WATER? LI YES LI NO				
				,	
LEGEND:				☐ Continue to next	page.
Code Description-Sample Ma	nagement	Code Description-Sample	e Management	Code Description-Sample M	
(D1) Analysis is not indicated i	in ČXC.	D13 Out of Holding Tim	e .	R1 Proceed as indicated in	COC Label
D2 Analysis mismatch COC		D14 Bubble is >6mm		R2 Refer to attached instruction	n
D3 Sample ID mismatch CO		DI5 No trip blank in coo	oler .	R3 Cancel the analysis	
		D16 Preservation not ind		R4 Use vial with smallest bub	ble first
		D17 Preservation misma		R5 Log-in with latest sampling	
D5 Container -[improper] [ie		D18 Insufficient chemica		R6 Adjust pH as necessary	
D6 Date/Time is not indicate		D19 Insufficient Sample		R7 Filter and preserved as nec	essary
D7 Date/Time mismatch CO		D20 No filtration info fo	· ·	70	
D8 Sample listed in COC is r					
D9 Sample received is not list		D21 No sample for moistu			
D10 No initial/date on correct		(522) has 2 date			
D11 Container count mismate	h COC vs received	D23		_ RII	<u> </u>
D12 Container size mismatch	COC vs received /	D24		R12	- AD
REVIEWS:	JANOIN 1///		(//, -/ :		nu juj
Sample Labeli	ng zamora / Chylle	$\underline{\mathcal{U}}$	SRF Y	<u>-</u> -	PM 911197
Da	nte 918127 9/8/23		Date 7/8/23	D	Pate 111963
REPORT ID: 231	050	_	/ /	P	age 3 of 37,
ILL CITIE. 201		EMAX Laboratorie P, AG E3	25 Af ji 9A SI., Torrance, CA 903	505	11/22/2023

REPORTING CONVENTIONS

DATA QUALIFIERS:

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

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

ACRONYMS AND ABBREVIATIONS:

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

DATES

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

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LABORATORY REPORT FOR

EUROFINS EATON ANALYTICAL

380-61968

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

SDG#: 231050

REPORT ID: 231050

CASE NARRATIVE

Client: EUROFINS EATON ANALYTICAL

Project: 380-61968

SDG : 23I050

METHOD 5030B/8015B

TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

A total of four(4) water samples were received on 09/08/23 to be analyzed for Total Petroleum Hydrocarbons by Purge and Trap in accordance with Method 5030B/8015B and project specific requirements.

Holding Time

Samples were analyzed within the prescribed holding time.

Calibration

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

Method Blank

Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. VG39I07B - result was compliant to project requirement. Refer to sample result summary form for details.

Lab Control Sample

Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of LCS/LCD was analyzed. VG39I07L/VG39I07C were within LCS limits. Refer to LCS summary form for details.

Matrix QC Sample

Matrix spike sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of MS/MSD was analyzed. Gasoline was within MS QC limits in I050-01M/I050-01S. Refer to Matrix QC summary form for details.

Surrogate

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

Sample Analysis

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

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Client : EUROFINS EATON ANALYTICAL Project : 380-61968	ANALYTICAL							SDG NO. Instrument ID	: 231050 t ID : GCT039
				ΔM	WATER				
Client	Laboratory	Dilution	»e •		ш	Sample	Calibration Prep.		
Sample ID	Sample ID	Factor	Moist	Datelime	Datelime	Data FN	Data FN	Batch	Notes
MBLK1W	VG39107B	-	¥	09/11/2312:35	09/11/2312:35	E111005A	EI11004A		Method Blank
LCS1W	VG39107L	1	Ν	09/11/2313:12	09/11/2313:12	EI11006A	E111004A	23VG39107 1	Lab Control Sample (LCS)
LCD1W	VG39107C	П	≨	09/11/2313:50	09/11/2313:50	EI11007A	EI11004A	23VG39107	LCS Duplicate
380-61968-1	1050 - 01	-	¥	09/11/2314:27	09/11/2314:27	E111008A	EI11004A	23VG39107	Field Sample
380-61968-1MS	I050-01M	Н	≨	09/11/2315:04	09/11/2315:04	EI11009A	EI11004A	23VG39I07	Matrix Spike Sample (MS)
380-61968-1MSD	1050-018	1	¥	09/11/2315:42	09/11/2315:42	EI11010A	EI11004A	23VG39I07	3VG39I07 MS Duplicate (MSD)
380-61968-2	1050-02	1	≨	09/11/2316:19	09/11/2316:19	E111011A	EI11004A	23VG39I07 F	23VG39I07 Field Sample
380-61968-5	1050-03	1	≨	09/11/2316:56	09/11/2316:56	EI11012A	EI11004A	23VG39I07 F	∹ield Sample
380-61968-6	1050-04	-	Ą	09/11/2317:33	09/11/2317:33	EI11013A	E111004A	23VG39I07 F	Field Sample
FN Filename									
% Moist									
29									
9 o									
f 94		•							
4									

SAMPLE RESULTS

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

Client	: EUROFINS EATON ANALYTICAL	Date Collected: 09/05/23 11:13
Project	380.61968	Date Received: 09/08/23

Date Received: 09/08/23 : 380-61968 Batch No. : 231050 Date Extracted: 09/11/23 14:27 Sample ID : 380-61968-1 Date Analyzed: 09/11/23 14:27

Lab Samp ID: I050-01 Dilution Factor: 1 Lab File ID: EI11008A Matrix: WATER Ext Btch ID: 23VG39I07 % Moisture: NA Calib. Ref.: EI11004A Instrument ID: 39

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)	
GASOLINE	ND	0.020	0.010	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromofluorobenzene	0.0322	0.0400	80	60-140

Notes:

Parameter H-C Range Gasoline C6-C10

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount : 5ml

Final Volume : 5ml

Prepared by

: SCerva

Analyzed by : SCerva

REPORT ID: 231050

: EUROFINS EATON ANALYTICAL

Date Collected: 09/05/23 10:27

Project : 380-61968 Batch No. : 23I050

Client

Date Received: 09/08/23 Date Extracted: 09/11/23 16:19

Sample ID : 380-61968-2

Date Analyzed: 09/11/23 16:19

Lab Samp ID: 1050-02 Lab File ID: EI11011A Ext Btch ID: 23VG39I07

Calib. Ref.: EI11004A

Dilution Factor: 1 Matrix: WATER

% Moisture: NA Instrument ID: 39

RL

(mg/L)

0.020

MDL (mg/L) 0.010

SURROGATE PARAMETERS RESULT SPK AMT %RECOVERY QC LIMIT Bromofluorobenzene 0.0313 0.0400 78 60-140

RESULTS

(mg/L)

Notes:

Parameter

PARAMETERS

GASOLINE

H-C Range

Gasoline

C6-C10

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount : 5ml

Final Volume : 5ml

Prepared by

: SCerva

Analyzed by : SCerva

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

Client : EUROFINS EATON ANALYTICAL Date Collected: 09/05/23 11:13

 Project
 : 380-61968
 Date Received: 09/08/23

 Batch No.
 : 23I050
 Date Extracted: 09/11/23 16:56

 Sample ID : 380-61968-5
 Date Analyzed: 09/11/23 16:56

 Lab Samp ID: I050-03
 Dilution Factor: 1

 Lab File ID: EI11012A
 Matrix: WATER

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)	
GASOLINE	ND	0.020	0.010	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromofluorobenzene	0.0314	0.0400	78	60-140

Notes:

Parameter H-C Range Gasoline C6-C10

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount : 5ml
Prepared by : SCerva

Final Volume : 5ml

Prepared by : SCerva Analyzed by : SCerva

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Client : EUROFINS EATON ANALYTICAL

Date Collected: 09/05/23 10:27

Project

: 380-61968

Date Received: 09/08/23

Batch No. : 23I050

Date Extracted: 09/11/23 17:33

Sample ID : 380-61968-6

Date Analyzed: 09/11/23 17:33 Dilution Factor: 1

Lab Samp ID: 1050-04 Lab File ID: EI11013A

Matrix: WATER

Ext Btch ID: 23VG39I07

% Moisture: NA

Calib. Ref.: EI11004A

Instrument ID: 39

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)	
GASOLINE	ND	0.020	0.010	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromofluorobenzene	0.0314	0.0400	79	60-140

Notes:

Parameter

H-C Range

Gasoline

C6-C10

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount : 5ml

Final Volume : 5ml

Prepared by

: SCerva

Analyzed by : SCerva

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QC SUMMARIES

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Client : EUROFINS EATON ANALYTICAL Date Collected: 09/11/23 12:35

Project

: 380-61968 Date Received: 09/11/23

Batch No. : 23I050 Sample ID : MBLK1W Date Extracted: 09/11/23 12:35

Lab Samp ID: VG39I07B

Date Analyzed: 09/11/23 12:35 Dilution Factor: 1

Lab File ID: EI11005A Ext Btch ID: 23VG39I07 Calib. Ref.: EI11004A

Matrix: WATER

% Moisture: NA Instrument ID: 39

RESULTS RL **PARAMETERS** (mg/L) (mg/L) (mg/L)

RESULT

GASOLINE

ND

0.020

0.010

MDL

SURROGATE PARAMETERS

SPK AMT

%RECOVERY

QC LIMIT

Bromofluorobenzene

0.0312 0.0400 78 60-140

Notes:

Parameter

H-C Range

Gasoline

C6-C10

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount : 5ml

Final Volume: 5ml

Prepared by

: SCerva

Analyzed by : SCerva

CLIENT

: EUROFINS EATON ANALYTICAL

PROJECT

: 380-61968

BATCH NO.

: 231050

METHOD

: 5030B/8015B

MATRIX

: WATER

DILUTION FACTOR: 1

SAMPLE ID : MBLK1W

LAB SAMPLE ID : VG39I07B

LAB FILE ID

: EI11005A DATE PREPARED : 09/11/23 12:35

DATE ANALYZED : 09/11/23 12:35

PREP BATCH

: 23VG39I07

CALIBRATION REF: EI11004A

1 LCS1W

VG39I07L

EI11006A 09/11/23 13:12

09/11/23 13:12 23VG39I07

EI11004A

% MOISTURE:NA

1 LCD1W

VG39I07C EI11007A

09/11/23 13:50

09/11/23 13:50

23VG39I07 EI11004A

ACCESSION:

MBResult SpikeAmt LCSResult LCSRec SpikeAmt LCDResult LCDRec RPD QCLimit MaxRPD **PARAMETERS** (mg/L) (mg/L) (mg/L) (%) (mg/L) (mg/L) (%) (%) (%) (%) 0.461 Gasoline ND 0.500 92 0.500 0.449 90 30 3 60-130

SURROGATE PARAMETER	SpikeAmt	LCSResult	LCSRec	SpikeAmt	LCDResult	LCDRec	QCLimit
	(mg/L)	(mg/L)	(%)	(mg/L)	(mg/L)	(%)	(%)
Bromofluorobenzene	0.0400	0.0420	105	0.0400	0.0417	104	70-130

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

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EMAX QUALITY CONTROL DATA MS/MSD ANALYSIS

CLIENT

: EUROFINS EATON ANALYTICAL

PROJECT

: 380-61968

BATCH NO.

: 231050

METHOD

: 5030B/8015B

SAMPLE ID

: WATER

DILUTION FACTOR: 1

: 380-61968-1

LAB SAMPLE ID : I050-01 LAB FILE ID : EI11008A

DATE PREPARED : 09/11/23 14:27 DATE ANALYZED : 09/11/23 14:27

PREP BATCH

: 23VG39I07 CALIBRATION REF: EI11004A

EI11009A 09/11/23 15:04

1

09/11/23 15:04 23VG39I07

380-61968-1MS

I050-01M

EI11004A

% MOISTURE:NA

380-61968-1MSD

I050-01S EI11010A

09/11/23 15:42

09/11/23 15:42 23VG39I07

EI11004A

ACCESSION:

PSResult SpikeAmt RPD QCLimit MaxRPD MSResult MSRec SpikeAmt MSDResult MSDRec **PARAMETERS** (mg/L) (mg/L) (mg/L) (%) (mg/L) (mg/L)(%) (%) (%) (%) Gasoline ND 0.500 0.479 96 0.500 0.478 96 0 50-130 30

	SpikeAmt	MSResult	MSRec	SpikeAmt	MSDResult	MSDRec	QCLimit
SURROGATE PARAMETER	(mg/L)	(mg/L)	(%)	(mg/L)	(mg/L)	(%)	(%)
				• • • • • • •	• • • • • • • • •		
Bromofluorobenzene	0.0400	0.0425	106	0.0400	0.0427	107	60-140

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

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LABORATORY REPORT FOR

EUROFINS EATON ANALYTICAL

380-61968

METHOD 3520C/8015B TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

SDG#: 231050

CASE NARRATIVE

Client: EUROFINS EATON ANALYTICAL

Project: 380-61968

SDG : 23I050

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

A total of two(2) water samples were received on 09/08/23 to be analyzed for Total Petroleum Hydrocarbons by Extraction in accordance with Method 3520C/8015B and project specific requirements.

Holding Time

Samples were analyzed within the prescribed holding time.

Calibration

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

Method Blank

Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. DSI023WB - result was compliant to project requirement. Refer to sample result summary form for details.

Lab Control Sample

Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of LCS/LCD was analyzed. DSI023WL/DSI023WC were within LCS limits. Refer to LCS summary form for details.

Matrix QC Sample

No matrix QC sample was provided on this SDG.

Surrogate

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

Sample Analysis

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

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CASE NARRATIVE

Client: EUROFINS EATON ANALYTICAL

Project: 380-61968

SDG : 23I050

METHOD 3520C/8015B PETROLEUM HYDROCARBONS BY EXTRACTION

A total of two(2) water samples were received on 09/08/23 to be analyzed for Petroleum Hydrocarbons by Extraction in accordance with Method 3520C/8015B and project specific requirements.

Holding Time

Samples were analyzed within the prescribed holding time.

Calibration

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

Method Blank

Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. DSI023WB - result was compliant to project requirement. Refer to sample result summary form for details.

Lab Control Sample

Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of LCS/LCD was analyzed. J51023WL/J51023WC were within LCS limits. Refer to LCS summary form for details.

Matrix QC Sample

No matrix QC sample was provided on this SDG.

Surrogate

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

Sample Analysis

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

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CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 380-61968

SDG : 23I050

METHOD 3520C/8015B PETROLEUM HYDROCARBONS BY EXTRACTION

A total of two(2) water samples were received on 09/08/23 to be analyzed for Petroleum Hydrocarbons by Extraction in accordance with Method 3520C/8015B and project specific requirements.

Holding Time

Samples were analyzed within the prescribed holding time.

Calibration

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

Method Blank

Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. DSI023WB - result was compliant to project requirement. Refer to sample result summary form for details.

Lab Control Sample

Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of LCS/LCD was analyzed. J8I023WL/J8I023WC were within LCS limits. Refer to LCS summary form for details.

Matrix QC Sample

No matrix QC sample was provided on this SDG.

Surrogate

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

Sample Analysis

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

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: 231050 : D5

SDG NO. Instrument ID 23DS1023W Lab Control Sample (LCS)
23DS1023W LCS Duplicate
23DS1023W Field Sample
23DS1023W Field Sample

LI14124A LI14124A LI20003A

LI14129A LI14135A LI20010A

09/14/2313:15 09/14/2313:15 09/14/2313:15 09/14/2313:15 09/14/2313:15

09/16/2303:43 09/16/2304:02 09/16/2304:20 09/16/2306:12 09/20/2318:48

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Method Blank

23DSI023W

LI14124A LI14124A

LI14127A LI14128A

Notes

Prep. Batch

Calibration

Data FN

Sample Data FN

Extraction DateTime

Analysis DateTime

Moist

Dilution Factor

Laboratory
Sample ID
......
DSI023WB
DSI023WL
DSI023WC
I050-02
I050-01

Sample ID

Client

MBLK1W

LCS1W

: EUROFINS EATON ANALYTICAL : 380-61968

Project

Client

WATER

11/22/2023

FN - Filename % Moist - Percent Moisture

380-61968-2 380-61968-1

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SDG NO. : 231050 Instrument ID : D5		ו Prep.	Batch Notes	23DSI023W Method Blank	23DSI023W Lab Control Sample (LCS)	23DSI023W LCS Duplicate	23DSI023W Field Sample	23DSI023W Field Sample
		Calibration	Data FN Batch	 LI14125A	LI14125A	LI14125A	LI14125A	LI20004A
		Sample	Data FN	 LI14127A	LI14130A	LI14131A	LI14135A	LI20010A
	WATER	Extraction	DateTime	09/14/2313:15	09/14/2313:15	09/14/2313:15	09/14/2313:15	09/14/2313:15
	MA:	Analysis	DateTime	09/16/2303:43	09/16/2304:39	09/16/2304:57	09/16/2306:12	09/20/2318:48
		3 %	Moist	 Ā	¥	¥	ΑĀ	¥
		Dilution	Factor	 1	-	Н	-	-
EUROFINS EATON ANALYTICAL 380-61968		Laboratory	Sample ID	 DSI023WB	J51023WL	J5I023WC	1050-02	1050-01
: EUROFINS EAT : 380-61968							-5	-1
Client Project		Client	Sample ID	 MBLK1W	LCS1W	LCD1W	380-61968	380-61968

: 231050 : D5

SDG NO. Instrument ID

_aboratory Dilution Sample ID J81023WL J81023WC I050-02 I050-01 DSI023WB : EUROFINS EATON ANALYTICAL : 380-61968 LCD1W 380-61968-2 380-61968-1 Sample ID Client Project MBLK1W Client LCS1W

23DSI023W Lab Control Sample (LCS)
23DSI023W LCS Duplicate
23DSI023W Field Sample
23DSI023W Field Sample

LI20005A LI14126A LI20005A

LI20009A LI14135A LI20010A

23DSI023W Method Blank Notes

> LI14126A LI14126A

LI14127A LI14132A

09/14/2313:15 09/14/2313:15 09/14/2313:15 09/14/2313:15

09/16/2303:43 09/16/2305:16 09/20/2318:29 09/16/2306:12 09/20/2318:48

≨ ≨ ≨ ≨

09/14/2313:15

Prep. Batch

Calibration

Data FN

Sample Data FN

Extraction DateTime

Analysis DateTime

Moist

Factor

WATER

FN · Filename % Moist · Percent Moisture

SAMPLE RESULTS

Client : EUROFINS EATON ANALYTICAL Date Collected: 09/05/23 11:13 Date Received: 09/08/23

Project : 380-61968 Batch No. : 23I050

Date Extracted: 09/14/23 13:15

Sample ID : 380-61968-1

Date Analyzed: 09/20/23 18:48 Dilution Factor: 1

Lab Samp ID: 23I050-01 Lab File ID: LI20010A

Matrix: WATER

Ext Btch ID: 23DSI023W % Moisture: NA Calib. Ref.: LI20003A Instrument ID: D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)	
Diesel	ND	0.026	0.013	
Motor Oil	ND	0.052	0.026	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.358	0.525	68	60-130
Hexacosane	0.129	0.131	98	60-130

Notes:

Parameter H-C Range Diese1 C10-C24

C24-C36 Motor 0il

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount : 950ml

Final Volume : 5ml

Prepared by

: POreto

Analyzed by : SDeeso

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: EUROFINS EATON ANALYTICAL Date Collected: 09/05/23 11:13

Client Project : 380-61968 Date Received: 09/08/23 Batch No. : 23I050 Date Extracted: 09/14/23 13:15

Sample ID : 380-61968-1 Date Analyzed: 09/20/23 18:48 Lab Samp ID: 23I050-01 Dilution Factor: 1

Lab File ID: LI20010A Matrix: WATER Ext Btch ID: 23DSI023W % Moisture: NA

Calib. Ref.: LI20004A Instrument ID: D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)	
JP5	ND	0.052	0.026	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene Hexacosane	0.358 0.129	0.525 0.131	68 98	60-130 60-130

Notes:

RL : Reporting Limit Parameter H-C Range

JP5 C8-C18

REPORT ID: 231050

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount : 950ml Final Volume : 5ml

Prepared by : POreto Analyzed by : SDeeso

METHOD 3520C/8015B PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATON ANALYTICAL Date Collected: 09/05/23 11:13
Project : 380-61968 Date Received: 09/08/23

Lab Samp ID: 23I050-01 Dilution Factor: 1

Lab File ID: LI20010A Matrix: WATER Ext Btch ID: 23DSI023W % Moisture: NA Calib. Ref.: LI20005A Instrument ID: D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)	
JP8	ND	0.052	0.026	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.358	0.525	68	60-130
Hexacosane	0.129	0.131	98	60-130

Notes:

RL: Reporting Limit
Parameter H-C Range

JP8 C8-C18

REPORT ID: 231050

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount : 950ml

Final Volume : 5ml

Prepared by : POreto Analyzed by : SDeeso

Client : EUROFINS EATON ANALYTICAL Date Collected: 09/05/23 10:27

Project : 380-61968 Batch No. : 23I050

Date Received: 09/08/23 Date Extracted: 09/14/23 13:15

Sample ID : 380-61968-2 Lab Samp ID: 23I050-02

Date Analyzed: 09/16/23 06:12 Dilution Factor: 1

Lab File ID: LI14135A Ext Btch ID: 23DSI023W

Matrix: WATER % Moisture: NA

Instrument ID: D5 Calib. Ref.: LI14124A

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)	
Diesel	ND	0.027	0.013	
Motor Oil	ND	0.053	0.027	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.404	0.530	76	60-130
Hexacosane	0.120	0.132	91	60-130

Notes:

Parameter H-C Range Diesel C10-C24

C24-C36 Motor Oil

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount : 940ml

Final Volume : 5ml

Prepared by

: POreto

Analyzed by : SDeeso

METHOD 3520C/8015B PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATON ANALYTICAL Date Collected: 09/05/23 10:27

Project : 380-61968 Date Received: 09/08/23

Batch No. : 23I050 Date Extracted: 09/14/23 13:15 Sample ID : 380-61968-2 Date Analyzed: 09/16/23 06:12

Lab Samp ID: 23I050-02 Dilution Factor: 1

Lab File ID: LI14135A Matrix: WATER Ext Btch ID: 23DSI023W % Moisture: NA Calib. Ref.: LI14125A Instrument ID: D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)	
JP5	ND	0.053	0.027	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene Hexacosane	0.404 0.120	0.530 0.132	76 91	60-130 60-130

Notes:

RL: Reporting Limit
Parameter H-C Range

JP5 C8-C18

REPORT ID: 231050

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount : 940ml Final Volume : 5ml

Prepared by : POreto Analyzed by : SDeeso

METHOD 3520C/8015B PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATON ANALYTICAL Date Collected: 09/05/23 10:27

Project : 380-61968 Date Received: 09/08/23

Batch No. : 231050 Date Extracted: 09/14/23 13:15

Sample ID : 380-61968-2 Date Analyzed: 09/16/23 06:12

Lab Samp ID: 23I050-02 Dilution Factor: 1
Lab File ID: LI14135A Matrix: WATER
Ext Btch ID: 23DSI023W % Moisture: NA
Calib. Ref.: LI14126A Instrument ID: D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)	
JP8	ND	0.053	0.027	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene Hexacosane	0.404 0.120	0.530 0.132	76 91	60 - 130 60 - 130

Notes:

RL: Reporting Limit
Parameter H-C Range
JP8 C8-C18

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount : 940ml

Final Volume : 5ml

Prepared by : POreto

REPORT ID: 231050

Analyzed by : SDeeso

QC SUMMARIES

METHOD 3520C/8015B TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATON ANALYTICAL Date Collected: 09/14/23 13:15 Project : 380-61968 Date Received: 09/14/23 Batch No. : 23I050 Date Extracted: 09/14/23 13:15 Sample ID : MBLK1W Date Analyzed: 09/16/23 03:43

Lab Samp ID: DSI023WB Dilution Factor: 1

Matrix: WATER Lab File ID: LI14127A Ext Btch ID: 23DSI023W % Moisture: NA Calib. Ref.: LI14124A Instrument ID: D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)	
Diesel	ND	0.025	0.012	
Motor Oil	ND	0.050	0.025	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.372	0.500	74	60-130
Hexacosane	0.102	0.125	82	60-130

Notes:

Parameter H-C Range C10-C24 Diesel Motor 0il C24-C36

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount

: 1000ml

Final Volume : 5ml

Prepared by

: POreto

Analyzed by : SDeeso

EMAX QUALITY CONTROL DATA LAB CONTROL SAMPLE ANALYSIS

CLIENT

: EUROFINS EATON ANALYTICAL

PROJECT

: 380-61968

BATCH NO.

: 231050

METHOD

: 3520C/8015B

MATRIX

: WATER

% MOISTURE:NA

DILUTION FACTOR: 1

: MBLK1W

SAMPLE ID

LCS1W DSI023WL LCD1W

LAB SAMPLE ID : DSI023WB LAB FILE ID

: LI14127A

LI14128A

DSI023WC

DATE PREPARED : 09/14/23 13:15

09/14/23 13:15

LI14129A

DATÉ ANALYZED : 09/16/23 03:43

09/16/23 04:02

09/14/23 13:15 09/16/23 04:20

PREP BATCH

: 23DSI023W

23DSI023W

23DSI023W

CALIBRATION REF: LI14124A

LI14124A

LI14124A

ACCESSION:

MBResult SpikeAmt LCSResult LCSRec SpikeAmt LCDResult LCDRec RPD QCLimit MaxRPD **PARAMETERS** (mg/L) (mg/L) (mg/L) (mg/L)(%) (mg/L) (%) (%) (%) ND Diesel 2.50 2.37 95 2.50 2.16 86 50-130 30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec	SpikeAmt (mg/L)	LCDResult (mg/L)	LCDRec (%)	QCLimit (%)
•••••							
Bromobenzene	0.500	0.402	80	0.500	0.390	78	60-130
Hexacosane	0.125	0.123	98	0.125	0.109	87	60-130

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

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REPORT ID: 231050

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METHOD 3520C/8015B PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATON ANALYTICAL Date Collected: 09/14/23 13:15 Project : 380-61968 Date Received: 09/14/23 Batch No. : 231050 Date Extracted: 09/14/23 13:15 Sample ID : MBLK1W Date Analyzed: 09/16/23 03:43 Lab Samp ID: DSI023WB Dilution Factor: 1 Lab File ID: LI14127A Matrix: WATER

Ext Btch ID: 23DSI023W % Moisture: NA Calib. Ref.: LI14125A Instrument ID: D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)	
JP5	ND	0.050	0.025	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene Hexacosane	0.372	0.500 0.125	74 82	60 · 130 60 · 130

Notes:

: Reporting Limit Parameter H-C Range C8-C18

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount : 1000ml

Final Volume : 5ml

Prepared by

: POreto

Analyzed by : SDeeso

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EMAX QUALITY CONTROL DATA LAB CONTROL SAMPLE ANALYSIS

CLIENT

: EUROFINS EATON ANALYTICAL

PROJECT

: 380-61968

BATCH NO.

: 231050

METHOD

: 3520C/8015B

MATRIX

: WATER

DILUTION FACTOR: 1

: MBLK1W

1 LCS1W % MOISTURE:NA 1

SAMPLE ID

LCD1W

LAB SAMPLE ID : DSI023WB

J5I023WL

J5I023WC

LAB FILE ID

: LI14127A

LI14130A

LI14131A

DATE PREPARED : 09/14/23 13:15

09/14/23 13:15

09/14/23 13:15

DATE ANALYZED : 09/16/23 03:43

09/16/23 04:39

09/16/23 04:57

PREP BATCH

: 23DSI023W

23DSI023W

23DSI023W

CALIBRATION REF: LI14125A

LI14125A

LI14125A

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)		•	LCDResult (mg/L)	LCDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
JP5	ND	2.50	1.60	64	2.50	1.75	70	9	30-160	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec	SpikeAmt (mg/L)	LCDResult (mg/L)	LCDRec (%)	QCLimit (%)
Bromobenzene	0.500	0.365	73	0.500	0.387	77	60-130
Hexacosane	0.125	0.115	92	0.125	0.103	82	60-130

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

: EUROFINS EATON ANALYTICAL

Date Collected: 09/14/23 13:15

Project

Client

: 380-61968 Date Received: 09/14/23

Batch No. : 23I050 Sample ID : MBLK1W Date Extracted: 09/14/23 13:15 Date Analyzed: 09/16/23 03:43

Lab Samp ID: DSI023WB

Dilution Factor: 1

Lab File ID: LI14127A Ext Btch ID: 23DSI023W Matrix: WATER

% Moisture: NA

Calib. Ref.: LI14126A

Instrument ID: D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)	
JP8	ND	0.050	0.025	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Rromohenzene	0 372	0.500	74	60-130

• • • • • • • • • • • • • • • • • • • •				
Bromobenzene	0.372	0.500	74	60-130
Hexacosane	0.102	0.125	82	60-130

Notes:

: Reporting Limit

Parameter

H-C Range C8-C18

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount : 1000ml

Final Volume : 5ml

: POreto Prepared by

Analyzed by : SDeeso

EMAX QUALITY CONTROL DATA LAB CONTROL SAMPLE ANALYSIS

CLIENT

: EUROFINS EATON ANALYTICAL

PROJECT

: 380-61968

BATCH NO.

: 231050

METHOD

: 3520C/8015B

MATRIX

: WATER

% MOISTURE:NA

DILUTION FACTOR: 1

: MBLK1W

LCS1W

1

SAMPLE ID

J8I023WL

LCD1W

LAB SAMPLE ID : DSI023WB LAB FILE ID

: LI14127A

LI14132A

J8I023WC LI20009A

DATE PREPARED : 09/14/23 13:15

09/14/23 13:15

DATE ANALYZED : 09/16/23 03:43

09/16/23 05:16

09/14/23 13:15

09/20/23 18:29

PREP BATCH

: 23DSI023W

23DSI023W

23DSI023W

CALIBRATION REF: LI14126A

LI14126A

LI20005A

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	SpikeAmt (mg/L)	LCDResult (mg/L)	LCDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
JP8	ND	2.50	1.76	70	2.50	1.64	66	7	30-160	30
		SpikeAmt	LCSResult	LCSRec	SpikeAmt	LCDResult	LCDRec		QCLimit	
SURROGATE PARAMETERS		(mg/L)	(mg/L)	(%)	(mg/L)	(mg/L)	(%)		(%)	
Bromobenzene		0.500	0.404	81	0.500	0.389	78		60-130	
Hexacosane		0.125	0.111	89	0.125	0.104	83		60-130	

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



October 17, 2023

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

Project Name: RED-HILL Project # 38001111 Job # 380-61968-1

Physis Project ID: 1407003-444

Dear Rachelle,

Enclosed are the analytical results for samples submitted to PHYSIS Environmental Laboratories, Inc. (PHYSIS) on 9/8/2023. A total of 2 samples were received for analysis in accordance with the attached chain of custody (COC). Per the COC, the samples were analyzed for:

Organics	
Polynuclear Aromatic Hydrocarbons by EPA 625.1	
Disalicylidenepropanediamine by EPA 625.1	
Dibenzo [a,l] Pyrene w/ PAHs by EPA 625.1	

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

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

Regards,

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



PROJECT SAMPLE LIST

Eurofins Eaton Analytical

RED-HILL Project # 38001111 Job # 380-61968-1

PHYSIS Project ID: 1407003-444

Total Samples: 2

PHYSIS ID	Sample ID	Description	Date	Time	Matrix	Sample Type
110864	AIEA WELLS PUMPS 1	&2 (26 3)31-203-TP400 (380-61968-1)	9/5/2023	11:13	Samplewater	Not Specified
110865	AIEA GULCH WELLS	PUMP 2 31-202-TP072 (380-61968-2)	9/5/2023	10:27	Samplewater	Not Specified

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12



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
BS ₂	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



QUALITY ASSURANCE SUMMARY

LABORATORY BATCH: Physis' QM defines a laboratory batch as a group of 20 or fewer project samples of similar matrix, processed together under the same conditions and with the same reagents. QC samples are associated with each batch and were used to assess the validity of the sample analyses.

PROCEDURAL BLANK: Laboratory contamination introduced during method use is assessed through the preparation and analysis of procedural blanks is provided at a minimum frequency of one per batch.

ACCURACY: Accuracy of analytical measurements is the degree of closeness based on percent recovery calculations between measured values and the actual or true value and includes a combination of reproducibility error and systematic bias due to sampling and analytical operations. Accuracy of the project data was indicated by analysis of MS, BS, LCS, LCM, CRM, and/or surrogate spikes on a minimum frequency of one per batch. Physis' QM requires that 95% of the target compounds greater than 10 times the MDL be within the specified acceptance limits.

PRECISION: Precision is the agreement among a set of replicate measurements without assumption of knowledge of the true value and is based on RPD calculations between repeated values. Precision of the project data was determined by analysis of replicate MS1/MS2, BS1/BS2, LCS1/LCS2, LCM1/LCM2, CRM1/CRM2, surrogate spikes and/or replicate project sample analysis (R1/R2) on a minimum frequency of one per batch. Physis' QM requires that for 95% of the compounds greater than 10 times the MDL, the percent RPD should be within the specified acceptance range.

BLANK SPIKES: BS is the introduction of a known concentration of analyte into the procedural blank. BS demonstrates performance of the preparation and analytical methods on a clean matrix void of potential matrix related interferences. The BS is performed in laboratory deionized water, making these recoveries a better indicator of the efficiency of the laboratory method per se.

MATRIX SPIKES: MS is the introduction of a known concentration of analyte into a sample. MS samples demonstrate the effect a particular project sample matrix has on the accuracy of a measurement. Individually, MS samples also indicate the bias of analytical measurements due to chemical interferences inherent in the in the specific project sample spiked. Intrinsic target analyte concentration in the specific project sample can also significantly impact MS recovery.

CERTIFIED REFERENCE MATERIALS: CRMs are materials of various matrices for which analytical information has been determined and certified by a recognized authority. These are used to provide a quantitative assessment of the accuracy of an analytical method. CRMs provide evidence that the laboratory preparation and analysis produces results that are comparable to those obtained by an independent organization.

LABORATORY CONTROL MATERIAL: LCM is provided because a suitable natural seawater CRM is not available and can be used to indicate accuracy of the method. Physis' internal LCM is seawater collected at ~800 meters in the Southern California San Pedro Basin and can be used as a reference for background concentrations in clean, natural seawater for comparison to project samples.

LABORATORY CONTROL SPIKES: LCS is the introduction of a known concentration of analyte into Physis' LCM. LCS samples were employed to assess the effect the seawater matrix has on the accuracy of a measurement. LCS also indicate the bias of this method due to chemical interferences inherent in the in the seawater matrix. Intrinsic LCM concentration can also significantly impact LCS recovery.

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SURROGATES: A surrogate is a pure analyte unlikely to be found in any project sample, behaves similarly to the target analyte and most often used with organic analytical procedures. Surrogates are added in known concentration to all samples and are measured to indicate overall efficiency of the method including processing and analyses.

HOLDING TIME: Method recommended holding times are the length of time a project sample can be stored under specific conditions after collection and prior to analysis without significantly affecting the analyte's concentration. Holding times can be extended if preservation techniques are employed to reduce biodegradation, volatilization, oxidation, sorption, precipitation, and other physical and chemical processes.

SAMPLE STORAGE/RETENTION: In order to maintain chemical integrity prior to analysis, all samples submitted to Physis are refrigerated (liquids) or frozen (solids) upon receipt unless otherwise recommended by applicable methods. Solid samples are retained for 1 year from collection while liquid samples are retained until method recommended holding times elapse.

TOTAL/DISSOLVED FRACTION: In some instances, the results for the dissolved fraction may be higher than the total fraction for a particular analyte (e.g. trace metals). This is typically caused by the analytical variation for each result and indicates that the target analyte is primarily in the dissolved phase, within the sample.

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PHYSIS QUALIFIER CODES

CODE	DEFINITION
#	see Case Narrative
ND	analyte not detected at or above the MDL
В	analyte was detected in the procedural blank greater than 10 times the MDL
Е	analyte concentration exceeds the upper limit of the linear calibration range, reported value is estimated
Н	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.

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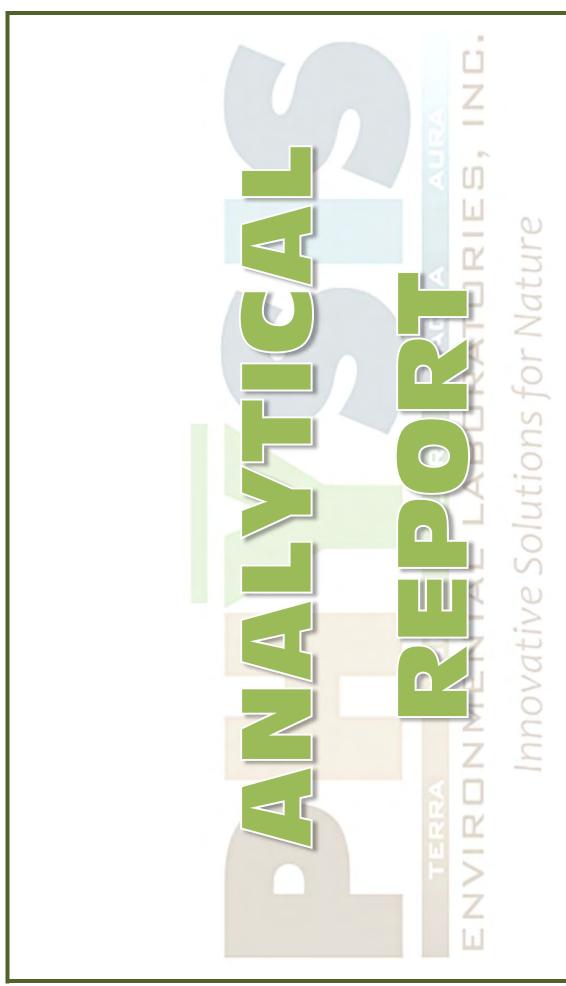
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11/22/2023



Project: RED-HILL Project # 38001111 Job # 380-61968-1

Innovative Solutions for Nature

Base/Neutral Extractable Compounds											
ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 110864-R1 AIEA WELLS PUMPS 1&2 (260) 331- Matrix: Samplewater Sampled: 05-Sep-23 11:13 Received: 08-Sep-									08-Sep-23		
Disalicylidenepropanediamine	EPA 625.1	μg/L	ND	1	0.05	0.1	Total		0-42086	12-Sep-23	15-Oct-23
Sample ID: 110865-R1 AIEA GULCH WELLS PUMP 2 331-20 Matrix: Samplewater Sampled: 05-Sep-23 10:27 Received: 08-Sep-23										08-Sep-23	
					•		Total		•	<u> </u>	<u> </u>

11/22/2023



Project: RED-HILL Project # 38001111 Job # 380-61968-1

Polynuclear Aromatic Hydrocarbons

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ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE Batch ID	Date Processed	Date Analyzed
Sample ID: 110864-R1	AIEA WELLS PUMPS 18	k2 (260) 331- M	atrix: Sampl	ewate	r	_	Sampled:	05-Sep-23 11:13	Received:	08-Sep-23
(d10-Acenaphthene)	EPA 625.1	% Recovery	78	1			Total	O-42086	12-Sep-23	15-Oct-23
(d10-Phenanthrene)	EPA 625.1	% Recovery	84	1			Total	O-42086	12-Sep-23	15-Oct-23
(d12-Chrysene)	EPA 625.1	% Recovery	90	1			Total	O-42086	12-Sep-23	15-Oct-23
(d12-Perylene)	EPA 625.1	% Recovery	83	1			Total	O-42086	12-Sep-23	15-Oct-23
(d8-Naphthalene)	EPA 625.1	% Recovery	74	1			Total	O-42086	12-Sep-23	15-Oct-23
1-Methylnaphthalene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-42086	12-Sep-23	15-Oct-23
1-Methylphenanthrene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-42086	12-Sep-23	15-Oct-23
2,3,5-Trimethylnaphthalene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-42086	12-Sep-23	15-Oct-23
2,6-Dimethylnaphthalene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-42086	12-Sep-23	15-Oct-23
2-Methylnaphthalene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-42086	12-Sep-23	15-Oct-23
Acenaphthene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-42086	12-Sep-23	15-Oct-23
Acenaphthylene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-42086	12-Sep-23	15-Oct-23
Anthracene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	0-42086	12-Sep-23	15-Oct-23
Benz[a]anthracene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-42086	12-Sep-23	15-Oct-23
Benzo[a]pyrene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	0-42086	12-Sep-23	15-Oct-23
Benzo[b]fluoranthene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-42086	12-Sep-23	15-Oct-23
Benzo[e]pyrene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	0-42086	12-Sep-23	15-Oct-23
Benzo[g,h,i]perylene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-42086	12-Sep-23	15-Oct-23
Benzo[k]fluoranthene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-42086	12-Sep-23	15-Oct-23
Biphenyl	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-42086	12-Sep-23	15-Oct-23
Chrysene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	0-42086	12-Sep-23	15-Oct-23
Dibenz[a,h]anthracene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	0-42086	12-Sep-23	15-Oct-23
Dibenzo[a,l]pyrene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	0-42086	12-Sep-23	15-Oct-23
Dibenzothiophene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-42086	12-Sep-23	15-Oct-23
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Project: RED-HILL Project # 38001111 Job # 380-61968-1

Innovative Solutions for Nature

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-42086	12-Sep-23	15-Oct-23
Fluorene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	0-42086	12-Sep-23	15-Oct-23
Indeno[1,2,3-cd]pyrene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-42086	12-Sep-23	15-Oct-23
Naphthalene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-42086	12-Sep-23	15-Oct-23
Perylene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-42086	12-Sep-23	15-Oct-23
Phenanthrene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-42086	12-Sep-23	15-Oct-23
Pyrene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-42086	12-Sep-23	15-Oct-23

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11/22/2023



Project: RED-HILL Project # 38001111 Job # 380-61968-1

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Polynuclear Aromatic Hydrocarbons

ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE Batch ID	Date Processed	Date Analyzed
Sample ID: 110865-R1	AIEA GULCH WELLS PU	JMP 2 331-20 M	atrix: Sampl	ewate	•		Sampled:	05-Sep-23 10:27	Received:	08-Sep-23
(d10-Acenaphthene)	EPA 625.1	% Recovery	65	1			Total	0-42086	12-Sep-23	15-Oct-23
(d10-Phenanthrene)	EPA 625.1	% Recovery	71	1			Total	0-42086	12-Sep-23	15-Oct-23
(d12-Chrysene)	EPA 625.1	% Recovery	82	1			Total	0-42086	12-Sep-23	15-Oct-23
(d12-Perylene)	EPA 625.1	% Recovery	83	1			Total	0-42086	12-Sep-23	15-Oct-23
(d8-Naphthalene)	EPA 625.1	% Recovery	59	1			Total	O-42086	12-Sep-23	15-Oct-23
1-Methylnaphthalene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-42086	12-Sep-23	15-Oct-23
1-Methylphenanthrene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-42086	12-Sep-23	15-Oct-23
2,3,5-Trimethylnaphthalene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-42086	12-Sep-23	15-Oct-23
2,6-Dimethylnaphthalene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-42086	12-Sep-23	15-Oct-23
2-Methylnaphthalene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-42086	12-Sep-23	15-Oct-23
Acenaphthene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-42086	12-Sep-23	15-Oct-23
Acenaphthylene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	0-42086	12-Sep-23	15-Oct-23
Anthracene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-42086	12-Sep-23	15-Oct-23
Benz[a]anthracene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-42086	12-Sep-23	15-Oct-23
Benzo[a]pyrene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-42086	12-Sep-23	15-Oct-23
Benzo[b]fluoranthene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	0-42086	12-Sep-23	15-Oct-23
Benzo[e]pyrene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-42086	12-Sep-23	15-Oct-23
Benzo[g,h,i]perylene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	0-42086	12-Sep-23	15-Oct-23
Benzo[k]fluoranthene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	0-42086	12-Sep-23	15-Oct-23
Biphenyl	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	0-42086	12-Sep-23	15-Oct-23
Chrysene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-42086	12-Sep-23	15-Oct-23
Dibenz[a,h]anthracene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-42086	12-Sep-23	15-Oct-23
Dibenzo[a,l]pyrene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-42086	12-Sep-23	15-Oct-23
Dibenzothiophene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-42086	12-Sep-23	15-Oct-23

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Project: RED-HILL Project # 38001111 Job # 380-61968-1

Innovative Solutions for Nature

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-42086	12-Sep-23	15-Oct-23
Fluorene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-42086	12-Sep-23	15-Oct-23
Indeno[1,2,3-cd]pyrene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-42086	12-Sep-23	15-Oct-23
Naphthalene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	0-42086	12-Sep-23	15-Oct-23
Perylene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-42086	12-Sep-23	15-Oct-23
Phenanthrene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-42086	12-Sep-23	15-Oct-23
Pyrene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-42086	12-Sep-23	15-Oct-23

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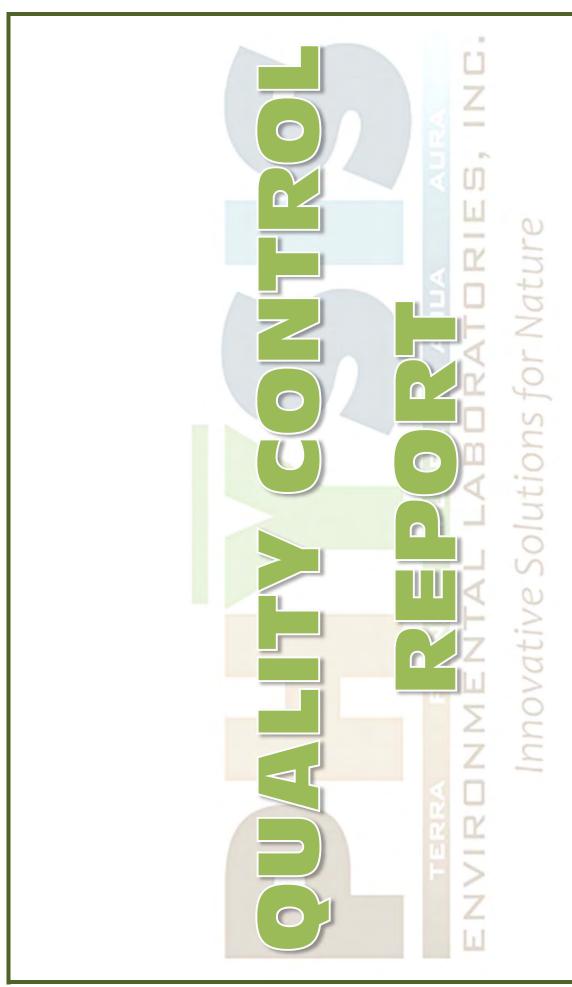
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Innovative Solutions for Nature

PHYSIS Project ID: 1407003-444 **Client: Eurofins Eaton Analytical**

Project: RED-HILL Project # 38001111 Job # 380-61968-1

Base/Neutral Extractable Compounds

OUALITY CONTROL REPORT

	,	0. 0. .				٦٦	o a i i a i			7					
ANALYTE	FRACT	ION	RESULT	DF	MDL	RL	UNITS	SPIKE	SOURCE		ACCURACY		PREC	ISION	QA CODEc
								LEVEL	RESUL	Г %	LIMITS	9	%	LIMITS	
Sample ID: 110863	3-B1	QAQC	Procedura	al Blar	nk		Matrix:	BlankMatri	x Sa	mpled:			Rec	eived:	
		Method	d: EPA 625.1				Batch ID:	0-42086	1	Prepared:	12-Sep-23		Ar	alyzed: 14	-Oct-23
Disalicylidenepropanediamine	Total	١	ND	1	0.05	0.1	μg/L								
Sample ID: 110863	-BS1	QAQC	Procedura	al Blar	nk		Matrix:	BlankMatri	x Sa	mpled:			Rec	eived:	
Sample ID: 110863	-BS1		Procedura	al Blar	nk		Matrix: Batch ID:			mpled:	12-Sep-23			eived: nalyzed: 14	-Oct-23
Sample ID: 110863 Disalicylidenepropanediamine	3-BS1 Total			al Blar	nk 0.05	0.1				•	12-Sep-23 50 - 150% P	ASS			-Oct-23
<u> </u>	Total	Method	d: EPA 625.1	1	0.05	0.1	Batch ID: µg/L	O-42086	0	Prepared:	, ,	ASS	Ar		-Oct-23
Disalicylidenepropanediamine	Total	Method	d: EPA 625.1 43.5	1	0.05	0.1	Batch ID: µg/L	O-42086 50 BlankMatri	0 x S a	Prepared: 6	50 - 150% P	ASS	Ar	nalyzed: 14	

11/22/2023



ACCURACY

Project: RED-HILL Project # 38001111 Job # 380-61968-1

Innovative Solutions for Nature

FRACTION

ANALYTE

Polynuclear Aromatic Hydrocarbons

RESULT DF MDL

RL

UNITS

SPIKE SOURCE

QUALITY CONTROL REPORT

PRECISION

							LEVEL	RESULT	%	LIMITS	% LIMITS
Sample ID: 110863	-B1 Q/	AQC Procedu	ıral Blank			Matrix: Bla	nkMatrix	Samı	pled:		Received:
	M	ethod: EPA 625	.1			Batch ID: O-42	2086	Prep	pared: 1	2-Sep-23	Analyzed: 14-Oct-23
(d10-Acenaphthene)	Total	85	1			% Recovery	100		85	27 - 133% PASS	
(d10-Phenanthrene)	Total	89	1			% Recovery	100		89	43 - 129% PASS	
(d12-Chrysene)	Total	88	1			% Recovery	100		88	52 - 144% PASS	
(d12-Perylene)	Total	94	1			% Recovery	100		94	36 - 161% PASS	
(d8-Naphthalene)	Total	85	1			% Recovery	100		85	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					

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QA CODEc

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Project: RED-HILL Project # 38001111 Job # 380-61968-1

Innovative Solutions for Nature

Pol	ynuclear	Aroma	itic	Hydr	ocarl	bons		Q	UAL	ITY CO	NTROL	REPO	RT
ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE	SOURCE	A	CCURACY	PRE	CISION	QA CODEc
							LEVEL	RESULT	%	LIMITS	%	LIMITS	
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							

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ACCURACY

Project: RED-HILL Project # 38001111 Job # 380-61968-1

Innovative Solutions for Nature

FRACTION

ANALYTE

Polynuclear Aromatic Hydrocarbons

RESULT DF MDL

QUALITY CONTROL REPORT

PRECISION

							LEVEL	RESULT	%	LIMITS	%	LIMITS
Sample ID: 110863	-BS1 QA	AQC Procedura	l Blank			Matrix: Bla	nkMatrix	s Sam	pled:		F	Received:
	Me	ethod: EPA 625.1				Batch ID: O-4	2086	Pre	pared: 1	2-Sep-23		Analyzed: 14-Oct-23
(d10-Acenaphthene)	Total	89	1			% Recovery	100	0	89	27 - 133% PASS		
(d10-Phenanthrene)	Total	96	1			% Recovery	100	0	96	43 - 129% PASS		
(d12-Chrysene)	Total	93	1			% Recovery	100	0	93	52 - 144% PASS		
(d12-Perylene)	Total	90	1			% Recovery	100	0	90	36 - 161% PASS		
(d8-Naphthalene)	Total	83	1			% Recovery	100	0	83	25 - 125% PASS		
1-Methylnaphthalene	Total	0.447	1	0.001	0.005	μg/L	0.5	0	89	31 - 128% PASS		
1-Methylphenanthrene	Total	0.45	1	0.001	0.005	μg/L	0.5	0	90	66 - 127% PASS		
2,3,5-Trimethylnaphthalene	Total	0.446	1	0.001	0.005	μg/L	0.5	0	89	55 - 122% PASS		
2,6-Dimethylnaphthalene	Total	0.442	1	0.001	0.005	μg/L	0.5	0	88	48 - 120% PASS		
2-Methylnaphthalene	Total	0.427	1	0.001	0.005	μg/L	0.5	0	85	47 - 130% PASS		
Acenaphthene	Total	0.45	1	0.001	0.005	μg/L	0.5	0	90	53 - 131% PASS		
Acenaphthylene	Total	0.458	1	0.001	0.005	μg/L	0.5	0	92	43 - 140% PASS		
Anthracene	Total	0.456	1	0.001	0.005	μg/L	0.5	0	91	58 - 135% PASS		
Benz[a]anthracene	Total	0.531	1	0.001	0.005	μg/L	0.5	0	106	55 - 145% PASS		
Benzo[a]pyrene	Total	0.467	1	0.001	0.005	μg/L	0.5	0	93	51 - 143% PASS		
Benzo[b]fluoranthene	Total	0.516	1	0.001	0.005	μg/L	0.5	0	103	46 - 165% PASS		
Benzo[e]pyrene	Total	0.422	1	0.001	0.005	μg/L	0.5	0	84	42 - 152% PASS		
Benzo[g,h,i]perylene	Total	0.473	1	0.001	0.005	μg/L	0.5	0	95	63 - 133% PASS		
Benzo[k]fluoranthene	Total	0.46	1	0.001	0.005	μg/L	0.5	0	92	56 - 145% PASS		
Biphenyl	Total	0.452	1	0.001	0.005	μg/L	0.5	0	90	56 - 119% PASS		
Chrysene	Total	0.394	1	0.001	0.005	μg/L	0.5	0	79	56 - 141% PASS		
Dibenz[a,h]anthracene	Total	0.531	1	0.001	0.005	μg/L	0.5	0	106	55 - 150% PASS		
Dibenzo[a,I]pyrene	Total	0.29	1	0.001	0.005	μg/L	0.5	0	58	50 - 150% PASS		

UNITS

SPIKE SOURCE

1904 E. Wright Circle, Anaheim CA 92806

main: (714) 602-5320

fax: (714) 602-5321

www.physislabs.com

info@physislabs.com

CA ELAP #2769

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11/22/2023

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QA CODEc

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Project: RED-HILL Project # 38001111 Job # 380-61968-1

Innovative Solutions for Nature

RT	REPO	ROL	ONT	ALITY C	QUA	(bons	ocar	Hydr	itic	Aroma	nuclear <i>i</i>	Poly
QA CODEc	ECISION	PRE		ACCURACY		SOURCE	SPIKE	UNITS	RL	MDL	DF	RESULT	FRACTION	ANALYTE
	LIMITS	%	5	LIMITS	%	RESULT	LEVEL							
			PASS	46 - 126%	94	0	0.5	μg/L	0.005	0.001	1	0.468	Total	Dibenzothiophene
			PASS	60 - 146%	91	0	0.5	μg/L	0.005	0.001	1	0.454	Total	Fluoranthene
			PASS	58 - 131%	90	0	0.5	μg/L	0.005	0.001	1	0.451	Total	Fluorene
			PASS	50 - 151%	101	0	0.5	μg/L	0.005	0.001	1	0.505	Total	Indeno[1,2,3-cd]pyrene
			PASS	41 - 126%	84	0	0.5	μg/L	0.005	0.001	1	0.42	Total	Naphthalene
			PASS	48 - 141%	97	0	0.5	μg/L	0.005	0.001	1	0.487	Total	Perylene
			PASS	67 - 127%	92	0	0.5	μg/L	0.005	0.001	1	0.461	Total	Phenanthrene
			PASS	54 - 156%	89	0	0.5	μg/L	0.005	0.001	1	0.447	Total	Pyrene
			PASS PASS PASS	41 - 126% 48 - 141% 67 - 127%	84 97 92	0 0	0.5 0.5 0.5	μg/L μg/L μg/L	0.005 0.005 0.005	0.001 0.001 0.001	1 1 1 1	0.42 0.487 0.461	Total Total Total	Naphthalene Perylene Phenanthrene

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Project: RED-HILL Project # 38001111 Job # 380-61968-1

Innovative Solutions for Nature

Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

ANALYTE	FRACTI	ON RESULT	DF	MDL	RL	UNITS	SPIKE	SOURCE		ACCURACY	PR	ECISION	QA CODEc
							LEVEL	RESULT	%	LIMITS	%	LIMITS	
Sample ID: 11086	3-BS2	QAQC Procedura	al Blar	nk		Matrix: Bla	nkMatri	x Sam	pled:		R	eceived:	
		Method: EPA 625.1				Batch ID: O-4	2086	Pre	pared:	12-Sep-23		Analyzed: 14-	Oct-23
(d10-Acenaphthene)	Total	89	1			% Recovery	100	0	89	27 - 133% PASS	0	30 PASS	
(d10-Phenanthrene)	Total	95	1			% Recovery	100	0	95	43 - 129% PASS	1	30 PASS	
(d12-Chrysene)	Total	93	1			% Recovery	100	0	93	52 - 144% PASS	0	30 PASS	
(d12-Perylene)	Total	90	1			% Recovery	100	0	90	36 - 161% PASS	0	30 PASS	
(d8-Naphthalene)	Total	82	1			% Recovery	100	0	82	25 - 125% PASS	1	30 PASS	
1-Methylnaphthalene	Total	0.408	1	0.001	0.005	μg/L	0.5	0	82	31 - 128% PASS	8	30 PASS	
1-Methylphenanthrene	Total	0.442	1	0.001	0.005	μg/L	0.5	0	88	66 - 127% PASS	2	30 PASS	
2,3,5-Trimethylnaphthalene	Total	0.441	1	0.001	0.005	μg/L	0.5	0	88	55 - 122% PASS	1	30 PASS	
2,6-Dimethylnaphthalene	Total	0.431	1	0.001	0.005	μg/L	0.5	0	86	48 - 120% PASS	2	30 PASS	
2-Methylnaphthalene	Total	0.417	1	0.001	0.005	μg/L	0.5	0	83	47 - 130% PASS	2	30 PASS	
Acenaphthene	Total	0.435	1	0.001	0.005	μg/L	0.5	0	87	53 - 131% PASS	3	30 PASS	
Acenaphthylene	Total	0.429	1	0.001	0.005	μg/L	0.5	0	86	43 - 140% PASS	7	30 PASS	
Anthracene	Total	0.437	1	0.001	0.005	μg/L	0.5	0	87	58 - 135% PASS	4	30 PASS	
Benz[a]anthracene	Total	0.529	1	0.001	0.005	μg/L	0.5	0	106	55 - 145% PASS	0	30 PASS	
Benzo[a]pyrene	Total	0.479	1	0.001	0.005	μg/L	0.5	0	96	51 - 143% PASS	3	30 PASS	
Benzo[b]fluoranthene	Total	0.517	1	0.001	0.005	μg/L	0.5	0	103	46 - 165% PASS	0	30 PASS	
Benzo[e]pyrene	Total	0.416	1	0.001	0.005	μg/L	0.5	0	83	42 - 152% PASS	1	30 PASS	
Benzo[g,h,i]perylene	Total	0.469	1	0.001	0.005	μg/L	0.5	0	94	63 - 133% PASS	1	30 PASS	
Benzo[k]fluoranthene	Total	0.453	1	0.001	0.005	μg/L	0.5	0	91	56 - 145% PASS	1	30 PASS	
Biphenyl	Total	0.443	1	0.001	0.005	μg/L	0.5	0	89	56 - 119% PASS	1	30 PASS	
Chrysene	Total	0.39	1	0.001	0.005	μg/L	0.5	0	78	56 - 141% PASS	1	30 PASS	
Dibenz[a,h]anthracene	Total	0.53	1	0.001	0.005	μg/L	0.5	0	106	55 - 150% PASS	0	30 PASS	
Dibenzo[a,l]pyrene	Total	0.298	1	0.001	0.005	μg/L	0.5	0	60	50 - 150% PASS	3	30 PASS	

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info@physislabs.com

CA ELAP #2769

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Project: RED-HILL Project # 38001111 Job # 380-61968-1

Innovative Solutions for Nature

Poly	ynuclear <i>i</i>	Aroma	itic	Hydro	ocar	bons		C	QUA	LITY CONT	ROL	. REPO	RT
ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE	SOURCE	4	ACCURACY	PR	ECISION	QA CODEc
							LEVEL	RESULT	%	LIMITS	%	LIMITS	
Dibenzothiophene	Total	0.449	1	0.001	0.005	μg/L	0.5	0	90	46 - 126% PASS	4	30 PASS	
Fluoranthene	Total	0.443	1	0.001	0.005	μg/L	0.5	0	89	60 - 146% PASS	2	30 PASS	
Fluorene	Total	0.444	1	0.001	0.005	μg/L	0.5	0	89	58 - 131% PASS	1	30 PASS	
Indeno[1,2,3-cd]pyrene	Total	0.501	1	0.001	0.005	μg/L	0.5	0	100	50 - 151% PASS	1	30 PASS	
Naphthalene	Total	0.412	1	0.001	0.005	μg/L	0.5	0	82	41 - 126% PASS	2	30 PASS	
Perylene	Total	0.484	1	0.001	0.005	μg/L	0.5	0	97	48 - 141% PASS	0	30 PASS	
Phenanthrene	Total	0.44	1	0.001	0.005	μg/L	0.5	0	88	67 - 127% PASS	4	30 PASS	
Pyrene	Total	0.442	1	0.001	0.005	μg/L	0.5	0	88	54 - 156% PASS	1	30 PASS	

11/22/2023



NMENTAL LABORATORIES, INC.

Innovative Solutions for Nature

Sample ID: 110864

	Retention	Area (% of	Concentration			Match Quality
	Time	total)	(ng/L)	Library/ID	Cas Number	(%)
	32.8594	3.0285	1111	Anthracene-D10	1517-22-2	96
Ī	10.0378	2.6643	977	Oxalic acid, cyclohexyl pentyl ester	1000309-30-6	91

Concentration estimated using the response for Anthracene-d10

Sample ID: 110865

	Area				
Retention	(% of	Concentration			Match Quality
Time	total)	(ng/L)	Library/ID	Cas Number	(%)
33.2875	7.3867	1111	Anthracene-D10	1517-22-2	92
10.0396	2.7996	421	Oxalic acid, cyclohexyl ethyl ester	1000309-30-2	92

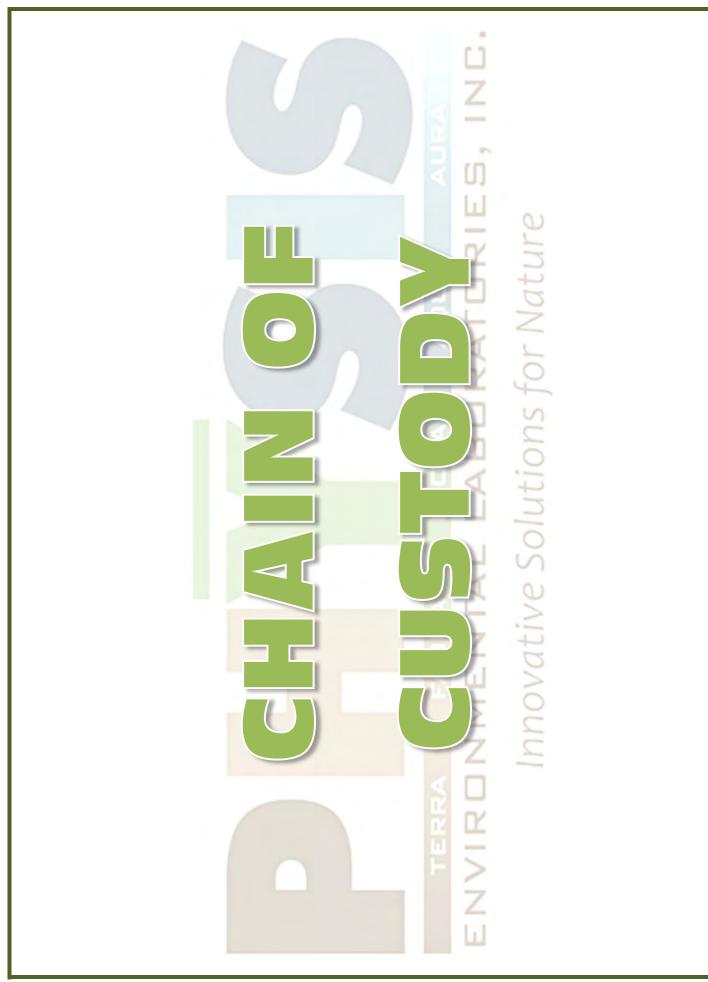
Concentration estimated using the response for Anthracene-d10

Sample ID: Lab Blank B1_42086

	Area				
Retention	(% of	Concentration			Match Quality
Time	total)	(ng/L)	Library/ID	Cas Number	(%)
33.3089	5.9312	1111	Anthracene-D10-	1517-22-2	94
10.0410	2.4414	457	Oxalic acid, cyclohexyl pentyl ester	1000309-30-6	91

Concentration estimated using the response for Anthracene-d10

. .



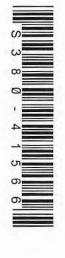
Chain of Custody Record

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Eurofins Eaton Analytical Pomona 941 Corporate Center Drive Pomona, CA 91768-2642	0	Chain of Custody Record	f Cust	ody Re	cord			TOTAL CONTINUES LOCAL		•	🔆 eurofins	Environment Testing
Client Information (Sub Contract Lab)	Sampler:			Lab PM: Arada,	Lab PM: Arada, Rachelle			Carrier Tr	Carrier Tracking No(s):		COC No: 380-76339,1	
	Phone:			E-Mail: Rache	elle.Arada@	et.eurofins	us.com	State of Origin: Hawaii	Origin:		Page: Page 1 of 1	
Company: Physis Environmental Laboratories				(0.)	ccreditations State - Haw	Accreditations Required (See not State - Hawaii	note):				Job#: 380-61968-1	
Address: 1904 Wright Circle,	Due Date Requested: 9/19/2023	ă.					alysis	Requested	<u>.</u>		Preservation Codes:	M - Hexane
City: Anaheim	TAT Requested (days):	lys):									B - NaOH C - Zn Acetate	N-None O-AsNaO2
State, Zip: CA, 92806					5 PAH					V Diese	D - Nitric Acid	Q-Na2SO3 R-Na2S2O3
Phone:	PO#										G - Amehlor	S - H2SO4 T - TSP Dodecahydrate
Email:	WO #:				lo)					5	I - Ice J - DI Water	V - MCAA W - nH 4-5
Project Name: RED-HILL	Project #: 38001111				s or l	-				italnei	L-EDA	Y - Trizma Z - other (specify)
Site: Honolulu BWS Sites	SSOW#:				SD (Y					of co	Other:	
			Sample		MS/M FPAH P L (EAL)				_	umber		
		0	(C=comp,	S=solid, Carwasta/oil,	erforn JB (62					otal N		
Sample Identification - Cheff (C. Cap. 17)	Vallibra Date	X	Preservation Code:		X					X:		
AIEA WELLS PUMPS 1&2 (260) (331-203-TP400) (380-61968-1)	9/5/23	11:13 Hawaiian		Water	×					2	See Attached Instructions	structions
AIEA GULCH WELLS PUMP 2 (331-202-TP072) (380-61968-2)	9/5/23	10:27 Hawaiian		Water	×					2	See Attached Instructions	structions
Note: Since laboratory accreditations are subject to change, Eurofins Eaton Analytical, LLC places the ownership of method, analyte & accreditation compliance upon our subconfract 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 attenting to said compliance to Eurofins Eaton Analytical, LLC.	ytical, LLC places the sts/matrix being analyzons are current to date	ownership of me ed, the samples , return the signa	thod, analyte 8 must be shipp ad Chain of Cu	accreditation of ed back to the I stody attesting	compliance upo Eurofins Eaton to said complia	on our subconte Analytical, LLC ance to Eurofin	ract laboratorion laboratory or seaton Analytics	es. This sample other instruction tical, LLC.	e shipment is fo ons will be prov	orwarded unde ided. Any char	r chain-of-custody. It iges to accreditation	f the laboratory does not status should be brought to
Possible Hazard Identification					Sample	le Disposal (Af	A fee may	Disposal By Lab	d if sample:	s are retain	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client Disposal By Lab Archive For Mon	1 month)
Deliverable Requested: I, II, III, IV, Other (specify)	Primary Deliverable Rank: 2	able Rank: 2			Special	Special Instructions/QC	QC Requirements:	ments:				
Empty Kit Relinquished by:		Date:			Time:			Me	Method of Shipment:	nt		
Relinquished by: Relinquished by:	Date/Time:	105	8	Company Company	Recei	Received by:	ng		Date/Time:	8/23	1059	Company S
Relinquished by:	Date/Time:		0	Company	Recei	Received by:			Date/Time	ime:		Company
Custody Seals Intact: Custody Seal No.:					Coole	Cooler Temperature(s) °C and Other Remarks:	s) °C and Othe	er Remarks:			#5 # 45 # 5 # 7 # 7 # 7	J. C.
												Ver: 06/08/2021

Shipping Order Form





eurofins

Ship To Information

Project Manager:

Attention:

Company Name: Physis Environmental Laboratories

Shipping/Receiving

Eurofins Eaton Analytical Pomona

11/22/2023

Ship Via: Lab Courier (UNASSIGNED)

Shipping Order ID: 41566

Environment Testing

941 Corporate Center Drive Pomona, CA 91768-2642 Phone (626) 386-1100

Due On: 9/8/2023 11:59:00PM

Shipping Method: Standard packing

☐ Preprinted COC

Number of COC Copies

☐ Return Shipment Labels ☐ Prepaid Return

☐ Short Hold Times Eurofins Eaton Analytical Pomona

☑ Temperature Control ☐ Rush

Please notify your PM immediately if an error is found in shipment. When returning samples, please return all provided QC samples.

Bottle Order Information

Bottle Order #:

Bottle Order:

Request From Client: 9/8/2023

Printed on 9/8/2023 8:06:07AM Order Completion Information

13 14 15

Filled by: Sent Date:

Sent Via:

Creator: Gustavo Sanchez Velasquez

Tracking #:

No

PWSID:

Lab Project Number: Deliver By Date: Prepared By: Order Status: Date Order Posted:

9/8/2023 11:59:00PM

Ready To Process

sampler instructions Scan QR code for field

Method	Method Matrix Sample Type
2000	\ <u>*</u>

	Relinquished By	Reiniquisned by
	Company	Company
	Date	Cale
	Time	Ilme
	Received By	Received By
	Company	Company
Seal #:	Seal #	Seal #

Please notify your PM immediately if an error is found in shipment. When returning samples, please return all provided QC samples.



Sample Receipt Summary

Client Name:

Project Iteration ID: 1407003-444

Eurofins Eaton Analytical

Project Name:

RED-HILL Project # 38001111 Job

380-61968-1

COC Page Number: 5 of 5 Bottle Label Color: NA

Receiving Info	Bottle Label Color: NA	
Initials Received By:		
2. Date Received: 9/8/23		
3. Time Received: 1059		
4. Client Name: &UVOfin?		
5. Courier Information: (Please circle)		4-
• Client • UPS	 Area Fast 	 DRS
 FedEx GSO/GLS 	 Ontrac 	 PAMS
PHYSIS Driver:		
i. Start Time:	iii. Total	Mileage:
ii. End Time:		per of Pickups:
6. Container Information: (Please put the #	of containers or circle none)	
• <u>1</u> Cooler •Styrofoam Co	ooler • Boxes	 None
 Carboy(s) Carboy Trash 		 Other
7. What type of ice was used: (Please circle	any that apply)	
	Dry Ice Water	 None
8. Randomly Selected Samples Temperatur	re (°C): <u>0 . \</u> Used I/R Theri	mometer # 1 - 2
Inspection Info		
Initials Inspected By:		
Sample Integrity Upon Receipt:		
1. COC(s) included and completely filled ou	t Yes	· / No
2. All sample containers arrived intact) / No
All samples listed on COC(s) are present.		
Information on containers consistent wit		
Correct containers and volume for all and	7	
6. All samples received within method hold	/-	1
7. Correct preservation used for all analyse		
8. Name of sampler included on COC(s)	Yes	/ (No)
	Notes:	
	14	
10		

P:\Sample Logistics (SL)\SRS

Page 1 of 1

Chain of Custody Record

Monrovia, CA (Suite 100) 750 Royal Oaks Drive Suite 100

Monrovia CA 91016 Phone (626) 386-1100

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🕻 eurofins

	Sampler Control	1		Lab PM						Carrier	Carrier Tracking No(s)		COC No		
Client Information		Ž		Arada	Arada, Rachelle	elle							380-27941-2757	-2757 2	
Client Contact Dr. Ron Fenstermacher	Phone 808-748-5840			Rach Rach	elle Ara	E-Mail Rachelle Arada@et euronisus com	euronis	us con	CI	State of Origin	Jugin		Page Page 1 of 2	2	
Company City & County of Honolulu			PWSID					Anal	/sis R	Analysis Requested	70		# qor		
Address 630 South Beretania Street, Chemistry Lab	Due Date Requested	p											Preservation Codes	des	- Hexane
City Honolulu	TAT Requested (days)	ys)					بد ۱۱۵	(A - HCL B - NaOH C - Zn Acetate		ne VaO2
State, Zip HI, 96843	Compliance Project	t A No					otoM b	JA3) -					D - Nitric Aci		2503 25203
Phone 808-748-5091 (tel)	PO# C20525101 exp 05312023	05312023			10								G - Amchlor H - Ascorbic		S - H2SO4 T - TSP Dodecahydrate
Email frenstemacher@hbws org	.# OM								ţsi_l						stone AA 14-5
Project Name RED-HILL/HBWS sites Event Desc: RUSH Weekly Red Hill	Project #: 38001111								liu3 t						Y - Trizma Z - other (specify)
Site	#MOSS								763 - O	Se			of coi		
Sample Identification	Sample Date	Sample	Sample Type (C=comp, G=qrab) BT	Matrix (W=water S=solid O=waste/oil BT=Tissue, A=Air)	Field Filtered : Perform MS/M	roartnooeus roartnooeus	roartnooaus	S25 2_PREC (A	BA9_NO_1 788	533 - All Analyte			Total Mumber	Special Instructions/Note:	ons/Note:
	\bigvee	\bigvee	Ø			├	\$	₽	_	z				$\bigg \bigg $	
AIEA WELLS PUMPS $1\&2~(260)$ PZ	5-Sep-2023	5	đ	Water		2	7	2 4							
AIEA GULCH WELLS PUMP2	5-Sep-2023	17201	ð	Water		7	7	2 4							
					ļ										
											***** T	20			
												4			
TB AIEA WELLS PUMPS 1&2 (260)	5-Sep-2023	<u>5</u>		Water				7			380-(380-61968 COC	O		
TB AIEA GULCH WELLS PUMP2	5-Sep-2023	1201		Water				7			-				
Possible Hazard Identification Non-Hazard Flammable Skin Imtant Pols	Poison B Unknown		Radiological		Sam	ple Dis	Ie Disposal (At Retum To Client	A fee	may b	e assessed if sam Disposal By Lab	d if sample By Lab	s are ret	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client Disposal By Lab Archive For Mon	han 1 month Mo	nth) Months
ested I, II, III, IV, Other (specify)					Spec	Special Instructions/QC Requirements	ructions	JOC R	eduirer	i			677	7733 2749	13751
Empty Kit Relinquished by		Date			Time	F		1		Me	Method of Shipment.		50 CJ7	733 2749	93762
Reinquished by DALLEY	Date/Lime October 22	223	3 1	Company HBWS	T.	Received		6	1 .	JEINER.		l m	12023 10.40	Company FO EETH	ony The
Relinquished by	Date/Time		ŭ	Сотрапу		Received by	ρλ		1			Time	Ì		אטו
Relinquished by	Date/Time		3	Company	A.E.	Received by	λą				Date/Time	Time		Company	ıny
Custody Seals Intact. Custody Seal No						Sooler Ter	mperatur (e(s) °C a	nd Other	Cooler Temperature(s) °C and Other Remarks (**	1514)	01.1°	0.20.	40	
				L		1	1		1	1				Ver 0	Ver 01/16/2019

Rost

Company

(2) 2.6° 6.2° -2.4°

Cooler Temperature(s) °C and Other Remarks ごぜし「アシンごう(コジル

Chain of Custody Record

Monrovia, CA (Suite 100)

750 Royal Oaks Drive Suite 100

Monrovia CA 91016 Phone (626) 386-1100

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Carner Tracking No(s)

N - None
O - AsNaO2
O - AsNaO2
Q - Na2SO3
R - Na2SO3
S - H2SO4
T - TSP Dodecahydrate

Z - other (specify)

U - Acetone V - MCAA W - pH 4-5 Y - Tnzma

Method of Shipment, FED & (2) 7733 2749 3762 13733 2749 3751 Special Instructions/Note. Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Mont COC No 380-27941-2757 2 Preservation Code: A - HCL
B - NaOH
C - Zn Acetate
D - Nitro Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid 10.40 Page 2 of 2 J - DI Water K EDTA L - EDA Page 09/03/2023 Total Number of containers Date/Time State of Origin Analysis Requested CPETIVER Special Instructions/QC Requirements Z 3 3 533 - All Analytes 3 237 1_DW_PREC - 537 1 Full List E-Mail Rachelle Arada@et euronisus com S SUBCONTRACT - 8015 Gas (Purgeable) LL (EAL) SSE S_PREC - (MOD) ESEplus PLUS TICS SUBCONTRACT - 8915 Diesel LL (EAL) and Motor Oil SUBCONTRACT - 8015 Gas (Purgable) LL (EAL) Received Lab PM Arada, Rachelle SUBCONTRACT - 625 PAH Physis LL (EAL) + TICs Perform MS/MSD (Yes or No) Time Field Filtered Sample (Yes or No) BT=Tissue A=Air) (W=water S=solid O=waste/oli, Preservation Code Water Water Water Water Company Company Company HBWS Radiological G=grab) (C=comp, Sample Type J PWSID (1) PO# C20525101 exp 05312023 Sample 138 108 5 Time 6 Date/Time CONTRACTORS Date な言う Unknown FAT Requested (days) Due Date Requested Sompliance Project Sample Date 808-748-5840 5-Sep-2023 5-Sep-2023 5-Sep-2023 5-Sep-2023 Project #* 38001111 Date/Time #MOSS # O/V Poison B RED-HILL/HBWS sites Event Desc RUSH Weekly Red Hill Skin Irritant AIEA WELLS PUMPS 1&2(260)Deliverable Requested 1 II, III, IV, Other (specify) FB AIEA WELLS PUMPS 1&2 (260) FB AIEA GULCH WELLS PUMP2 630 South Beretania Street, Chemistry Lab AIEA GULCH WELLS PUMP2 AND Ka paysinbulles Empty Kit Relinquished by fenstemacher@hbws org City & County of Honolulu Client Information Dr Ron Fenstermacher Sample Identification 808-748-5091 (tel) linquished by singuished by State Zip HI, 96843 Honolulu

Custody Seal No

Custody Seals Intact △ Yes △ No

567

Printed on 8/21/2023 1:59:22PM

13 14 15

11/22/2023

Field Blank Field Blank Field Blank Field Blank Trip Blank Normal Normal Normal Normal Normal Water 525.2_PREC - (MOD) 525plus Plus 537.1_DW_PREC - 537.1 Full List SUBCONTRACT - 8015 Diesel LL (EAL) and Motor Oil SUBCONTRACT - 8015 Gas (Purgeable) LL (EAL) SUBCONTRACT - 8015 Gas (Purgeable) LL (EAL) 533 - All Analytes Sodium Thiosulfate/H ydrochloric Acid Sodium Thiosufate/H ydrochloric Sodium Sulfite w/HCI Thiosulfate Sodium Thiosulfate Ammonium Ammonium Trizma Trizma Acetate None Acetate None Acid

Plastic 250ml - Reagent Water

Plastic 250ml - Trizma

rs D

2

Plastic 250ml - Reagent Water

Plastic 250ml - Ammonlum

e e

O O

Acetate

Plastic 250ml - Ammonium

15

15

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2 2

Plastic 250ml - Trizma

29

Sample Type

Order Completion Information

Michelle Do

Creator: Filled by:

RUSH RED-HILL WEEKLY

Sottle Order Information

7/20/2022 11:12:54AM

3/2/2023 2757

Request From Client: Date Order Posted:

Bottle Order #:

Bottle Order:

Ready To Process Davis Haley

Order Status: Prepared By:

8/23/2023 11:59:00PM

Lab Project Number: 38001111

PWSID.

Deliver By Date:

Tracking #:

Sent Date: Sent Via:

625 PAH Common

Normal

Water

SUBCONTRACT - 625 PAH Physis

Sodium

Amber Glass 1 liter - Sodium

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N

Thiosulfate

Bottle Type Description

3

Bottles/Set

4 Amber Glass 1 L - NaThiosulfate

œ

2

4

8ml HCL

Voa Vial 40ml - SodiumThio

9

4

w/HCLdropper

Amber Glass 1 Liter- Sodium

œ

N

4

Suffite/HCI

VOA Vial 40mL -NaThiosulfate/HCL

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8

Preserve

LL (EAL) + TICs

Please notify your PM Immediately if an error is found in shipment. When returning samples, please return all provided QC samples.

Page 3 of 4

Login Sample Receipt Checklist

Client: City & County of Honolulu Job Number: 380-61968-2

Login Number: 61968 List Source: Eurofins Eaton Analytical Pomona

List Number: 1

Creator: Segura, Ryan

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Samples do not require splitting or compositing.	True	
Container provided by EEA	True	

3

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5

7

9

4 4

12

15