ANALYTICAL REPORT

PREPARED FOR

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

JOB DESCRIPTION

Generated 9/9/2023 10:54:08 AM

RED-HILL

JOB NUMBER

380-54555-2

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

Eurofins Eaton Analytical Pomona

Job Notes

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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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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: 380-54555-2 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 MLMinimum 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)

TNTC Too Numerous To Count

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Case Narrative

Client: City & County of Honolulu

Job ID: 380-54555-2 Project/Site: RED-HILL

Job ID: 380-54555-2

Laboratory: Eurofins Eaton Analytical Pomona

Narrative

Job Narrative 380-54555-2

Comments

No additional comments.

Receipt

The samples were received on 7/12/2023 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.7° C.

Subcontract non-Sister

See attached subcontract report.

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.

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.

Detection Summary

Client: City & County of Honolulu Project/Site: RED-HILL	Job ID: 380-54555-2
Client Sample ID: AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Lab Sample ID: 380-54555-1
No Detections.	
Client Sample ID: AIEA WELLS PUMPS 1&2 (260) (331-203-TP400)	Lab Sample ID: 380-54555-2
No Detections.	
Client Sample ID: TB:AIEA GULCH WELLS P2 (331-202-TP072)	Lab Sample ID: 380-54555-7
No Detections.	
Client Sample ID: TB: AIEA WELLS PUMPS 1&2 (260) (331-203-TP400)	Lab Sample ID: 380-54555-8
No Detections.	

Client Sample Results

Client: City & County of Honolulu Job ID: 380-54555-2

Project/Site: RED-HILL

Client Sample ID: AIEA GULCH WELLS PUMP 2

(331-202-TP072)

Analyte

DIESEL

MOTOR OIL

JP5

JP8

Date Collected: 07/10/23 09:00 Matrix: Drinking Water

Date Received: 07/12/23 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 17:49	
1-Methylphenanthrene	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 17:49	1
2,3,5-Trimethylnaphthalene	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 17:49	1
2,6-Dimethylnaphthalene	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 17:49	1
2-Methylnaphthalene	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 17:49	1
Acenaphthene	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 17:49	1
Acenaphthylene	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 17:49	1
Anthracene	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 17:49	1
Benz[a]anthracene	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 17:49	1
Benzo[a]pyrene	ND		0.005	0.001			07/17/23 00:00	07/30/23 17:49	1
Benzo[b]fluoranthene	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 17:49	1
Benzo[e]pyrene	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 17:49	1
Benzo[g,h,i]perylene	ND		0.005	0.001	μg/L			07/30/23 17:49	1
Benzo[k]fluoranthene	ND		0.005	0.001	μg/L			07/30/23 17:49	1
Biphenyl	ND		0.005	0.001			07/17/23 00:00	07/30/23 17:49	1
Chrysene	ND		0.005	0.001			07/17/23 00:00	07/30/23 17:49	1
Dibenz[a,h]anthracene	ND		0.005	0.001	. •		07/17/23 00:00	07/30/23 17:49	1
Dibenzo[a,l]pyrene	ND		0.005		. •			07/30/23 17:49	1
Dibenzothiophene	ND		0.005	0.001			07/17/23 00:00	07/30/23 17:49	1
Disalicylidenepropanediamine	ND		0.1		μg/L		07/17/23 00:00	07/30/23 17:49	1
Fluoranthene	ND		0.005	0.001			07/17/23 00:00	07/30/23 17:49	1
Fluorene	ND		0.005	0.001			07/17/23 00:00	07/30/23 17:49	1
Indeno[1,2,3-cd]pyrene	ND		0.005	0.001			07/17/23 00:00	07/30/23 17:49	1
Naphthalene	ND		0.005	0.001			07/17/23 00:00	07/30/23 17:49	1
Perylene	ND		0.005	0.001			07/17/23 00:00	07/30/23 17:49	1
Phenanthrene	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 17:49	1
Pyrene	ND		0.005	0.001			07/17/23 00:00	07/30/23 17:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
(d10-Acenaphthene)	59		27 - 133				07/17/23 00:00	07/30/23 17:49	1
(d10-Phenanthrene)	92		43 - 129				07/17/23 00:00	07/30/23 17:49	1
(d12-Chrysene)	99		52 - 144				07/17/23 00:00	07/30/23 17:49	1
(d12-Perylene)	83		36 - 161				07/17/23 00:00	07/30/23 17:49	1
(d8-Naphthalene)	58		25 - 125				07/17/23 00:00	07/30/23 17:49	1
Method: 8015 Gas (Purgeal Analyte		SW846 80	15B Gasolin RL		Organio Unit	S D	Prepared	Analyzed	Dil Fac
GASOLINE	ND		0.02		mg/L			07/17/23 16:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
BROMOFLUOROBENZENE	81		60 - 140					07/17/23 16:49	1

RL

0.028

0.056

0.056

0.056

MDL Unit

mg/L

mg/L

mg/L

mg/L

Result Qualifier

ND U

ND U

ND U

ND U

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Analyzed

07/21/23 23:53

07/21/23 23:53

07/21/23 23:53

07/21/23 23:53

Dil Fac

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Prepared

2

Lab Sample ID: 380-54555-1

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Client Sample Results

Client: City & County of Honolulu

Project/Site: RED-HILL

Client Sample ID: AIEA GULCH WELLS PUMP 2

(331-202-TP072)

Date Collected: 07/10/23 09:00 Matrix: Drinking Water

Date Received: 07/12/23 10:00

Surrogate	%Recovery	Qualifier	Limits	Prepared Analyzed	Dil Fac
BROMOBENZENE	77		60 - 130	07/21/23 23:	53 1
HEXACOSANE	93		60 - 130	07/21/23 23:	53 1

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

(331-203-TP400)

Date Collected: 07/10/23 09:30 Matrix: Drinking Water

Date Received: 07/12/23 10:00

Method: 625 PAH Physis LL Analyte	- (EAL) + TICs - Result Q		ase/Neutra RL	I and Ad		Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.005	0.001	μg/L —	07/17/23 00:00	07/30/23 19:38	1
1-Methylphenanthrene	ND		0.005	0.001	μg/L	07/17/23 00:00	07/30/23 19:38	1
2,3,5-Trimethylnaphthalene	ND		0.005	0.001	μg/L	07/17/23 00:00	07/30/23 19:38	1
2,6-Dimethylnaphthalene	ND		0.005	0.001	μg/L	07/17/23 00:00	07/30/23 19:38	1
2-Methylnaphthalene	ND		0.005	0.001	μg/L	07/17/23 00:00	07/30/23 19:38	1
Acenaphthene	ND		0.005	0.001	μg/L	07/17/23 00:00	07/30/23 19:38	1
Acenaphthylene	ND		0.005	0.001	μg/L	07/17/23 00:00	07/30/23 19:38	1
Anthracene	ND		0.005	0.001	μg/L	07/17/23 00:00	07/30/23 19:38	1
Benz[a]anthracene	ND		0.005	0.001	μg/L	07/17/23 00:00	07/30/23 19:38	1
Benzo[a]pyrene	ND		0.005	0.001	μg/L	07/17/23 00:00	07/30/23 19:38	1
Benzo[b]fluoranthene	ND		0.005	0.001	μg/L	07/17/23 00:00	07/30/23 19:38	1
Benzo[e]pyrene	ND		0.005	0.001	μg/L	07/17/23 00:00	07/30/23 19:38	1
Benzo[g,h,i]perylene	ND		0.005	0.001	μg/L	07/17/23 00:00	07/30/23 19:38	1
Benzo[k]fluoranthene	ND		0.005	0.001	μg/L	07/17/23 00:00	07/30/23 19:38	1
Biphenyl	ND		0.005	0.001	μg/L	07/17/23 00:00	07/30/23 19:38	1
Chrysene	ND		0.005	0.001	μg/L	07/17/23 00:00	07/30/23 19:38	1
Dibenz[a,h]anthracene	ND		0.005	0.001	μg/L	07/17/23 00:00	07/30/23 19:38	1
Dibenzo[a,l]pyrene	ND		0.005	0.001	μg/L	07/17/23 00:00	07/30/23 19:38	1
Dibenzothiophene	ND		0.005	0.001	μg/L	07/17/23 00:00	07/30/23 19:38	1
Disalicylidenepropanediamine	ND		0.1	0.05	μg/L	07/17/23 00:00	07/30/23 19:38	1
Fluoranthene	ND		0.005	0.001	μg/L	07/17/23 00:00	07/30/23 19:38	1
Fluorene	ND		0.005	0.001	μg/L	07/17/23 00:00	07/30/23 19:38	1
Indeno[1,2,3-cd]pyrene	ND		0.005	0.001	μg/L	07/17/23 00:00	07/30/23 19:38	1
Naphthalene	ND		0.005	0.001	μg/L	07/17/23 00:00	07/30/23 19:38	1
Perylene	ND		0.005	0.001	μg/L	07/17/23 00:00	07/30/23 19:38	1
Phenanthrene	ND		0.005	0.001	μg/L	07/17/23 00:00	07/30/23 19:38	1
Pyrene	ND		0.005	0.001	μg/L	07/17/23 00:00	07/30/23 19:38	1
Surrogate	%Recovery Q	Qualifier	Limits			Prepared	Analyzed	Dil Fac
(d10-Acenaphthene)	60		27 - 133			07/17/23 00:00	07/30/23 19:38	1
(d10-Phenanthrene)	95		43 - 129			07/17/23 00:00	07/30/23 19:38	1
(d12-Chrysene)	97		52 - 144			07/17/23 00:00	07/30/23 19:38	1
(d12-Perylene)	81		36 - 161			07/17/23 00:00	07/30/23 19:38	1
(d8-Naphthalene)	61		25 - 125			07/17/23 00:00	07/30/23 19:38	1

Method: 8015 Gas (Purgeable)	LL (EAL) - :	577846 80	15B Gasoline	Range O	rganics				
Analyte	Result	Qualifier	RL	MDL Ur	nit	D	Prepared	Analyzed	Dil Fac
GASOLINE	ND	U	0.02	mọ	g/L			07/17/23 17:26	1

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Job ID: 380-54555-2

Lab Sample ID: 380-54555-1

Lab Sample ID: 380-54555-2

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Client Sample Results

Client: City & County of Honolulu

Project/Site: RED-HILL

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

(331-203-TP400)

Date Collected: 07/10/23 09:30 **Matrix: Drinking Water**

Date Received: 07/12/23 10:00

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
BROMOFLUOROBENZENE	79		60 - 140			-		07/17/23 17:26	1
Method: 8015 LL DRO/M	RO/JP5/JP8 - 80 ²	15 - TPH D	RO/ORO						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DIESEL	ND	U	0.027		mg/L			07/22/23 00:12	1
JP5	ND	U	0.054		mg/L			07/22/23 00:12	1
JP8	ND	U	0.054		mg/L			07/22/23 00:12	1
MOTOR OIL	ND	U	0.054		mg/L			07/22/23 00:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
BROMOBENZENE	72	- 	60 - 130			-		07/22/23 00:12	1

60 - 130

Client Sample ID: TB:AIEA GULCH WELLS P2 (331-202-TP072)

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Lab Sample ID: 380-54555-7

Lab Sample ID: 380-54555-8

07/22/23 00:12

Matrix: Water

Date Collected: 07/10/23 09:00 Date Received: 07/12/23 10:00

Method: 8015 Gas (Purgeable) LL (EAL) - SW846 8015B Gasoline Range Organics Analyte **MDL** Unit Result Qualifier RL D Analyzed Dil Fac Prepared GASOLINE $\overline{\mathsf{ND}}$ $\overline{\mathsf{U}}$ 0.02 mg/L 07/17/23 18:40 Surrogate Analyzed Dil Fac %Recovery Qualifier Limits Prepared BROMOFLUOROBENZENE 80 60 - 140 07/17/23 18:40

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

(331-203-TP400)

HEXACOSANE

Date Collected: 07/10/23 09:30 **Matrix: Water**

Date Received: 07/12/23 10:00

Method: 8015 Gas (Purgeable)	LL (EAL) -	SW846 80	15B Gasolin	ne Range	Organics	8			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GASOLINE	ND	U	0.02		mg/L			07/17/23 19:16	1
Surrogate BROMOFLUOROBENZENE	%Recovery	Qualifier	Limits 60 - 140				Prepared	Analyzed 07/17/23 19:16	Dil Fac

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Job ID: 380-54555-2

Lab Sample ID: 380-54555-2

Client: City & County of Honolulu

Project/Site: RED-HILL

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

Matrix: BlankMatrix Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Lim						
		Acenapht	Phenanth	CRY	NPT	PRY			
Lab Sample ID	Client Sample ID	(27-133)	(43-129)	(52-144)	(25-125)	(36-161)			
108340-B1	Method Blank	65	102	107	66	85			
108340-BS1	Lab Control Sample	58	80	96	60	79			
108340-BS2	Lab Control Sample Dup	68	92	107	69	88			
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

		Percent Surrogate Recovery (Acceptance Limits)						
		Acenapht	Phenanth	CRY	NPT	PRY		
Lab Sample ID	Client Sample ID	(27-133)	(43-129)	(52-144)	(25-125)	(36-161)		
380-54555-1	AIEA GULCH WELLS PUMP 2 (59	92	99	58	83		
380-54555-2	AIEA WELLS PUMPS 1&2 (260) (331-203-TP400)	60	95	97	61	81		

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	
Lab Sample ID	Client Sample ID	(60-140)	
380-54555-1	AIEA GULCH WELLS PUMP 2 (81	
380-54555-2	AIEA WELLS PUMPS 1&2 (260) (331-203-TP400)	79	
Surrogate Legend			
BFB = BROMOFLUORO	OBENZENE		

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

Matrix: Water Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)
		BFB	
Lab Sample ID	Client Sample ID	(60-140)	
380-54555-7	TB:AIEA GULCH WELLS P2 (33	80	
380-54555-8	TB: AIEA WELLS PUMPS 1&2 (260) (331-203-TP400)	78	
Surrogate Legend			
BFB = BROMOFLUOR	OBENZENE		

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Job ID: 380-54555-2

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Job ID: 380-54555-2

Percent Surrogate Recovery (Acceptance Limits)

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)

BFB

Lab Sample IDClient Sample ID23VG39G08BMethod Blank

Surrogate Legend

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
 (70-130)

 23VG39G08C
 LCD
 107

 23VG39G08L
 Lab Control Sample
 109

Surrogate Legend

BFB = BROMOFLUOROBENZENE

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

Matrix: Drinking Water Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits) BB XACOSA Lab Sample ID Client Sample ID (60-130)(60-130)380-54555-1 AIEA GULCH WELLS PUMP 2 (77 93 380-54555-2 AIEA WELLS PUMPS 1&2 (260) 72 89 (331-203-TP400)

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 ID23DSG024WBMethod Blank

Surrogate Legend

BB = BROMOBENZENE

HEXACOSANE = HEXACOSANE

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

Matrix: WATER Prep Type: Total/NA

			Percent	Percent Surrogate Recovery (A			
		ВВ	XACOSA				
Lab Sample ID	Client Sample ID	(60-130)	(60-130)				
23DSG024WC	LCD	73	98				
23DSG024WL	Lab Control Sample	68	91				
23J5G024WC	LCD	81	90				
23J5G024WL	Lab Control Sample	75	88				
23J8G024WC	LCD	96	90				

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9/9/2023

Surrogate Summary

Client: City & County of Honolulu Job ID: 380-54555-2

Project/Site: RED-HILL

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

Matrix: WATER Prep Type: Total/NA

			Percen	nt Surrogate Recovery (Acceptance Lin
		ВВ	XACOSAI	
Lab Sample ID	Client Sample ID	(60-130)	(60-130)	
23J8G024WL	Lab Control Sample		92	

Surrogate Legend

BB = BROMOBENZENE

HEXACOSANE = HEXACOSANE

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Job ID: 380-54555-2

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

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

Lab Sample ID: 108340-B1

Matrix: BlankMatrix

Analysis Batch: O-41148

Blank Blank

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: O-41148_P

	Blank	Blank						•	_
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 12:24	1
1-Methylphenanthrene	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 12:24	1
2,3,5-Trimethylnaphthalene	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 12:24	1
2,6-Dimethylnaphthalene	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 12:24	1
2-Methylnaphthalene	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 12:24	1
Acenaphthene	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 12:24	1
Acenaphthylene	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 12:24	1
Anthracene	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 12:24	1
Benz[a]anthracene	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 12:24	1
Benzo[a]pyrene	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 12:24	1
Benzo[b]fluoranthene	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 12:24	1
Benzo[e]pyrene	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 12:24	1
Benzo[g,h,i]perylene	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 12:24	1
Benzo[k]fluoranthene	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 12:24	1
Biphenyl	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 12:24	1
Chrysene	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 12:24	1
Dibenz[a,h]anthracene	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 12:24	1
Dibenzo[a,l]pyrene	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 12:24	1
Dibenzothiophene	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 12:24	1
Disalicylidenepropanediamine	ND		0.1	0.05	μg/L		07/17/23 00:00	07/30/23 12:24	1
Fluoranthene	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 12:24	1
Fluorene	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 12:24	1
Indeno[1,2,3-cd]pyrene	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 12:24	1
Naphthalene	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 12:24	1
Perylene	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 12:24	1
Phenanthrene	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 12:24	1
Pyrene	ND		0.005	0.001	μg/L		07/17/23 00:00	07/30/23 12:24	1

	Blank	Blank				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
(d10-Acenaphthene)	65		27 - 133	07/17/23 00:00	07/30/23 12:24	1
(d10-Phenanthrene)	102		43 - 129	07/17/23 00:00	07/30/23 12:24	1
(d12-Chrysene)	107		52 - 144	07/17/23 00:00	07/30/23 12:24	1
(d12-Perylene)	85		36 - 161	07/17/23 00:00	07/30/23 12:24	1
(d8-Naphthalene)	66		25 - 125	07/17/23 00:00	07/30/23 12:24	1

Lab Sample ID: 108340-BS1 Matrix: BlankMatrix Analysis Batch: O-41148 Client Sample ID: Lab Control Sample Prep Type: Total/NA Prep Batch: O-41148_P

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1-Methylnaphthalene	0.5	0.352		μg/L		70	31 - 128	
1-Methylphenanthrene	0.5	0.505		μg/L		101	66 - 127	
2,3,5-Trimethylnaphthalene	0.5	0.441		μg/L		88	55 - 122	
2,6-Dimethylnaphthalene	0.5	0.394		μg/L		79	48 - 120	
2-Methylnaphthalene	0.5	0.396		μg/L		79	47 - 130	
Acenaphthene	0.5	0.38		μg/L		76	53 - 131	
Acenaphthylene	0.5	0.431		µg/L		86	43 - 140	
Anthracene	0.5	0.429		μg/L		86	58 - 135	

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Client: City & County of Honolulu Job ID: 380-54555-2

Project/Site: RED-HILL

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

Lab Sample ID: 108340-BS1 Matrix: BlankMatrix **Analysis Batch: O-41148**

Client Sample ID: Lab Control Sample Prep Type: Total/NA Prep Batch: O-41148_P

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D %	Rec	Limits	
Benz[a]anthracene	0.5	0.502		µg/L		100	55 - 145	
Benzo[a]pyrene	0.5	0.443		µg/L		89	51 - 143	
Benzo[b]fluoranthene	0.5	0.484		µg/L		97	46 - 165	
Benzo[e]pyrene	0.5	0.464		µg/L		93	42 - 152	
Benzo[g,h,i]perylene	0.5	0.466		µg/L		93	63 - 133	
Benzo[k]fluoranthene	0.5	0.483		µg/L		97	56 - 145	
Biphenyl	0.5	0.456		µg/L		91	56 - 119	
Chrysene	0.5	0.476		µg/L		95	56 - 141	
Dibenz[a,h]anthracene	0.5	0.454		µg/L		91	55 - 150	
Dibenzo[a,l]pyrene	0.5	0.386		µg/L		77	50 - 150	
Dibenzothiophene	0.5	0.487		µg/L		97	46 - 126	
Disalicylidenepropanediamine	50	28.1		µg/L		56	50 - 150	
Fluoranthene	0.5	0.58		µg/L		116	60 - 146	
Fluorene	0.5	0.421		µg/L		84	58 - 131	
Indeno[1,2,3-cd]pyrene	0.5	0.446		µg/L		89	50 - 151	
Naphthalene	0.5	0.356		µg/L		71	41 - 126	
Perylene	0.5	0.407		µg/L		81	48 - 141	
Phenanthrene	0.5	0.442		µg/L		88	67 - 127	
Pyrene	0.5	0.53		µg/L		106	54 - 156	
10	s 10s							

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
(d10-Acenaphthene)	58		27 - 133
(d10-Phenanthrene)	80		43 - 129
(d12-Chrysene)	96		52 - 144
(d12-Perylene)	79		36 - 161
(d8-Naphthalene)	60		25 - 125

Lab Sample ID: 108340-BS2

Matrix: BlankMatrix **Analysis Batch: O-41148** **Client Sample ID: Lab Control Sample Dup** Prep Type: Total/NA Prep Batch: O-41148_P

, , , , , , , , , , , , , , , , , , , ,	Spike	LCS DUP	LCS DUP				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1-Methylnaphthalene	0.5	0.388		μg/L		78	31 - 128	11	30
1-Methylphenanthrene	0.5	0.546		μg/L		109	66 - 127	8	30
2,3,5-Trimethylnaphthalene	0.5	0.467		μg/L		93	55 - 122	6	30
2,6-Dimethylnaphthalene	0.5	0.424		μg/L		85	48 - 120	7	30
2-Methylnaphthalene	0.5	0.414		μg/L		83	47 - 130	5	30
Acenaphthene	0.5	0.403		μg/L		81	53 - 131	6	30
Acenaphthylene	0.5	0.469		μg/L		94	43 - 140	9	30
Anthracene	0.5	0.469		μg/L		94	58 - 135	9	30
Benz[a]anthracene	0.5	0.541		μg/L		108	55 - 145	8	30
Benzo[a]pyrene	0.5	0.492		μg/L		98	51 - 143	10	30
Benzo[b]fluoranthene	0.5	0.489		μg/L		98	46 - 165	1	30
Benzo[e]pyrene	0.5	0.491		μg/L		98	42 - 152	5	30
Benzo[g,h,i]perylene	0.5	0.493		μg/L		99	63 - 133	6	30
Benzo[k]fluoranthene	0.5	0.496		μg/L		99	56 - 145	2	30
Biphenyl	0.5	0.505		μg/L		101	56 - 119	10	30
Chrysene	0.5	0.507		μg/L		101	56 - 141	6	30

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Job ID: 380-54555-2

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: 108340-BS2		Client Samp	le ID: Lab Control Sam	ple Dup
Matrix: BlankMatrix			Prep Type:	Total/NA
Analysis Batch: O-41148			Prep Batch: O-	41148_P
-	Spike	LCS DUP LCS DUP	%Rec	RPD

	Spike	LCS DUP	LCS DUP				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Dibenz[a,h]anthracene	0.5	0.481		μg/L		96	55 - 150	5	30
Dibenzo[a,l]pyrene	0.5	0.401		μg/L		80	50 - 150	4	30
Dibenzothiophene	0.5	0.5		μg/L		100	46 - 126	3	30
Disalicylidenepropanediamine	50	29		μg/L		58	50 - 150	4	30
Fluoranthene	0.5	0.629		μg/L		126	60 - 146	8	30
Fluorene	0.5	0.46		μg/L		92	58 - 131	9	30
Indeno[1,2,3-cd]pyrene	0.5	0.467		μg/L		93	50 - 151	4	30
Naphthalene	0.5	0.398		μg/L		80	41 - 126	12	30
Perylene	0.5	0.447		μg/L		89	48 - 141	9	30
Phenanthrene	0.5	0.464		μg/L		93	67 - 127	6	30
Pyrene	0.5	0.565		μg/L		113	54 - 156	6	30

LCS DUP LCS DUP

Surrogate	%Recovery	Qualifier	Limits
(d10-Acenaphthene)	68		27 - 133
(d10-Phenanthrene)	92		43 - 129
(d12-Chrysene)	107		52 - 144
(d12-Perylene)	88		36 - 161
(d8-Naphthalene)	69		25 - 125

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

Lab Sample ID: 23VG39G08B **Client Sample ID: Method Blank Matrix: WATER** Prep Type: Total/NA

Analysis Batch: 23VG39G08

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GASOLINE	ND	U	0.02		mg/L			07/17/23 12:33	1
	MB	МВ							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
BROMOFLUOROBENZENE						-		07/17/23 12:33	1

Lab Sample ID: 23VG39G08L **Client Sample ID: Lab Control Sample Matrix: WATER**

Analysis Batch: 23VG39G08

	Эріке	LUS	LUS			70KeC	
Analyte	Added	Result	Qualifier Un	it D	%Rec	Limits	
GASOLINE	0.5	0.472	mg	/L	94	60 - 130	

LCS LCS %Recovery Qualifier Surrogate Limits BROMOFLUOROBENZENE 109 70 - 130

Eurofins Eaton Analytical Pomona

Prep Type: Total/NA

9/9/2023

Client: City & County of Honolulu Job ID: 380-54555-2

Project/Site: RED-HILL

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

Lab Sample ID: 23DSG024WB	Client Sample ID: Method Blank
Matrix: WATER	Pren Type: Total/NA

Analysis Batch: 23DSG024W

Analysis Baton. 200002411									
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DIESEL	ND	U	0.025		mg/L			07/21/23 20:09	1
JP5	ND	U	0.05		mg/L			07/21/23 20:09	1
JP8	ND	U	0.05		mg/L			07/21/23 20:09	1
MOTOR OIL	ND	U	0.05		mg/L			07/21/23 20:09	1
	MB	MB							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
BROMOBENZENE						-		07/21/23 20:09	1

Lab Sample ID: 23DSG024WL **Client Sample ID: Lab Control Sample Matrix: WATER** Prep Type: Total/NA

Analysis Batch: 23DSG024W

HEXACOSANE

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
DIESEL	2.5	2.24		mg/L		90	50 - 130	

	LCS LCS	
Surrogate	%Recovery Qualifier	Limits
BROMOBENZENE	68	60 - 130
HEXACOSANE	91	60 - 130

Lab Sample ID: 23J5G024WL **Client Sample ID: Lab Control Sample** Matrix: WATER Prep Type: Total/NA

Analysis Batch: 23DSG024W

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
JP5	2.5	1.79		mg/L		72	30 - 160	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
BROMOBENZENE	75		60 - 130
HEXACOSANE	88		60 - 130

Lab Sample ID: 23J8G024WL **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: WATER

Analysis Batch: 23DSG024W

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
JP8	 2.5	1.97		mg/L		79	30 - 160	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
BROMOBENZENE	87		60 - 130
HEXACOSANE	92		60 - 130

9/9/2023

07/21/23 20:09

QC Association Summary

Client: City & County of Honolulu Job ID: 380-54555-2

Project/Site: RED-HILL

Subcontract

Analysis Batch: O-41148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-54555-1	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Total/NA	Drinking Water	625 PAH Physis	O-41148_P
				LL (EAL) + TICs	
380-54555-2	AIEA WELLS PUMPS 1&2 (260) (331-203-TP400	Total/NA	Drinking Water	625 PAH Physis	O-41148_P
				LL (EAL) + TICs	
108340-B1	Method Blank	Total/NA	BlankMatrix	625 PAH Physis	O-41148_P
				LL (EAL) + TICs	
108340-BS1	Lab Control Sample	Total/NA	BlankMatrix	625 PAH Physis	O-41148_P
				LL (EAL) + TICs	
108340-BS2	Lab Control Sample Dup	Total/NA	BlankMatrix	625 PAH Physis	O-41148_P
				LL (EAL) + TICs	

Analysis Batch: 23DSG024W

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-54555-1	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Total/NA	Drinking Water	8015 LL	-
				DRO/MRO/JP5/J	
				P8	
380-54555-2	AIEA WELLS PUMPS 1&2 (260) (331-203-TP400	Total/NA	Drinking Water	8015 LL	
				DRO/MRO/JP5/J	
				P8	
23DSG024WB	Method Blank	Total/NA	WATER	8015 LL	
				DRO/MRO/JP5/J	
				P8	
23DSG024WL	Lab Control Sample	Total/NA	WATER	8015 LL	
				DRO/MRO/JP5/J	
				P8	
23J5G024WL	Lab Control Sample	Total/NA	WATER	8015 LL	
				DRO/MRO/JP5/J	
				P8	
23J8G024WL	Lab Control Sample	Total/NA	WATER	8015 LL	
				DRO/MRO/JP5/J	
				P8	

Analysis Batch: 23VG39G08

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-54555-1	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Total/NA	Drinking Water	8015 Gas	
				(Purgeable) LL	
				(EAL)	
380-54555-2	AIEA WELLS PUMPS 1&2 (260) (331-203-TP400	Total/NA	Drinking Water	8015 Gas	
				(Purgeable) LL	
				(EAL)	
380-54555-7	TB:AIEA GULCH WELLS P2 (331-202-TP072)	Total/NA	Water	8015 Gas	
				(Purgeable) LL	
				(EAL)	
380-54555-8	TB: AIEA WELLS PUMPS 1&2 (260) (331-203-TF	Total/NA	Water	8015 Gas	
				(Purgeable) LL	
				(EAL)	
23VG39G08B	Method Blank	Total/NA	WATER	8015 Gas	
				(Purgeable) LL	
				(EAL)	
23VG39G08L	Lab Control Sample	Total/NA	WATER	8015 Gas	
				(Purgeable) LL	
				(EAL)	

Prep Batch: O-41148_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-54555-1	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Total/NA	Drinking Water	EPA_625	
380-54555-2	AIEA WELLS PUMPS 1&2 (260) (331-203-TP400	Total/NA	Drinking Water	EPA_625	

QC Association Summary

Client: City & County of Honolulu Job ID: 380-54555-2

Project/Site: RED-HILL

Subcontract (Continued)

Prep Batch: O-41148_P (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
108340-B1	Method Blank	Total/NA	BlankMatrix	EPA_625	
108340-BS1	Lab Control Sample	Total/NA	BlankMatrix	EPA_625	
108340-BS2	Lab Control Sample Dup	Total/NA	BlankMatrix	EPA_625	

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Lab Sample ID: 380-54555-1

Lab Sample ID: 380-54555-2

Client: City & County of Honolulu

Project/Site: RED-HILL

Client Sample ID: AIEA GULCH WELLS PUMP 2

(331-202-TP072)

Date Collected: 07/10/23 09:00 **Matrix: Drinking Water**

Date Received: 07/12/23 10:00

Prep Type Total/NA Total/NA	Batch Type Prep Analysis	Batch Method EPA_625 625 PAH Physis LL (EAL) + TICs	Run	Pactor 1	Batch Number O-41148_P O-41148	Analyst YC	Lab	Prepared or Analyzed 07/17/23 00:00 07/30/23 17:49
Total/NA	Analysis	8015 Gas (Purgeable) LL (EAL)		1	23VG39G08	SCerva		07/17/23 16:49
Total/NA	Analysis	8015 LL DRO/MRO/JP5/JP8		1	23DSG024W	SDees		07/21/23 23:53

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

(331-203-TP400)

Date Collected: 07/10/23 09:30 **Matrix: Drinking Water**

Date Received: 07/12/23 10:00

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	EPA_625		1	O-41148_P			07/17/23 00:00
Total/NA	Analysis	625 PAH Physis LL (EAL) + TICs		1	O-41148	YC		07/30/23 19:38
Total/NA	Analysis	8015 Gas (Purgeable) LL (EAL)		1	23VG39G08	SCerva		07/17/23 17:26
Total/NA	Analysis	8015 LL DRO/MRO/JP5/JP8		1	23DSG024W	SDees		07/22/23 00:12

Client Sample ID: TB:AIEA GULCH WELLS P2 (331-202-TP072)

Lab Sample ID: 380-54555-7 Date Collected: 07/10/23 09:00 **Matrix: Water**

Date Received: 07/12/23 10:00

	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	23VG39G08	SCerva		07/17/23 18:40

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

(331-203-TP400)

Date Collected: 07/10/23 09:30 **Matrix: Water**

Date Received: 07/12/23 10:00

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	8015 Gas		1	23VG39G08	SCerva		07/17/23 19:16

Laboratory References:

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

Eurofins Eaton Analytical Pomona

Lab Sample ID: 380-54555-8

Method Summary

Client: City & County of Honolulu

Project/Site: RED-HILL

Job ID: 380-54555-2

Method	Method Description	Protocol	Laboratory
625	EPA 625 Base/Neutral and Acid Organics i	EPA	
8015	8015 - TPH DRO/ORO	EPA	
8015B	SW846 8015B Gasoline Range Organics	SW846	

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Sample Summary

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
380-54555-1	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Drinking Water	07/10/23 09:00	07/12/23 10:00
380-54555-2	AIEA WELLS PUMPS 1&2 (260) (331-203-TP400)	Drinking Water	07/10/23 09:30	07/12/23 10:00
380-54555-7	TB:AIEA GULCH WELLS P2 (331-202-TP072)	Water	07/10/23 09:00	07/12/23 10:00
380-54555-8	TB: AIEA WELLS PUMPS 1&2 (260) (331-203-TP400)	Water	07/10/23 09:30	07/12/23 10:00

Job ID: 380-54555-2



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

Date: 08-11-2023 EMAX Batch No.: 23G107

Attn: Jackie Contreras

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

Subject: Laboratory Report

Project: 380-54555

Enclosed is the Laboratory report for samples received on 07/14/23. The data reported relate only to samples listed below :

Sample ID	Control # Col Date	Matrix	Analysis
380-54555-1	G107-01 07/10/23	WATER	TPH GASOLINE TPH
380-54555-2	G107-02 07/10/23	WATER	TPH GASOLINE TPH
380 - 54555 - 7	G107-03 07/10/23	WATER	TPH GASOLINE
380-54555-8	G107-04 07/10/23	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 you

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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230107

Chain of Custody Record

Eurofins Eaton Analytical Pomona

** eurofins Environment Testing

941 Corporate Center Drive Pomona, CA 91768-2642	O	hain c	of Cus	Chain of Custody Record	ecord	_				L29/91		· y	ुः eurotins	S Environment Testing	Testing
(Sub Contract Lab)	Sampler:			Lab PM: Arada,	Lab PM: Arada, Rachelle				Carrier	Carrier Tracking No(s)	o(s):		COC No. 380-63022.1		
IOI (Sub continue Lab)	Phone:			E-Mail:	elle Arads	E-Mail: Rachelle Arada@et eurofinsus com	noo snsui		State o Hawa	State of Origin: Hawaii			Page: Page 1 of 1		
Shipping/Receiving Company:					Accreditations Re	Accreditations Required (See note)	See note):						Job #:		
EMAX Laboratories inc Address:	Due Date Requested:	ä					1			3			Preservation Codes	1	
3051 Fujita Street,	7/26/2023						Analysis	SIS KE	neanesie		F	3	A - HCL		
City: Torrance State, 2/2: CA 9/205	TAT Requested (days.):	ys):			seo ç								B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4	O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3	
Phone:	PO#:					17 910		-				Nels:	G - Amchlor H - Ascorbic Acid	10	hydrate
Email:	WO#:				(oN	8 i(89t							I - Ice J - Di Water		
Project Name: RED-HIII	Project#: 38001111				10 68	O'JPE/							L-EDA	Y - Trizma Z - other (specify)	ŝ
Site: Honolulu BWS Sites	SSOW#:				Y) asi eging)	ROIMR							Other:		
		Sample	Sample Type (C=comp,	Matrix (www.atsr, Smeolid, Oww.astsloil,	bid Filtered frorm MS/N B (8015 Gas	B (8015 LL D (8015 LL D				A A A A A A A A A A A A A A A A A A A		ied Number			
Sample Identification - Client ID (Lab ID)	Sample Date	Time		S=grab) BT=Tleaue, A=Air)	ea be	กร		80	80)T >	Specia	Special Instructions/Note:	ote:
	$\sqrt{}$	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	רומפפועם	ilon code.	1							4	See Attached Instructions	Instructions	I
AIEA GULCH WELLS PUMP 2 (331-202-TP072) (380-54555-1)	7/10/23	Hawaiian		Water	×	×				\dashv		0			
Z AIEA WELLS PUMPS 1&2 (260) (331-203-TP400) (380-54555-2)	7/10/23	09:30 Hawaijan		Water	×	×			,			ဖ	See Attached Instructions	Instructions	
TB:AIEA GULCH WELLS P2 (331-202-TP072) (380-54555-7)	7/10/23	09:00 Hawaiian		Water	×							2	See Attached Instructions	Instructions	
TB: AIEA WELLS PUMPS 1&2 (260) (331-203-TP400) (380-5455	5 7/10/23	09:30 Hawaiian		Water	×							2	See Attached Instructions	Instructions	
												14841 14851			
Note: Since laboratory accreditations are subject to change, Euroffins 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 Euroffins Eaton Analytical, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Euroffins Eaton Analytical, LLC.	rtical, LLC places the of the standard standard standard subject to date on the standard subject to date	ownership of m ed, the sample , return the sig	ethod, analyte s must be ship ned Chain of C	& accreditation ped back to the ustody attesting	compliance Eurofins Ea to said corr	upon our suk ton Analytica pliance to Eu	contract lab , LLC labor rofins Eator	oratories. atory or off	This sam ner instruc it, LLC.	ple shipme	int is forwar e provided.	ded under Any chang	chain-of-custod	r. If the laboratory doe ion status should be b	s not rought to
Possible Hazard Identification					Samp	le Dispos	I (A fee	may be	assess	ed if sa	nples ar	e retaine	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	in 1 month)	
Unconfirmed]	Return To Client	Client		Dispos	Disposal By Lab		Archi	Archive For	Months	
Deliverable Requested: I, II, III, IV, Other (specify)	Primary Deliverable Rank:	able Rank: 2			Specia	Special Instructions/QC Requirements:	ns/QC R	ednirem							
Empty Kit Relinquished by:	, co	Date:			Time:				-	Method of Shipment:	hipment:				
Relinquished by	Date/The:	31	410	Company	Re	Received by:	7	1			Date/Time: 07/14/	4/13	1014	Company ピープトン	ÿ
Relinquished by:	Date/Time: '		•	Company	Re	Received by:	-				Date/Time:			Company	
Relinquished by:	Date/Time:			Company	Re	Received by:					Date/Time:			Сотрапу	
Custody Seals Intact: Custody Seal No.: REPOSE To Info : 2.3G-10.7					8	Cooler Temperature(s) ${}^{\circ}$ C and Other Remarks: 2.8/2.7 $(\not\equiv -$ 0.1	ture(s) °C a	nd Other!	Remarks:					Page 2 of 39	30
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					l									10/00/20	2



Type of De	livery		Airbill / Tracki	ing Number	ECN 23G167	
□ Fedex □ UPS □ GSO					Recipient JOCHUNE SOII	s-Ramos
□ EMAX Courier					Date 07/14/23	Time 10:14
COC INSPECTION			D.Clov Name	Sampling Date/Time	☑ Sample ID	Matrix
☑ Client Name	Client PM/FC		☐ Sampler Name	Zi Analysis Required	☐ Preservative (if any)	TAT
□ Address	☐ Tel # / Fax #		Courier Signature		Li rieservative (ii any)	Qa 17Ci
Safety Issues (if any)	☐ High concentrations expe	cted	☐ From Superfund Site	☐ Rad screening required		
Note:						
PACKAGING INSPECTIO	N /					
Container	Cooler		□ Box	Other		
	☐ Custody Scal		☐ Intact	☐ Damaged		
VOLIVOITON	Bubble Pack,		☐ Styrofoam	□ Popcom	☐ Sufficient	0
Luciui . oit	Cooler 12.8/2.7 °C	ПСоо	ler 2°C	□ Cooler 3 °C	Cooler 4°C	Cooler 5°C
Temperatures (Cool, ≤6 °C but not frozen)	Cooler 6 °C		ler.7°C	□ Cooler 8°C	Cooler 9°C	□ Cooler 10°C
Thermometer:	A - S/N221852768	1	B-8/N12/925379	C - S/N	D - S/N	
Comments: Temperature is ou		1				
1	to range. The was into the		LDW II DO			
Note:						
DISCREPANCIES						
LabSampleID	LabSampleContainerID	Code		abel ID / Information	Corrective	Action
3,42 154 07/14	13,14,15,10,4	p7	second date say	s: 7/0/23	K /	
1	5,60 351	02	JP5/JP8 not in	dicated on label	V	
	314 7/11					
					1	
·						
				,		1
				100		
				JSR 07/14		
□ pH holding time requiremen	1	i 11/	eter complex for pH ana	lucis are received beyond 15	minutes from sampling time	10 7/18/23
☐ pH holding time requiremen	it for water samples is 15 in	1115. **	ater samples for pri ana	19313 110 10001100 0090110 12		105 /110/00
NOTES/OBSERVATIONS	:					
SAMPLE MATRIX IS DRINKING	G WATER? □ YES □ NO					
					☐ Continue to next pa	age.
LEGEND:			n tale Comple Mar	u na simont	Code Description-Sample Man	-
Code Description- Sample Man	0		Description-Sample Mar	nagement	R1 Proceed as indicated in 10 Co	
D1 Analysis is not indicated in			Out of Holding Time		R2 Refer to attached instruction	
(D2) Analysis mismatch COC v			Bubble is >6mm		R3 Cancel the analysis	
D3 Sample ID mismatch COC	vs label		No trip blank in cooler	a to	R4 Use vial with smallest bubble	a first
D4 Sample ID is not indicated	in	20 - 0	Preservation not indicated			
D5 Container -[improper] [lea			Preservation mismatch Co		R5 Log-in with latest sampling of	are and thire 1 mm
D6 Date/Time is not indicated			Insufficient chemical pres	servative	R6 Adjust pH as necessary	
(D7) (Date/Time mismatch COC	vs label		Insufficient Sample		R7 Filter and preserved as neces	sary
D8 Sample listed in COC is no	ot received		No filtration info for diss		R8	
D9 Sample received is not list	ed in COC	D21	No sample for moisture dete	ennination		
D10 No initial/date on correction		D22			R10	
D11 Container count mismatch	COC vs received	D23			R11	
D12 Container size mismatch C	OC vs received	D24		145011100	R12	- A
REVIEWS:	Nandeen Joselyne			Jocely ne		$M_{\rm S}$
Sample Labelin	g Nacana Solis-Ra	(VII)	SF		- Pr	(11,002
Dat	e 07/14/23/ 07/14/2	3	Ďa	nte 07/14/23	Da	
REPORT ID: 23G1	107 '		Dans 04 - f	00	Page	$= 3 \text{ of } 39_{12023}$
	E	MAX L	aborator ies,96c.445 9 1	An a St., Torrance, CA 9050)5	9/9/2023

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

380-54555

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

SDG#: 23G107

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CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 380-54555

SDG : 23G107

METHOD 5030B/8015B

TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

A total of four(4) water samples were received on 07/14/23 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. VG39G08B - 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. VG39G08L/VG39G08C 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 G106-01M/G106-01S. Refer to Matrix QC summary form for details.

Surrogate

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

Sample Analysis

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

LAB CHRONICLE TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

Client : EUROFINS EAT	EUROFINS EATON ANALYTICAL							SDG NO.	SDG NO. : 23G107
								Instrument	ID : GCT039
				WATER	ER				
Client	Laboratory	Dilution	%	Analysis	Extraction	Sample	Calibration	n Prep.	
Sample ID	Sample ID Factor	Factor	Moist	DateTime	DateTime	Data FN	Data FN Batch		Notes
		:	:				:		
MBLK1W	VG39G08B	1	A	07/17/2312:33	07/17/2312:33	EG17005A	EG17004A	23VG39G08 M	33VG39G08 Method Blank
LCS1W	VG39G08L	1	A	07/17/2313:09	07/17/2313:09	EG17006A	EG17004A	23VG39G08 L	23VG39G08 Lab Control Sample (LCS)
LCD1W	VG39G08C	1	×	07/17/2313:46	07/17/2313:46	EG17007A	EG17004A	23VG39G08 L	CS Duplicate
380-54555-1	G107-01	1	¥	07/17/2316:49	07/17/2316:49	EG17012A	EG17004A	23VG39G08 F	ield Sample
380-54555-2	G107-02	1	NA	07/17/2317:26	07/17/2317:26	EG17013A	EG17004A	23VG39G08 F	Field Sample
380-54555-7	G107-03	1	X	07/17/2318:40	07/17/2318:40	EG17015A	EG17014A	23VG39G08 F	Field Sample
380-54555-8	G107-04	1	W	07/17/2319:16	07/17/2319:16	EG17016A	EG17014A	23VG39G08 F	ield Sample

REPORT ID: 23G107

SAMPLE RESULTS

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Client : EUROFINS EATON ANALYTICAL Date Collected: 07/10/23 09:00

 Project
 : 380-54555
 Date Received: 07/14/23

 Batch No.
 : 23G107
 Date Extracted: 07/17/23 16:49

 Sample ID
 : 380-54555-1
 Date Analyzed: 07/17/23 16:49

Lab Samp ID: G107-01 Dilution Factor: 1
Lab File ID: EG17012A Matrix: WATER
Ext Btch ID: 23VG39G08 % Moisture: NA
Calib. Ref.: EG17004A Instrument ID: 39

RESULTS RL MDL PARAMETERS (mg/L) (mg/L) (mg/L) ND 0.020 0.010 GASOLINE RESULT SPK AMT %RECOVERY SURROGATE PARAMETERS QC LIMIT Bromofluorobenzene 0.0324 0.0400 81 60-140

Notes:

Parameter H-C Range Gasoline C6-C10

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount : 5ml Final Volume : 5ml Prepared by : SCerva Analyzed by : SCerva

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Client : EUROFINS EATON ANALYTICAL Date Collected: 07/10/23 09:30

Project : 380-54555 Date Received: 07/14/23
Batch No. : 23G107 Date Extracted: 07/17/23 17:26
Sample ID : 380-54555-2 Date Analyzed: 07/17/23 17:26
Lab Samp ID: G107-02 Dilution Factor: 1

Lab Samp ID: G107-02 Dilution Factor: 1
Lab File ID: EG17013A Matrix: WATER
Ext Btch ID: 23VG39G08 % Moisture: NA
Calib. Ref.: EG17004A 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	0.0317	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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Client :	EUROFINS EATON ANALYTICAL	Date Collected:	07/10/23 09:00
Project :	380 - 54555	Date Received:	07/14/23
Batch No. :	23G107	Date Extracted:	07/17/23 18:40
Sample ID :	380-54555-7	Date Analyzed:	07/17/23 18:40
Lab Samp ID:	G107-03	Dilution Factor:	1
Lab File ID:	EG17015A	Matrix:	WATER
Ext Btch ID:	23VG39G08	% Moisture:	NA
Calib. Ref.:	EG17014A	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	0.0319	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

Client :	EUROFINS EATON ANALYTICAL	Date Collected:	07/10/23 09:30
Project :	380-54555	Date Received:	07/14/23
Batch No. :	23G107	Date Extracted:	07/17/23 19:16
Sample ID :	380-54555-8	Date Analyzed:	07/17/23 19:16
Lab Samp ID:	G107-04	Dilution Factor:	1
Lab File ID:	EG17016A	Matrix:	WATER
Ext Btch ID:	23VG39G08	% Moisture:	NA
Calib. Ref.:	EG17014A	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	0.0311	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

REPORT ID: 23G107

QC SUMMARIES

Client : EUROFINS EATON ANALYTICAL Date Collected: 07/17/23 12:33

Project : 380-54555 Date Received: 07/17/23

Batch No. : 23G107 Date Extracted: 07/17/23 12:33

Sample ID : MBLK1W Date Analyzed: 07/17/23 12:33
Lab Samp ID: VG39G08B Dilution Factor: 1

Lab File ID: EG17005A Matrix: WATER Ext Btch ID: 23VG39G08 % Moisture: NA Calib. Ref.: EG17004A 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	0.0323	0.0400	81	60-140

Notes:

Parameter H-C Range Gasoline C6-C10

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount : 5ml Final Volume : 5ml Prepared by : SCerva Analyzed by : SCerva

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EMAX QUALITY CONTROL DATA LAB CONTROL SAMPLE ANALYSIS

CLIENT

: EUROFINS EATON ANALYTICAL

PROJECT

: 380-54555

BATCH NO.

: 23G107

METHOD

: 5030B/8015B

MATRIX	
DILUTION	į

: WATER

% MOISTURE:NA

FACTOR: 1

SAMPLE ID : MBLK1W

1 LCS1W

LAB SAMPLE ID : VG39G08B LAB FILE ID : EG17005A

CALIBRATION REF: EG17004A

VG39G08L EG17006A 07/17/23 13:09 LCD1W VG39G08C EG17007A 07/17/23 13:46

DATE PREPARED : 07/17/23 12:33 DATE ANALYZED : 07/17/23 12:33 PREP BATCH

: 23VG39G08

07/17/23 13:09 23VG39G08 EG17004A

07/17/23 13:46 23VG39G08 EG17004A

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	(%)	(mg/L)	LCDResult (mg/L)	LCDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
Gasoline	ND	0.500	0.472	94	0.500	0.499	100	6	60-130	30
SURROGATE PARAMETER		SpikeAmt	LCSResult			LCDResult (mg/L)	LCDRec		QCLimit	
Bromofluorobenzene		0.0400	0.0437	109	0.0400	0.0428	107		70-130	

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

EMAX QUALITY CONTROL DATA MS/MSD ANALYSIS

CLIENT

: EUROFINS EATON ANALYTICAL

PROJECT

: 380-54548

BATCH NO.

: 23G106

METHOD

: 5030B/8015B

: WATER

% MOISTURE:NA

DILUTION FACTOR: 1

SAMPLE ID : 380-54548-1

LAB SAMPLE ID : G106-01

380-54548-1MS G106-01M

380-54548-1MSD G106-01S

LAB FILE ID : EG17008A

EG17009A 07/17/23 14:59 EG17010A 07/17/23 15:36

DATE PREPARED : 07/17/23 14:22 DATE ANALYZED : 07/17/23 14:22

07/17/23 14:59 23VG39G08

0.469

07/17/23 15:36 23VG39G08

CALIBRATION REF: EG17004A

PREP BATCH : 23VG39G08

EG17004A

EG17004A

ACCESSION:

Gasoline

MSDResult MSDRec PSResult SpikeAmt MSResult MSRec SpikeAmt (mg/L) PARAMETERS (mg/L) (mg/L) (mg/L) (%)

0.500

(mg/L) (%) (%) (%) (%) 30 0.500 0.439 88 7 50 - 130

RPD

QCLimit MaxRPD

QCLimit SpikeAmt MSResult MSRec SpikeAmt MSDResult MSDRec (mg/L) (mg/L) (%) (%) SURROGATE PARAMETER (mg/L) (mg/L) (%) 108 0.0400 0.0408 102 60-140 0.0400 0.0433 Bromofluorobenzene

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

LABORATORY REPORT FOR

EUROFINS EATON ANALYTICAL

380-54555

METHOD 3520C/8015B TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

SDG#: 23G107

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CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 380-54555

SDG : 23G107

METHOD 3520C/8015B

TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

A total of two(2) water samples were received on 07/14/23 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. DSG024WB - 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. DSG024WL/DSG024WC 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. Diesel was within MS QC limits in 23G106-01M/23G106-01S. Refer to Matrix QC summary form for details.

Surrogate

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

Sample Analysis

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

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 380-54555

SDG : 23G107

METHOD 3520C/8015B PETROLEUM HYDROCARBONS BY EXTRACTION

A total of two(2) water samples were received on 07/14/23 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. DSG024WB - 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. J5G024WL/J5G024WC 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. JP5 was within MS QC limits in 23G106-01M/23G106-01S. Refer to Matrix QC summary form for details.

Surrogate

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

Sample Analysis

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

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 380-54555

: 23G107 SDG

METHOD 3520C/8015B PETROLEUM HYDROCARBONS BY EXTRACTION

A total of two(2) water samples were received on 07/14/23 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. DSG024WB - 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. J8G024WL/J8G024WC 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.

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.

23DSG024W Lab Control Sample (LCS) 23DSG024W LCS Duplicate

23DSG024W Method Blank Notes

LG21003A

LG21009A

07/20/2312:30

Calibration Prep. Data FN Batch

Sample Data FN

Extraction DateTime

Analysis DateTime

Moist

Dilution Factor

Laboratory Sample ID

Sample ID

Client

MBLK1W

LCS1W

: EUROFINS EATON ANALYTICAL : 380-54555

Project

Client

WATER

23DSG024W Field Sample 23DSG024W Field Sample

LG21003A LG21003A LG21003A LG21003A

LG21010A LG21011A LG21021A LG21022A

07/20/2312:30 07/20/2312:30 07/20/2312:30 07/20/2312:30

07/21/2320:09 07/21/2320:27 07/21/2320:46 07/21/2323:53 07/22/2300:12

₹₹₹₹

DSG024WL DSG024WC DSG024WB

G107-01 G107-02

: 23G107 : D5

Instrument ID SDG NO.

LAB CHRONICLE PETROLEUM HYDROCARBONS BY EXTRACTION

Client	· FIROFINS FATON ANALYTICAL							SDG NO. :	: 23G107
Project	: 380-54555							Instrument ID : D5	15
				M	WATER				
Client	Laborati	ory Dilution	%		ш	Sample	Calibration Prep.	n Prep.	
Sample ID	Sample ID	ID Factor	Moist	DateTime	DateTime	Data FN	Data FN	Batch Notes	
		:::::::::::::::::::::::::::::::::::::::	-			:			
MRI K1W	DSG024W	3	A	07/21/2320:09	07/20/2312:30	LG21009A	LG21004A	23DSG024W Method Blank	ank
L CS1W	J5G024W	-	W	07/21/2321:05	07/20/2312:30	LG21012A	LG21004A	23DSG024W Lab Control Sample (LCS)	ol Sample (LCS)
CDIM	J5G024W		¥	07/21/2321:24	07/20/2312:30	LG21013A	LG21004A	23DSG024W LCS Duplicate	cate
380-54555-1		1	¥	07/21/2323:53	07/20/2312:30	LG21021A	LG21004A	23DSG024W Field Sample	ple
380-54555-2	g G107-02	г	¥	07/22/2300:12	07/20/2312:30	LG21022A	LG21004A	23DSG024W Field Sample	ple

LAB CHRONICLE PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EU	JROFINS EATON ANALYTICAL							SDG NO. : 23G107
	: 380-54555							Instrument ID : D5
				MA	WATER			
Client	Laboratory	Dilution	26		Extraction	Sample	Calibration Prep.	ı Prep.
Sample ID	Sample ID	Factor	Moist	DateTime	DateTime	Data FN	Data FN	Batch Notes
		:	:			:::::		
MBI K1W	DSG024WB	1	W	07/21/2320:09	07/20/2312:30	LG21009A	LG21005A	23DSG024W Method Blank
LCS1W	J8G024WL	1	NA	07/21/2321:42	07/20/2312:30	LG21014A	LG21005A	23DSG024W Lab Control Sample (LCS)
LCD1W	J8G024WC	1	¥	07/21/2322:01	07/20/2312:30	LG21015A	LG21005A	23DSG024W LCS Duplicate
380-54555-1	G107-01	1	M	07/21/2323:53	07/20/2312:30	LG21021A	LG21005A	23DSG024W Field Sample
380-54555-2	G107-02	1	A	07/22/2300:12	07/20/2312:30	LG21022A	LG21005A	23DSG024W Field Sample

FN - Filename % Moist - Percent Moisture

SAMPLE RESULTS

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: EUROFINS EATON ANALYTICAL

Date Collected: 07/10/23 09:00

Date Received: 07/14/23

Batch No. : 23G107 Sample ID : 380-54555-1

Project : 380-54555

Client

Date Extracted: 07/20/23 12:30 Date Analyzed: 07/21/23 23:53

Lab Samp ID: 23G107-01 Lab File ID: LG21021A Ext Btch ID: 23DSG024W

Calib. Ref.: LG21003A

Dilution Factor: 1 Matrix: WATER

% Moisture: NA Instrument ID: D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)	
Diesel	ND	0.028	0.014	
Motor Oil	ND	0.056	0.028	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.425	0.555	77	60-130
Hexacosane	0.129	0.139	93	60-130

Notes:

H-C Range Parameter 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 : 900ml

Final Volume : 5ml

Prepared by

: RGalan

Analyzed by : SDeeso

METHOD 3520C/8015B PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATON ANALYTICAL Date Collected: 07/10/23 09:00

 Project
 : 380-54555
 Date Received: 07/14/23

 Batch No.
 : 23G107
 Date Extracted: 07/20/23 12:30

 Sample ID
 : 380-54555-1
 Date Analyzed: 07/21/23 23:53

Lab Samp ID: 23G107-01 Dilution Factor: 1 Lab File ID: LG21021A Matrix: WATER Ext Btch ID: 23DSG024W % Moisture: NA Calib. Ref.: LG21004A Instrument ID: D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)	
JP5	ND	0.056	0.028	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene Hexacosane	0.425 0.129	0.555 0.139	77 93	60-130 60-130

Notes:

RL: Reporting Limit
Parameter H-C Range
JP5 C8-C18

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount : 900ml

Final Volume : 5ml

Prepared by : RGalan

Analyzed by : SDeeso

REPORT ID: 23G107 Page

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Client :	EUROFINS EATON ANALYTICAL	Date Collected:	07/10/23 09:00
Project :	380-54555	Date Received:	07/14/23
Batch No. :	23G107	Date Extracted:	07/20/23 12:30
Sample ID :	380-54555-1	Date Analyzed:	07/21/23 23:53
Lab Samp ID:	23G107-01	Dilution Factor:	1
Lab File ID:	LG21021A	Matrix:	WATER
Ext Btch ID:	23DSG024W	% Moisture:	NA
Calib. Ref.:	LG21005A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)	
JP8	ND	0.056	0.028	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene Hexacosane	0.425 0.129	0.555 0.139	77 93	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 : 900ml

Final Volume : 5ml

Prepared by : RGalan

Analyzed by : SDeeso

Client :	EUROFINS EATON ANALYTICAL	Date Collected:	07/10/23 09:30
Project :	380 - 54555	Date Received:	07/14/23
Batch No. :	23G107	Date Extracted:	07/20/23 12:30
Sample ID :	380-54555-2	Date Analyzed:	07/22/23 00:12
Lab Samp ID:	23G107-02	Dilution Factor:	1
Lab File ID:	LG21022A	Matrix:	WATER
Ext Btch ID:	23DSG024W	% Moisture:	NA
Calib. Ref.:	LG21003A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)	
Diesel	ND	0.027	0.014	
Motor Oil	ND	0.054	0.027	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.386	0.540	72	60-130
Hexacosane	0.120	0.135	89	60-130

Notes:

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

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount : 930ml

Final Volume : 5ml

Prepared by : RGalan

Analyzed by : SDeeso

METHOD 3520C/8015B PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATON ANALYTICAL Date Collected: 07/10/23 09:30

 Project
 : 380-54555
 Date Received: 07/14/23

 Batch No.
 : 23G107
 Date Extracted: 07/20/23 12:30

 Sample ID
 : 380-54555-2
 Date Analyzed: 07/22/23 00:12

Lab Samp ID: 23G107-02 Dilution Factor: 1 Lab File ID: LG21022A Matrix: WATER Ext Btch ID: 23DSG024W % Moisture: NA

Calib. Ref.: LG21004A Instrument ID: D5

RESULTS	RL	MDL	
(IIIg/L)	(IIIg/L)	(IIIg/L)	
ND	0.054	0.027	
RESULT	SPK_AMT	%RECOVERY	QC LIMIT
0.386 0.120	0.540 0.135	72 89	60-130 60-130
	(mg/L) ND RESULT 0.386	(mg/L) (mg/L) ND 0.054 RESULT SPK_AMT 0.386 0.540	(mg/L) (mg/L) (mg/L) ND 0.054 0.027 RESULT SPK_AMT %RECOVERY 0.386 0.540 72

Notes:

RL: Reporting Limit
Parameter H-C Range
JP5 C8-C18

REPORT ID: 23G107

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount : 930ml Final Volume : 5ml

Prepared by : RGalan Analyzed by : SDeeso

METHOD 3520C/8015B PETROLEUM HYDROCARBONS BY EXTRACTION

Date Collected: 07/10/23 09:30 Client : EUROFINS EATON ANALYTICAL

Project : 380-54555 Date Received: 07/14/23 Date Extracted: 07/20/23 12:30 Batch No. : 23G107 Sample ID : 380-54555-2 Date Analyzed: 07/22/23 00:12

Dilution Factor: 1 Lab Samp ID: 23G107-02 Lab File ID: LG21022A Matrix: WATER % Moisture: NA Ext Btch ID: 23DSG024W Instrument ID: D5 Calib. Ref.: LG21005A

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)	
JP8	ND	0.054	0.027	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene Hexacosane	0.386 0.120	0.540 0.135	72 89	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 : 930ml

Final Volume : 5ml

Prepared by : RGalan

Analyzed by : SDeeso

QC SUMMARIES

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METHOD 3520C/8015B TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATON ANALYTICAL Date Collected: 07/20/23 12:30

 Project
 : 380-54555
 Date Received: 07/20/23

 Batch No.
 : 23G107
 Date Extracted: 07/20/23 12:30

 Sample ID
 : MBLK1W
 Date Analyzed: 07/21/23 20:09

Lab Samp ID: DSG024WB Dilution Factor: 1 Lab File ID: LG21009A Matrix: WATER Ext Btch ID: 23DSG024W % Moisture: NA Calib. Ref.: LG21003A 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	0.380	0.500	76	60-130
Hexacosane	0.117	0.125	93	60-130

Notes:

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

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount : 1000ml

Final Volume : 5ml

Prepared by : RGalan

Analyzed by : SDeeso

EMAX QUALITY CONTROL DATA LAB CONTROL SAMPLE ANALYSIS

CLIENT

: EUROFINS EATON ANALYTICAL

PROJECT

: 380-54555

BATCH NO.

: 23G107

METHOD

: 3520C/8015B

MATRIX

: WATER

% MOISTURE:NA

DILUTION FACTOR: 1

1

SAMPLE ID : MBLK1W

LCS1W

LCD1W

LAB SAMPLE ID : DSG024WB

DSG024WL

DSG024WC

LAB FILE ID : LG21009A

LG21010A

LG21011A

DATE ANALYZED : 07/21/23 20:09

DATE PREPARED : 07/20/23 12:30

07/20/23 12:30 07/21/23 20:27

07/20/23 12:30 07/21/23 20:46

PREP BATCH : 23DSG024W

23DSG024W

23DSG024W

CALIBRATION REF: LG21003A

LG21003A

LG21003A

ACCESSION:

MBResult SpikeAmt LCSResult LCSRec SpikeAmt LCDResult LCDRec RPD QCLimit MaxRPD PARAMETERS (mg/L) (mg/L) (mg/L) (%) (mg/L) (mg/L) (%) (%) (%) (%) 50-130 30 Diesel ND 2.50 2.24 90 2.50 2.13 85 5

SURROGATE PARAMETERS	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec	SpikeAmt (mg/L)	LCDResult (mg/L)	LCDRec (%)	QCLimit (%)
			• • • • • •				
Bromobenzene	0.500	0.341	68	0.500	0.365	73	60-130
Hexacosane	0.125	0.114	91	0.125	0.122	98	60-130

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

EMAX QUALITY CONTROL DATA MS/MSD ANALYSIS

CLIENT

: EUROFINS EATON ANALYTICAL

PROJECT

: 380-54548

BATCH NO.

: 23G106

METHOD

: 3520C/8015B

MATRIX	:	WATE
DILUTION	FACTOR:	1

% MOISTURE:NA

SAMPLE ID : 380-54548-1

380-54548-1MS

LAB SAMPLE ID : 23G106-01 LAB FILE ID : LG21016A

23G106-01M

380-54548-1MSD 23G106-01S

LG21017A

LG21018A

DATE PREPARED : 07/20/23 12:30 DATE ANALYZED : 07/21/23 22:20

07/20/23 12:30

07/20/23 12:30 07/21/23 22:57

PREP BATCH : 23DSG024W

07/21/23 22:38 23DSG024W

23DSG024W

CALIBRATION REF: LG21003A

LG21003A

LG21003A

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
Diesel	ND	2.70	2.49	92	2.65	2.42	91	3	50-130	30
SURROGATE PARAMETERS		SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)		QCLimit (%)	
Bromobenzene		0.540	0.372	69	0.530	0.407	77		60-130	
Hexacosane		0.135	0.136	101	0.132	0.122	92		60-130	

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

METHOD 3520C/8015B PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATON ANALYTICAL Date Collected: 07/20/23 12:30 Project : 380-54555 Date Received: 07/20/23

 Batch No.
 : 23G107
 Date Extracted: 07/20/23 12:30

 Sample ID
 : MBLK1W
 Date Analyzed: 07/21/23 20:09

Lab Samp ID: DSG024WB Dilution Factor: 1
Lab File ID: LG21009A Matrix: WATER
Ext Btch ID: 23DSG024W % Moisture: NA
Calib. Ref.: LG21004A 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	0.380 0.117	0.500 0.125	76 93	60-130 60-130

Notes:

RL : Reporting Limit
Parameter H-C Range
JP5 C8-C18

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

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

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EMAX QUALITY CONTROL DATA LAB CONTROL SAMPLE ANALYSIS

CLIENT

: EUROFINS EATON ANALYTICAL

PROJECT BATCH NO. : 380-54555

: 23G107

METHOD

: 3520C/8015B

MATRIX

: WATER

1

% MOISTURE:NA

DILUTION FACTOR: 1

: MBLK1W

LCS1W

SAMPLE ID LAB SAMPLE ID : DSG024WB

J5G024WL

LCD1W

LAB FILE ID : LG21009A

LG21012A

J5G024WC LG21013A

DATE PREPARED : 07/20/23 12:30

07/20/23 12:30

07/20/23 12:30

DATE ANALYZED : 07/21/23 20:09

07/21/23 21:05

07/21/23 21:24

PREP BATCH

: 23DSG024W

23DSG024W

23DSG024W

CALIBRATION REF: LG21004A

LG21004A

LG21004A

ACCESSION:

PARAMETERS	MBResult (mg/L)					LCDResult (mg/L)			QCLimit (%)	
								• • • • • • •		• • • • • • •
JP5	ND	2.50	1.79	72	2.50	1.83	73	2	30-160	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	SpikeAmt (mg/L)	LCDResult (mg/L)	LCDRec (%)	QCLimit (%)
Bromobenzene	0.500	0.376	75	0.500	0.407	81	60-130
Hexacosane	0.125	0.110	88	0.125	0.113	90	60-130

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

EMAX QUALITY CONTROL DATA MS/MSD ANALYSIS

CLIENT

: EUROFINS EATON ANALYTICAL

PROJECT

: 380-54548

BATCH NO.

: 23G106

METHOD

: 3520C/8015B

MATRIX	: WATER		% MO
		_	

DILUTION FACTOR: 1

10 I STURE: NA

SAMPLE ID : 380-54548-1

LAB SAMPLE ID : 23G106-01

380-54548-1MS 23G106-01M

380-54548-1MSD 23G106-01S

LAB FILE ID : LG21016A DATE PREPARED : 07/20/23 12:30

LG21019A 07/20/23 12:30 LG21020A 07/20/23 12:30

DATE ANALYZED : 07/21/23 22:20 PREP BATCH : 23DSG024W

CALIBRATION REF: LG21004A

07/21/23 23:16 23DSG024W

LG21004A

07/21/23 23:34 23DSG024W LG21004A

ACCESSION:

PSResult SpikeAmt RPD QCLimit MaxRPD MSResult MSRec SpikeAmt MSDResult MSDRec **PARAMETERS** (mg/L) (mg/L) (mg/L) (%) (mg/L) (mg/L) (%) (%) (%) (%) 2.70 1.98 73 2.72 1.75 64 30-160 30 JP5 ND

SURROGATE PARAMETERS	SpikeAmt	MSResult	MSRec	SpikeAmt	MSDResult	MSDRec	QCLimit
	(mg/L)	(mg/L)	(%)	(mg/L)	(mg/L)	(%)	(%)
Bromobenzene	0.540	0.383	71	0.545	0.346	63	60-130
Hexacosane	0.135	0.115	85	0.136	0.118	87	60-130

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

METHOD 3520C/8015B PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATON ANALYTICAL Date Collected: 07/20/23 12:30

Project : 380-54555 Date Received: 07/20/23
Batch No. : 23G107 Date Extracted: 07/20/23 12:30

Sample ID : MBLK1W Date Analyzed: 07/21/23 20:09
Lab Samp ID: DSG024WB Dilution Factor: 1

Lab File ID: LG21009A Matrix: WATER
Ext Btch ID: 23DSG024W % Moisture: NA
Calib. Ref.: LG21005A Instrument ID: D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)	
JP8	ND	0.050	0.025	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene Hexacosane	0.380 0.117	0.500 0.125	76 93	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 : 1000ml Final Volume : 5ml

Prepared by : RGalan Analyzed by : SDeeso

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EMAX QUALITY CONTROL DATA LAB CONTROL SAMPLE ANALYSIS

CLIENT

: EUROFINS EATON ANALYTICAL

PR0JECT

: 380-54555

BATCH NO.

: 23G107

METHOD

: 3520C/8015B

MATRIX

: WATER

% MOISTURE:NA

DILUTION FACTOR: 1

: MBLK1W

1 LCS1W 1

SAMPLE ID

LAB SAMPLE ID : DSG024WB

J8G024WL

LCD1W J8G024WC

LAB FILE ID : LG21009A

DATE PREPARED : 07/20/23 12:30

LG21014A

LG21015A 07/20/23 12:30

DATE ANALYZED : 07/21/23 20:09

07/20/23 12:30 07/21/23 21:42 23DSG024W

07/21/23 22:01 23DSG024W

PREP BATCH CALIBRATION REF: LG21005A

: 23DSG024W

LG21005A

LG21005A

ACCESSION:

LCSResult LCSRec SpikeAmt LCDResult LCDRec RPD QCLimit MaxRPD MBResult SpikeAmt (mg/L) PARAMETERS (mg/L) (mg/L) (%) (mg/L) (mg/L) (%) (%) (%) 30 JP8 ND 2.50 1.97 79 2.50 2.38 95 19 30-160

SURROGATE PARAMETERS	SpikeAmt	LCSResult	LCSRec	SpikeAmt	LCDResult	LCDRec	QCLimit
	(mg/L)	(mg/L)	(%)	(mg/L)	(mg/L)	(%)	(%)
Bromobenzene	0.500	0.433	87	0.500	0.479	96	60-130
Hexacosane	0.125	0.115	92	0.125	0.112	90	60-130

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



August 01, 2023

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

RED-HILL Project # 38001111 Job # 380-54555-1 Project Name:

Physis Project ID: 1407003-416

Dear Rachelle,

Enclosed are the analytical results for samples submitted to PHYSIS Environmental Laboratories, Inc. (PHYSIS) on 7/14/2023. 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 # 380-54555-1

PHYSIS Project ID: 1407003-416

Total Samples: 2

PHYSIS ID	Sample ID	Description	Date	Time	Matrix	Sample Type
108341	AIEA GULCH WELLS PUMF	231-202-TP072 (380-54555-1)	7/10/2023	9:00	Samplewater	Not Specified
108342	AIEA WELLS PLIMPS 182 (2	6 6 81-203-TP400 (380-54555-2)	7/10/2023	9.30	Samplewater	Not Specified

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ABBREVIATIONS and ACRONYMS

014	Ouglitus Managed
QM	Quality Manual
QA	Quality Assurance
QC	Quality Control
MDL	method detection limit
RL	reporting limit
R1	project sample
R2	project sample replicate
MS1	matrix spike
MS2	matrix spike replicate
B1	procedural blank
B2	procedural blank replicate
BS1	blank spike
BS2	blank spike replicate
LCS1	laboratory control spike
LCS2	laboratory control spike replicate
LCM1	laboratory control material
LCM2	laboratory control material replicate
CRM1	certified reference material
CRM2	certified reference material replicate
RPD	relative percent difference
LMW	low molecular weight
HMW	high molecular weight



QUALITY ASSURANCE SUMMARY

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

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

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

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

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

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

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

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

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

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

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the target analyte and most often used with organic analytical procedures. Surrogates are added in known concentration to all samples and are measured to indicate overall efficiency of the method including processing and analyses.

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

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

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



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
E	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



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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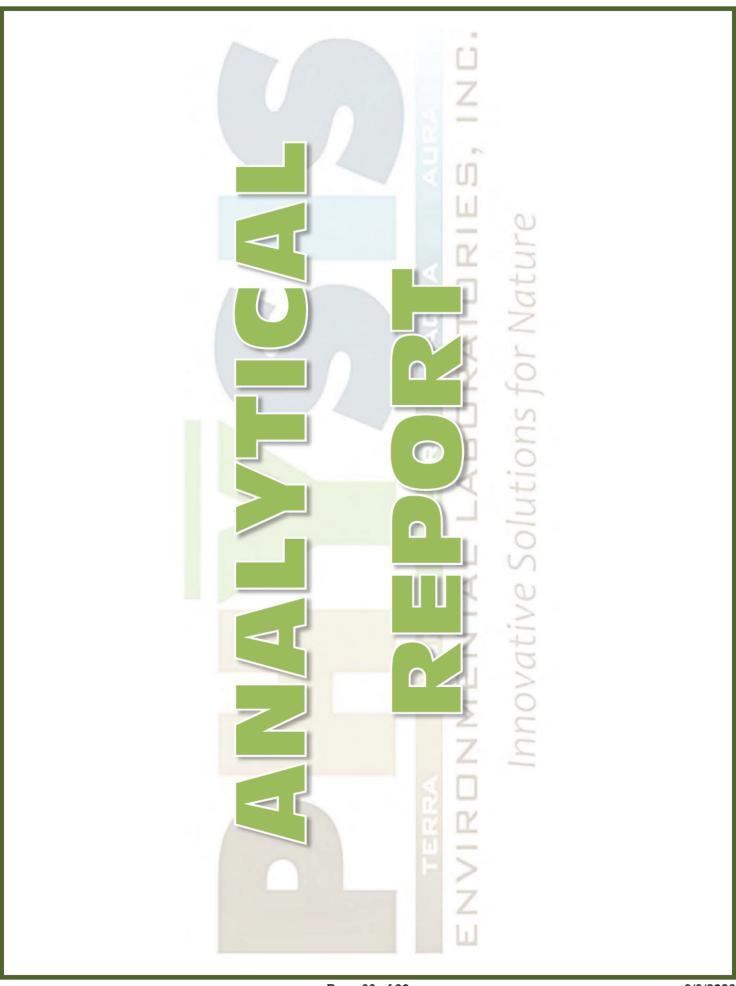
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PHYSIS Project ID: 1407003-416 Client: Eurofins Eaton Analytical

Project: RED-HILL Project # 38001111 Job # 380-54555-1

Innovative Solutions for Nature

Polynuclear Aromatic Hydrocarbons

ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE Batch ID	Date Processed	Date Analyzed
Sample ID: 108341-R1	AIEA GULCH WELLS PL	JMP 2 331-20 M	latrix: Sampl	ewateı	•		Sampled:	10-Jul-23 9:00	Received:	14-Jul-23
(d10-Acenaphthene)	EPA 625.1	% Recovery	59	1			Total	O-41148	17-Jul-23	30-Jul-23
(d10-Phenanthrene)	EPA 625.1	% Recovery	92	1			Total	O-41148	17-Jul-23	30-Jul-23
(d12-Chrysene)	EPA 625.1	% Recovery	99	1			Total	O-41148	17-Jul-23	30-Jul-23
(d12-Perylene)	EPA 625.1	% Recovery	83	1			Total	O-41148	17-Jul-23	30-Jul-23
(d8-Naphthalene)	EPA 625.1	% Recovery	58	1			Total	O-41148	17-Jul-23	30-Jul-23
1-Methylnaphthalene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
1-Methylphenanthrene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
2,3,5-Trimethylnaphthalene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
2,6-Dimethylnaphthalene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
2-Methylnaphthalene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Acenaphthene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Acenaphthylene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Anthracene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Benz[a]anthracene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Benzo[a]pyrene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Benzo[b]fluoranthene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Benzo[e]pyrene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Benzo[g,h,i]perylene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Benzo[k]fluoranthene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Biphenyl	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Chrysene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Dibenz[a,h]anthracene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Dibenzo[a,l]pyrene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Dibenzothiophene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23

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CA ELAP #2769

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PHYSIS Project ID: 1407003-416 Client: Eurofins Eaton Analytical

Project: RED-HILL Project # 38001111 Job # 380-54555-1

Innovative Solutions for Nature

Polynuclear Aromatic Hydrocarbons										
ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE Batch ID	Date Processed	Date Analyzed
Disalicylidenepropanediamine	EPA 625.1	μg/L	ND	1	0.05	0.1	Total	O-41148	17-Jul-23	30-Jul-23
Fluoranthene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Fluorene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Indeno[1,2,3-cd]pyrene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Naphthalene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Perylene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Phenanthrene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Pyrene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23

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PHYSIS Project ID: 1407003-416 Client: Eurofins Eaton Analytical

Project: RED-HILL Project # 38001111 Job # 380-54555-1

Polynuclear Aromatic Hydrocarbons

ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE Batch ID	Date Processed	Date Analyzed
Sample ID: 108342-R1	AIEA WELLS PUMPS 18	ı2 (260) 331- M	atrix: Sampl	ewateı	ſ		Sampled:	10-Jul-23 9:30	Received:	14-Jul-23
(d10-Acenaphthene)	EPA 625.1	% Recovery	60	1			Total	O-41148	17-Jul-23	30-Jul-23
(d10-Phenanthrene)	EPA 625.1	% Recovery	95	1			Total	O-41148	17-Jul-23	30-Jul-23
(d12-Chrysene)	EPA 625.1	% Recovery	97	1			Total	O-41148	17-Jul-23	30-Jul-23
(d12-Perylene)	EPA 625.1	% Recovery	81	1			Total	O-41148	17-Jul-23	30-Jul-23
(d8-Naphthalene)	EPA 625.1	% Recovery	61	1			Total	O-41148	17-Jul-23	30-Jul-23
1-Methylnaphthalene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
1-Methylphenanthrene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
2,3,5-Trimethylnaphthalene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
2,6-Dimethylnaphthalene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
2-Methylnaphthalene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Acenaphthene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Acenaphthylene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Anthracene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Benz[a]anthracene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Benzo[a]pyrene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Benzo[b]fluoranthene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Benzo[e]pyrene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Benzo[g,h,i]perylene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Benzo[k]fluoranthene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Biphenyl	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Chrysene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Dibenz[a,h]anthracene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Dibenzo[a,l]pyrene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Dibenzothiophene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23

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PHYSIS Project ID: 1407003-416 **Client: Eurofins Eaton Analytical**

Project: RED-HILL Project # 38001111 Job # 380-54555-1

Innovative Solutions for Nature

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Polynuclear Aromatic Hydrocarbons										
ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE Batch ID	Date Processed	Date Analyzed
Disalicylidenepropanediamine	EPA 625.1	μg/L	ND	1	0.05	0.1	Total	O-41148	17-Jul-23	30-Jul-23
Fluoranthene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Fluorene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Indeno[1,2,3-cd]pyrene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Naphthalene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Perylene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Phenanthrene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23
Pyrene	EPA 625.1	μg/L	ND	1	0.001	0.005	Total	O-41148	17-Jul-23	30-Jul-23

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Project: RED-HILL Project # 38001111 Job # 380-54555-1

Innovative Solutions for Nature

Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE SOURCE	ACCURACY	PR	ECISION	QA CODEc
							LEVEL RESULT	% LIMITS	%	LIMITS	

								70	LIMITS	70 EIIVII 13
Sample ID: 108340	-B1	QAQC Procedu	ral Blank			Matrix: Bla	nkMatrix	Sampled:		Received:
		Method: EPA 625.	.1			Batch ID: O-41	148	Prepared: 1	7-Jul-23	Analyzed: 30-Jul-23
(d10-Acenaphthene)	Total	65	1			% Recovery	100	65	27 - 133% PASS	
(d10-Phenanthrene)	Total	102	1			% Recovery	100	102	43 - 129% PASS	
(d12-Chrysene)	Total	107	1			% Recovery	100	107	52 - 144% PASS	
(d12-Perylene)	Total	85	1			% Recovery	100	85	36 - 161% PASS	
(d8-Naphthalene)	Total	66	1			% Recovery	100	66	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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Project: RED-HILL Project # 38001111 Job # 380-54555-1

Innovative Solutions for Nature

Poly	nuclear	Aroma	Hydr	QUALITY CONTROL REPORT									
ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE	SOURCE		ACCURACY	PRI	ECISION	QA CODEc
							LEVEL	RESULT	%	LIMITS	%	LIMITS	
Dibenzothiophene	Total	ND	1	0.001	0.005	μg/L							
Disalicylidenepropanediamin	Total	ND	1	0.05	0.1	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							

9/9/2023



Project: RED-HILL Project # 38001111 Job # 380-54555-1

Innovative Solutions for Nature

Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE SOURCE	ACCURACY	PR	ECISION	QA CODEc
							LEVEL RESULT	% LIMITS	%	LIMITS	

							LEVEL	NESULI	/0	LIMITS		% LIMITS
Sample ID: 108340	-BS1	QAQC Procedur	al Blank			Matrix: Bla	nkMatri	K San	npled:			Received:
		Method: EPA 625.1				Batch ID: O-4	1148	Pr	epared: 17			Analyzed: 30-Jul-23
(d10-Acenaphthene)	Total	58	1			% Recovery	100	0	58	27 - 133%	PASS	
(d10-Phenanthrene)	Total	80	1			% Recovery	100	0	80	43 - 129%	PASS	
(d12-Chrysene)	Total	96	1			% Recovery	100	0	96	52 - 144%	PASS	
(d12-Perylene)	Total	79	1			% Recovery	100	0	79	36 - 161%	PASS	
(d8-Naphthalene)	Total	60	1			% Recovery	100	0	60	25 - 125%	PASS	
1-Methylnaphthalene	Total	0.352	1	0.001	0.005	μg/L	0.5	0	70	31 - 128%	PASS	
1-Methylphenanthrene	Total	0.505	1	0.001	0.005	μg/L	0.5	0	101	66 - 127%	PASS	
2,3,5-Trimethylnaphthalene	Total	0.441	1	0.001	0.005	μg/L	0.5	0	88	55 - 122%	PASS	
2,6-Dimethylnaphthalene	Total	0.394	1	0.001	0.005	μg/L	0.5	0	79	48 - 120%	PASS	
2-Methylnaphthalene	Total	0.396	1	0.001	0.005	μg/L	0.5	0	79	47 - 130%	PASS	
Acenaphthene	Total	0.38	1	0.001	0.005	μg/L	0.5	0	76	53 - 131%	PASS	
Acenaphthylene	Total	0.431	1	0.001	0.005	μg/L	0.5	0	86	43 - 140%	PASS	
Anthracene	Total	0.429	1	0.001	0.005	μg/L	0.5	0	86	58 - 135%	PASS	
Benz[a]anthracene	Total	0.502	1	0.001	0.005	μg/L	0.5	0	100	55 - 145%	PASS	
Benzo[a]pyrene	Total	0.443	1	0.001	0.005	μg/L	0.5	0	89	51 - 143%	PASS	
Benzo[b]fluoranthene	Total	0.484	1	0.001	0.005	μg/L	0.5	0	97	46 - 165%	PASS	
Benzo[e]pyrene	Total	0.464	1	0.001	0.005	μg/L	0.5	0	93	42 - 152%	PASS	
Benzo[g,h,i]perylene	Total	0.466	1	0.001	0.005	μg/L	0.5	0	93	63 - 133%	PASS	
Benzo[k]fluoranthene	Total	0.483	1	0.001	0.005	μg/L	0.5	0	97	56 - 145%	PASS	
Biphenyl	Total	0.456	1	0.001	0.005	μg/L	0.5	0	91	56 - 119%	PASS	
Chrysene	Total	0.476	1	0.001	0.005	μg/L	0.5	0	95	56 - 141%	PASS	
Dibenz[a,h]anthracene	Total	0.454	1	0.001	0.005	μg/L	0.5	0	91	55 - 150%	PASS	
Dibenzo[a,l]pyrene	Total	0.386	1	0.001	0.005	μg/L	0.5	0	77	50 - 150%	PASS	

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CA ELAP #2769

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Project: RED-HILL Project # 38001111 Job # 380-54555-1

Innovative Solutions for Nature

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE	SOURCE	Α	CCURACY	PR	ECISION	QA CODEc
							LEVEL	RESULT	%	LIMITS	%	LIMITS	
Dibenzothiophene	Total	0.487	1	0.001	0.005	μg/L	0.5	0	97	46 - 126% PASS			
Disalicylidenepropanediamin	Total	28.1	1	0.05	0.1	μg/L	50	0	56	50 - 150% PASS			
Fluoranthene	Total	0.58	1	0.001	0.005	μg/L	0.5	0	116	60 - 146% PASS			
Fluorene	Total	0.421	1	0.001	0.005	μg/L	0.5	0	84	58 - 131% PASS			
Indeno[1,2,3-cd]pyrene	Total	0.446	1	0.001	0.005	μg/L	0.5	0	89	50 - 151% PASS			
Naphthalene	Total	0.356	1	0.001	0.005	μg/L	0.5	0	71	41 - 126% PASS			
Perylene	Total	0.407	1	0.001	0.005	μg/L	0.5	0	81	48 - 141% PASS			
Phenanthrene	Total	0.442	1	0.001	0.005	μg/L	0.5	0	88	67 - 127% PASS			
Pyrene	Total	0.53	1	0.001	0.005	μg/L	0.5	0	106	54 - 156% PASS			

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Project: RED-HILL Project # 38001111 Job # 380-54555-1

Innovative Solutions for Nature

Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF MDL	RL	UNITS	SPIKE SOUF	RCE /	ACCURACY	PRECISION	QA CODEc
						LEVEL RESU	JLT %	LIMITS	% LIMITS	
Sample ID: 10	8340-BS2 QAQ	C Procedural	Blank		Matrix	: BlankMatrix	Sampled:		Received:	

									,,,			,,	
Sample ID: 108340	-BS2	QAQC Procedur	al Blank			Matrix: Bla	nkMatrix	Sa	mpled:			R	leceived:
		Method: EPA 625.1				Batch ID: O-41	1148	I	Prepared: 17	7-Jul-23			Analyzed: 30-Jul-23
(d10-Acenaphthene)	Total	68	1			% Recovery	100	0	68	27 - 133%	PASS	16	30 PASS
(d10-Phenanthrene)	Total	92	1			% Recovery	100	0	92	43 - 129%	PASS	14	30 PASS
(d12-Chrysene)	Total	107	1			% Recovery	100	0	107	52 - 144%	PASS	11	30 PASS
(d12-Perylene)	Total	88	1			% Recovery	100	0	88	36 - 161%	PASS	11	30 PASS
(d8-Naphthalene)	Total	69	1			% Recovery	100	0	69	25 - 125%	PASS	14	30 PASS
1-Methylnaphthalene	Total	0.388	1	0.001	0.005	μg/L	0.5	0	78	31 - 128%	PASS	11	30 PASS
1-Methylphenanthrene	Total	0.546	1	0.001	0.005	μg/L	0.5	0	109	66 - 127%	PASS	8	30 PASS
2,3,5-Trimethylnaphthalene	Total	0.467	1	0.001	0.005	μg/L	0.5	0	93	55 - 122%	PASS	6	30 PASS
2,6-Dimethylnaphthalene	Total	0.424	1	0.001	0.005	μg/L	0.5	0	85	48 - 120%	PASS	7	30 PASS
2-Methylnaphthalene	Total	0.414	1	0.001	0.005	μg/L	0.5	0	83	47 - 130%	PASS	5	30 PASS
Acenaphthene	Total	0.403	1	0.001	0.005	μg/L	0.5	0	81	53 - 131%	PASS	6	30 PASS
Acenaphthylene	Total	0.469	1	0.001	0.005	μg/L	0.5	0	94	43 - 140%	PASS	9	30 PASS
Anthracene	Total	0.469	1	0.001	0.005	μg/L	0.5	0	94	58 - 135%	PASS	9	30 PASS
Benz[a]anthracene	Total	0.541	1	0.001	0.005	μg/L	0.5	0	108	55 - 145%	PASS	8	30 PASS
Benzo[a]pyrene	Total	0.492	1	0.001	0.005	μg/L	0.5	0	98	51 - 143%	PASS	10	30 PASS
Benzo[b]fluoranthene	Total	0.489	1	0.001	0.005	μg/L	0.5	0	98	46 - 165%	PASS	1	30 PASS
Benzo[e]pyrene	Total	0.491	1	0.001	0.005	μg/L	0.5	0	98	42 - 152%	PASS	5	30 PASS
Benzo[g,h,i]perylene	Total	0.493	1	0.001	0.005	μg/L	0.5	0	99	63 - 133%	PASS	6	30 PASS
Benzo[k]fluoranthene	Total	0.496	1	0.001	0.005	μg/L	0.5	0	99	56 - 145%	PASS	2	30 PASS
Biphenyl	Total	0.505	1	0.001	0.005	μg/L	0.5	0	101	56 - 119%	PASS	10	30 PASS
Chrysene	Total	0.507	1	0.001	0.005	μg/L	0.5	0	101	56 - 141%	PASS	6	30 PASS
Dibenz[a,h]anthracene	Total	0.481	1	0.001	0.005	μg/L	0.5	0	96	55 - 150%	PASS	5	30 PASS
Dibenzo[a,l]pyrene	Total	0.401	1	0.001	0.005	μg/L	0.5	0	80	50 - 150%	PASS	4	30 PASS

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CA ELAP #2769

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Project: RED-HILL Project # 38001111 Job # 380-54555-1

Innovative Solutions for Nature

Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE	SOURCE	Α	CCURACY	PRE	CISION QA CODEc
							LEVEL	RESULT	%	LIMITS	%	LIMITS
Dibenzothiophene	Total	0.5	1	0.001	0.005	μg/L	0.5	0	100	46 - 126% PASS	3	30 PASS
Disalicylidenepropanediamin	Total	29	1	0.05	0.1	μg/L	50	0	58	50 - 150% PASS	4	30 PASS
Fluoranthene	Total	0.629	1	0.001	0.005	μg/L	0.5	0	126	60 - 146% PASS	8	30 PASS
Fluorene	Total	0.46	1	0.001	0.005	μg/L	0.5	0	92	58 - 131% PASS	9	30 PASS
Indeno[1,2,3-cd]pyrene	Total	0.467	1	0.001	0.005	μg/L	0.5	0	93	50 - 151% PASS	4	30 PASS
Naphthalene	Total	0.398	1	0.001	0.005	μg/L	0.5	0	80	41 - 126% PASS	12	30 PASS
Perylene	Total	0.447	1	0.001	0.005	μg/L	0.5	0	89	48 - 141% PASS	9	30 PASS
Phenanthrene	Total	0.464	1	0.001	0.005	μg/L	0.5	0	93	67 - 127% PASS	6	30 PASS
Pyrene	Total	0.565	1	0.001	0.005	μg/L	0.5	0	113	54 - 156% PASS	6	30 PASS



Innovative Solutions for Nature

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Sample ID: 108341

	Area				
Retention	(% of	Concentration			Match Quality
Time	total)	(ng/L)	Library/ID	Cas Number	(%)
34.8351	3.0137	1111	Anthracene-D10-	1719-06-8	90
10.1772	6.6958	2469	m-Menthane, (1S,3S)-(+)-	13837-67-7	91
10.1197	3.3856	1248	Octane, 3-methyl-6-methylene-	74630-07-2	84
10.3910	2.6656	983	Cyclohexane, nitro-	1122-60-7	86
10.0594	0.9678	357	Sulfurous acid, di(cyclohexylmethyl) ester	1010309-22-7	86
10.2309	0.4729	174	Pentane, 3-ethyl-	617-78-7	81
10.2309	0.4632	171	Pyrrolidine	123-75-1	85
10.3887	0.4217	155	4,7-Epoxytricyclo[4.1.0.0(3,5)]heptane	175879-37-5	81
10.7631	0.3084	114	2-Pentene, 3,4-dimethyl-, (Z)-	4914-91-4	86

Concentration estimated using the response for Anthracene-d10

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Sample ID: 108342

	Area				
Retention	(% of	Concentration			Match Quality
Time	total)	(ng/L)	Library/ID	Cas Number	(%)
34.8351	3.6435	1111	Anthracene-D10	1517-22-2	91
10.1766	6.5675	2003	m-Menthane, (1S,3S)-(+)-	13837-67-7	91
10.3917	3.4906	1064	Cyclohexane, nitro-	1122-60-7	87
10.1198	3.3303	1016	Octane, 3-methyl-6-methylene-	74630-07-2	85
10.0436	1.5071	460	Hydroperoxide, 1-ethylbutyl	24254-56-6	84
10.7239	0.7706	235	2-Pentene, 3,4-dimethyl-, (E)-	4914-92-5	86
10.7249	0.6682	204	hihydrooxazole, 2-t-butyl-4-(1-hydroxy-1-methylethyl)-3-methoxycarbonyl-5-me	36808-01-2	85

Concentration estimated using the response for Anthracene-d10

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Sample ID: Lab Blank B1_41148

	Area				
Retention	(% of	Concentration			Match Quality
Time	total)	(ng/L)	Library/ID	Cas Number	(%)
34.8301	3.4334	1111	Anthracene-D10	1517-22-2	89
10.1718	3.7748	1222	m-Menthane, (1S,3S)-(+)-	13837-67-7	90
10.3871	3.0103	974	Cyclohexane, nitro-	1122-60-7	87
10.1172	1.8635	603	Octane, 3-methyl-6-methylene-	74630-07-2	83
10.0414	1.3015	421	Hydroperoxide, 1-ethylbutyl	24254-56-6	86
10.7248	0.8740	283	Cyclohexane, methyl-	108-87-2	83
10.7248	0.6842	221	2-Pentene, 4,4-dimethyl-, (Z)-	762-63-0	86
31.5777	0.3717	120	Benzoic acid, 2-ethylhexyl ester	5444-75-7	82

Concentration estimated using the response for Anthracene-d10

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

Chain of Custody Record

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Environment Testing

FINITE: 020-300-11VU	Sampler:			Lab PM:	W.	ı				Carr	er Track	Carrier Tracking No(s):	Ä	1	COC No:	No:	2	1			
Client Information (Sub Contract Lab)				Arac	Arada, Rachelle	e									380	380-63024.1	=				L
Client Contact Shipping/Receiving	Phone:			E-Mail:	E-Mail: Rachelle.Arada@et.eurofinsu	da@et.	eurofins	us.com	_	State of C	State of Origin: Hawaii	2			Page:	Page: Page 1 of 1	_				
Company: Physis Environmental Laboratories					Accreditations Re State - Hawaii	Accreditations Required (See State - Hawaii	ired (Se	note):							Job #:	Job #: 380-54565-1	7.				
Address:	Due Date Requested:	ed:						Analysis		Requested	1		- 1		Pres	ervati	Preservation Codes:	es:			
City:	TAT Requested (days):	ays):				\dashv	7			-		\dashv	╛	_	BA	A-HCL B-NaOH		N S	N - None		
Anaheim						_		-	_						0	n Acet	ile i	P - 2	1204S		
State, Zip: CA, 92806					DAL							_			mo	Vitric Ac		ZZ	Q - Na2SQ3		
Phone:	PO#					,, 020						-			ω T	F - MeOH G - Amchior		- S - S - S - S - S - S - S - S - S - S	S - H2SO4	S - H2SO4 T - TSP Dodecahydrate	_
Email:	WO#)										- I	H - Ascorbic Acid	Acid	4 - A	U - Acetone V - MCAA		
					No)				_					ere	1000	J - DI Water K - EDTA		×- P	W-pH 4-5		
Project Name: RED-HILL	Project #: 38001.111				es or			-						taine		EDA		Y - Trizma Z - other (s	Y - Trizma Z - other (specify)	(Aji	
Site:	SSOW#:				(Y		_	_			_			cor	Other:	n					
Honolulu BWS Sites					MSD			-						rofe	_			l			L
		Sample	Sample Type	Matrix (www.ts., S-solid,	d Filtered form MS/M (625 PAH	sis LL (EAL								al Number							
Sample Identification - Client ID (Lab ID)	Sample Date	100	G=grab)	BT=Tissue, A=Air	F		I		-	t	I	H		1	1	Spe	CIALL	Struc	Special instructions/Note:	Aote:	
	X	X	Preserva	Preservation Code:	X										1	1	1	I	1		
AIEA GULCH WELLS PUMP 2 (331-202-TP072) (380-54555-1)	7/10/23	09:00 Hawaiian		Water		×								N		Attach	See Attached Instructions	ruction	co.		
AIEA WELLS PUMPS 1&2 (260) (331-203-TP400) (380-54555-2)	7/10/23	09:30		Water		×					4			N	_	Attach	See Attached Instructions	ruction	co .		
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							Н			Н											
									+	+		+		-							
																Ш					
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Note: Since laboratory accreditations are subject to change, Eurofins Eaton Analytical, LLC places the ownership of method, analyte & accreditation compliance upon our subcontracturently 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 Eurofins Eaton Analytical, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins	tical, LLC places the os/matrix being analyzons are current to date	ownership of me ed, the samples , return the sign	sthod, analyte must be ship ed Chain of C	& accreditation ped back to the ustody attesting	compliano Eurofins E to said co	aton Anal	r subcon ytical, LL to Eurofil	tract labora C labora ns Eaton	ct laboratories. This s laboratory or other inst Eaton Analytical, LLC.	This sa her instr al, LLC.	mple shi	oment is	forward ovided.	ed und Any cha	er chain	accred	ody. If	the labo	nould be	ut laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eaton Analytical, LLC.	6
Possible Hazard Identification Unconfirmed					Sam	Sample Disposal (A fee may be assessed if samples are retained longer Return To Client Disposal By Lab Archive For	To Cli	A fee i	nay be	Dispo	assessed if san Disposal By Lab	sampl	es are	retain	tained long Archive For	nger i	than 1 month) Mon	Mont	nth) Months		
Deliverable Requested: I, II, III, IV, Other (specify)	Primary Deliverable Rank:	able Rank: 2			Spec	Special Instructions/C	uctions		C Requirements:	ents:											
Empty Kit Relinquished by:		Date:			Time:						Method	Method of Shipment:	nent		- 2	П				7	-
Relinquished by:	Date Time	111	W	Company	2 2	Received by	1	1				Date/T Date/T	The	23	_	1:1	15	Company	Company 9	213	
Relinquished by:	Date/Time:			Company	20	Received by:	×					Date	Date/Time:					Company	any		
Custody Seals Intact: Custody Seal No.: A Yes A No					0	Cooler Temperature(s)	perature	-	°C and Other Remarks:	emarks		1									
							1			١	1			1				Ver:	Ver: 06/08/2021	021	



Sample Receipt Summary

Receiving Info



Project Iteration ID: 1407003-416

Client Name: Euro

Eurofins Eaton Analytical

Project Name:

RED-HILL Project # 38001111 Job

380-54555-1

COC Page Number:	2 of 2
Bottle Label Color:	NA

1. Initials Received By:		
2. Date Received: 7/15/23		
3. Time Received: 11:15		
4. Client Name: Eurofins		
5. Courier Information: (Please circle)		
• Client • UPS	 Area Fast 	• DRS
FedEx GSO/GLS	Ontrac	PAMS
PHYSIS Driver:		TANG.
i. Start Time:	iii. Total	Mileage:
ii. End Time:		er of Pickups:
6. Container Information: (Please put the # of co		ci oi i ionapoi
• Cooler • Styrofoam Cooler		None
Carboy(s) Carboy Trash Can(s)		Other
7. What type of ice was used: (Please circle any t		- Other
• Wet Ice • Blue Ice	Dry Ice • Water	None
8. Randomly Selected Samples Temperature (°C)		1
	- Joseph Miller	nometer w
Inspection Info		
1. Initials Inspected By: RGH		
Sample Integrity Upon Receipt:		
COC(s) included and completely filled out		/ No
2. All sample containers arrived intact	/ / /	
 All samples listed on COC(s) are present Information on containers consistent with info 		
Correct containers and volume for all analyses		
All samples received within method holding till		
7. Correct preservation used for all analyses indic) / No
8. Name of sampler included on COC(s)	1 /	/ (No)
	Notes:	
	Notes.	

P.\Sample Logistics (SL)\SRS

Page 1 of 1

Monrovia, CA (Suite 100)

750 Royal Oaks Drive Suite 100 Monrovia, CA 91016 Phone (626) 386-1100

Chain of Custody Record



Environment Testing America

Client Information	Sampler: Brys	son No	ileamot		da, Rad	helle							r Trackin				COC No: 380-27941-2757.2	
Client Contact: Dr. Ron Fenstermacher	Phone: 808-748-5840			E-M	ail: chelle.A	rada@	Det e	uronis	IS CO	m		State	of Origin:				Page: Page 2 of 2	
Company:	000-7-40-00-40		PWSID:	144	I	raday	201.0				_	_				_	Job#:	
City & County of Honolulu Address:	Due Date Requeste	rd:				_			Ana	lysis	Rec	quest	ted				Preservation Codes	•
630 South Beretania Street; Chemistry Lab																	A HCI	M - Hexane
City: Honolulu	TAT Requested (da	iys):				23		or Oil	12								B - NaOH	N - None O - AsNaO2 P - Na2O4S
State, Zip: HI, 96843	Compliance Projec	t: A No				F	(EAL)	Motor	LL (EAL)			1					E - NaHSO4	Q - Na2SO3 R - Na2S2O3
Phone: 808-748-5091 (tel)	PO#: C20525101 exp	05312023				PAH Physis LL (EAL) + TICs	빌	- 8915 Diesel LL (EAL) and	See Li							3	G - Amchlor	S - H2SO4 T - TSP Dodecahydrate
Email:	WO #:	00012020			or No	sis L1	(Purgable) LL	ILL (EAL) a	Gas (Purgeable)	, ts							I - ICE	U - Acetone V - MCAA
rfenstemacher@hbws.org Project Name:	Project #:				88	P _y	s (Pu	lesell	G) SE	= =						ners	K-EDTA	W - pH 4-5 Y - Trizma
RED-HILL/HBWS sites Event Desc: RUSH Weekly Red Hill	38001111				0 0	PAH	5 Gas	5 Die		7.1 F						ntail	L-EDA Z	Z - other (specify)
Site:	SSOW#:				Samp	- 625	. 8015	- 891	8-	C - 53	200					of cont	Other:	
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (w=water, s=solid, O=waste/oil, BT=Tissue, A=Ali	Field Filtered	SUBCONTRACT		SUBCONTRACT - 89	SUBCONTRACT - 8015	537.1_DW_PREC - 537.1 Full List	533 - All Analytes					Total Number	Special Inst	tructions/Note:
	\sim	><	Preserva	tion Code:	XX	R	R	RA	R	AY	N	1878				X		
MOANALUA WELLS				Water													(7504) 1.0/	0.9
AIEA GULCH WELLS PUMP2	7/10/2023	0900	6	Water		2		2	2 4							ad .	Fel X: 77270	6496367
AIEA WELLS PUMPS 1&2 (260)	7/10/7023	0930	67	Water	T	2		2 7	- 4		T						Pump 2	-
HALAWA WELLS UNITS 1&2				Water	П					T							(750A) 0.6/0	1.5
					П					T						100	Fel X: 7727	06495555
FB MOANALUA WELLS				Water	П					Т		П		1 1			(750A) 1-71	1.6
FB AIEA GULCH WELLS PUMP2	7/10/2023			Water	П				7		T	T	12	<u> </u>		199	Fed x: 7727	06823720
FB AIEA WELLS PUMPS 1&2 (260)	7/10/2023			Water	П	П			7	-		T	14					
FB HALAWA WELLS UNITS 1&2				Water	П							T		-				
					П				T		T	38	30-545	55 COC	-	13		
					T						T	Ťι				17		
Possible Hazard Identification Non-Hazard Flammable Skin Irritant F Deliverable Requested: I, II, III, IV, Other (specify)	Poison B Unkn	nown 🗆	Radiologica	ı		$\Box_{\scriptscriptstyle F}$	eturn	To Cl	ent			Dispos	sed if s	amples .ab			ed longer than 1 m	nonth) Months
		10.1					msuc	CHOIS	/QC I	Kequ	reme		M - 111	1 Oh :		_		
Empty Kit Relinquished by: Relinquished by:	Date/Time: -/ ,	Date:		Company	Time		inad.t-	-					wietnod (of Shipme	100	X	772706491	
	+110	1/23	1130	Company HBWS		Wi	W	1-	Jac	FU	110	itia		Date/T		13	(000)	Company
Relinquished by:	Date/Time:			Company			ived by							Date/T	ime:		(Company
Relinquished by:	Date/Time:			Company		Rece								Date/T				Company

Monrovia, CA (Suite 100)

750 Royal Oaks Drive Suite 100 Monrovia, CA 91016 Phone (626) 386-1100

Chain of Custody Record

🔆 eurofins

Environment Testing America

Client Information	Sampler: Bys	m 11.1	acusto		ь РМ: ada, F	Pacha	ماا					C	Carrier Tracking	No(s):			COC No: 380-27941-2757.2)
Client Information Client Contact:	Phone:	Nav		E-I	Mail:							- 5	State of Origin:			7	Page:	
Dr. Ron Fenstermacher	808-748-5840		PWSID:	R	achelle	e.Arac	la@et.	euron	isus.	.com						_	Page 2 of 2	
Company: City & County of Honolulu			PWSID:						Ar	nalys	sis F	Requ	iested			ľ	100 #.	
Address: 630 South Beretania Street; Chemistry Lab	Due Date Request	ed:										T					Preservation Codes	s: M - Hexane
City:	TAT Requested (d	ays):			-11			동									A - HCL	N - None
Honolulu State, Zip:	-						3 3			Ē		i					C - Zn Acetate	O - AsNaO2 P - Na2O4S
HI, 96843	Compliance Proje	ct: A No			-111		E E	and Motor		L (E/							E - NaHSO4	Q - Na2SO3 R - Na2S2O3
Phone: 808-748-5091 (tel)	PO #: C20525101 exp	05312023					An Physis Lt (EAL) + IIC Gas (Purgable) LL (EAL)	L) an	S	Gas (Purgeable) LL (EAL)		- 1					C Amelias	S - H2SO4 T - TSP Dodecahydrate
Email:	WO #:	7 000 12020			or No)			8915 Diesel LL (EAL)	US T	rgeal	.						1 - Ice	U - Acetone V - MCAA
rfenstemacher@hbws.org Project Name:	Project #:				- 8	S L		l les	Is PL	s (Pu	II Lis					ers	K - EDTA	W - pH 4-5 Y - Trizma
RED-HILL/HBWS sites Event Desc: RUSH Weekly Red Hill	38001111				٥	0 80	S Gas	5 Die	25pl	5 Ga	표					끝	L - EDA	Z - other (specify)
Site:	SSOW#:				ашр		- 625 PAR PRIVSIS - 8015 Gas (Purga		525.2_PREC - (MOD) 525plus PLUS TICs	SUBCONTRACT - 8015	537.1_DW_PREC - 537.1 Full List					of co	Other:	
			Sample	Matrix	ed S	IS/M	SUBCONTRACT	SUBCONTRACT	C - (M	MCT	PREC	533 - Ali Analytes				per		
			Туре	(W=water, S=solid,	9 9	rm N		ONTE	PRE	ONT	M	A A				Nen		
Sample Identification	Sample Date	Sample Time	(C=comp, G=grab)	O=waste/oil	Air) H	Perform		UBC	25.2	UBC	37.1	33 - /				Total Number	Special Inc	tructions/Note:
Sample identification	Sample Date			tion Code	- A			RA	ю			N				Ź	Opecial illist	d detions/Note.
MOANALUA WELLS				Water	П							\neg					(750A) 1.0/	09
AIEA GULCH WELLS PUMP2	7/10/23	0100	6	Water	\forall		+				3	3						70649636
AIEA WELLS PUMPS 1&2 (260)	7/10/23	0930	6	Water	П							2,					Punp 2	
HALAWA WELLS UNITS 1&2				Water	П												750A) 0.6	0.5
					П		T					1					Fed 1.7727	106495555
FB MOANALUA WELLS				Water	П		Т										950A 171	1.6
FB AIEA GULCH WELLS PUMP2	7/10/23			Water	П						1	(Fed X: 7727	+06823710
FB AIEA WELLS PUMPS 1&2 (260)	7/10/23			Water	П						1	1						
FB HALAWA WELLS UNITS 1&2				Water														
Possible Hazard Identification						Sam	٦				ay b	_			\neg		d longer than 1 n	
Non-Hazard Flammable Skin Irritant Po	ison B Unki	nown -	Radiological	1	\dashv	Spec	Retur	n To		_	nuire		sposal By La	b	Aı	rchi	ve For	Months
							ai iiist	dollo	10/0	O 1780	14116	ment		Oblesses				
Empty Kit Relinquished by:	10.4.5	Date:			Tin								Method of					
Relinquished by: Bry Pult		10/23	1130	Company HBWS		_	eceived	-	N	lork	U	cu	ia	Date/Time:	123	,	1000	Company EE/4P
Relinquished by:	Date/Time:			Company		R	eceived	by:						Date/Time:				Company
Relinquished by:	Date/Time:			Company			eceived							Date/Time:				Company
Custody Seals Intact: Custody Seal No.:						C	poler Te	mperat	ure(s)	°C and	Othe	r Rem	arks: (750)	13.8	13:	7	ac) - fr	250

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Login Sample Receipt Checklist

Client: City & County of Honolulu Job Number: 380-54555-2

Login Number: 54555 List Source: Eurofins Eaton Analytical Pomona

List Number: 1

Creator: Ngo, Theodore

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

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