

Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Erwin Kawata City & County of Honolulu 630 South Beretania Street Public Service Bldg. Room 310 Honolulu, Hawaii 96843 Generated 11/21/2023 3:34:25 PM

JOB DESCRIPTION

RED-HILL

JOB NUMBER

380-58282-2

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





Eurofins Eaton Analytical Pomona

Job Notes

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

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

Compliance Statement

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

Authorization

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

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Qualifiers		3
Subcontract		
Qualifier	Qualifier Description	4
U	This analyte was not detected.	
Glossary		5
Abbreviation	These commonly used abbreviations may or may not be present in this report.	6
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis	
%R	Percent Recovery	7
CFL	Contains Free Liquid	
CFU	Colony Forming Unit	0
CNF	Contains No Free Liquid	0
DER	Duplicate Error Ratio (normalized absolute difference)	
Dil Fac	Dilution Factor	9
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	10
DLC	Decision Level Concentration (Radiochemistry)	
EDL	Estimated Detection Limit (Dioxin)	11
LOD	Limit of Detection (DoD/DOE)	
LOQ	Limit of Quantitation (DoD/DOE)	
MCL	EPA recommended "Maximum Contaminant Level"	
MDA	Minimum Detectable Activity (Radiochemistry)	
MDC	Minimum Detectable Concentration (Radiochemistry)	
MDL	Method Detection Limit	
ML	Minimum Level (Dioxin)	
MPN	Most Probable Number	
MQL	Method Quantitation Limit	
NC	Not Calculated	
ND	Not Detected at the reporting limit (or MDL or EDL if shown)	
NEG	Negative / Absent	
POS	Positive / Present	
PQL	Practical Quantitation Limit	
PRES	Presumptive	
QC	Quality Control	
RER	Relative Error Ratio (Radiochemistry)	
RL	Reporting Limit or Requested Limit (Radiochemistry)	
RPD	Relative Percent Difference, a measure of the relative difference between two points	
TEF	Toxicity Equivalent Factor (Dioxin)	
TEQ	Toxicity Equivalent Quotient (Dioxin)	
TNTC	Too Numerous To Count	

Job ID: 380-58282-2

Laboratory: Eurofins Eaton Analytical Pomona

Narrative

Job Narrative 380-58282-2

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

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

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

Receipt

The samples were received on 8/9/2023 10:10 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 time was 3.4°C

Subcontract Work

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

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

Dete	ction	Summa	ary

Lab Sample ID: 380-58282-3

Client Sample ID: MOANALUA WELLS

Lab Sample ID: 380-58282-1

No Detections.

Client Sample ID: TB: MOANALUA WELLS

No Detections.

This Detection Summary does not include radiochemical test results.

RL

0.005

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

Result Qualifier

ND

Analyte

1-Methylnaphthalene

Client Sample ID: MOANALUA WELLS Date Collected: 08/07/23 11:00 Date Received: 08/09/23 10:10

Lab Sample ID: 380-58282-1 Matrix: Drinking Water

08/10/23 00:00 09/06/23 18:11

Analyzed

6

8
9

Dil Fac

1

D

Prepared

MDL Unit

0.001 µg/L

BROMOFLUOROBENZENE 	87		60 - 140					08/10/23 18:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
GASOLINE	ND	U	0.02		mg/L			08/10/23 18:37	1
Analyte	Result	Qualifier	RL	MDL	-	<u>D</u>	Prepared	Analyzed	Dil Fac
_ Method: 8015 Gas (Purgeable) LL (EAL) -	SW846 80	15B Gasoline	e Range	Organic	s			
(d8-Naphthalene)	78		25 - 125				08/10/23 00:00	09/06/23 18:11	1
(d12-Perylene)	97		36 - 161				08/10/23 00:00	09/06/23 18:11	1
(d12-Chrysene)	90		52 - 144				08/10/23 00:00	09/06/23 18:11	1
(d10-Phenanthrene)	93		43 - 129				08/10/23 00:00	09/06/23 18:11	1
(d10-Acenaphthene)	88		27 - 133				08/10/23 00:00	09/06/23 18:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Pyrene	ND		0.005	0.001	µg/L		08/10/23 00:00	09/06/23 18:11	1
Phenanthrene	ND		0.005	0.001	µg/L		08/10/23 00:00	09/06/23 18:11	1
Perylene	ND		0.005	0.001	µg/L		08/10/23 00:00	09/06/23 18:11	1
Naphthalene	ND		0.005	0.001	µg/L		08/10/23 00:00	09/06/23 18:11	1
Indeno[1,2,3-cd]pyrene	ND		0.005	0.001	µg/L		08/10/23 00:00	09/06/23 18:11	1
Fluorene	ND		0.005	0.001	µg/L		08/10/23 00:00	09/06/23 18:11	1
Fluoranthene	ND		0.005	0.001	µg/L		08/10/23 00:00	09/06/23 18:11	1
Disalicylidenepropanediamine	ND		0.1	0.05	µg/L		08/10/23 00:00	09/06/23 18:11	1
Dibenzothiophene	ND		0.005	0.001	µg/L		08/10/23 00:00	09/06/23 18:11	1
Dibenzo[a,l]pyrene	ND		0.005	0.001	µg/L		08/10/23 00:00	09/06/23 18:11	1
Dibenz[a,h]anthracene	ND		0.005	0.001	µg/L		08/10/23 00:00	09/06/23 18:11	1
Chrysene	ND		0.005	0.001	µg/L		08/10/23 00:00	09/06/23 18:11	1
Biphenyl	ND		0.005	0.001	µg/L		08/10/23 00:00	09/06/23 18:11	1
Benzo[k]fluoranthene	ND		0.005	0.001	µg/L		08/10/23 00:00	09/06/23 18:11	1
Benzo[g,h,i]perylene	ND		0.005	0.001	µg/L		08/10/23 00:00	09/06/23 18:11	1
Benzo[e]pyrene	ND		0.005	0.001	µg/L		08/10/23 00:00	09/06/23 18:11	1
Benzo[b]fluoranthene	ND		0.005	0.001	µg/L		08/10/23 00:00	09/06/23 18:11	1
Benzo[a]pyrene	ND		0.005	0.001	µg/L		08/10/23 00:00	09/06/23 18:11	1
Benz[a]anthracene	ND		0.005	0.001	µg/L		08/10/23 00:00	09/06/23 18:11	1
Anthracene	ND		0.005	0.001	µg/L		08/10/23 00:00	09/06/23 18:11	1
Acenaphthylene	ND		0.005	0.001	µg/L		08/10/23 00:00	09/06/23 18:11	1
Acenaphthene	ND		0.005	0.001	µg/L		08/10/23 00:00	09/06/23 18:11	1
2-Methylnaphthalene	ND		0.005	0.001	µg/L		08/10/23 00:00	09/06/23 18:11	1
2,6-Dimethylnaphthalene	ND		0.005	0.001	µg/L		08/10/23 00:00	09/06/23 18:11	1
2,3,5-Trimethylnaphthalene	ND		0.005	0.001	µg/L		08/10/23 00:00	09/06/23 18:11	1
1-Methylphenanthrene	ND		0.005	0.001	µg/L		08/10/23 00:00	09/06/23 18:11	1

Method: 8015 LL DRO/MRO/JP5/JP8 - 8015 - TPH DRO/ORO									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DIESEL	ND	U	0.024		mg/L			08/16/23 21:46	1
JP5	ND	U	0.048		mg/L			08/16/23 21:46	1
JP8	ND	U	0.048		mg/L			08/16/23 21:46	1
MOTOR OIL	ND	U	0.048		mg/L			08/16/23 21:46	1
Surrogate BROMOBENZENE	%Recovery 76	Qualifier	Limits 60 - 130			-	Prepared	Analyzed 08/16/23 21:46	Dil Fac

Job ID: 380-58282-2

Client Sample ID: MOANALUA WELLS Lab Sample ID: 380-58282-1 Date Collected: 08/07/23 11:00 **Matrix: Drinking Water** Date Received: 08/09/23 10:10 Method: 8015 LL DRO/MRO/JP5/JP8 - 8015 - TPH DRO/ORO (Continued) Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac HEXACOSANE 94 60 - 130 08/16/23 21:46 1 Client Sample ID: TB: MOANALUA WELLS Lab Sample ID: 380-58282-3 Date Collected: 08/07/23 11:00 Matrix: Water Date Received: 08/09/23 10:10 Method: 8015 Gas (Purgeable) LL (EAL) - SW846 8015B Gasoline Range Organics Analyte Result Qualifier MDL Unit D RL Prepared Analyzed Dil Fac GASOLINE ND U 0.02 mg/L 08/10/23 20:33 1 Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac BROMOFLUOROBENZENE 87 60 - 140 08/10/23 20:33 1

Surrogate Summary

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 Limits) Acenapht Phenanth CRY NPT PRY Lab Sample ID **Client Sample ID** (27 - 133)(43-129) (52-144)(25 - 125)(36-161) 109591-B1 Method Blank 104 105 101 96 109 109591-BS1 Lab Control Sample 103 95 104 102 110 109591-BS2 Lab Control Sample Dup 109 104 101 104 109 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) CRY NPT PRY Acenapht Phenanth (25-125) (36-161) Lab Sample ID **Client Sample ID** (27 - 133)(43-129) (52-144) 380-58282-1 MOANALUA WELLS 93 88 90 78 97 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

Surrogate	Legend	

Lab Sample ID

380-58282-1

BFB = BROMOFLUOROBENZENE

Client Sample ID

MOANALUA WELLS

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

(60-140)

87

 Matrix: Water
 Prep Type: Total/NA

 Image: Chient Sample ID
 BFB

 380-58282-3
 Client Sample ID

 Surrogate Legend
 60-140)

BFB = BROMOFLUOROBENZENE

Surrogate Summary

Matrix: WATER	bas (Fulgeable) LL (LA	L) - 3v 040 001;	B Gasoline Range Organics Prep Type: Total/NA
			Percent Surrogate Recovery (Acceptance Limits)
		BFB	
Lab Sample ID	Client Sample ID	(60-140)	
23H071-01M	Matrix Spike	109	
23H071-01S	Matrix Spike Duplicate	108	
Surrogate Legend			
BFB = BROMOFLU	JOROBENZENE		
lethod: 8015 (as (Purgaabla) II (FA	I) - SW846 801	B Gasoline Range Organics
latrix: WATER	bas (Fulgeable) LL (LA	L) - 30040 00 1	• •
			Prep Type: Total/NA
			Percent Surrogate Recovery (Acceptance Limits)
		BFB	
Lab Sample ID	Client Sample ID		
23VGH7H05B	Method Blank		
Surrogate Legend			
BFB = BROMOFLU			
	JOROBENZENE		
Aethod: 8015 0	as (Purgeable) LL (EA	L) - SW846 801	B Gasoline Range Organics
		,	
Atrix: WATER			Pred Type: Total/NA
Matrix: WATER			Prep Type: Total/NA
Matrix: WATER			Prep Type: Total/NA Percent Surrogate Recovery (Acceptance Limits)

		BFB
Lab Sample ID	Client Sample ID	(70-130)
23VGH7H05C	LCD	108
23VGH7H05L	Lab Control Sample	96

Surrogate Legend

BFB = BROMOFLUOROBENZENE

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

		Percent Surrogate Recovery (Acceptance Limits)		
		BB	XACOSA	
Lab Sample ID	Client Sample ID	(60-130)	(60-130)	
380-58282-1	MOANALUA WELLS	76	94	

Surrogate Legend

BB = BROMOBENZENE

HEXACOSANE = HEXACOSANE

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

Γ			Percent Surrogate Recovery (Acceptance Limits)
		BB	XACOSA
Lab Sample ID	Client Sample ID		
23DSH017WB	Method Blank		
Surrogate Legend			
BB = BROMOBENZ	ENE		
HEXACOSANE = H	EXACOSANE		

Prep Type: Total/NA

Prep Type: Total/NA

Surrogate Summary

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

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

			Perc	ent Surrogate Recovery (Acceptance Limits)
		BB	XACOSA	
Lab Sample ID	Client Sample ID	(60-130)	(60-130)	
23DSH017WC	LCD	80	100	
23DSH017WL	Lab Control Sample	83	106	
23J5H017WC	LCD	80	97	
23J5H017WL	Lab Control Sample	83	90	
23J8H017WC	LCD	99	92	
23J8H017WL	Lab Control Sample	98	91	
Surrogate Legend				
BB = BROMOBENZ	ENE			

HEXACOSANE = HEXACOSANE

Job ID: 380-58282-2

Prep Type: Total/NA

5

8 9

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

Lab Sample ID: 109591-B1 Matrix: BlankMatrix Analysis Batch: O-42030

Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: O-42030_P

· · · · · · · · · · · · · · · · · · ·	Blank	Blank							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.005	0.001	µg/L		08/07/23 00:00	09/06/23 02:16	1
1-Methylphenanthrene	ND		0.005	0.001	µg/L		08/07/23 00:00	09/06/23 02:16	1
2,3,5-Trimethylnaphthalene	ND		0.005	0.001	µg/L		08/07/23 00:00	09/06/23 02:16	1
2,6-Dimethylnaphthalene	ND		0.005	0.001	µg/L		08/07/23 00:00	09/06/23 02:16	1
2-Methylnaphthalene	ND		0.005	0.001	µg/L		08/07/23 00:00	09/06/23 02:16	1
Acenaphthene	ND		0.005	0.001	µg/L		08/07/23 00:00	09/06/23 02:16	1
Acenaphthylene	ND		0.005	0.001	µg/L		08/07/23 00:00	09/06/23 02:16	1
Anthracene	ND		0.005	0.001	µg/L		08/07/23 00:00	09/06/23 02:16	1
Benz[a]anthracene	ND		0.005	0.001	µg/L		08/07/23 00:00	09/06/23 02:16	1
Benzo[a]pyrene	ND		0.005	0.001	µg/L		08/07/23 00:00	09/06/23 02:16	1
Benzo[b]fluoranthene	ND		0.005	0.001	µg/L		08/07/23 00:00	09/06/23 02:16	1
Benzo[e]pyrene	ND		0.005	0.001	µg/L		08/07/23 00:00	09/06/23 02:16	1
Benzo[g,h,i]perylene	ND		0.005	0.001	µg/L		08/07/23 00:00	09/06/23 02:16	1
Benzo[k]fluoranthene	ND		0.005	0.001	µg/L		08/07/23 00:00	09/06/23 02:16	1
Biphenyl	ND		0.005	0.001	µg/L		08/07/23 00:00	09/06/23 02:16	1
Chrysene	ND		0.005	0.001	µg/L		08/07/23 00:00	09/06/23 02:16	1
Dibenz[a,h]anthracene	ND		0.005	0.001	µg/L		08/07/23 00:00	09/06/23 02:16	1
Dibenzo[a,l]pyrene	ND		0.005	0.001	µg/L		08/07/23 00:00	09/06/23 02:16	1
Dibenzothiophene	ND		0.005	0.001	µg/L		08/07/23 00:00	09/06/23 02:16	1
Disalicylidenepropanediamine	ND		0.1	0.05	µg/L		08/07/23 00:00	09/06/23 02:16	1
Fluoranthene	ND		0.005	0.001	µg/L		08/07/23 00:00	09/06/23 02:16	1
Fluorene	ND		0.005	0.001	µg/L		08/07/23 00:00	09/06/23 02:16	1
Indeno[1,2,3-cd]pyrene	ND		0.005	0.001	µg/L		08/07/23 00:00	09/06/23 02:16	1
Naphthalene	ND		0.005	0.001	µg/L		08/07/23 00:00	09/06/23 02:16	1
Perylene	ND		0.005	0.001	µg/L		08/07/23 00:00	09/06/23 02:16	1
Phenanthrene	ND		0.005	0.001	µg/L		08/07/23 00:00	09/06/23 02:16	1
Pyrene	ND		0.005	0.001	µg/L		08/07/23 00:00	09/06/23 02:16	1

	Blank	Blank				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
(d10-Acenaphthene)	104		27 - 133	08/07/23 00:00	09/06/23 02:16	1
(d10-Phenanthrene)	105		43 - 129	08/07/23 00:00	09/06/23 02:16	1
(d12-Chrysene)	101		52 - 144	08/07/23 00:00	09/06/23 02:16	1
(d12-Perylene)	109		36 - 161	08/07/23 00:00	09/06/23 02:16	1
(d8-Naphthalene)	96		25 - 125	08/07/23 00:00	09/06/23 02:16	1

Lab Sample ID: 109591-BS1 Matrix: BlankMatrix Analysis Batch: O-42030

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

Prep Batch: O-42030_P

	Spike	LCS	LCS				%Rec	_
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1-Methylnaphthalene	0.5	0.483		µg/L		97	31 - 128	
1-Methylphenanthrene	0.5	0.519		µg/L		104	66 - 127	
2,3,5-Trimethylnaphthalene	0.5	0.522		µg/L		104	55 - 122	
2,6-Dimethylnaphthalene	0.5	0.507		µg/L		101	48 - 120	
2-Methylnaphthalene	0.5	0.492		µg/L		98	47 - 130	
Acenaphthene	0.5	0.504		µg/L		101	53 - 131	
Acenaphthylene	0.5	0.533		µg/L		107	43 - 140	
Anthracene	0.5	0.509		µg/L		102	58 - 135	

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

Lab Sample ID: 109591-BS1 Matrix: BlankMatrix

Client Sample ID: Lab Control Sample Prep Type: Total/NA Prep Batch: 0-42030 P

Analysis Batch: O-42030						Pi	rep Batch: O-42030_P	
•	Spike	LCS	LCS				%Rec	5
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benz[a]anthracene	0.5	0.455		µg/L		91	55 - 145	
Benzo[a]pyrene	0.5	0.538		µg/L		108	51 - 143	
Benzo[b]fluoranthene	0.5	0.499		µg/L		100	46 - 165	
Benzo[e]pyrene	0.5	0.514		µg/L		103	42 - 152	
Benzo[g,h,i]perylene	0.5	0.52		µg/L		104	63 - 133	8
Benzo[k]fluoranthene	0.5	0.512		µg/L		102	56 - 145	0
Biphenyl	0.5	0.503		µg/L		101	56 - 119	
Chrysene	0.5	0.488		µg/L		98	56 - 141	9
Dibenz[a,h]anthracene	0.5	0.525		µg/L		105	55 - 150	
Dibenzo[a,l]pyrene	0.5	0.413		µg/L		83	50 - 150	
Dibenzothiophene	0.5	0.498		µg/L		100	46 - 126	
Disalicylidenepropanediamine	50	54.4		µg/L		109	50 - 150	
Fluoranthene	0.5	0.501		µg/L		100	60 - 146	
Fluorene	0.5	0.529		µg/L		106	58 - 131	
Indeno[1,2,3-cd]pyrene	0.5	0.503		µg/L		101	50 - 151	
Naphthalene	0.5	0.472		µg/L		94	41 - 126	13
Perylene	0.5	0.525		µg/L		105	48 - 141	
Phenanthrene	0.5	0.502		µg/L		100	67 - 127	
Pyrene	0.5	0.51		µg/L		102	54 - 156	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
(d10-Acenaphthene)	103		27 - 133
(d10-Phenanthrene)	104		43 - 129
(d12-Chrysene)	102		52 - 144
(d12-Perylene)	110		36 - 161
(d8-Naphthalene)	95		25 - 125

Lab Sample ID: 109591-BS2 Matrix: BlankMatrix Analysis Batch: O-42030

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA Prep Batch: 0-42030 P

								130_P
Spike	LCS DUP	LCS DUP				%Rec		RPD
Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
0.5	0.52		µg/L		104	31 - 128	7	30
0.5	0.495		µg/L		99	66 - 127	5	30
0.5	0.525		µg/L		105	55 - 122	1	30
0.5	0.527		µg/L		105	48 - 120	4	30
0.5	0.523		µg/L		105	47 - 130	7	30
0.5	0.524		µg/L		105	53 - 131	4	30
0.5	0.54		µg/L		108	43 - 140	1	30
0.5	0.509		µg/L		102	58 - 135	0	30
0.5	0.425		µg/L		85	55 - 145	7	30
0.5	0.515		µg/L		103	51 - 143	5	30
0.5	0.487		µg/L		97	46 - 165	3	30
0.5	0.505		µg/L		101	42 - 152	2	30
0.5	0.512		µg/L		102	63 - 133	2	30
0.5	0.483		µg/L		97	56 - 145	5	30
0.5	0.528		µg/L		106	56 - 119	5	30
0.5	0.475		µg/L		95	56 - 141	3	30
	Added 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	Added Result 0.5 0.52 0.5 0.495 0.5 0.525 0.5 0.525 0.5 0.527 0.5 0.523 0.5 0.523 0.5 0.523 0.5 0.524 0.5 0.524 0.5 0.54 0.5 0.54 0.5 0.545 0.5 0.545 0.5 0.515 0.5 0.515 0.5 0.515 0.5 0.505 0.5 0.512 0.5 0.487 0.5 0.512 0.5 0.483 0.5 0.528	AddedResultQualifier0.50.520.520.50.4950.5250.50.5250.5230.50.5230.5230.50.5240.50.50.5240.50.50.540.540.50.5150.5150.50.5120.5120.50.5120.5120.50.4830.50.50.5120.512	Added Result Qualifier Unit 0.5 0.52 μg/L 0.5 0.495 μg/L 0.5 0.525 μg/L 0.5 0.527 μg/L 0.5 0.523 μg/L 0.5 0.523 μg/L 0.5 0.524 μg/L 0.5 0.524 μg/L 0.5 0.509 μg/L 0.5 0.515 μg/L 0.5 0.512 μg/L 0.5 0.512 μg/L 0.5 0.512 μg/L 0.5 0.512 μg/L 0.5 0.528 μg/L	Added Result Qualifier Unit D 0.5 0.52 µg/L µg/L 0.5 0.495 µg/L µg/L 0.5 0.525 µg/L µg/L 0.5 0.527 µg/L µg/L 0.5 0.523 µg/L µg/L 0.5 0.524 µg/L µg/L 0.5 0.509 µg/L µg/L 0.5 0.515 µg/L µg/L 0.5 0.425 µg/L µg/L 0.5 0.515 µg/L µg/L 0.5 0.505 µg/L µg/L 0.5 0.512 µg/L µg/L 0.5 0.512 µg/L µg/L 0.5 0.483 µg/L µg/L 0.5 0.528 µg/L µg/L	$\begin{array}{ c c c c c c } \hline Added & Result Qualifier Unit D %Rec \\ \hline 0.5 & 0.52 & \mug/L & 104 \\ \hline 0.5 & 0.495 & \mug/L & 99 \\ \hline 0.5 & 0.525 & \mug/L & 105 \\ \hline 0.5 & 0.527 & \mug/L & 105 \\ \hline 0.5 & 0.523 & \mug/L & 105 \\ \hline 0.5 & 0.524 & \mug/L & 105 \\ \hline 0.5 & 0.524 & \mug/L & 108 \\ \hline 0.5 & 0.54 & \mug/L & 108 \\ \hline 0.5 & 0.54 & \mug/L & 102 \\ \hline 0.5 & 0.425 & \mug/L & 85 \\ \hline 0.5 & 0.425 & \mug/L & 103 \\ \hline 0.5 & 0.425 & \mug/L & 103 \\ \hline 0.5 & 0.487 & \mug/L & 97 \\ \hline 0.5 & 0.512 & \mug/L & 101 \\ \hline 0.5 & 0.512 & \mug/L & 101 \\ \hline 0.5 & 0.483 & \mug/L & 97 \\ \hline 0.5 & 0.528 & \mug/L & 106 \\ \hline \end{array}$	$\begin{array}{ c c c c c c c } \hline Added & Result & Qualifier & Unit & D & %Rec & Limits \\ \hline 0.5 & 0.52 & \mu g/L & 104 & 31.128 \\ \hline 0.5 & 0.495 & \mu g/L & 99 & 66-127 \\ \hline 0.5 & 0.525 & \mu g/L & 105 & 55.122 \\ \hline 0.5 & 0.527 & \mu g/L & 105 & 48.120 \\ \hline 0.5 & 0.523 & \mu g/L & 105 & 47.130 \\ \hline 0.5 & 0.524 & \mu g/L & 105 & 53.131 \\ \hline 0.5 & 0.54 & \mu g/L & 108 & 43.140 \\ \hline 0.5 & 0.509 & \mu g/L & 102 & 58.135 \\ \hline 0.5 & 0.425 & \mu g/L & 103 & 51.143 \\ \hline 0.5 & 0.515 & \mu g/L & 103 & 51.143 \\ \hline 0.5 & 0.505 & \mu g/L & 101 & 42.152 \\ \hline 0.5 & 0.512 & \mu g/L & 101 & 42.152 \\ \hline 0.5 & 0.512 & \mu g/L & 102 & 63.133 \\ \hline 0.5 & 0.483 & \mu g/L & 97 & 56.145 \\ \hline 0.5 & 0.528 & \mu g/L & 106 & 56.119 \\ \hline \end{array}$	$\begin{array}{ c c c c c c c } \hline Added & Result Qualifier Unit & D & %Rec & Limits & RPD \\ \hline 0.5 & 0.52 & \mu g/L & 99 & 66-127 & 5 \\ \hline 0.5 & 0.495 & \mu g/L & 105 & 55-122 & 1 \\ \hline 0.5 & 0.525 & \mu g/L & 105 & 48-120 & 4 \\ \hline 0.5 & 0.527 & \mu g/L & 105 & 48-120 & 4 \\ \hline 0.5 & 0.523 & \mu g/L & 105 & 47-130 & 7 \\ \hline 0.5 & 0.524 & \mu g/L & 105 & 53-131 & 4 \\ \hline 0.5 & 0.54 & \mu g/L & 108 & 43-140 & 1 \\ \hline 0.5 & 0.509 & \mu g/L & 108 & 43-140 & 1 \\ \hline 0.5 & 0.425 & \mu g/L & 102 & 58-135 & 0 \\ \hline 0.5 & 0.515 & \mu g/L & 103 & 51-143 & 5 \\ \hline 0.5 & 0.515 & \mu g/L & 101 & 42-152 & 2 \\ \hline 0.5 & 0.512 & \mu g/L & 101 & 42-152 & 2 \\ \hline 0.5 & 0.512 & \mu g/L & 102 & 63-133 & 2 \\ \hline 0.5 & 0.483 & \mu g/L & 97 & 56-145 & 5 \\ \hline 0.5 & 0.528 & \mu g/L & 106 & 56-119 & 5 \\ \hline \end{array}$

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

Lab Sample ID: 109591-BS2 Matrix: BlankMatrix

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA Prep Batch: O-42030 P

Matrix: BlankMatrix	
Analysis Batch: O-42030	

Analysis Datch. 0-42030							ep Daten	. 0-420	/JU_I
	Spike	LCS DUP	LCS DUP				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Dibenz[a,h]anthracene	0.5	0.507		µg/L		101	55 - 150	4	30
Dibenzo[a,l]pyrene	0.5	0.384		µg/L		77	50 - 150	8	30
Dibenzothiophene	0.5	0.499		µg/L		100	46 - 126	0	30
Disalicylidenepropanediamine	50	52		µg/L		104	50 - 150	5	30
Fluoranthene	0.5	0.479		µg/L		96	60 - 146	4	30
Fluorene	0.5	0.527		µg/L		105	58 - 131	1	30
Indeno[1,2,3-cd]pyrene	0.5	0.485		µg/L		97	50 - 151	4	30
Naphthalene	0.5	0.502		µg/L		100	41 - 126	6	30
Perylene	0.5	0.509		µg/L		102	48 - 141	3	30
Phenanthrene	0.5	0.502		µg/L		100	67 - 127	0	30
Pyrene	0.5	0.484		µg/L		97	54 - 156	5	30

Limits
27 - 133
43 - 129
52 - 144
36 - 161
25 - 125

5

8

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

Lab Sample ID: 23VGH7H05	B								Cli	ent S	Sam	ple ID: Method	
Matrix: WATER												Prep Type: To	otal/NA
Analysis Batch: 23VGH7H0	5												
		MB	MB										
Analyte	Re	sult	Qualifier	RL		MDL	Unit		D P	repai	ed	Analyzed	Dil Fac
GASOLINE		ND	U	0.02			mg/L					08/10/23 16:43	1
		ΜВ	МВ										
Surrogate	%Recov	very	Qualifier	Limits					F	Prepar	red	Analyzed	Dil Fac
BROMOFLUOROBENZENE												08/10/23 16:43	1
Lab Sample ID: 23VGH7H05)L							Clie	nt Sa	mple) ID:	: Lab Control S	
Matrix: WATER												Prep Type: To	otal/NA
Analysis Batch: 23VGH7H0	5												
				Spike	LCS	LCS	5					%Rec	
Analyte				Added	Result	Qua	lifier	Unit	D	%R	ec	Limits	
GASOLINE				0.5	0.4			mg/L			80	60 - 130	
	LCS	LCS											
Surrogate	%Recovery	Qual	lifier	Limits									
BROMOFLUOROBENZENE	96			70 - 130									
Lab Sample ID: 23H071-01N									C	liont	Sar	mple ID: Matrix	Sniko
Matrix: WATER									Ŭ	ient	Jai	Prep Type: To	
Analysis Batch: 23VGH7H0	5											i iep iype. it	
	Sample	Sam	ple	Spike	MS	MS						%Rec	
Analyte	Result		•	Added	Result	Qua	lifier	Unit	D	%R	ec	Limits	
GASOLINE	ND			0.5	0.429			mg/L			86	50 - 130	

QC Sample Results

light: City & County of Honoly		QC	Sample	Resi	ults				50000 0
Client: City & County of Honolu Project/Site: RED-HILL	IIU							Job ID: 380-5	00202-2
lethod: 8015 Gas (Purg	eable) Ll	_ (EAL) -	SW846 80	15B G	asoline	Range	Organics	(Continued)
Lab Sample ID: 23H071-01M Matrix: WATER							Client Sar	mple ID: Matrix Prep Type: T	
Analysis Batch: 23VGH7H0	5								
	MS								
Surrogate BROMOFLUOROBENZENE	%Recovery 109	Qualifier	Limits 60 - 140						
BRUMUFLUUKUBEINZEINE	109		00 - 140						
Lab Sample ID: 23H071-01S Matrix: WATER						Client S	ample ID: M	latrix Spike Du Prep Type: Te	
Analysis Batch: 23VGH7H0		0la	Onika	Men	MSD			%Rec	RPD
Analyte	Sample Result	Sample Qualifier	Spike Added	-	Qualifier	Unit	D %Rec	Limits RPI	
GASOLINE	ND	Quaimer	0.5	0.441	Quanner	mg/L	<u> </u>		$\frac{1}{3}$ $\frac{1}{30}$
			0.0	V		mg, E		00-100	0 00
	MSD								
	%Recovery	Qualifier	Limits						
BROMOFLUOROBENZENE	108		60 - 140						
Analysis Poton 2705 Burger	. .							Prep Type: T	
		MB MB							
Analyte	Res	sult Qualifier		_	MDL Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Analyte DIESEL	Res	ND U	0.025	5	mg/L	D	Prepared	Analyzed	Dil Fac
Analyte DIESEL JP5	Res	ND U	0.025	5	mg/L mg/L	D	Prepared	Analyzed 08/16/23 18:21 08/16/23 18:21	Dil Fac 1 1
Analyte DIESEL JP5 JP8	Res	ND U ND U ND U ND U	0.025 0.05 0.05	5 5 5	mg/L mg/L mg/L	D	Prepared	Analyzed 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21	Dil Fac 1 1 1
Analyte DIESEL JP5 JP8	Res	ND U ND U ND U ND U ND U ND U	0.025	5 5 5	mg/L mg/L	<u>D</u>	Prepared	Analyzed 08/16/23 18:21 08/16/23 18:21	Dil Fac 1 1
Analyte DIESEL JP5 JP8 MOTOR OIL	<u>Res</u>	Sult Qualifier ND U ND U ND U ND U ND U ND U ND W	0.025 0.05 0.05 0.05	5 5 5	mg/L mg/L mg/L	<u>D</u>		Analyzed 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21	Dil Fac 1 1 1 1
Analyte DIESEL JP5 JP8 MOTOR OIL Surrogate	<u>Res</u>	ND U ND U ND U ND U ND U ND U	0.025 0.05 0.05 0.05	5 5 5	mg/L mg/L mg/L	<u>D</u>	Prepared Prepared	Analyzed 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 Analyzed	Dil Fac 1 1 1 1 Dil Fac
Analyte DIESEL JP5 JP8 MOTOR OIL Surrogate BROMOBENZENE	<u>Res</u>	Sult Qualifier ND U ND U ND U ND U ND U ND U ND W	0.025 0.05 0.05 0.05	5 5 5	mg/L mg/L mg/L	<u>D</u>		Analyzed 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 Analyzed 08/16/23 18:21	Dil Fac 1 1 1 1 1 <i>Dil Fac</i> 1
Analyte DIESEL JP5 JP8 MOTOR OIL Surrogate BROMOBENZENE HEXACOSANE	Res	Sult Qualifier ND U ND U ND U ND U ND U ND U ND W	0.025 0.05 0.05 0.05	5 5 5	mg/L mg/L mg/L		Prepared	Analyzed 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21	Dil Fac 1 1 1 1 1 1 Dil Fac 1 1
Analyte DIESEL JP5 JP8 MOTOR OIL Surrogate BROMOBENZENE HEXACOSANE Lab Sample ID: 23DSH017W Matrix: WATER	Res	Sult Qualifier ND U ND U ND U ND U ND U ND U ND W	0.025 0.05 0.05 0.05	5 5 5	mg/L mg/L mg/L		Prepared	Analyzed 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 Analyzed 08/16/23 18:21	Dil Fac 1 1 1 1 1 <i>Dil Fac</i> 1 1 Sample
Analysis Batch: 23DSH017V Analyte DIESEL JP5 JP8 MOTOR OIL Surrogate BROMOBENZENE HEXACOSANE Lab Sample ID: 23DSH017W Matrix: WATER Analysis Batch: 23DSH017V	Res	Sult Qualifier ND U ND U ND U ND U ND U ND U ND W	0.025 0.05 0.05 <u>Limits</u>	5	mg/L mg/L mg/L		Prepared	Analyzed 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 Analyzed 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 : Lab Control S Prep Type: To	Dil Fac 1 1 1 1 1 <i>Dil Fac</i> 1 1 Sample
Analyte DIESEL JP5 JP8 MOTOR OIL Surrogate BROMOBENZENE HEXACOSANE Lab Sample ID: 23DSH017W Matrix: WATER Analysis Batch: 23DSH017W	Res	Sult Qualifier ND U ND U ND U ND U ND U ND U ND W	0.025 0.05 0.05 0.05	5 5 5 	mg/L mg/L mg/L	Clien	Prepared	Analyzed 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 Analyzed 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 : Lab Control S Prep Type: To %Rec	Dil Fac 1 1 1 1 1 <i>Dil Fac</i> 1 1 Sample
Analyte DIESEL JP5 JP8 MOTOR OIL Surrogate BROMOBENZENE HEXACOSANE Lab Sample ID: 23DSH017W Matrix: WATER Analysis Batch: 23DSH017W	Res	Sult Qualifier ND U ND U ND U ND U ND U ND U ND W	0.025 0.05 0.05 <u>Limits</u>	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	mg/L mg/L mg/L	Clien	Prepared nt Sample ID: D %Rec	Analyzed 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 Analyzed 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 : Lab Control S Prep Type: To	Dil Fac 1 1 1 1 1 <i>Dil Fac</i> 1 1 Sample
Analyte DIESEL JP5 JP8 MOTOR OIL Surrogate BROMOBENZENE HEXACOSANE Lab Sample ID: 23DSH017W Matrix: WATER Analysis Batch: 23DSH017W	Recov	Sult Qualifier ND U ND U ND U ND U MB MB Very Qualifier	0.025 0.05 0.05 <i>Limits</i>	5 5 5 	mg/L mg/L mg/L	Clien	Prepared	Analyzed 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 <i>Analyzed</i> 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 : Lab Control S Prep Type: To %Rec Limits	Dil Fac 1 1 1 1 1 <i>Dil Fac</i> 1 1 Sample
Analyte DIESEL JP5 JP8 MOTOR OIL Surrogate BROMOBENZENE HEXACOSANE Lab Sample ID: 23DSH017W Matrix: WATER Analysis Batch: 23DSH017W Analyte DIESEL	Res	Sult Qualifier ND U ND U ND U ND U MB MB Very Qualifier LCS	0.025 0.05 0.05 0.05 <i>Limits</i> Spike Added 2.5	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	mg/L mg/L mg/L	Clien	Prepared nt Sample ID: D %Rec	Analyzed 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 <i>Analyzed</i> 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 : Lab Control S Prep Type: To %Rec Limits	Dil Fac 1 1 1 1 1 <i>Dil Fac</i> 1 1 Sample
Analyte DIESEL JP5 JP8 MOTOR OIL Surrogate BROMOBENZENE HEXACOSANE Lab Sample ID: 23DSH017W Matrix: WATER Analysis Batch: 23DSH017W Analyte DIESEL Surrogate	Res	Sult Qualifier ND U ND U ND U ND U MB MB Very Qualifier LCS	0.025 0.05 0.05 0.05 <i>Limits</i> 2.5 <i>Limits</i>	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	mg/L mg/L mg/L	Clien	Prepared nt Sample ID: D %Rec	Analyzed 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 <i>Analyzed</i> 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 : Lab Control S Prep Type: To %Rec Limits	Dil Fac 1 1 1 1 1 <i>Dil Fac</i> 1 1 Sample
Analyte DIESEL JP5 JP8 MOTOR OIL Surrogate BROMOBENZENE HEXACOSANE Lab Sample ID: 23DSH017W Matrix: WATER Analysis Batch: 23DSH017V Analyte DIESEL Surrogate BROMOBENZENE	Res	Sult Qualifier ND U ND U ND U ND U MB MB Very Qualifier LCS	0.025 0.05 0.05 0.05 <i>Limits</i> 2.5 Limits 60 - 130	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	mg/L mg/L mg/L	Clien	Prepared nt Sample ID: D %Rec	Analyzed 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 <i>Analyzed</i> 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 : Lab Control S Prep Type: To %Rec Limits	Dil Fac 1 1 1 1 1 <i>Dil Fac</i> 1 1 Sample
Analyte DIESEL JP5 JP8 MOTOR OIL Surrogate BROMOBENZENE HEXACOSANE Lab Sample ID: 23DSH017W Matrix: WATER Analysis Batch: 23DSH017W Analyte DIESEL	Res	Sult Qualifier ND U ND U ND U ND U MB MB Very Qualifier LCS	0.025 0.05 0.05 0.05 <i>Limits</i> 2.5 <i>Limits</i>	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	mg/L mg/L mg/L	Clien	Prepared nt Sample ID: D %Rec	Analyzed 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 <i>Analyzed</i> 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 : Lab Control S Prep Type: To %Rec Limits	Dil Fac 1 1 1 1 1 <i>Dil Fac</i> 1 1 Sample
Analyte DIESEL JP5 JP8 MOTOR OIL Surrogate BROMOBENZENE HEXACOSANE Lab Sample ID: 23DSH017W Matrix: WATER Analysis Batch: 23DSH017W Analyte DIESEL Surrogate BROMOBENZENE HEXACOSANE Lab Sample ID: 23J5H017W Matrix: WATER	Res	Sult Qualifier ND U ND U ND U ND U MB MB Very Qualifier LCS	0.025 0.05 0.05 0.05 <i>Limits</i> 2.5 Limits 60 - 130	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	mg/L mg/L mg/L	Clien Unit mg/L	Prepared It Sample ID: <u>D</u> %Rec 109	Analyzed 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 <i>Analyzed</i> 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 : Lab Control S Prep Type: To %Rec Limits	Dil Fac 1 1 1 1 1 Dil Fac 1 1 Sample otal/NA
Analyte DIESEL JP5 JP8 MOTOR OIL Surrogate BROMOBENZENE HEXACOSANE Lab Sample ID: 23DSH017W Matrix: WATER Analysis Batch: 23DSH017W Analyte DIESEL Surrogate BROMOBENZENE HEXACOSANE Lab Sample ID: 23J5H017W	Res	Sult Qualifier ND U ND U ND U ND U MB MB Very Qualifier LCS	0.025 0.05 0.05 0.05 <i>Limits</i> 2.5 Limits 60 - 130	LCS Result 2.73	LCS Qualifier	Clien Unit mg/L	Prepared It Sample ID: <u>D</u> %Rec 109	Analyzed 08/16/23 18:21 08/16/23 18:21 10/16/23 18:21 10/1	Dil Fac 1 1 1 1 1 1 1 1 Sample otal/NA
Analyte DIESEL JP5 JP8 MOTOR OIL Surrogate BROMOBENZENE HEXACOSANE Lab Sample ID: 23DSH017W Matrix: WATER Analysis Batch: 23DSH017V Analyte DIESEL Surrogate BROMOBENZENE HEXACOSANE Lab Sample ID: 23J5H017W Matrix: WATER Analysis Batch: 23DSH017V	Res	Sult Qualifier ND U ND U ND U ND U MB MB Very Qualifier LCS	0.025 0.05 0.05 0.05 <i>Limits</i> 2.5 Limits 60 - 130	LCS Result 2.73	mg/L mg/L mg/L	Clien Unit mg/L	Prepared It Sample ID: <u>D</u> %Rec 109	Analyzed 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 08/16/23 18:21 1.100 Control S Prep Type: Tr %Rec Limits 50 - 130	Dil Fac 1 1 1 1 1 Dil Fac 1 1 Sample rotal/NA
Analyte DIESEL JP5 JP8 MOTOR OIL Surrogate BROMOBENZENE HEXACOSANE Lab Sample ID: 23DSH017W Matrix: WATER Analysis Batch: 23DSH017W Analyte DIESEL Surrogate BROMOBENZENE HEXACOSANE Lab Sample ID: 23J5H017W Matrix: WATER	Res	Sult Qualifier ND U ND U ND U ND U MB MB Very Qualifier LCS	0.025 0.05 0.05 0.05 0.05 0.05 0.05 0.05	LCS LCS LCS	LCS Qualifier	Clien Unit mg/L	Prepared It Sample ID: <u>D</u> %Rec 109	Analyzed 08/16/23 18:21 08/16/23 18:21 10/16/23 18:21 10/1	Dil Fac 1 1 1 1 1 1 1 1 Sample otal/NA

HEXACOSANE

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

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Lab Sample ID: 23J5H Matrix: WATER Analysis Batch: 23DS						Clie	ent Sar	nple ID	: Lab Control Samp Prep Type: Total/N	
	LCS	LCS								
Surrogate	%Recovery	Qualifier	Limits							
BROMOBENZENE	83		60 - 130							
HEXACOSANE	90		60 - 130							
Lab Sample ID: 23J8H Matrix: WATER Analysis Batch: 23DS						Clie	ent Sar	nple ID	: Lab Control Samp Prep Type: Total/N	
			Spike	LCS	LCS				%Rec	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	
JP8			2.5	2.68		mg/L		107	30 - 160	
	LCS	LCS								
Surrogate	%Recovery	Qualifier	Limits							
BROMOBENZENE	98		60 - 130							

60 - 130

Job ID: 380-58282-2

Analysis Batch: O-42030

Subcontract

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-58282-1	MOANALUA WELLS	Total/NA	Drinking Water	625 PAH Physis	O-42030_P
				LL (EAL) + TICs	
109591-B1	Method Blank	Total/NA	BlankMatrix	625 PAH Physis	O-42030_P
				LL (EAL) + TICs	
109591-BS1	Lab Control Sample	Total/NA	BlankMatrix	625 PAH Physis	O-42030_P
				LL (EAL) + TICs	
109591-BS2	Lab Control Sample Dup	Total/NA	BlankMatrix	625 PAH Physis	O-42030_P
				LL (EAL) + TICs	

Analysis Batch: 23DSH017W

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-58282-1	MOANALUA WELLS	Total/NA	Drinking Water	- 8015 LL DRO/MRO/JP5/J P8	
23DSH017WB	Method Blank	Total/NA	WATER	8015 LL DRO/MRO/JP5/J P8	
23DSH017WL	Lab Control Sample	Total/NA	WATER	8015 LL DRO/MRO/JP5/J P8	
23J5H017WL	Lab Control Sample	Total/NA	WATER	8015 LL	
23J8H017WL	Lab Control Sample	Total/NA	WATER	DRO/MRO/JP5/J P8 8015 LL	
				DRO/MRO/JP5/J P8	

Analysis Batch: 23VGH7H05

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-58282-1	MOANALUA WELLS	Total/NA	Drinking Water	8015 Gas	
				(Purgeable) LL	
				(EAL)	
380-58282-3	TB: MOANALUA WELLS	Total/NA	Water	8015 Gas	
				(Purgeable) LL	
				(EAL)	
23VGH7H05B	Method Blank	Total/NA	WATER	8015 Gas	
				(Purgeable) LL	
				(EAL)	
23VGH7H05L	Lab Control Sample	Total/NA	WATER	8015 Gas	
				(Purgeable) LL	
				(EAL)	
23H071-01M	Matrix Spike	Total/NA	WATER	8015 Gas	
				(Purgeable) LL	
				(EAL)	
23H071-01S	Matrix Spike Duplicate	Total/NA	WATER	8015 Gas	
				(Purgeable) LL	
L				(EAL)	

Prep Batch: O-42030_P

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
380-58282-1	MOANALUA WELLS	Total/NA	Drinking Water	EPA_625	
109591-B1	Method Blank	Total/NA	BlankMatrix	EPA_625	
109591-BS1	Lab Control Sample	Total/NA	BlankMatrix	EPA_625	
109591-BS2	Lab Control Sample Dup	Total/NA	BlankMatrix	EPA_625	

Client Sample ID: MOANALUA WELLS Date Collected: 08/07/23 11:00 Date Received: 08/09/23 10:10

Matrix: Water

Lab Sample ID: 380-58282-1 Matrix: Drinking Water

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	EPA_625		1	O-42030_P			08/10/23 00:00
Total/NA	Analysis	625 PAH Physis LL (EAL) + TICs		1	O-42030	YC		09/06/23 18:11
Total/NA	Analysis	8015 Gas (Purgeable) LL (EAL)		1	23VGH7H05	SCerva		08/10/23 18:37
Total/NA	Analysis	8015 LL DRO/MRO/JP5/JP8		1	23DSH017W	SDees		08/16/23 21:46
Client Sam	ple ID: TB:	MOANALUA WE	ELLS				L	ab Sample ID: 380-58282-3

Client Sample ID: TB: MOANALUA WELLS Date Collected: 08/07/23 11:00 Date Received: 08/09/23 10:10

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Analysis	8015 Gas		1	23VGH7H05	SCerva		08/10/23 20:33
		(Purgeable) LL (EAL)						

Laboratory References:

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

11/21/2023

Method Summary

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

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

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
380-58282-1	MOANALUA WELLS	Drinking Water	08/07/23 11:00	08/09/23 10:10
380-58282-3	TB: MOANALUA WELLS	Water	08/07/23 11:00	08/09/23 10:10



Date: 09-05-2023 EMAX Batch No.: 23H071

Attn: Jackie Contreras

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

Subject: Laboratory Report Project: 380-58282

Enclosed is the Laboratory report for samples received on $08/10/23. \ The data reported relate only to samples listed below :$

Sample ID	Control # Col Date	Matrix	Analysis
			• • • • • • • •
380-58282-1	H071-01 08/07/23	WATER	TPH GASOLINE
380-58282-2	H071-02 08/07/23	WATER	TPH GASOLINE
380-58282-1MS	H071-01M 08/07/23	WATER	TPH GASOLINE
380-58282-1MSD	H071-01S 08/07/23	WATER	TPH GASOLINE

The results are summarized on the following pages.

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

Sincerely yours,

Caspar J. Pang Laboratory Director

This report is confidential and intended solely for the use of the individual or entity to whom it is addressed. This report shall not be reproduced except in full or without the written approval of EMAX.

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

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

Eurofins Eaton Analytical Pomona			23H071		;
941 Corporate Center Drive Pomona CA 91768-2642	Chain o	Chain of Custody Record	ecord		😴 eurofins Environment Testing
6-386-1100			-		COD Mo-
Client Information (Sub Contract Lab)	Sampler:	Lab PM: Arada,	t, Rachelle	ND(S):	380-69194.1
l I	Phone:	E-Mail: Rache	E-Mail: Rachelle.Arada@et.eurofinsus.com	State of Origin: Hawaii	Page: Page 1 of 1
Company: FMAX Laboratories Inc			Accreditations Required (See note): State - Hawaii		Job #: 380-58282-1
Adress: Adress: Potst fuitta Street	Due Date Requested: 8/23/2023		Analysis Rec	Requested	8
ooosi rujita oueed,	TAT Requested (days):				
I orrance State, Zpr C A DAFORE					D - Nitric Acid P - Na204S E - NaHSO4 R - Na2S03
Phone:	PO#:		<u>8108 ((</u>		
Email:	WO #:		(o) (O)	CAN SET ON Y BUILDING	
Project Name: RED-HILL	Project #: 38001111		es ot (9]	ienistn	K - EDTA Y - Trizma L - EDA Z - other (specify)
site: Honolulu BWS Sites	SSOW#:		SD (Y Purge (Purge (Purge	01 CO	Other:
		Matrix (wi=water, S=solid.	ו דוונפינט (MNSM mice 166915 נבר D 16615 נבר D 16915 (16915 נבר D 16915 (16915 נבר D 16915 (16915	l Number	
Sample Identification - Client ID (Lab ID)	Sample Date Time	-	Perfo 8UB (Purg 9UB (BUB (Special Instructions/Note:
	X	Preservation Code:			Con Attracted Instructions
MOANALUA WELLS (331-223-TP202) (380-58282-1)	8/7/23 Hawaiian	Water	XX	9	See Auached Instructions
2 FB: MOANALUA WELLS (331-223-TP202) (380-58282-2)	8/7/23 11:00 Hawaijan	Water	×	2	See Attached Instructions
Note: Since laboratory accreditations are subject to change, Eurofins Eaton Analytical, LLC places the ownership of method, analyte 8 accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-oustory does not currently maturing maturing and pacts the samples must be shipped back to the Eurofins Eaton Analytical, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Eaton Analytical, LLC alboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Eaton Analytical, LLC alboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Eaton Analytical, LLC attentions will be provided. Any changes to accreditation status should be brought to Eurofins Eaton Analytical, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Eaton Analytical, LLC.	ytical, LLC places the ownership of m sts/matrix being analyzed, the samples ons are current to date, return the sign	thod, analyte & accreditation of must be shipped back to the i ed Chain of Custody attesting	compilance upon our subcontract laboratories. Eurofins Eaton Analytical, LLC laboratory or othe to said compilance to Eurofins Eaton Analytical,	This sample shipment is forwarded under r instructions will be provided. Any chan LLC.	chain-of-custody. If the laboratory does not ges to accreditation status should be brought to
Possible Hazard Identification			Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	assessed if samples are retaine	tained longer than 1 month) Archive For Months
Deliverable Requested: I, II, II, IV, Other (specify)	Primary Deliverable Rank: 2		C Requireme		
Empty Kit Relinquished by:	Date:		Time:	Method of Shipment:	
Relinquished by:	Bate/Film# / 05	S Company	Received by	Date/Time: 05/10/23	1 UST EM4-X
Relinquished by:	1 22	Company	Received/by:	Date/Time:	Company
Relinquished by:	Date/Time:	- Company	Received by:	Date/Time:	Company
Custody Seals intact: Custody Seal No.: RFR邻RN No: ク3HO71			Cooler Temperature(s) ^o C and Other Remarks:	5.4/5.3	*cf:- 0. page 2 of 32
			11 12 13 14	7 8 9 10	- 2 3 4 5 6
			2		



REFERENCE: EMAX-SM02 Rev. 12 SAMPLE RECEIPT FORM 1

No INALA	X_{-}	Υ.	SA	REFERENCE: EMAX-SM02 Rev. 12 MPLE RECEIPT FORM 1
LABORATORIES	, INC.			
Type of De	livery	Airbill / Trac	king Number	ECN 23H671
Fedex UPS GSO			/	Recipient JUCLYNE SOLIS-RAMOS Date 08/10/23 Time 10:55
EMAX Courier Client Deli	very			Date 08/10/23 Time 10:55
COC INSPECTION	1			No. 1 Inc. N. Maria
Client Name	Client PM/FC	Sampler Name	Sampling Date/Time	Sample ID Matrix
Address	Tel # / Fax #	Courier Signature		D Preservative (If any)
afety Issues (if any)	□ High concentrations exp	ected	LI Kau screening required	
lote:				
				· - ·
PACKAGING INSPECTIO	S Cooler	D Box	🗆 Other	
Condition Correction	Custody Seal	🗆 Intact	Damaged	· · · · · · · · · · · · · · · · · · ·
Packaging factor:	N Bubble Pack	Styrofoam	Popcorn	□ Sufficient □
emperatures	Cooler 15.4/5.3 C	Cooler 2°C	Cooler 3°C	□ Cooler 4°C □ Cooler 5°C
Cool, ≤6 "C but not frozen) -0.1	Cooler 6 °C	□ Cooler 7°C	□ Cooler 8°C	□ Cooler 9°C □ Cooler 10°C
Thermometer:	1 - S/N 221852768	B) S/N 124925379	C - S/N	D - S/N
Comments: 🗆 Temperature is of	ut of range. PM was inform	ed IMMEDIATELY.		-
Note:				· · ·
DISCREPANCIES	LabSampleContainerID	Code ClientSample	Label ID / Information	Corrective Action
LabSampleID			t on label	RI
	516	DZZ 2vd Date rec		J
2	718	DZZ 2vd Date rea	ADS. 8/1/05	V
<u> </u>			/	
			-	
-				
			1	
			A. [
-			- LA/10/3	AN Stol2
□ pH holding time requireme	nt for water samples is 15 h	mins. Water samples for pH at	- LA/10/3	minutes from sampling time. ALS 8/10/25
		nins. Water samples for pH ar	- LA/10/3	minutes from sampling time. AS 8/10/25
NOTES/OBSERVATION	S:		- LA/10/3	
NOTES/OBSERVATION	S:		nalysis are received beyond 15	
NOTES/OBSERVATION	S:		nalysis are received beyond 15	
NOTES/OBSERVATION	S:		nalysis are received beyond 15	
NOTES/OBSERVATION	S:		nalysis are received beyond 15	Continue to next page.
NOTES/OBSERVATION: SAMPLE MATRIX IS DRINKIN LEGEND: Code Description- Sample Ma	S: IG WATER? VES NC) Code Description-Sample N	nalysis are received beyond 15	□ Continue to next page. Code Description-Sample Management
NOTES/OBSERVATION: SAMPLE MATRIX IS DRINKIN	S: IG WATER? VES NC) Code Description-Sample M D13 Out of Holding Time	nalysis are received beyond 15	Continue to next page. Code Description-Sample Management R1 Proceed as indicated in COC D Label
NOTES/OBSERVATION: SAMPLE MATRIX IS DRINKIN LEGEND: Code Description- Sample Ma	S: IG WATER? D YES D NO inagement in] MbC]) Code Description-Sample M D13 Out of Holding Time D14 Bubble is >6mm	halysis are received beyond 15	Continue to next page. Code Description-Sample Management R1 Proceed as indicated in COC D Label R2 Refer to attached instruction
NOTES/OBSERVATION SAMPLE MATRIX IS DRINKIN LEGEND: Code Description- Sample Ma	S: IG WATER? UYES UNC Inagement in 19601 vs label	Code Description-Sample M D13 Out of Holding Time D14 Bubble is >6mm D15 No trip blank in cooler	halysis are received beyond 15	Code Description-Sample Management RI Proceed as indicated in COC Dabel R2 Refer to attached instruction R3 Cancel the analysis
NOTES/OBSERVATION SAMPLE MATRIX IS DRINKIN LEGEND: Code Description- Sample Ma D Analysis is not indicated D2 Analysis mismatch COC	S: IG WATER? YES NO Magement in Model C vs label C vs label	Code Description-Sample M D13 Out of Holding Time D14 Bubble is >6mm D15 No trip blank in cooler D16 Preservation not indica	ted in	Code Description-Sample Management R1 Proceed as indicated in COC Dabel R2 Refer to attached instruction R3 Cancel the analysis R4 Use vial with smallest bubble first
NOTES/OBSERVATION SAMPLE MATRIX IS DRINKIN LEGEND: Code Description- Sample Ma Datalysis is not indicated D2 Analysis mismatch COC D3 Sample ID mismatch COC	S: IG WATER? VES NO Magement in] Abcl vs label C vs label d in	Code Description-Sample M D13 Out of Holding Time D14 Bubble is >6mm D15 No trip blank in cooler D16 Preservation not indica D17 Preservation mismatch	ted inCOC vs label	Code Description-Sample Management R1 Proceed as indicated in MCCOC Label R2 Refer to attached instruction R3 Cancel the analysis R4 Use vial with smallest bubble first R5 Log-in with latest sampling date and time+1 min
NOTES/OBSERVATION SAMPLE MATRIX IS DRINKIN LEGEND: Code Description-Sample Ma Analysis is not indicated D2 Analysis mismatch COC D3 Sample ID mismatch CO D4 Sample ID is not indicated	S: IG WATER? VES NO Magement in 1960 vs label C vs label C vs label d in eaking] [broken]	Code Description-Sample M D13 Out of Holding Time D14 Bubble is >6mm D15 No trip blank in cooler D16 Preservation not indica D17 Preservation mismatch D18 Insufficient chemical p	ted inCOC vs label	☐ Continue to next page. Code Description-Sample Management R1 Proceed as indicated in COC □ Label R2 Refer to attached instruction R3 Cancel the analysis R4 Use vial with smallest bubble first R5 Log-in with latest sampling date and time+1 min R6 Adjust pH as necessary
NOTES/OBSERVATION SAMPLE MATRIX IS DRINKIN LEGEND: Code Description-Sample Ma Analysis is not indicated D2 Analysis mismatch COC D3 Sample ID mismatch COC D4 Sample ID is not indicate D5 Container -[improper] [le D6 Date/Time is not indicate D7 Date/Time mismatch COC	S: IG WATER? VES NO Magement in] Abcl vs label C vs label d in eaking] [broken] ed in C vs label	Code Description-Sample M D13 Out of Holding Time D14 Bubble is >6mm D15 No trip blank in cooler D16 Preservation not indica D17 Preservation mismatch D18 Insufficient chemical p D19 Insufficient Sample	ted in COC vs label preservative	Code Description-Sample Management R1 Proceed as indicated in the COC D Label R2 Refer to attached instruction R3 Cancel the analysis R4 Use vial with smallest bubble first R5 Log-in with latest sampling date and time+1 min R6 Adjust pH as necessary R7 Filter and preserved as necessary
NOTES/OBSERVATION SAMPLE MATRIX IS DRINKIN LEGEND: Code Description- Sample Ma D Analysis is not indicated D2 Analysis mismatch COC D3 Sample ID mismatch COC D4 Sample ID is not indicate D5 Container -[improper] [le D6 Date/Time is not indicate	S: IG WATER? VES NO Magement in] Abcl vs label C vs label d in eaking] [broken] ed in C vs label	Code Description-Sample M D13 Out of Holding Time D14 Bubble is >6mm D15 No trip blank in cooler D16 Preservation not indica D17 Preservation mismatch D18 Insufficient chemical p D19 Insufficient Sample D20 No filtration info for di	ted in COC vs label reservative	 □ Continue to next page. Code Description-Sample Management R1 Proceed as indicated in COC □ Label R2 Refer to attached instruction R3 Cancel the analysis R4 Use vial with smallest bubble first R5 Log-in with latest sampling date and time+1 min R6 Adjust pH as necessary R7 Filter and preserved as necessary R8
NOTES/OBSERVATION SAMPLE MATRIX IS DRINKIN LEGEND: Code Description-Sample Ma D Analysis is not indicated D2 Analysis mismatch COC D3 Sample ID mismatch COC D4 Sample ID is not indicate D5 Container -[improper] [le D6 Date/Time is not indicate D7 Date/Time mismatch CO	S: IG WATER? VES NO magement in 196C1 vs label C vs label d in caking] [broken] ed in C vs label not received	Code Description-Sample M D13 Out of Holding Time D14 Bubble is >6mm D15 No trip blank in cooler D16 Preservation not indica D17 Preservation mismatch D18 Insufficient chemical p D19 Insufficient Sample D20 No filtration info for di D21 No sample for moisture of	ted in COC vs label reservative issolved analysis Jetennination	Code Description-Sample Management R1 Proceed as indicated in COC D Label R2 Refer to attached instruction R3 Cancel the analysis R4 Use vial with smallest bubble first R5 Log-in with latest sampling date and time+1 min R6 Adjust pH as necessary R7 Filter and preserved as necessary R8 R9
NOTES/OBSERVATION SAMPLE MATRIX IS DRINKIN LEGEND: Code Description- Sample Ma D Analysis is not indicated D2 Analysis mismatch COC D3 Sample ID mismatch COC D4 Sample ID is not indicate D5 Container -[improper] [le D6 Date/Time mismatch CO D8 Sample listed in COC is in D9 Sample received is not list D10 No initial/date on correct	S: IG WATER? VES NO magement in 196C1 vs label C vs label id in raking] [broken] ed in C vs label not received sted in COC ions in COC/label	Code Description-Sample M D13 Out of Holding Time D14 Bubble is >6mm D15 No trip blank in cooler D16 Preservation not indica D17 Preservation mismatch D18 Insufficient chemical p D19 Insufficient Sample D20 No filtration info for di D21 No sample for moisture of D22 2nd Dafe	ted in COC vs label reservative	Code Description-Sample Management R1 Proceed as indicated in COC D Label R2 Refer to attached instruction R3 Cancel the analysis R4 Use vial with smallest bubble first R5 Log-in with latest sampling date and time+1 min R6 Adjust pH as necessary R7 Filter and preserved as necessary R8 R9 R9 R10
NOTES/OBSERVATION SAMPLE MATRIX IS DRINKIN LEGEND: Code Description- Sample Ma D Analysis is not indicated D2 Analysis mismatch COC D3 Sample ID mismatch COC D4 Sample ID is not indicate D5 Container -[improper] [le D6 Date/Time is not indicate D7 Date/Time mismatch CO D8 Sample listed in COC is in D9 Sample received is not lim D10 No initial/date on correct D11 Container count mismatch	S: IG WATER? VES NO Imagement in <u>PbC1</u> vs label C vs label id in c vs label id in C vs label in treceived sted in COC ions in COC/label th COC vs received	Code Description-Sample M D13 Out of Holding Time D14 Bubble is >6mm D15 No trip blank in cooler D16 Preservation not indica D17 Preservation mismatch D18 Insufficient chemical p D19 Insufficient Sample D20 No filtration info for di D21 No sample for moisture of D22 2nd Dafe D23	ted in COC vs label reservative issolved analysis Jetennination	Code Description-Sample Management R1 Proceed as indicated in COC □ Label R2 Refer to attached instruction R3 Cancel the analysis R4 Use vial with smallest bubble first R5 Log-in with latest sampling date and time+1 min R6 Adjust pH as necessary R7 Filter and preserved as necessary R8 R9 R1 R1
NOTES/OBSERVATION SAMPLE MATRIX IS DRINKIN LEGEND: Code Description- Sample Ma D Analysis is not indicated D2 Analysis mismatch COC D3 Sample ID mismatch COC D4 Sample ID is not indicate D5 Container -[improper] [le D6 Date/Time mismatch CO D8 Sample listed in COC is in D9 Sample received is not lim D10 No initial/date on correct D11 Container count mismatch D12 Container size mismatch	S: IG WATER? VES NO Imagement in <u>PbC1</u> vs label C vs label d in c vs label in c vs label not received sted in COC ions in COC/label th COC vs received COC vs received	Code Description-Sample M D13 Out of Holding Time D14 Bubble is >6mm D15 No trip blank in cooler D16 Preservation not indica D17 Preservation mismatch D18 Insufficient chemical p D19 Insufficient Sample D20 No filtration info for di D21 No sample for moisture of D22 2nd Dafe	ted in COC vs label reservative issolved analysis Jetennination	Code Description-Sample Management R1 Proceed as indicated in COC D Label R2 Refer to attached instruction R3 Cancel the analysis R4 Use vial with smallest bubble first R5 Log-in with latest sampling date and time+1 min R6 Adjust pH as necessary R7 Filter and preserved as necessary R8 R9 R9 R10
NOTES/OBSERVATION SAMPLE MATRIX IS DRINKIN LEGEND: Code Description- Sample Ma D Analysis is not indicated D2 Analysis mismatch COC D3 Sample ID mismatch COC D4 Sample ID is not indicate D5 Container -[improper] [le D6 Date/Time mismatch CO D8 Sample listed in COC is in D9 Sample received is not lim D10 No initial/date on correct D11 Container count mismatch D12 Container size mismatch REVIEWS:	S: IG WATER? VES NO Imagement in <u>PbC1</u> vs label C vs label d in ct in C vs label not received sted in COC ions in COC/label th COC vs received COC vs received	Code Description-Sample M D13 Out of Holding Time D14 Bubble is >6mm D15 No trip blank in cooler D16 Preservation not indica D17 Preservation mismatch D18 Insufficient chemical p D19 Insufficient Sample D20 No filtration info for di D21 No sample for moisture of D22 2nd Dafe D23 D24	ted in COC vs label reservative issolved analysis tetermination	Code Description-Sample Management R1 Proceed as indicated in COC □ Label R2 Refer to attached instruction R3 Cancel the analysis R4 Use vial with smallest bubble first R5 Log-in with latest sampling date and time+1 min R6 Adjust pH as necessary R7 Filter and preserved as necessary R8 R9 R9 R10 R11 R12 M
NOTES/OBSERVATION SAMPLE MATRIX IS DRINKIN LEGEND: Code Description- Sample Ma D Analysis is not indicated D2 Analysis mismatch COC D3 Sample ID mismatch COC D4 Sample ID is not indicate D5 Container -[improper] [le D6 Date/Time mismatch CO D8 Sample listed in COC is in D9 Sample received is not lim D10 No initial/date on correct D11 Container count mismatch D12 Container size mismatch	S: IG WATER? UYES NO Magement in 1960 vs label C vs label d in C vs label not received sted in COC ions in COC/label th COC vs received COC vs received COC vs received Maria Muth	Code Description-Sample M D13 Out of Holding Time D14 Bubble is >6mm D15 No trip blank in cooler D16 Preservation not indica D17 Preservation mismatch D18 Insufficient chemical p D19 Insufficient Sample D20 No filtration info for di D21 No sample for moisture of D22 2nd Dafe D23 D24	ted in COC vs label reservative issolved analysis Jetennination	Code Description-Sample Management R1 Proceed as indicated in COC □ Label R2 Refer to attached instruction R3 Cancel the analysis R4 Use vial with smallest bubble first R5 Log-in with latest sampling date and time+1 min R6 Adjust pH as necessary R7 Filter and preserved as necessary R8 R9 R1 R1

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.

LABORATORY REPORT FOR

EUROFINS EATON ANALYTICAL

380-58282

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

SDG#: 23H071

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 380-58282

SDG : 23H071

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

A total of two(2) water samples were received on 08/10/23 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. VGH7H05B - 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. VGH7H05L/VGH7H05C 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 H071-01M/H071-01S. 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

Cl ient Project	: EUROFINS EATON ANALYTICAL : 380-58282	ANALYTICAL							SDG NO. : 23H071 Instrument ID : H7	23H071 H7
					WATER	ER				
Client		Laboratory	Dilution	96	Analysis	Extraction	Sample	Calibration Prep.	ו Prep.	
Sample ID		Sample ID	Factor	Moist	DateTime	DateTime	Data FN	Data FN	Batch Notes	
MBI K1W		VGH7H05B	Ч	NA	08/10/2316:43	08/10/2316:43	AH10005A	AH10004A	23VGH7H05 Method Blank	Blank
LCSIM		VGH7H05L	1	N	08/10/2317:21	08/10/2317:21	AH10006A	AH10004A	23VGH7H05 Lab Control Sample (LCS)	trol Sample (LCS)
LCD1W		VGH7H05C	1	NA	08/10/2317:59	08/10/2317:59	AH10007A	AH10004A	23VGH7H05 LCS Dup	licate
380-58282-	1	H071-01	1	NA	08/10/2318:37	08/10/2318:37	AH10008A	AH10004A	23VGH7H05 Field S	ample
380-58282-	IMS	H071-01M	1	NA	08/10/2319:17	08/10/2319:17	AH10009A	AH10004A	23VGH7H05 Matrix	Matrix Spike Sample (MS)
380-58282-	1 MSD	H071-01S	1	AN	08/10/2319:55	08/10/2319:55	AH10010A	AH10004A	23VGH7H05 MS Dup1	icate (MSD)
380-58282-2	2	H071-02	7	NA	08/10/2320:33	08/10/2320:33	AH1001HA	AH10004A	23VGH7H05 Field Sample	ample

FN - Filename % Moist - Percent Moisture

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SAMPLE RESULTS

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

Client :	EUROFINS EATON ANALYTICAL	Date Collected:	08/07/23 11:00
Project :	380-58282	Date Received:	08/10/23
Batch No. :	23H071	Date Extracted:	08/10/23 18:37
Sample ID :	380-58282-1	Date Analyzed:	08/10/23 18:37
Lab Samp ID:	H071-01	Dilution Factor:	1
Lab File ID:	AH10008A	Matrix:	WATER
Ext Btch ID:		% Moisture:	NA
Calib. Ref.:	AH10004A	Instrument ID:	H7
	a din lai sa ang ang ang ang ang ang ang ang ang an		

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	0.0347	0.0400	87	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: 5mlPrepared by: SCervaAnalyzed by : SCerva

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

Client :	EUROFINS EATON ANALYTICAL	Date Collected:	08/07/23 11:00
Project :	380-58282	Date Received:	08/10/23
Batch No. :	23H071	Date Extracted:	08/10/23 20:33
Sample ID :	380-58282-2	Date Analyzed:	08/10/23 20:33
Lab Samp ID:	H071-02	Dilution Factor:	1
Lab File ID:	AH10011A	Matrix:	WATER
Ext Btch ID:	23VGH7H05	<pre>% Moisture:</pre>	NA
Calib. Ref.:	AH10004A	Instrument ID:	H7 .

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	0.0350	0.0400	87	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: 5mlPrepared by: SCervaAnalyzed by : SCerva

QC SUMMARIES

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

			a name and an and star in a star of the star of		
Client : EUROFINS E	ATON ANALYTICAL	Date	Collected:	08/10/23	16:43
Project : 380.58282		Date	e Received:	08/10/23	
Batch No. : 23H071		Date	Extracted:	08/10/23	16:43
Sample ID : MBLK1W		Date	e Analyzed:	08/10/23	16:43
Lab Samp ID: VGH7H05B		Dilut	ion Factor:	1	
Lab File ID: AH10005A			Matrix:	WATER	
Ext Btch ID: 23VGH7H05		5	Moisture:	NA	
Calib. Ref.: AH10004A		Inst	trument ID:	H7	
		- 1	1051		
	RESULTS	RL	MDL		
PARAMETERS	(mg/L)	(mg/L)	(mg/L)		
				-	
GASOLINE	ND	0.020	0.010		
	55011 T		*DEQQUERU	00.1.7	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LI	111

		_		
Bromofluorobenzene	0.0302	0.0400	75	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: 5mlPrepared by: SCervaAnalyzed by : SCerva

EMAX QUALITY CONTROL DATA LAB CONTROL SAMPLE ANALYSIS

SURROGATE PARAMETER		SpikeAmt (mg/L) 0.0400	LCSResult (mg/L) 0.0383	LCSRec (%) 96	(mg/L)	LCDResult (mg/L) 0.0431	(%)		QCLimit (%) 70-130	
Gasoline	ND	0.500	0.400	80		0.417		4	60-130	30
PARAMETERS	MBResult (mg/L)	•	LCSResult (mg/L)	(%)	(mg/L)	LCDResult (mg/L)	LCDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
ACCESSION:										
DATE ANALYZED : 08/10/23 16:43 PREP BATCH : 23VGH7H05 CALIBRATION REF: AH10004A		08/10/23 1 23VGH7H05 AH10004A	7:21		08/10/23 1 23VGH7H05 AH10004A	7:59				
DATE PREPARED : 08/10/			08/10/23 1	7:21		08/10/23 1	7:59			
LAB SAMPLE ID : VGH7H(LAB FILE ID : AH100(VGH7H05L AH10006A			VGH7H05C AH10007A				
DILUTION FACTOR: 1 SAMPLE ID : MBLK1	N		1 LCS1W			1 LCD1W				
MATRIX : WATER						% MOISTURE	:NA			
PROJECT : 380-58 BATCH NO. : 23H07 METHOD : 5030B/	1						,	ning dia san yan tekseni net usu g		

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

EMAX QUALITY CONTROL DATA MS/MSD ANALYSIS

Bromofluorobenze	ene	0.0400	0.0437	109	0.0400	0.0433	108		60-140	
SURROGATE PARAME	ETER	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	(%)		QCLimit (%)	
Gasoline	ND	0.500	0.429	86	0.500	0.441	88	3	50-130	30
PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPI (%)
ACCESSION:										
CALIBRATION REF:			AH10004A			AH10004A				
	: 08/10/23 18:37 : 23VGH7H05		08/10/23 19 23VGH7H05	9:17		08/10/23 1 23VGH7H05	.9:55			
	08/10/23 18:37		08/10/23 1	9:17		08/10/23 1	9:55			
	AH10008A		AH10009A			AH10010A	1			
SAMPLE ID : LAB SAMPLE ID :	380-58282-1		380-58282-3 H071-01M	1MS		380-58282- H071-01S	1MSD			
DILUTION FACTOR:			1			1				
MATRIX	WATER					% MOISTURE	:NA			
METHOD :	5030B/8015B									
BATCH NO.	23H071									
	: EUROFINS EATON ANA : 380-58282	LTIUAL								

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

LABORATORY REPORT FOR

EUROFINS EATON ANALYTICAL

380-58282

METHOD 3520C/8015B TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

SDG#: 23H071

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 380-58282

SDG : 23H071

METHOD 3520C/8015B TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

One(1) water sample was received on 08/10/23 to be analyzed for Total Petroleum Hydrocarbons by Extraction in accordance with Method 3520C/8015B and project specific requirements.

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

Calibration

Multi-calibration points were generated to establish initial calibration (ICAL). ICAL was verified using a secondary source (ICV). Continuing calibration (CCV) verifications were carried out on a frequency specified by the project. All calibration requirements were within acceptance criteria. Refer to calibration summary forms of ICAL, ICV and CCV for details. MRL was analyzed as required by the project. 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. DSH017WB 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. DSH017WL/DSH017WC were within LCS limits. Refer to LCS summary form for details.

Matrix QC Sample No matrix QC sample was provided on this SDG.

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

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

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 380-58282

SDG : 23H071

METHOD 3520C/8015B PETROLEUM HYDROCARBONS BY EXTRACTION

One(1) water sample was received on 08/10/23 to be analyzed for Petroleum Hydrocarbons by Extraction in accordance with Method 3520C/8015B and project specific requirements.

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

Calibration

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

Method Blank Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. DSH017WB 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. J5H017WL/J5H017WC were within LCS limits. Refer to LCS summary form for details.

Matrix QC Sample No matrix QC sample was provided on this SDG.

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

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

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 380-58282

SDG : 23H071

METHOD 3520C/8015B PETROLEUM HYDROCARBONS BY EXTRACTION

One(1) water sample was received on 08/10/23 to be analyzed for Petroleum Hydrocarbons by Extraction in accordance with Method 3520C/8015B and project specific requirements.

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

Calibration

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

Method Blank

Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. DSH017WB - 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. J8H017WL/J8H017WC were within LCS limits. Refer to LCS summary form for details.

Matrix QC Sample No matrix QC sample was provided on this SDG.

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

Sample Analysis The sample was analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met. LAB CHRONICLE TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client Project	: EUROFINS EATON ANALYTICAL : 380-58282	ALYTICAL							SDG NO. Instrumer	SDG NO. : 23H071 Instrument ID : D5
					WAT	WATER				
Client		Laboratory	Dilution	26	Analysis	Extraction	Sample	Calibration Prep.	ו Prep.	
Sample ID		Sample ID	Factor	Moist	DateTime	DateTime	Data FN	Data FN	Batch	Notes
MBLK1W		DSH017WB	1	NA	08/16/2318:21	08/14/2310:30	LH16016A	LH16009A	23DSH017W	Method Blank
LCS1W		DSH017WL	1	NA	08/16/2318:40	08/14/2310:30	LH16017A	LH16009A	23DSH017W	Lab Control Sample (LCS)
LCD1W		DSH017WC	1	NA	08/16/2318:58	08/14/2310:30	LH16018A	LH16009A	23DSH017W	23DSH017W LCS Duplicate
380-58282-1		H071-01	-	NA	08/16/2321:46	08/14/2310:30	LH16027A	LH16009A	23DSH017W	23DSH017W Field Sample
	- Eilename									

FN - Filename % Moist - Percent Moisture



PETROLEUM HYDROCARBONS BY EXTRACTION

	Client Project	: EUROFINS EATON ANALYTICAL : 380-58282	VALYTICAL							SDG NO. Instrumer	SDG NO. : 23H071 Instrument ID : D5
Laboratory Dilution * Analysis Extraction Sample Sample ID Factor Moist DateTime DateTime Data FN DSH017WB 1 NA 08/16/2318:21 08/14/2310:30 LH16016A J5H017WL 1 NA 08/16/2319:17 08/14/2310:30 LH16019A						LAW	TER				
Sample ID Factor Moist DateTime DateTime DateTime Data FN DSH017WB 1 NA 08/16/2318:21 08/14/2310:30 LH16016A J5H017WL 1 NA 08/16/2319:17 08/14/2310:30 LH16019A	Client		Laboratory	Dilution	26	Analysis	Extraction	Sample	Calibratior	n Prep.	
DSH017WB 1 NA 08/16/2318:21 08/14/2310:30 LH16016A 1 J5H017WL 1 NA 08/16/2319:17 08/14/2310:30 LH16019A 1	Sample ID	-	Sample ID	Factor	Moist	DateTime	DateTime	Data FN	Data FN	Batch	Notes
DSH017WB 1 NA 08/16/2318:21 08/14/2310:30 LH16016A 1 J5H017WL 1 NA 08/16/2319:17 08/14/2310:30 LH16019A 1											
J5H017WL 1 NA 08/16/2319:17 08/14/2310:30 LH16019A 1	MBLK1W		DSH017WB	1	NA	08/16/2318:21	08/14/2310:30	LH16016A	LH16010A	23DSH017W	Method Blank
	LCS1W		J5H017WL	1	NA	08/16/2319:17	08/14/2310:30	LH16019A	LH16010A	23DSH017W	Lab Control Sample (LCS)
J5H017WC 1 NA 08/16/2319:36 08/14/2310:30 LH16020A 1	LCD1W		J5H017WC	-1	NA	08/16/2319:36	08/14/2310:30	LH16020A	LH16010A	23DSH017W	23DSH017W LCS Duplicate
H071-01 1 NA 08/16/2321:46 08/14/2310:30 LH16027A L	380-58282-		H071-01	1	NA	08/16/2321:46	08/14/2310:30	LH16027A	LH16010A	23DSH017W	Field Sample
	CN	[i]ouramo									

FN - Filename % Moist - Percent Moisture REPORT ID: 23H071

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PETROLEUM HYDROCARBONS BY EXTRACTION

C1ient Project	: EUROFINS EATON ANALYTICAL : 380-58282	ALYTICAL							SDG NO. : 23H071 Instrument ID : D5
					WATER	Ë			
Client		aboratory	Dilution	96		Extraction	Sample	Calibration Prep.	Prep.
Sample ID	S	Sample ID	Factor	Moist		DateTime	Data FN	Data FN	Batch Notes
MBLK1W		ISH017WB	1	NA	08/16/2318:21	08/14/2310:30	LH16016A	LH16011A	23DSH017W Method Blank
LCS1W		1M/LOH8	1	NA	08/16/2319:54	08/14/2310:30	LH16021A	LH16011A	23DSH017W Lab Control Sample (LCS)
LCD1W		18H017WC	-	NA	08/16/2320:13	08/14/2310:30	LH16022A	LH16011A	23DSH017W LCS Duplicate
380-58282-1		H071-01	1	NA	08/16/2321:46	08/14/2310:30	LH16027A	LH16011A	23DSH017W Field Sample
i									

FN - Filename % Moist - Percent Moisture

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age 21 of 32	
age 2	4
ũ	5
	6
	8
	9
	13
	14

SAMPLE RESULTS

5

METHOD 3520C/8015B TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Hexacosane	0.112	0.119	94	60-13	30
Bromobenzene	0.363	0.475	76	60-13	30
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LI	1IT
Motor Oil	ND	0.048	0.024		
Diesel	ND	0.024	0.012	•	
PARAMETERS			(mg/L)		
	RESULTS	RL	MDL		
Calib. Ref.: LH16009A		Inst	trument ID:	D5	
Ext Btch ID: 23DSH017W		5	Moisture:		
Lab File ID: LH16027A		Diluc	Matrix:	_	
Sample ID : 380–58282–1 Lab Samp ID: 23H071–01			e Analyzed: ion Factor:		21:46
Batch No. : 23H071			Extracted:		
Project : 380-58282			e Received:		
Client : EUROFINS EATO	N ANALYTICAL	Date	Collected:	08/07/23	11:00

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 : 1050mlFinal Volume : 5mlPrepared by : RGalanAnalyzed by : SDeeso

METHOD 3520C/8015B PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATO	N ANALYTICAL			08/07/23 11:0
Project : 380-58282 Batch No. : 23H071			e Received:	08/10/23
Sample ID : 380-58282-1		+ + -		08/16/23 21:4
Lab Samp ID: 23H071-01			ion Factor:	
Lab File ID: LH16027A			Matrix:	WATER
Ext Btch ID: 23DSH017W		1	% Moisture:	NA
Calib. Ref.: LH16010A		Inst	trument ID:	D5
			an in the fact in	
	RESULTS	RL	MDL	
	(mg/L)			
JP5	ND	0.048		•
SURROGATE PARAMETERS				
	0.363			
Hexacosane	0.112	0.119	94	60-130

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

Detection limits are reported relative to sample result significant figures.Sample Amount: 1050mlPrepared by: RGalanAnalyzed by : SDeeso

METHOD 3520C/8015B PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATON Project : 380-58282 Batch No. : 23H071 Sample ID : 380-58282-1 Lab Samp ID: 23H071-01 Lab File ID: LH16027A Ext Btch ID: 23DSH017W Calib. Ref.: LH16011A	I ANALYTICAL	Date Date Date Dilut	Collected: e Received: Extracted: e Analyzed: ion Factor: Matrix: % Moisture: trument ID:	08/10/23 08/14/23 1 08/16/23 2 1 WATER NA	0:30
PARAMETERS	RESULTS (mg/L)		MDL (mg/L)		
JP8	ND	0.048	0.024		
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMI	т
Bromobenzene Hexacosane		0.475 0.119	76 94	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: 1050mlPrepared by: RGalanFinal Volume : 5mlAnalyzed by : SDeeso

QC SUMMARIES

METHOD 3520C/8015B TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EAT	ON ANALYTICAL	Date	Collected:	08/14/23	10:30
Project : 380-58282		Date	e Received:	08/14/23	
Batch No. : 23H071		Date	Extracted:	08/14/23	10:30
Sample ID : MBLK1W .		Date	e Analyzed:	08/16/23	18:21
Lab Samp ID: DSH017WB		Diluti	ion Factor:	1	
Lab File ID: LH16016A			Matrix:	WATER	
Ext Btch ID: 23DSH017W		2	Moisture:	NA	
Calib. Ref.: LH16009A		Inst	trument ID:	D5	
	RESULTS	RL	MDL.		
PARAMETERS	(mg/L)	(mg/L)	(mg/L)		
Diesel	ND	0.025	0.012		
Motor Oil	ND	0.050	0.025		
SURROGATE PARAMETERS	RESULT	SPK AMT	%RECOVERY	OC LIM	IT
Bromobenzene	0.379	0.500	76	60-13	0
Hexacosane	0.114	0.125	91	60-13	0
	and the second				

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 : 1000mlFinal Volume : 5mlPrepared by : RGalanAnalyzed by : SDeeso

EMAX QUALITY CONTROL DATA LAB CONTROL SAMPLE ANALYSIS

Bromobenzene Hexacosane			0.500 0.125	0.414 0.133		0.500 0.125	0.398 0.125			60.130 60.130	
SURROGATE PARAM	IETERS		SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	SpikeAmt (mg/L)	LCDResult (mg/L)	LCDRec (%)		QCLimit (%)	
)iesel		ND	2.50	2.73	109	2,50	2.76	110	1	50-130	30
PARAMETERS		MBResult (mg/L)	•	LCSResult (mg/L)	LCSRec (%)		LCDResult (mg/L)	LCDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
ACCESSION:											
ALIBRATION REF	: LH16009/	A	LH16009A			LH16009A					
REP BATCH	: 23DSH017		23DSH017V			23DSH017					
	: 08/14/23 : 08/16/23		08/14/23 08/16/23			08/14/23 08/16/23					
AB FILE ID	: LH160164		LH16017A			LH16018A					
AB SAMPLE ID		3	DSH017WL			DSH017WC					
DILUTION FACTOR SAMPLE ID	: I : MBLK1W		1 LCS1W			1 LCD1W					
	: WATER					% MOISTUR	RE:NA				
IETHOD	: 3520C/80)15B								1917 (I - 1911 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 19	
CLIENT PROJECT BATCH NO.	: 380-5828 : 23H071	S EATON ANA 32	LITICAL								

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

METHOD 3520C/8015B PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATOM Project : 380-58282 Batch No. : 23H071 Sample ID : MBLK1W Lab Samp ID: DSH017WB Lab File ID: LH16016A Ext Btch ID: 23DSH017W Calib. Ref.: LH16010A	N ANALYTICAL	Date Date Date Diluti	e Received: Extracted:	08/14/23 10:30 08/16/23 18:21 1 WATER NA
	RESULTS (mg/L)	(mg/L)	(mg/L)	
JP5	ND	0.050		
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene Hexacosane			76 91	
Notes: RL : Reporting Limit Parameter H-C Range JP5 C8-C18		X		

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.Sample Amount: 1000mlPrepared by: RGalanFinal Volume : 5mlAnalyzed by : SDeeso

EMAX QUALITY CONTROL DATA LAB CONTROL SAMPLE ANALYSIS

BATCH NO. : 23H07 METHOD : 35200										
MATRIX : WATER					% MOISTU	RE : NA				
DILUTION FACTOR: 1		1			1					
SAMPLE ID : MBLK1	W	LCS1W			LCD1W					
LAB SAMPLE ID : DSH01		J5H017WL			J5H017WC					
LAB FILE ID : LH160		LH16019A			LH16020A					
DATE PREPARED : 08/14		08/14/23			08/14/23					
DATE ANALYZED : 08/16 PREP BATCH : 23DSH		08/16/23			08/16/23 23DSH017					
PREP BATCH : 23DSH CALIBRATION REF: LH160		23DSH017V LH16010A			LH16010A	-				
ACCESSION:		Calkatak	1000 au 14		CaileAnt			000	001 in it	MayDDD
PARAMETERS	MBResult (mg/L)	•	LCSResult (mg/L)		SpikeAmt (mg/L)	LCDResult (mg/L)	LCDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
	((mg/ L/	(mg/ ב/		(mg/ L)	(
JP5	ND	2.50	2.15	86	2.50	2.06	82	4	30-160	30
	1994 (BER (BER (BER (BER ALTA) ALTA) BER (BER (BER (BER (BER ALTA)))))))	SpikeAmt	LCSResult	LCSRec	SpikeAmt	LCDResult	LCDRec	and on the local design of the second se	QCLimit	
SURROGATE PARAMETERS		(mg/L)	(mg/L)	(%)	(mg/L)	(mg/L)	(%)		(%)	
Bromobenzene		0.500	0.416	83	0.500	0.402	80		60-130	
Hexacosane		0.125	0.113	90	0.125	0.121	97		60-130	

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

METHOD 3520C/8015B PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EA	TON ANALYTICAL	Date	Collected:	08/14/23 10:3
Project : 380-58282		Date	e Received:	08/14/23
Batch No. : 23H071		Date	Extracted:	08/14/23 10:3
Sample ID : MBLK1W		Date	e Analyzed:	08/16/23 18:2
Lab Samp ID: DSH017WB		Diluti	ion Factor:	1
Lab File ID: LH16016A			Matrix:	WATER
Ext Btch ID: 23DSH017W		2	Moisture:	NA
Calib. Ref.: LH16011A		Inst	rument ID:	D5
PARAMETERS JP8	RESULTS (mg/L) ND	RL (mg/L) 0.050	MDL (mg/L) 0.025	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.379	0.500	76	60-130
Hexacosane	0.114	0.125	91	60-130

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

Detection limits are reported relative to sample result significant figures.Sample Amount: 1000mlPrepared by: RGalanAnalyzed by : SDeeso

EMAX QUALITY CONTROL DATA LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROF1 PROJECT : 380-58 BATCH NO. : 23H071 METHOD : 3520C/	l									
MATRIX : WATER DILUTION FACTOR: 1 SAMPLE ID : MBLK1W LAB SAMPLE ID : DSH017 LAB FILE ID : LH1601 DATE PREPARED : 08/14/ DATE ANALYZED : 08/16/ PREP BATCH : 23DSH0 CALIBRATION REF: LH1601	WB 6A 23 10:30 23 18:21 017W	1 LCS1W J8H017WL LH16021A 08/14/23 08/16/23 23DSH017V LH16011A	10:30 19:54 √		% MOISTU 1 LCD1W J8H017WC LH16022A 08/14/23 08/16/23 23DSH017M LH16011A	10:30 20:13				
ACCESSION:										
PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)			LCDResult (mg/L)	LCDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
JP8	ND	2.50	2.68	107	2.50	2.60	104	3	30-160	30
SURROGATE PARAMETERS		SpikeAmt (mg/L)	LCSResult (mg/L)	(%)	SpikeAmt (mg/L)	LCDResult (mg/L)	(%)		QCLimit (%)	0 00 00 00 00 00 00 00 00
Bromobenzene Hexacosane		0.500 0.125	0.492 0.114	98 91		0.495 0.115			60-130 60-130	

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



September 07, 2023

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

 Project Name:
 RED-HILL Project # 38001111 Job # 380-58282-1

 Physis Project ID:
 1407003-433

Dear Rachelle,

Enclosed are the analytical results for the sample submitted to PHYSIS Environmental Laboratories, Inc. (PHYSIS) on 8/10/2023. A total of 1 sample was received for analysis in accordance with the attached chain of custody (COC). Per the COC, the sample was analyzed for:

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

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, Montokildua

Misty Mercier 714 602-5320 Extension 202 mistymercier@physislabs.com



PROJECT SAMPLE LIST

Eurofins Eaton Analytical

PHYSIS Project ID: 1407003-433

RED-HILL Proje	ect # 38001111 Job # 3	Total Samples: 1					
PHYSIS ID	Sample ID	Description	Date	Time	Matrix	Sample Type	
109592	MOANALUA WELLS	331-223-TP202 (380-58282-1)	8/7/2023	11:00	Samplewater	Not Specified	

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ABBREVIATIONS and ACRONYMS

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

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QUALITY ASSURANCE SUMMARY

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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PHYSIS QUALIFIER CODES

CODE	DEFINITION
#	see Case Narrative
ND	analyte not detected at or above the MDL
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
Ν	insufficient sample, analysis could not be performed
Μ	analyte was outside the specified accuracy and/or precision acceptance limits due to matrix interference. The associated B/BS were within limits, therefore the sample data was reported without further clarification
SH	analyte concentration in the project sample exceeded the spike concentration, therefore accuracy and/or precision acceptance limits do not apply
SL	analyte results were lower than 10 times the MDL, therefore accuracy and/or precision acceptance limits do not apply
NH	project sample was heterogeneous and sample homogeneity could not be readily achieved using routine laboratory practices, therefore accuracy and/or precision acceptance limits do not apply
Q	analyte was outside the specified QAPP acceptance limits for precision and/or accuracy but within Physis derived acceptance limits, therefore the sample data was reported without further clarification
R	Physis' QM allows for 5% of the target compounds greater than 10 times the MDL to be outside the specified acceptance limits for precision and/or accuracy. This is often due to random error and does not indicate any significant problems with the analysis of these project samples

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1904 E. Wright Circle Anaheim, CA 92806

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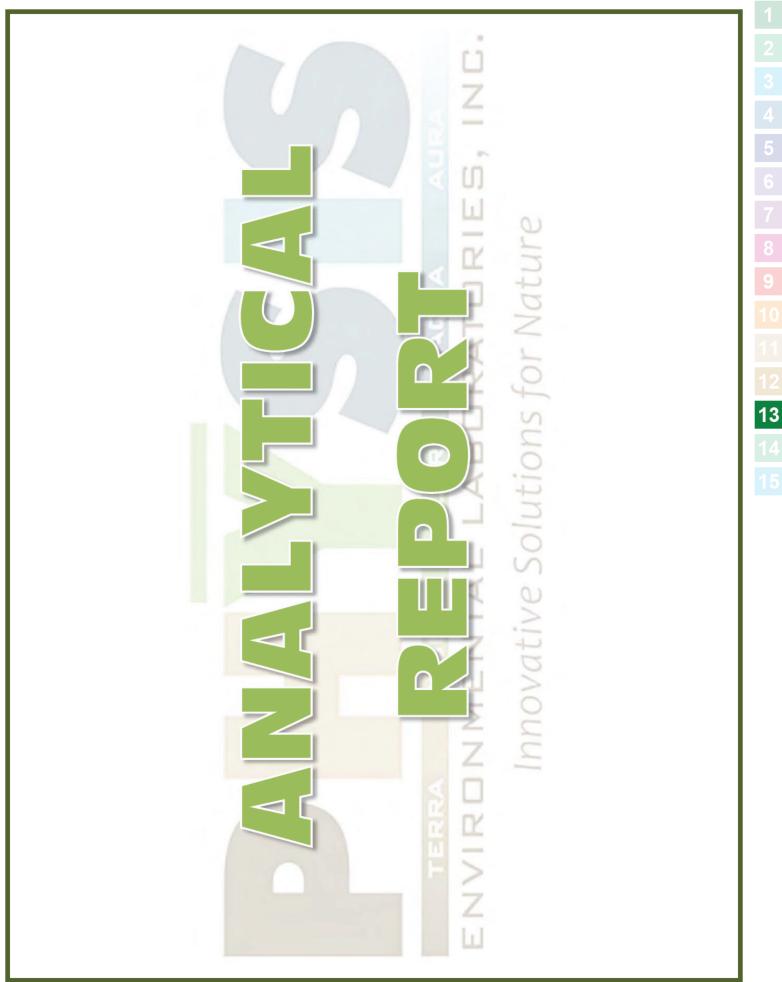
CASE NARRATIVE

QUALIFIER NOTES

In addition to the use of analyte specific Physis Qualifier Codes where applicable, the following were also noted.

ND

MDL is listed due to report format restrictions; it is not used in reporting. Analytical results reported are ND at the RL.





PHYSIS Project ID: 1407003-433 Client: Eurofins Eaton Analytical Project: RED-HILL Project # 38001111 Job # 380-58282-1

		Base/N	leutral Ex	xtra	ctabl	e Co	mpour	lds			
ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 109592-R1	MOANALUA WELLS 3	31-223-TP202	Matrix: Samp	lewate	r		Sampled:	07-Aug-23	11:00	Received:	10-Aug-23
Disalicylidenepropanediamine	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-42030	10-Aug-23	06-Sep-23
Disanoynaonopropanoalamino	2.7.025.	10				•••	rotar		0-42030	10-Aug-23	00-3ep-25
	,	10		1			, otal		0-42030	10-Aug-23	00-3ep-23



PHYSIS Project ID: 1407003-433 **Client: Eurofins Eaton Analytical** Project: RED-HILL Project # 38001111 Job # 380-58282-1

lynuclear A	Ar	oma	itic H	Jydr o	ocarbo	ns		
its RESULT	т	DF	MDL	RL	Fraction	QA CODE Batch ID	Date Processed	Date Analyze
P202 Matrix: Sam	mpl	lewater			Sampled:	07-Aug-23 11:00	Received:	10-Aug-23
ecovery 88		1			Total	0-42030	10-Aug-23	06-Sep-23
ecovery 93		1			Total	0-42030	10-Aug-23	06-Sep-23
ecovery 90		1			Total	0-42030	10-Aug-23	06-Sep-23
ecovery 97		1			Total	O-42030	10-Aug-23	06-Sep-23
ecovery 78		1			Total	O-42030	10-Aug-23	06-Sep-23
ıg/L ND		1	0.001	0.005	Total	O-42030	10-Aug-23	06-Sep-23
ıg/L ND		1	0.001	0.005	Total	O-42030	10-Aug-23	06-Sep-23
ıg/L ND		1	0.001	0.005	Total	O-42030	10-Aug-23	06-Sep-23
ıg/L ND		1	0.001	0.005	Total	O-42030	10-Aug-23	06-Sep-23
ıg/L ND		1	0.001	0.005	Total	O-42030	10-Aug-23	06-Sep-23
ıg/L ND		1	0.001	0.005	Total	O-42030	10-Aug-23	06-Sep-23
ıg/L ND		1	0.001	0.005	Total	O-42030	10-Aug-23	06-Sep-23
ıg/L ND		1	0.001	0.005	Total	O-42030	10-Aug-23	06-Sep-23
ıg/L ND		1	0.001	0.005	Total	O-42030	10-Aug-23	06-Sep-23
ıg/L ND		1	0.001	0.005	Total	O-42030	10-Aug-23	06-Sep-23
ıg/L ND		1	0.001	0.005	Total	O-42030	10-Aug-23	06-Sep-23
ıg/L ND		1	0.001	0.005	Total	O-42030	10-Aug-23	06-Sep-23
ıg/L ND		1	0.001	0.005	Total	0-42030	10-Aug-23	06-Sep-23
ıg/L ND		1	0.001	0.005	Total	0-42030	10-Aug-23	06-Sep-23
ıg/L ND		1	0.001	0.005	Total	0-42030	10-Aug-23	06-Sep-23
ıg/L ND		1	0.001	0.005	Total	O-42030	10-Aug-23	06-Sep-23
ıg/L ND		1	0.001	0.005	Total	O-42030	10-Aug-23	06-Sep-23
ıg/L ND		1	0.001	0.005	Total	O-42030	10-Aug-23	06-Sep-23
ıg/L ND		1	0.001	0.005	Total	O-42030	10-Aug-23	06-Sep-23
	ıg/L ND ıg/L ND	ıg/L ND ıg/L ND	ıg/L ND 1 ıg/L ND 1	ug/L ND 1 0.001 ug/L ND 1 0.001	ıg/L ND <u>1</u> 0.001 0.005 ıg/L ND <u>1</u> 0.001 0.005	ug/L ND <u>1</u> 0.001 0.005 Total ug/L ND <u>1</u> 0.001 0.005 Total	ug/L ND 1 0.001 0.005 Total O-42030 ug/L ND 1 0.001 0.005 Total O-42030	ug/L ND 1 0.001 0.005 Total O-42030 10-Aug-23 ug/L ND 1 0.001 0.005 Total O-42030 10-Aug-23



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PHYSIS Project ID: 1407003-433 Client: Eurofins Eaton Analytical Project: RED-HILL Project # 38001111 Job # 380-58282-1

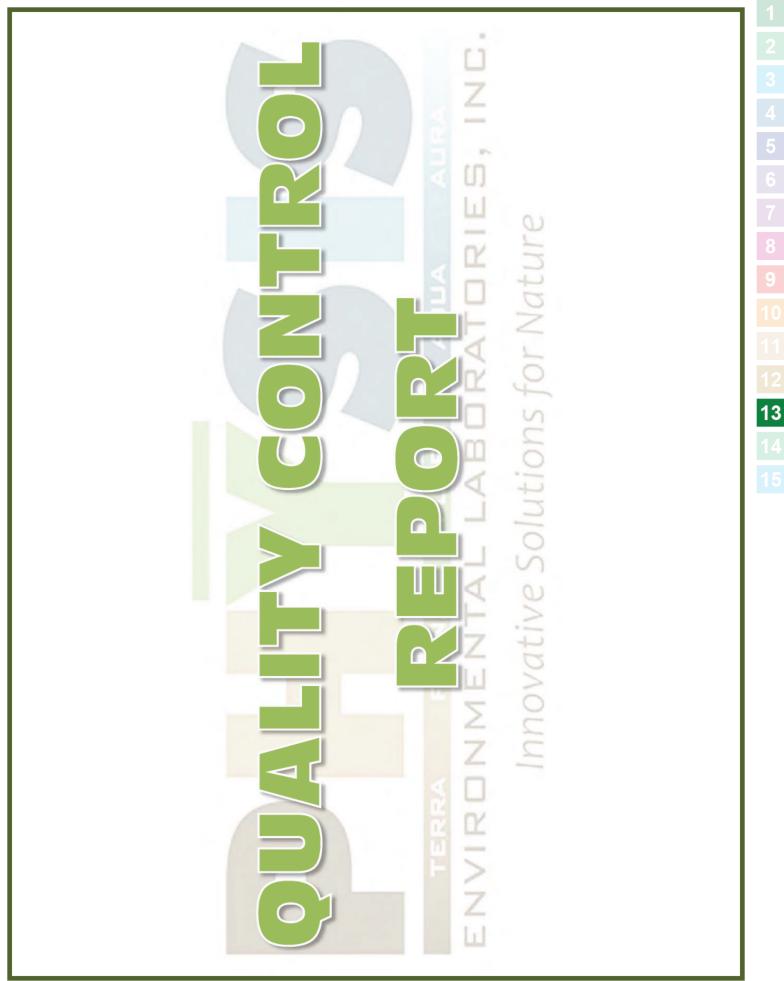
info@physislabs.com

CA ELAP #2769

	Polynuclear Aromatic Hydrocarbons														
ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE Batch ID	Date Processed	Date Analyzed					
Fluoranthene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total	O-42030	10-Aug-23	06-Sep-23					
Fluorene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total	0-42030	10-Aug-23	06-Sep-23					
Indeno[1,2,3-cd]pyrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total	0-42030	10-Aug-23	06-Sep-23					
Naphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total	0-42030	10-Aug-23	06-Sep-23					
Perylene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total	O-42030	10-Aug-23	06-Sep-23					
Phenanthrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total	O-42030	10-Aug-23	06-Sep-23					
Pyrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total	0-42030	10-Aug-23	06-Sep-23					

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PHYSIS Project ID: 1407003-433 Client: Eurofins Eaton Analytical Project: RED-HILL Project # 38001111 Job # 380-58282-1

Base/Neutral Extractable Compounds

QUALITY CONTROL REPORT

ANALYTE	FRACTIO	N RESULT	DF	MDL	RL	UNITS	SPIKE	SOURCE	A	CCURACY	PRECISION	QA CODEc
							LEVEL	RESULT	%	LIMITS	% LIMITS	
Sample ID: 109591	I-B1 C	QAQC Procedur	al Blaı	nk		Matrix: I	BlankMatr	ix Sam	npled:		Received:	
	Ν	Method: EPA 625.1				Batch ID: (D-42030	Pre	epared: o	7-Aug-23	Analyzed:	06-Sep-23
Disalicylidenepropanediamin	Total	ND	1	0.05	0.1	µg/L						
Sample ID: 109591	I-BS1 C	QAQC Procedura	al Blaı	nk		Matrix: I	BlankMatr	ix Sam	pled:		Received:	
	Ν	Method: EPA 625.1				Batch ID: (D-42030	Pre	epared: o	7-Aug-23	Analyzed:	06-Sep-23
Disalicylidenepropanediamin	۸ Total	Method: EPA 625.1 54.4	1	0.05	0.1	Batch ID:(µg/L	D-42030 50	Pre 0	epared: c 109	7-Aug-23 50 - 150% PASS	Analyzed:	o6-Sep-23
Disalicylidenepropanediamin Sample ID: 109591	Total	-	1		0.1	µg/L		0		, 0,	Analyzed: Received:	o6-Sep-23
	Total I-BS2 C	54.4	1		0.1	µg/L	50 BlankMatr	0 ix Sam	109 109	, 0,		



PHYSIS Project ID: 1407003-433 Client: Eurofins Eaton Analytical Project: RED-HILL Project # 38001111 Job # 380-58282-1

Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

ANALYTE	FRACTIO	N RESULT	DF	MDL	RL	UNITS	SPIKE	SOURCE	ŀ	ACCURACY		PREC	ISION	QA CODEc
							LEVEL	RESULT	%	LIMITS		%	LIMITS	
Sample ID: 10959)1-B1 (QAQC Procedur	al Blaı	nk		Matrix: Bla	ankMati	rix Saı	mpled:			Re	ceived:	
		Method: EPA 625.1				Batch ID: O-4	-	P	-	07-Aug-23		ł	Analyzed: d	06-Sep-23
(d10-Acenaphthene)	Total	104	1			% Recovery	100		104	27 - 133%				
(d10-Phenanthrene)	Total	105	1			% Recovery	100		105	43 - 129%	PASS			
(d12-Chrysene)	Total	101	1			% Recovery	100		101	52 - 144%	PASS			
(d12-Perylene)	Total	109	1			% Recovery	100		109	36 - 161%	PASS			
(d8-Naphthalene)	Total	96	1			% Recovery	100		96	25 - 125%	PASS			
1-Methylnaphthalene	Total	ND	1	0.001	0.005	µg/L								
1-Methylphenanthrene	Total	ND	1	0.001	0.005	µg/L								
2,3,5-Trimethylnaphthalene	Total	ND	1	0.001	0.005	µg/L								
2,6-Dimethylnaphthalene	Total	ND	1	0.001	0.005	µg/L								
2-Methylnaphthalene	Total	ND	1	0.001	0.005	µg/L								
Acenaphthene	Total	ND	1	0.001	0.005	µg/L								
Acenaphthylene	Total	ND	1	0.001	0.005	µg/L								
Anthracene	Total	ND	1	0.001	0.005	µg/L								
Benz[a]anthracene	Total	ND	1	0.001	0.005	µg/L								
Benzo[a]pyrene	Total	ND	1	0.001	0.005	μg/L								
Benzo[b]fluoranthene	Total	ND	1	0.001	0.005	µg/L								
Benzo[e]pyrene	Total	ND	1	0.001	0.005	µg/L								
Benzo[g,h,i]perylene	Total	ND	1	0.001	0.005	µg/L								
Benzo[k]fluoranthene	Total	ND	1	0.001	0.005	µg/L								
Biphenyl	Total	ND	1	0.001	0.005	µg/L								
Chrysene	Total	ND	1	0.001	0.005	µg/L								
Dibenz[a,h]anthracene	Total	ND	1	0.001	0.005	µg/L								
Dibenzo[a,l]pyrene	Total	ND	1	0.001	0.005	µg/L								
Dibenzothiophene	Total	ND	1	0.001	0.005	µg/L								

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PHYSIS Project ID: 1407003-433 Client: Eurofins Eaton Analytical Project: RED-HILL Project # 38001111 Job # 380-58282-1

Polynuclear Aromatic Hydrocarbons

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS
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

QUALITY CONTROL REPORT

RL	UNITS	SPIKE	SOURCE		ACCURACY	PRE	CISION	QA CODEc	
		LEVEL	RESULT	%	LIMITS	%	LIMITS		
0.005	µg/L								
0.005	µg/L								
0.005	µg/L								
0.005	µg/L								
0.005	µg/L								
0.005	µg/L								
0.005	µg/L								



PHYSIS Project ID: 1407003-433 Client: Eurofins Eaton Analytical Project: RED-HILL Project # 38001111 Job # 380-58282-1

Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

ANALYTE	FRACTIC	ON RESULT	DF	MDL	RL	UNITS		SOURC		CCURACY		PRECISION	QA CODEc
							LEVEL	RESUL	Т %	LIMITS		% LIMITS	
Sample ID: 10959	91-BS1	QAQC Procedura	al Blar	ηk		Matrix: Bla	ankMatı	rix S	Sampled:			Received:	
		Method: EPA 625.1				Batch ID: O-4	2030		Prepared: o	97-Aug-23		Analyzed:	06-Sep-23
(d10-Acenaphthene)	Total	103	1			% Recovery	100	0	103	27 - 133%	PASS		
(d10-Phenanthrene)	Total	104	1			% Recovery	100	0	104	43 - 129%	PASS		
(d12-Chrysene)	Total	102	1			% Recovery	100	0	102	52 - 144%	PASS		
(d12-Perylene)	Total	110	1			% Recovery	100	0	110	36 - 161%	PASS		
(d8-Naphthalene)	Total	95	1			% Recovery	100	0	95	25 - 125%	PASS		
1-Methylnaphthalene	Total	0.483	1	0.00	1 0.005	µg/L	0.5	0	97	31 - 128%	PASS		
1-Methylphenanthrene	Total	0.519	1	0.00	1 0.005	µg/L	0.5	0	104	66 - 127%	PASS		
2,3,5-TrimethyInaphthalene	Total	0.522	1	0.00	1 0.005	µg/L	0.5	0	104	55 - 122%	PASS		
2,6-Dimethylnaphthalene	Total	0.507	1	0.00	1 0.005	µg/L	0.5	0	101	48 - 120%	PASS		
2-Methylnaphthalene	Total	0.492	1	0.00	1 0.005	µg/L	0.5	0	98	47 - 130%	PASS		
Acenaphthene	Total	0.504	1	0.00	1 0.005	µg/L	0.5	0	101	53 - 131%	PASS		
Acenaphthylene	Total	0.533	1	0.00	1 0.005	µg/L	0.5	0	107	43 - 140%	PASS		
Anthracene	Total	0.509	1	0.00	1 0.005	µg/L	0.5	0	102	58 - 135%	PASS		
Benz[a]anthracene	Total	0.455	1	0.00	1 0.005	μg/L	0.5	0	91	55 - 145%	PASS		
Benzo[a]pyrene	Total	0.538	1	0.00	1 0.005	μg/L	0.5	0	108	51 - 143%	PASS		
Benzo[b]fluoranthene	Total	0.499	1	0.00	1 0.005	μg/L	0.5	0	100	46 - 165%	PASS		
Benzo[e]pyrene	Total	0.514	1	0.00	1 0.005	μg/L	0.5	0	103	42 - 152%	PASS		
Benzo[g,h,i]perylene	Total	0.52	1	0.00	1 0.005	μg/L	0.5	0	104	63 - 133%	PASS		
Benzo[k]fluoranthene	Total	0.512	1	0.00	1 0.005	µg/L	0.5	0	102	56 - 145%	PASS		
Biphenyl	Total	0.503	1	0.00	1 0.005	μg/L	0.5	0	101	56 - 119%	PASS		
Chrysene	Total	0.488	1	0.00	1 0.005	μg/L	0.5	0	98	56 - 141%	PASS		
Dibenz[a,h]anthracene	Total	0.525	1	0.00	1 0.005	μg/L	0.5	0	105	55 - 150%	PASS		
Dibenzo[a,l]pyrene	Total	0.413	1	0.00	1 0.005	μg/L	0.5	0	83	50 - 150%	PASS		
Dibenzothiophene	Total	0.498	1	0.00	1 0.005	μg/L	0.5	0	100	46 - 126%	PASS		

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CA ELAP #2769

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PHYSIS Project ID: 1407003-433 Client: Eurofins Eaton Analytical Project: RED-HILL Project # 38001111 Job # 380-58282-1

Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE	SOURCE	A	CCURACY	P	RECISION	QA CODEc
							LEVEL	RESULT	%	LIMITS	%	LIMITS	
Fluoranthene	Total	0.501	1	0.001	0.005	5 μg/L	0.5	0	100	60 - 146% PASS			
Fluorene	Total	0.529	1	0.001	0.005	δ μg/L	0.5	0	106	58 - 131% PASS			
Indeno[1,2,3-cd]pyrene	Total	0.503	1	0.001	0.005	δ μg/L	0.5	0	101	50 - 151% PASS			
Naphthalene	Total	0.472	1	0.001	0.005	5 μg/L	0.5	0	94	41 - 126% PASS			
Perylene	Total	0.525	1	0.001	0.005	δ μg/L	0.5	0	105	48 - 141% PASS			
Phenanthrene	Total	0.502	1	0.001	0.005	5 μg/L	0.5	0	100	67 - 127% PASS			
Pyrene	Total	0.51	1	0.001	0.005	δ μg/L	0.5	0	102	54 - 156% PASS			



PHYSIS Project ID: 1407003-433 Client: Eurofins Eaton Analytical Project: RED-HILL Project # 38001111 Job # 380-58282-1

Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

ANALYTE	FRACTI	ON RESULT	DF	MDL	RL	UNITS	SPIKE	SOURC	E A	CCURACY	PRE	ECISION	QA CODEc
							LEVEL	RESUL	Т %	LIMITS	%	LIMITS	
Sample ID: 10959	1-BS2	QAQC Procedura	al Blaı	nk		Matrix: Bl	ankMatr	ix S	Sampled:		F	Received:	
		Method: EPA 625.1				Batch ID: O-4			Prepared: (Analyzed:	1 -
(d10-Acenaphthene)	Total	109	1			% Recovery	100	0	109	27 - 133% PASS	6	30 PAS	_
(d10-Phenanthrene)	Total	104	1			% Recovery	100	0	104	43 - 129% PASS	0	30 PAS	
(d12-Chrysene)	Total	101	1			% Recovery	100	0	101	52 - 144% PASS	1	30 PAS	S
(d12-Perylene)	Total	109	1			% Recovery	100	0	109	36 - 161% PASS	1	30 PAS	S
(d8-Naphthalene)	Total	104	1			% Recovery	100	0	104	25 - 125% PASS	9	30 PAS	S
1-Methylnaphthalene	Total	0.52	1	0.00	0.00	5 μg/L	0.5	0	104	31 - 128% PASS	7	30 PAS	S
1-Methylphenanthrene	Total	0.495	1	0.00	0.00	5 µg/L	0.5	0	99	66 - 127% PASS	5	30 PAS	S
2,3,5-Trimethylnaphthalene	Total	0.525	1	0.00	0.00	5 μg/L	0.5	0	105	55 - 122% PASS	1	30 PAS	S
2,6-Dimethylnaphthalene	Total	0.527	1	0.00	0.00	5 μg/L	0.5	0	105	48 - 120% PASS	4	30 PAS	S
2-Methylnaphthalene	Total	0.523	1	0.00	0.00	5 µg/L	0.5	0	105	47 - 130% PASS	7	30 PAS	S
Acenaphthene	Total	0.524	1	0.00	0.00	5 µg/L	0.5	0	105	53 - 131% PASS	4	30 PAS	S
Acenaphthylene	Total	0.54	1	0.00	0.00	5 μg/L	0.5	0	108	43 - 140% PASS	1	30 PAS	S
Anthracene	Total	0.509	1	0.00	0.00	5 µg/L	0.5	0	102	58 - 135% PASS	0	30 PAS	S
Benz[a]anthracene	Total	0.425	1	0.00	0.00	5 µg/L	0.5	0	85	55 - 145% PASS	7	30 PAS	S
Benzo[a]pyrene	Total	0.515	1	0.00	0.00	5 µg/L	0.5	0	103	51 - 143% PASS	5	30 PAS	S
Benzo[b]fluoranthene	Total	0.487	1	0.00	0.00	5 µg/L	0.5	0	97	46 - 165% PASS	3	30 PAS	S
Benzo[e]pyrene	Total	0.505	1	0.00	0.00	5 µg/L	0.5	0	101	42 - 152% PASS	2	30 PAS	S
Benzo[g,h,i]perylene	Total	0.512	1	0.00	0.00	5 µg/L	0.5	0	102	63 - 133% PASS	2	30 PAS	S
Benzo[k]fluoranthene	Total	0.483	1	0.00	0.00	5 µg/L	0.5	0	97	56 - 145% PASS	5	30 PAS	S
Biphenyl	Total	0.528	1	0.00	0.00	5 µg/L	0.5	0	106	56 - 119% PASS	5	30 PAS	S
Chrysene	Total	0.475	1	0.00	0.00	5 µg/L	0.5	0	95	56 - 141% PASS	3	30 PAS	S
Dibenz[a,h]anthracene	Total	0.507	1	0.00	0.00	5 µg/L	0.5	0	101	55 - 150% PASS	4	30 PAS	S
Dibenzo[a,l]pyrene	Total	0.384	1	0.00	0.00	5 µg/L	0.5	0	77	50 - 150% PASS	8	30 PAS	S
Dibenzothiophene	Total	0.499	1	0.00	0.00	5 µg/L	0.5	0	100	46 - 126% PASS	0	30 PAS	S

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CA ELAP #2769

qcb - 6 of 7



PHYSIS Project ID: 1407003-433 Client: Eurofins Eaton Analytical Project: RED-HILL Project # 38001111 Job # 380-58282-1

Polynuclear Aromatic Hydrocarbons

QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE	SOURCE	A	CCURACY	PRI	ECISION	QA CODEc
							LEVEL	RESULT	%	LIMITS	%	LIMITS	
Fluoranthene	Total	0.479	1	0.001	0.005	μg/L	0.5	0	96	60 - 146% PASS	4	30 PAS	6
Fluorene	Total	0.527	1	0.001	0.005	μg/L	0.5	0	105	58 - 131% PASS	1	30 PAS	6
Indeno[1,2,3-cd]pyrene	Total	0.485	1	0.001	0.005	μg/L	0.5	0	97	50 - 151% PASS	4	30 PAS	6
Naphthalene	Total	0.502	1	0.001	0.005	μg/L	0.5	0	100	41 - 126% PASS	6	30 PAS	6
Perylene	Total	0.509	1	0.001	0.005	μg/L	0.5	0	102	48 - 141% PASS	3	30 PAS	6
Phenanthrene	Total	0.502	1	0.001	0.005	μg/L	0.5	0	100	67 - 127% PASS	0	30 PAS	3
Pyrene	Total	0.484	1	0.001	0.005	μg/L	0.5	0	97	54 - 156% PASS	5	30 PAS	6

TENTATIVELY IDENTIFIED COMPOUNDS ENVIRONMENTAL LABORATORIES, INC. Innovative Solutions for Nature

Sample ID: 109592

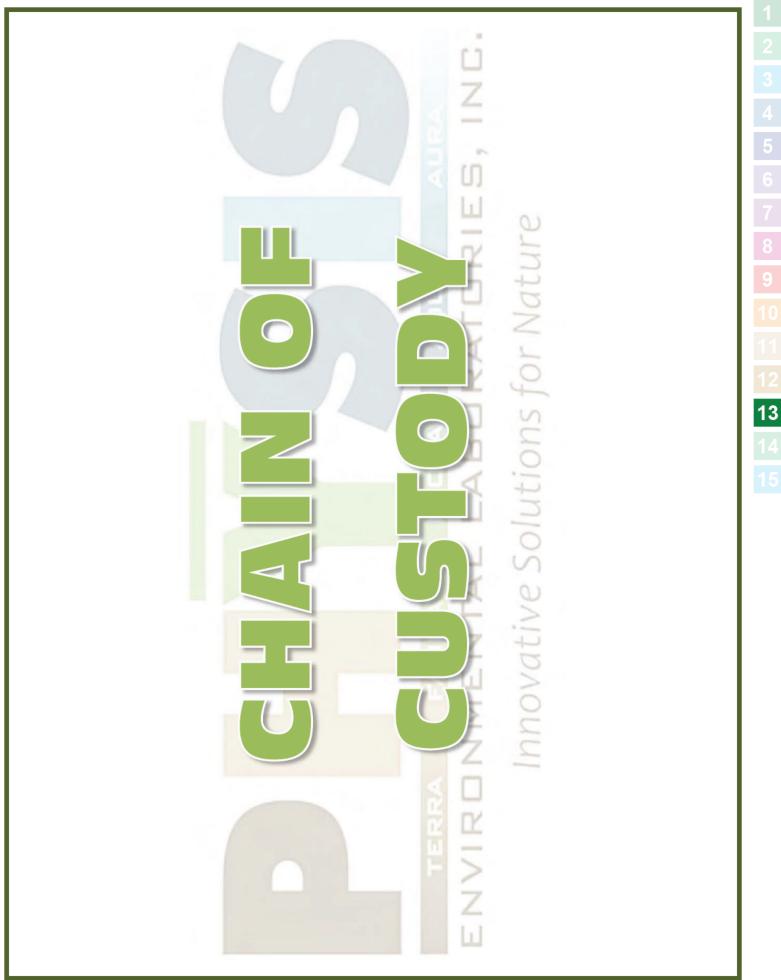
	Area				
Retention	(% of	Concentration			Match Quality
Time	total)	(ng/L)	Library/ID	Cas Number	(%)
34.0469	6.9771	1111	Anthracene-D10-	1719-06-8	95
10.2482	1.8333	292	1,5-Heptadien-4-one, 3,3,6-trimethyl-	546-49-6	90

Concentration estimated using the response for Anthracene-d10

Sample ID: Lab Blank B1_42030

	Area				
Retention	(% of	Concentration			Match Quality
Time	total)	(ng/L)	Library/ID	Cas Number	(%)
34.0478	5.4189	1111	Anthracene-D10-	1719-06-8	95
10.2503	1.7825	365	1,5-Heptadien-4-one, 3,3,6-trimethyl-	546-49-6	90

Concentration estimated using the response for Anthracene-d10



Custody Seals Intact: Custody Seal No.:	Relinquished by:	Relinguished by:	Relinquished by	Empty Kit Relinquished by:	Deliverable Requested: I, II, III, IV, Other (specify)	Unconfirmed	ate of Origin I immediately.			MOANALUA WELLS (331-223-TP202) (380-58282-1)		Sample Identification - Client ID (Lab ID)	Honolulu BWS Sites	RED-HILL	Emai:	Phone:	Stale, Zip: CA, 92806	City: Anaheim	1904 Wright Circle, ,	Company: Physis Environmental Laboratories		Client Information (Sub Contract Lab)	Eurotins Eaton Analytical Pomona 941 Corporate Center Drive Pomona, CA 91766-2642 Phone: 626-366-1100
	Date/Time:	Date/Time:	DateTime		Primary Deliverable Rank: 2		ange, Eurofins Eaton Analytical, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract latoratories. This stated above for analysis/hests/matrix being analyzed, the samples must be shipped back to the Eurofins Eaton Analytical, LLC laboratory or other inst If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Eaton Analytical, LLC interfaced accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Eaton Analytical, LLC interfaced accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Eaton Analytical, LLC interfaced accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Eaton Analytical, LLC interfaced accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Eaton Analytical, LLC interfaced accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Eaton Analytical, LLC interfaced accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Eaton Analytical, LLC interfaced accreditations are current to date.			8/7/23	X	Sample Date	SOUW	Project #: 38001111	WO #	PO #		TAT Requested (days):	Due Date Requested: 8/23/2023		Phone:	Sampler:	
			115	Date:	erable Rank:		ityzed, the sample ate, return the sig			Hawaiian	X	e Sample Time						(days):	osted:				Chain
	0	- 0	S.		2		nethod, analyte (es must be shipp yned Chain of Cu				Preservation Code:	Sample Type (C=comp, G=grab)											Chain of Custody Record
	Company	Company	Company				A accreditation o wed back to the E ustody attesting t			Water	ion Code:	1								(0.)	E-Mailt Rache	Lab PM Arada	tody Re
Cooler To	Received by:	Received	- macan	Time:	Special Ins	Retu	ompliance upon urofins Eaton Ar o said complianc			×		Field Filters Perform MS SUB (625 PA Physis LL (E	S/MSD (Yes or	No)		25 PA	1		Accreditations Required (See not State - Hawaii	E-Mait Rachelle.Arada@et.eurofinsus.	Lab PM: Arada, Rachelle	ecord
Cooler Temperature(s) °C	by:	By:	hand		Special Instructions/QC	Return To Client	our subcontract valytical, LLC lab as to Eurofins Ea							_			_		Ana	dnises) pavind	t.eurofinsus.c		
and Other Remarks:			R	Pa	Requirements:	ie may be as	aboratories. Thi oratory or other ton Analytical, L						_						Analysis Req		3		ाज्यस्य
arks:			E	Method of	59	Disposal By Lab	is sample shipm instructions will LC,		++	-			_	-		_	_		Requested		State of Origin: Hawali	Carrier Tracking No(s)	
	Date/Time:	Date/Time:	01/20	Method of Shipment:		an cardina	be provided. Ar							_			_					No(s):	
			1231155			Disposal By Lab	d under chain-of-custody. ny changes to accreditation			2 See Attached Instructions	X	Total Numt	per of co			G - Amehlor H - Ascorbic Acid	E - NaHSO4	B - NaOH C - Zn Acetata	A - HCL M	380-58282-1	Page 1 of 1	COC Na: 380-69198.1	🐼 eurofins
V- 06/08/2017 1	Company	Company	- WAYSYS			Months	laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not orratory or other instructions will be provided. Any changes to accreditation status should be brought to non Analytical, LLC.			structions		Special Instructions/Note:		Y - Trizma Z - other (specify)			Q - Na2SO3 R - Na2S2O3	0 - AsNa02 P - Na2045	M - Hexane				S Environment Testin

DUVCIC	PHYSIS	
PHISIS	Project Iteration ID: 1407003-433	
TERMA TAUNA TUBA ABUA AUT	Client Name: Eurofins Eaton Analytical	
Innovative Solutions for Nature	Project Name: RED-HILL Project # 38001111 Job	
ample Possint Summer	# 380-58282-1	
ample Receipt Summary	COC Page Number: 2 of 2	
eceiving Info	Bottle Label Color: NA	
1. Initials Received By:		
2. Date Received: 8/10/23		
3. Time Received: 1155		
4. Client Name: EusoCorr		
5 Courier-Information: (Please circle)		
Client UPS	Area Fast DRS	
FedEx GSO/GLS	Ontrac PAMS	
PHYSIS Driver:		
i. Start Time:	iii. Total Mileage:	
ii. End Time:	iv. Number of Pickups:	
6. Container Information: (Please put the # of o		
Cooler Styrofoam Coole	er •Boxes • None	
Carboy(s) Carboy Trash Carboy		
7. What type of ice was used: (Please circle and		
	Dry Ice Water None	
8. Randomly Selected Samples Temperature (*	C): 1.3 Used I/R Thermometer # $1-2$	
1. Initials Inspected By:		
nple Integrity Upon Receipt:		
1. COC(s) included and completely filled out	Yes / No	
2. All sample containers arrived intact		
3. All samples listed on COC(s) are present	Yes / No	
4. Information on containers consistent with in		
5. Correct containers and volume for all analys		
6. All samples received within method holding		
	dicated	
7. Correct preservation used for all analyses in		
 Correct preservation used for all analyses in Name of sampler included on COC(s) 		-
		1
	Yes / No]
	Yes / No	

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Mon	1

750 Royal Oaks Drive Suite 100 Monrovia CA 91016

Chain of Custody Record

🐝 eurofins Environment Testing

Phone (626) 386-1100														
Client Information	Sampler Byson	Natan	oto	Lab PM Arada, Rachelle	chelle				0	Carner Tracking No(s)	ng No(s)		COC No 380-27941-2757	72
Client Contact: Dr Ron Fenstermacher	Phone. 808-748-5840			E-Mail Rachelle Arada@et euronisus com	vrada@	et euro	nisus ci	<u> </u>	ίΩ.	State of Origin	-		Page Page 2 of 2	
Company Crity & County of Honolulu		alswd					Ané	sis	Requ	Requested			:# qop	
Address 630 South Beretania Street, Chemistry Lab	Due Date Requested:				3	e 5	e						Preservation Codes:	ŏ
City Honolulu	TAT Requested (days):				sO								A - HCL B - NaOH C - Zn Acetate	
State, Zp HI, 96843	Compliance Project:	A No		Т	IT + (.			ר (באו					E - NaHSO4	
Phone 808-748-5091 (tel)	PO # C20525101 exp 05312023	312023		(0	IA3) -L			able) L					G - Amchior G - Amchior H - Ascorbic Acid	S - H2SO4 T - TSP Dodecahydrate
Email Ifenstemacher@hbws org	,# OM			Section Section Section										
Project Name RED-HILL/HBWS sites Event Desc RUSH Weekly Red Hill	Project# 38001111			And Second Second										Y - Trizma Z - other (specify)
Site.	SSOW#			and the second s	_				se				Other:	
Sample Identification	Sample Date	Sar Ty Sample (C=c Time G=c	Sample Matrix Type S====================================	Eield Filtered	TOAATNOOBU2	roartnooaus roartnooaus	525.2_PREC - (N	TOAATNOOBUS	ətylsınA IIA - EEZ				Total Number Special	Special Instructions/Note:
	(Preservation Code:	Ŕ	ĸ	R		-	z			\square		
MOANALUA WELLS	N E202/t/S	1 00 1	Cn Water		2	27	0						Emr 2	
AIEA GULCH WELLS PUMP2			Water										-	
AIEA WELLS PUMPS 1&2 (260)			Water											
HALAWA WELLS UNITS 1&2			Water											
								_		24	2			
FB MOANALUA WELLS	8/7/2023		Water			N				17. 				
FB AIEA GULCH WELLS PUMP2			Water											
FB AIEA WELLS PUMPS 1&2 (260)			Water							380-583	380-58282 COC			
FB HALAWA WELLS UNITS 1&2			Water							_				
											_			
Possible Hazard Identification	[- [-	ample I	Dispose	al (A fe	e may	be ass	essed if	samples a	re retai	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	1 month)
Non-Hazard Flammable Skin Irritant Poli Delivershia Revinested 1 11 111 N Other (sec.ifv)	Poison B Unknown		adiological	U.		Return To Client Dis	Client	Bedlin	DIS	Disposal By Lab	Lab] A	Archive For	Months
				<u>^</u>				linhovi		. 1				
Empty Kit Relanguished by:	Date	ė		Time	- t	1	-			Method	Method of Shipment: FEIS		HASS 6245 X3	14 6151
Reinquished by	Date/Time 8/7/20	23	200 HBWS		Recei	Received by	0	C. PETINER	NGR		0ate/Time	9/202	10.10	Company
	Date/Time.		Company		Received by	ed by	7				Date/Time	-		Company
Reinquished by	Date/Time.		Company		Received by	ed by					Date/Time.	di .		Company
Custody Seals Intact: Custody Seal No					Cooler	Cooler Temperature(s) °C and Other Remarks	ature(s) °(and Oth	ler Rema	\sim	752A) 3.	<i>6</i> °0	s22.2.40	6-6-6
					1					1				2
					4	3	2	2			5 3		5	2

Monrovia, CA (Suite 100) 750 Royal Oaks Drive Suite 100 Monrovia, CA 91016

Chain of Custody Record

Control Environment Testing America

Monrovia, CA 91016 Phone (626) 386-1100													America	rica
Client Information	Sampler Bryson Nul	Nakemetro	Lab PM Arada, Rachelle	elle				Cami	Carrier Tracking No(s)	(s)oN BL		COC No 380-27941-2757	41-2757 2	
Client Contact Dr Ron Fenstermacher			E-Mail Rachelle Arada@et euronisus com	ada@et	t euronis	us con		State	State of Origin			Page Page 2 of	f 2	
Company		DISMd				- I V		Ambiel Description				# qof		
ury & county of nonorard Address	Due Date Requested:			$\left \right $	F			sanhay y		F	╞	Preserva	Preservation Codes:	
630 South Beretania Street; Chemistry Lab City Honolulu	TAT Requested (days):			s	r Oil							A - HCL B - NaOH C - Zn Acetate		exane one sNaO2
State, Zip HI, 96843	Compliance Project: Δ No		Т			r (Evr						D - Nitric A E - NaHSC		12045 12803 128203
Phone 808-748-5091 (tel)	PO# C20525101 exp 05312023		(0		ns (JA							F - MeOH G - Amchli H - Ascorb		2SO4 P Dodecahydrate
Email rfenstemacher@hbws.org	# OM				ורר (בי		ţei.J							U - Acetone V - MCAA W - pH 4-5
Project Name RED-HILL/HBWS sttes Event Desc RUSH Weekly Red Hill	Project #- 38001111				əsəiQ S		lina I.							Y - Trizma Z - other (specify)
Site	-#MOSS				3168 - T						·····	of col		
Sample Identification	Sample Time	Sample Matrix Type (Nurwath) (C=comp, 0=matrix(i, G=grab) B1-TISSUE, A=Alr	Perform MS/M	IDAATNODBU2 IDAATNODBU2	IDAATNODBU2	ADDECONTRAC - (N	399_WQ_1.768	atylsnA IIA - EEB				Total Number S	Special Instructions/Note:	ions/Note:
	X	· m	e: X	R	RA	R	≻	z				X	$\left \right $	
MOANALUA WELLS	8/7/2023 1100	ign Water	_			-	3	2				8 np	20	
AIEA GULCH WELLS PUMP2		Water												
AIEA WELLS PUMPS 1&2 (260)		Water		-										
HALAWA WELLS UNITS 1&2		Water	er -											
FB MOANALUA WELLS	5702/ ±/g	Water	-					_						
FB AIEA GULCH WELLS PUMP2		Water	_		_									
FB AIEA WELLS PUMPS 1&2 (260)		Water	er											
FB HALAWA WELLS UNITS 1&2		Water												
Identification			San	ple Di	Sample Disposal (A fee may be assessed if	A fee	may be	asses	sed if :	sample	s are re	samples are retained longer than 1 month	than 1 mont	(4)
	Poison B Unknown	Radiological	Spe	Retu	Special Instructions/QC Requirements	ient /QC Re	sdurren	Dispo	Disposal By Lab ents:	ab		Archive For	Mc	Months
Emnty Kit Relinguished by	Date		Time	ŀ					Method	of Shipme	Method of Shipment:	1		11 11-1
Relinquished by 70 11	Date/Time. J ?	Company	-	Received by		+				Date/Time	Į.	1244 720	0	1010) Vue
Palaminhod hus Bry Row	5202/2/9	1200 HBWS	0	$\overline{\mathbf{J}}$	ŤÅ,	0	S.P.F.	PETTNER	d	208/00		2023 10	Q	CA-2
	Date/ IIITe	Company		Keceived by	ha	.				Date/ IIIue	a		Company	any
Relinquished by:	.Date/Time.	Company		Received by	i by'				~	Date/Time	ime		Company	any
Custody Seals Intact: Custody Seal No				Cooler To	Cooler Temperature(s) °C and Other Remarks	e(s) °C al	nd Other	Remarks	HZ-SE/	24	2. N	0-0.2 -	3.40 6	CHER - Fristen
													Ver (01/16/2019

11/21/2023

Client: City & County of Honolulu

Login Number: 58282 List Number: 1 Creator: Segura, Ryan

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

Job Number: 380-58282-2

List Source: Eurofins Eaton Analytical Pomona