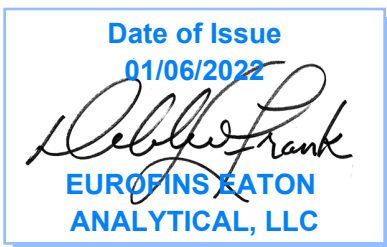


750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Report

for

Honolulu Board of Water Supply
630 South Beretania Street
Public Service Bldg.” Room 308
Honolulu, HI 96843
Attention: Erwin Kawata
Fax: 808-550-5018



Utah ELCP CA00006

DEB: Debbie L Frank
Project Manager

Report: 976775
Project: RED-HILL
Group: TPH-8015_Red_Hill(2021)

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

* As applicable, this report consists of the cover page, State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms.

* Test results relate only to the sample(s) tested.

* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

* This report shall not be reproduced except in full, without the written approval of the laboratory.

* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	NE-OS-21-13
Arkansas	CA00006	Nevada	CA00006
California	2813	New Hampshire *	2959
Colorado	CA00006	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	CA00006
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	21-008R	Ohio - 537.1	87786
Hawaii	CA00006	Oregon *	4034
Idaho	CA00006	Pennsylvania *	68-00565
Illinois	200033	Puerto Rico	CA00006
Indiana	C-CA-01	Rhode Island	LAO00326
Iowa – Asbestos	413	South Carolina	87016
Kansas *	E-10268	South Dakota	CA11320
Kentucky	90107	Tennessee	TN02839
Louisiana *	LA008	Texas *	T104704230-20-18
Maine	CA00006	Utah (Primary AB) *	CA00006
Maryland	224	Vermont	VT0114
Marianas Islands	MP0004	Virginia *	460260
Massachusetts	M-CA006	Washington	C838
Michigan	9906	EPA Region 5	CA00006
Mississippi	CA00006	Los Angeles County Sanitation Districts	10264

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025:2917 Accredited Method List

The test listed below are accredited and met the requirements of ISO/IEC 17025 as verify by A2LA.

Refer to our certificates and scope of accreditations (no. 5890-1 and 5890-2) found at:

<https://www.eurofinsus.com/Eaton>

Test(s)	Method(s)	Potable Water *	Waste Water	Test(s)	Method(s)	Potable Water *	Waste Water
Enterococci	Enterolert	x	x	Gross Alpha coprecipitation	SM 7110 C	x	x
<i>Escherichia coli</i> (Enumeration)	SM 9221 B.1 SM 9221 F	x		Hardness	SM 2340 B	x	x
Fecal Coliform (P/A and Enumeration)	SM 9221 C (MTF/EC), SM 9221 E (MTF/EC)	x	x	Hexavalent Chromium	EPA 218.6,	x	x
Fecal Streptococci and Enterococci	SM 9230 B	x	x	Hexavalent Chromium	EPA 218.7,	x	
Heterotrophic Bacteria	SM 9215 B	x		Hexavalent Chromium	SM 3500-Cr B		x
Legionella	Legiolert®	x		Inorganic Anions and DBPs	EPA 300.0	x	x
<i>Pseudomonas aeruginosa</i>	Idexx Pseudalart	x		Norganic Anions and DBPs	EPA 300.1	x	
Total Coliform (P/A and Enumeration)	SM 9221A, SM 9221B, SM 9221 C	x	x	Kjeldahl Nitrogen	EPA 351.2		x
Total Coliform, Total Coliform with Chlorine Present	SM 9221 B	x	x	Metals	EPA 200.7, EPA200.8	x	x
Total Coliform/ <i>E. coli</i> (P/A and Enumeration, Idexx Colilert, Idexx Colilert 18, Colisure)	SM 9223	x		Nitrosamines	EEA-Agilent 521.1 (GCMS-24250)	x	
Total Microcystins and Nodularins	EPA 546	X		Nitrate/Nitrite Nitrogen	EPA 353.2	x	x
Yeast and Mold	SM 9610	x		Odor	SM2150B	x	
1,2,3-Trichloropropane (TCP) at 5 PPT	CA SRL 524M-TCP	x		Organohalide Pesticides and PCB	EPA 505	x	
1,4-Dioxane	EPA 522	x		Ortho Phosphate	SM 4500P E	x	
2,3,7,8-TCDD	Modified EPA 1613 B	x		Oxyhalides Disinfection Byproducts	EPA 317.0	x	
Acrylamide	+ LCMS 2440)	x		Perchlorate	EPA 331.0	x	
Algal Toxins/Microcystin	+ LCMS 3570	x		Perchlorate (Low and High Levels)	EPA 314.0	x	
Alkalinity	SM 2320B	x	x	Perfluorinated Alkyl Acids	EPA 533, EPA 537, EPA 537.1	x	
Ammonia	EPA 350.1, SM 4500-NH3 H		x	PPCP and EDC	+ LCMS-2443	x	
Asbestos	EPA 100.2	x	x	pH	EPA 150.1 SM 4500-H+ B	x	x
Bicarbonate Alkalinity as HCO ₃	SM 2330 B	x	x	Phenolics – Low Level	+WC 2493 (EPA 420.2 and EPA 420.4 MOD)	x	x
BOD/CBOD	SM 5210 B		x	Phenylurea Pesticides/Herbicides	+ LCMS-2448	x	
Bromate	+ LCMS- 2447	x		Radium-226, Radium-228	GA Tech (Rad-2374)	x	
Carbonate as CO ₃	SM 2330 B	x	x	Radon-222	SM 7500RN	x	
Carbonyls	EPA 556	x	x	Residue (Filterable)	SM 2540C	x	x
Chemical Oxygen Demand	EPA 410.4, SM 5220D		x	Residue (Non-Filterable)	SM 2540D		x
Chlorinated Acids	EPA 515.4	x		Residue (Total)	SM 2540B		x
Chlorine Dioxide	Palin Test Chlordio X Plus, SM 4500-CLO2 D	x		Residue (Volatile)	EPA 160.4		x
Chlorine, Free, Combined, Total Residual, Chloramines	SM 4500-Cl G	x		Semi-Volatile Compounds	EPA 525.2	x	
Color	SM2120B	x		Silica	SM 4500-SiO2 C	x	x
Conductivity	EPA 120.1, SM 2510B	x	x	Sulfide	SM 4500-S D		x
Corrosivity (Langelier Index), Carbonate as CO ₃ , Hydroxide as OH Calculated	SM 2330 B	x		Sulfite	SM 4500-SO3 B	x	x
Cyanide (Amenable)	SM 4500-CN G	x	x	Surfactants	SM 5540C	x	x
Cyanide (Free)	SM 4500CN F	x	x	Taste and Odor	SM 6040 E	x	
Cyanide (Total)	EPA 335.4	x	x	Total Organic Carbon	SM 5310 C	x	x
Cyanogen Chloride (Screen)	+ 335 Mod (WC-24467)	x		Total Phenols	EPA 420.1		x
Diquat and Paraquat	EPA 549.2	x		Total Phenols	EPA 420.4	x	x
DBP and HAA	SM 6251 B	x		Triazine Pesticides and their Degradates	+ LCMS-3617	x	
Dissolved Organic Carbon	SM 5310 C	x		Turbidity	EPA 180.1	x	x
Dissolved Oxygen	SM 4500-O G		x	Uranium by ICP/MS	EPA 200.8	x	
EDB/DCBP/TCP	EPA 504.1	x		UV 254 Organic Constituents	SM 5910B	x	
EDB/DBCP and Disinfection Byproducts	EPA 551.1	x		VOCs	EPA 524.2	x	
EDTA and NTA	+ WC-2454	x		VOCs	+ (GCMS 2412) by EPA 524.2 modified	x	
Endothall	EPA 548.1, +(LCMS-2445)	x					
Fluoride	SM 4500F C	x	x				
Glyphosate	EPA 547	x					
Glyphosate and AMPA	+ LCMS-3618	x					
Gross Alpha and Gross Beta	EPA 900.0	x	x				

(*): includes: Bottled Water, Drinking Water and Water as Component of Food & Beverage.

(+): In-House Method

Acknowledgement of Samples Received

Addr: **Honolulu Board of Water Supply**
630 South Beretania Street
Public Service Bldg." Room 308
Honolulu, HI 96843

Attn: Erwin Kawata
Phone: 808-748-5091

Client ID: HONOLULU
Folder #: 976775
Project: RED-HILL
Sample Group: TPH-8015_Red_Hill(2021)

Project Manager: Debbie L Frank
Phone: (626) 386-1149
PO #: C20525101 exp 05312023

The following samples were received from you on **December 21, 2021 at 1309**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202112220436</u>	HALAWA WELLS UNITS P2 (331-024-WL064) @8015B GAS/DIESEL/OIL_Calscience	12/20/2021 0953
<u>202112220437</u>	AIEA WELLS PUMPS P2 (260)-331-004-WL103 @8015B GAS/DIESEL/OIL_Calscience	12/20/2021 1036
<u>202112220438</u>	TB: HALAWA WELLS UNITS P2 (331-024-WL064) (SUB)Gas Fraction Hydrocarbons	12/20/2021 0953
<u>202112220439</u>	TB: AIEA WELLS PUMPS P2 (260)-331-004-WL103 (SUB)Gas Fraction Hydrocarbons	12/20/2021 1036
<u>202112300627</u>	RUSH RUSH	12/20/2021 10:36

Test Description

@8015B GAS/DIESEL/OIL_Calscience -- Gas, Diesel, and Motor Oil Organics

Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Laboratory Comments

Report: 976775
Project: RED-HILL
Group: TPH-8015_Red_Hill(2021)

Honolulu Board of Water Supply
Erwin Kawata
630 South Beretania Street
Public Service Bldg." Room 308
Honolulu, HI 96843

Folder Comments

Results for Gasoline Range Organics and TPH Carbon Chain are submitted by Asset Laboratories

Purgeable TPH gas missed HT and is not tested on the field samples, due to split issue.
deb010522

Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

Report: 976775
Project: RED-HILL
Group: TPH-8015_Red_Hill(2021)

Honolulu Board of Water Supply
Erwin Kawata
630 South Beretania Street
Public Service Bldg." Room 308
Honolulu, HI 96843

Samples Received on:
12/21/2021 1309

Analyzed	Analyte	Sample ID	Result	HI Limit	Units	MRL
----------	---------	-----------	--------	----------	-------	-----

Tel: (626) 386-1100
 Fax: (626) 988-3757
 1 800 566 LABS (1 800 566 5227)

Report: 976775
 Project: RED-HILL
 Group: TPH-8015_Red_Hill(2021)

Honolulu Board of Water Supply
 Erwin Kawata
 630 South Beretania Street
 Public Service Bldg. Room 308
 Honolulu, HI 96843

Samples Received on:
 12/21/2021 1309

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<u>HALAWA WELLS UNITS P2 (331-024-WL064) (202112220436)</u>						Sampled on 12/20/2021 0953			
8015B - Gas, Diesel, and Motor Oil Organics									
12/23/21	12/23/21 21:27			(8015B)	Diesel Range Organics (DRO)-C10-C28	ND	ug/L	50	1
12/23/21	12/23/21 21:27			(8015B)	Gasoline Range Organics (GRO) -C6-C10	ND	ug/L	50	1
12/23/21	12/23/21 21:27			(8015B)	Oil Range Organics (C28-C40)	ND	ug/L	50	1
<u>AIEA WELLS PUMPS P2 (260)-331-004-WL103 (202112220437)</u>						Sampled on 12/20/2021 1036			
8015B - Gas, Diesel, and Motor Oil Organics									
12/23/21	12/23/21 22:01			(8015B)	Diesel Range Organics (DRO)-C10-C28	ND	ug/L	50	1
12/23/21	12/23/21 22:01			(8015B)	Gasoline Range Organics (GRO) -C6-C10	ND	ug/L	50	1
12/23/21	12/23/21 22:01			(8015B)	Oil Range Organics (C28-C40)	ND	ug/L	50	1
<u>TB: HALAWA WELLS UNITS P2 (331-024-WL064) (202112220438)</u>						Sampled on 12/20/2021 0953			
SW 8015B - (SUB)Gas Fraction Hydrocarbons									
12/23/21	12/23/21 17:42			(SW 8015B)	(SUB)Gas Fraction Hydrocarbons	ND	mg/L	0.05	1
<u>TB: AIEA WELLS PUMPS P2 (260)-331-004-WL103 (202112220439)</u>						Sampled on 12/20/2021 1036			
SW 8015B - (SUB)Gas Fraction Hydrocarbons									
12/23/21	12/23/21 18:13			(SW 8015B)	(SUB)Gas Fraction Hydrocarbons	ND	mg/L	0.05	1

Rounding on totals after summation.
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

December 28, 2021

Debbie Frank
Eurofins
750 Royal Oaks Drive Suite 100
Monrovia, CA 91016-3629
TEL: (626) 386-1158
FAX:

Workorder No.: N048553

RE:

Attention: Debbie Frank

Enclosed are the results for sample(s) received on December 23, 2021 by ASSET Laboratories. The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (702) 307-2659 if I can be of further assistance to your company.

Sincerely,



Nancy Sibucan
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and ASSET Laboratories - Las Vegas.



ASSET LABORATORIES
ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

CALIFORNIA | P: 562.219.7435 F: 562.219.7436
11110 Artesia Blvd., Ste B, Cerritos, CA 90703
ELAP Cert 2921
EPA ID CA01638

NEVADA | P: 702.307.2659 F: 702.307.2691
3151 W. Post Rd., Las Vegas, NV 89118
ELAP Cert 2676 | NV Cert NV00922
ORELAP/NELAP Cert 4046

"Serving Clients with Passion and Professionalism"

CLIENT: Eurofins
Project:
Lab Order: N048553

CASE NARRATIVE

SAMPLE RECEIVING/GENERAL COMMENTS:

All sample containers were received intact with proper chain of custody documentation.

Information on sample receipt conditions including discrepancies can be found in attached Sample Receipt Checklist Form.

Cooler temperature and sample preservation were verified upon receipt of samples if applicable.

Samples were analyzed within method holding time.

Results were J-Flag. "J" is used to flag those results that are between the PQL (Practical Quantitation Limit) and the calculated MDL (Method Detection Limit). Results that are "J" Flagged are estimated values since it becomes difficult to accurately quantitate the analyte near the MDL.

Analytical Comments for EPA 8015B_GRO:

RPD of Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria for GRO in QC samples N048551-001A-MS/MSD possibly due to matrix interference. The associated Laboratory Control Sample (LCS) recovery was acceptable.



CLIENT: Eurofins
Project:
Lab Order: N048553
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
N048553-001A	976775_202112220436_HAL AWA WELLS UNITS P2 (331-024)	Drinking Water	12/20/2021 9:53:00 AM	12/23/2021	12/28/2021
N048553-002A	976775_202112220437_AIE A WELLS PUMPS P2 (260) (331)	Drinking Water	12/20/2021 10:36:00 AM	12/23/2021	12/28/2021
N048553-003A	976775_202112220438_TB: HALAWA WELLS UNITS P2 (331)	Drinking Water	12/20/2021 9:53:00 AM	12/23/2021	12/28/2021
N048553-004A	976775_202112220439_TB: AIEA WELLS PUMPS P2 (260)	Drinking Water	12/20/2021 10:36:00 AM	12/23/2021	12/28/2021



ASSET Laboratories

ANALYTICAL RESULTS

Print Date: 28-Dec-21

CLIENT: Eurofins
Lab Order: N048553
Project:
Lab ID: N048553-001

Client Sample ID: 976775_202112220436_HALAWA W
Collection Date: 12/20/2021 9:53:00 AM
Matrix: DRINKING WATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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TPH CARBON CHAIN EPA 8015

	EPA 3510C	EPA 8015B(M)					
RunID: NV00922-GC3_211223A	QC Batch: 90856			PrepDate:	12/23/2021		Analyst: PL
Diesel Range Organics (C10-C28)	ND	33	50	ug/L		1	12/23/2021 09:27 PM
Oil Range Organics (C28-C40)	ND	33	50	ug/L		1	12/23/2021 09:27 PM
Gas Range Organics (extractable) (C8-C10)	ND	33	50	ug/L		1	12/23/2021 09:27 PM
Surr: p-Terphenyl	76.4	0	33-138	%REC		1	12/23/2021 09:27 PM

Qualifiers:	B Analyte detected in the associated Method Blank	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	S Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified	DO Surrogate Diluted Out



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ANALYTICAL RESULTS

Print Date: 28-Dec-21

CLIENT: Eurofins
Lab Order: N048553
Project:
Lab ID: N048553-002

Client Sample ID: 976775_202112220437_AIEA WELL
Collection Date: 12/20/2021 10:36:00 AM
Matrix: DRINKING WATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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TPH CARBON CHAIN EPA 8015

	EPA 3510C		EPA 8015B(M)				
RunID: NV00922-GC3_211223A	QC Batch: 90856			PrepDate: 12/23/2021			Analyst: PL
Diesel Range Organics (C10-C28)	ND	33	50	ug/L	1	12/23/2021	10:01 PM
Oil Range Organics (C28-C40)	ND	33	50	ug/L	1	12/23/2021	10:01 PM
Gas Range Organics (extractable) (C8-C10)	ND	33	50	ug/L	1	12/23/2021	10:01 PM
Surr: p-Terphenyl	84.5	0	33-138	%REC	1	12/23/2021	10:01 PM

Qualifiers:	B Analyte detected in the associated Method Blank	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	S Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified	DO Surrogate Diluted Out



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CLIENT: Eurofins
Lab Order: N048553
Project:
Lab ID: N048553-003

Client Sample ID: 976775_202112220438_TB: HALAW
Collection Date: 12/20/2021 9:53:00 AM
Matrix: DRINKING WATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B

RunID: NV00922-GC4_211223A	QC Batch: E21WV117			PrepDate:		Analyst: DJ
Gas Range Organics (purgeable) (C6-C10)	ND	0.046	0.050	mg/L	1	12/23/2021 05:42 PM
Surr: Chlorobenzene - d5	86.0	0	69-130	%REC	1	12/23/2021 05:42 PM

Qualifiers:	B Analyte detected in the associated Method Blank	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	S Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified	DO Surrogate Diluted Out



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 3151 W. Post Rd., Las Vegas, NV 89118
 ELAP Cert 2676 | NV Cert NV00922
 ORELAP/NELAP Cert 4046

"Serving Clients with Passion and Professionalism"

CLIENT: Eurofins
Lab Order: N048553
Project:
Lab ID: N048553-004

Client Sample ID: 976775_202112220439_TB: AIEA W
Collection Date: 12/20/2021 10:36:00 AM
Matrix: DRINKING WATER

Analyses	Result	MDL	PQL	Qual	Units	DF	Date Analyzed
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GASOLINE RANGE ORGANICS BY GC/FID

EPA 8015B

RunID: NV00922-GC4_211223A	QC Batch: E21WV117				PrepDate:		Analyst: DJ
Gas Range Organics (purgeable) (C6-C10)	ND	0.046	0.050		mg/L	1	12/23/2021 06:13 PM
Surr: Chlorobenzene - d5	86.8	0	69-130		%REC	1	12/23/2021 06:13 PM

Qualifiers:	B Analyte detected in the associated Method Blank	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	S Spike/Surrogate outside of limits due to matrix interference
	Results are wet unless otherwise specified	DO Surrogate Diluted Out



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ANALYTICAL SUPPORT SERVICES FOR ENVIRONMENTAL TECHNOLOGIES

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ANALYTICAL QC SUMMARY REPORT

CLIENT: Eurofins
 Work Order: N048553

Project: **TestCode: 8015DM_W_CC**

Sample ID: MB-90856	SampType: MBLK	TestCode: 8015DM_W_C	Units: ug/L	Prep Date: 12/23/2021	RunNo: 159157						
Client ID: PBW	Batch ID: 90856	TestNo: EPA 8015B(M EPA 3510C)		Analysis Date: 12/23/2021	SeqNo: 4478691						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diesel Range Organics (C10-C28)	ND	50									
Oil Range Organics (C28-C40)	ND	50									
Gas Range Organics (extractable) (C8-C	ND	50									
Surr: p-Terphenyl	72.476		80.00		90.6	33	138				

Sample ID: LCS-90856	SampType: LCS	TestCode: 8015DM_W_C	Units: ug/L	Prep Date: 12/23/2021	RunNo: 159157						
Client ID: LCSW	Batch ID: 90856	TestNo: EPA 8015B(M EPA 3510C)		Analysis Date: 12/23/2021	SeqNo: 4478692						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diesel Range Organics (C10-C28)	676.099	50	1000	0	67.6	48	120				
Surr: p-Terphenyl	74.209		80.00		92.8	33	138				

Sample ID: LCSD-90856	SampType: LCSD	TestCode: 8015DM_W_C	Units: ug/L	Prep Date: 12/23/2021	RunNo: 159157						
Client ID: LCS502	Batch ID: 90856	TestNo: EPA 8015B(M EPA 3510C)		Analysis Date: 12/23/2021	SeqNo: 4478866						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diesel Range Organics (C10-C28)	661.252	50	1000	0	66.1	48	120	676.1	2.22	20	
Surr: p-Terphenyl	82.454		80.00		103	33	138		0	0	

Qualifiers:

- B Analyte detected in the associated Method Blank
 - J Analyte detected below quantitation limits
 - S Spike/Surrogate outside of limits due to matrix interference
 - E Value above quantitation range
 - ND Not Detected at the Reporting Limit
 - DO Surrogate Diluted Out
 - H Holding times for preparation or analysis exceeded
 - R RPD outside accepted recovery limits
- Calculations are based on raw values



ASSET LABORATORIES
 "Serving Clients with Passion and Professionalism"
 CALIFORNIA P-562,219,7435 F-562,219,7436 NEVADA P-702,307,2659 F-702,307,2691
 11110 Artesia Blvd., Ste B, Cerritos, CA 90703 3151 W. Post Rd., Las Vegas, NV 89118
 ELAP Cert 2921 ELAP Cert 2676 | NV Cert NV00922
 EPA ID: CA01638 ORELAP/NELAP Cert 4046

ANALYTICAL QC SUMMARY REPORT

CLIENT: Eurofins
Work Order: N048553

Project: TestCode: 8015GAS_WP

Sample ID: E211223LCS	SampType: LCS	TestCode: 8015GAS_WP	Units: mg/L	Prep Date: 159156							
Client ID: LCSW	Batch ID: E21WV117	TestNo: EPA 8015B		SeqNo: 4478683							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gas Range Organics (purgeable) (C6-C)	1.045	0.050	1.000	0	104	69	143				
Surr: Chlorobenzene - d5	40.199		50.00		80.4	69	130				

Sample ID: E211223MB	SampType: MBLK	TestCode: 8015GAS_WP	Units: mg/L	Prep Date: 159156							
Client ID: PBW	Batch ID: E21WV117	TestNo: EPA 8015B		SeqNo: 4478684							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gas Range Organics (purgeable) (C6-C)	ND	0.050	50.00		88.3	69	130				
Surr: Chlorobenzene - d5	44.164										

Sample ID: N048551-001AMS	SampType: MS	TestCode: 8015GAS_WP	Units: mg/L	Prep Date: 159156							
Client ID: ZZZZZZ	Batch ID: E21WV117	TestNo: EPA 8015B		SeqNo: 4478686							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gas Range Organics (purgeable) (C6-C)	0.916	0.050	1.000	0	91.6	49	156				
Surr: Chlorobenzene - d5	40.196		50.00		80.4	69	130				

Sample ID: N048551-001MSD	SampType: MSD	TestCode: 8015GAS_WP	Units: mg/L	Prep Date: 159156							
Client ID: ZZZZZZ	Batch ID: E21WV117	TestNo: EPA 8015B		SeqNo: 4478687							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gas Range Organics (purgeable) (C6-C)	1.176	0.050	1.000	0	118	49	156	0.9160	24.9	20	R
Surr: Chlorobenzene - d5	42.235		50.00		84.5	69	130		0	0	

Qualifiers:

- B Analyte detected in the associated Method Blank
- J Analyte detected below quantitation limits
- S Spike/Surrogate outside of limits due to matrix interference
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out
- H Holding times for preparation or analysis exceeded
- R RPD outside accepted recovery limits

Calculations are based on raw values



CALIFORNIA P:562.219.7435 F:562.219.7436 NEVADA P:702.307.2659 F:702.307.2691
 11110 Artesia Blvd - Ste B, Cerritos, CA 90703 3151 W. Post Rd., Las Vegas, NV 89118
 ELAP Cert 2921 ELAP Cert 2676 | NV Cert NV00922
 EPA ID:CA01638 ORELAP/NELAP Cert 4046



Eaton Analytical

Ship To:

Asset Laboratories
11110 Artesia Blvd. #B
3151 W. Post Road
Cerritos, CA 90703
Las Vegas NV 89118
Phone: 562-219-7435 Fax: 562-219-7436

702-307-2659
AHW Sample Receiving / Marlon Cortin

Folder #: 976775
Report Due: 12/27/2021

Reports: Jackie Contreras Sub-Contracting Administrator
EMAIL: TO: Eaton-MonroviaSubContract@eurofins.com
Eurofins Eaton Analytical, LLC 750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016
Phone (626) 386-1166 Fax (626) 386-1122
Invoices to: Eurofins Eaton Analytical, LLC
Accounts Payable 2425 New Holland Pike, Lancaster, PA 17605

Provide in each Report the Specified State Certification # and Exp Date for requested tests + matrix

Samples from: HAWAII

Submittal Form

Date: 12/22/2021

*REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers! Report & Invoice must have the Folder # 976775 Job # 1000014

Report all quality control data according to Method. Include dates analyzed. Date extracted (if extracted) and Method reference on the report. Results must have Complete data & QC with Approval Signature.

1 d Bush HBWS
Marlon Cortin

Sample ID 202112220436	Client Sample ID for reference on! HALAWA WELLS UNITS P2 (331-024-WL064)	Sample Date & Time 12/20/21 0953 DW	Clip Code	PWSID B6AN
Sample type:	Sample Event:	Facility ID:	Sample Point ID:	Static ID:

Method 8015B 8015B M SW 8015B	Prep Method EPA 3510C EPA 3510C EPA 5030C	Analysis Requested Gas, Diesel, and Motor Oil Organics 6257_8015B(M) C6-C44 (SUB)Gas Fraction Hydrocarbons	only these ranges extracted C8-C44 Volatiles 12/21 22	N048553-01
--	--	---	---	------------

Sample ID 202112220437	Client Sample ID for reference on! AIEA WELLS PUMPS P2 (260-331-004-WL103)	Sample Date & Time 01/01/00 1036 DW	Clip Code	PWSID B6AN
Sample type:	Sample Event:	Facility ID:	Sample Point ID:	Static ID:

Method 8015B 8015B M SW 8015B	Prep Method EPA 3510C EPA 3510C EPA 5030C	Analysis Requested Gas, Diesel, and Motor Oil Organics 6257_8015B(M) C6-C44 (SUB)Gas Fraction Hydrocarbons	extending only these ranges 12/21 22	-02
--	--	---	---	-----

Relinquished by: Chris Sample Control
Received by: Guille Garcia
Relinquished by: Sample Control
Received by: _____

Date: 12-22-21 Time: 1602
Date: 12/23/21 Time: 0835
Date: _____ Time: _____
Date: _____ Time: _____

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS
An Acknowledgement of Receipt is requested to attn: Jackie Contreras

1.3 °C 10#3
Folder # 7288

Sample ID 202112220438	Client Sample ID for reference on! TB: HALAWA WELLS UNITS P2 (331-024-WL064)	Sample Date & Time Matrix 01/01/00 0953 DW	Clip Code	PWSID B6AN
Sample type:	Sample Event:	Facility ID:	Sample Point ID:	Static ID:
Method SW 8015B	Prep Method EPA 5030C	Analysis Requested (SUB)Gas Fraction Hydrocarbons		
Sample ID 202112220439	Client Sample ID for reference on! TB: AIEA WELLS PUMPS P2 (260)-331-004-WL103	Sample Date & Time Matrix 01/01/00 1036 DW	Clip Code	PWSID B6AN
Sample type:	Sample Event:	Facility ID:	Sample Point ID:	Static ID:
Method SW 8015B	Prep Method EPA 5030C	Analysis Requested (SUB)Gas Fraction Hydrocarbons		

N048553-03

-04

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS

An Acknowledgement of Receipt is requested to attn Jackie Contreras

1.3 °C 1E# 3
Fobx # 7200

Relinquished by: Chris [Signature] Date 12-22-11 Time 1602

Received by: Yvonne Garcia [Signature] Date 12/23/11 Time 0835

Relinquished by: _____ Date _____ Time _____

Received by: _____ Date _____ Time _____

ASSET Laboratories

Please review the checklist below. Any NO signifies non-compliance. Any non-compliance will be noted and must be understood as having an impact on the quality of the data. All tests will be performed as requested regardless of any compliance issues.

If you have any questions or further instruction, please contact our Project Coordinator at (702) 307-2659.

Cooler Received/Opened On: 12/23/2021 Workorder: N048553
 Rep sample Temp (Deg C): 1.3 IR Gun ID: 3
 Temp Blank: Yes No
 Carrier name: FedEx
 Last 4 digits of Tracking No.: 7288 Packing Material Used: Bubble Wrap
 Cooling process: Ice Ice Pack Dry Ice Other None

Sample Receipt Checklist

- | | | | |
|---|---|--|---|
| 1. Shipping container/cooler in good condition? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/> |
| 2. Custody seals intact, signed, dated on shipping container/cooler? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| 3. Custody seals intact on sample bottles? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| 4. Chain of custody present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 5. Sampler's name present in COC? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | |
| 6. Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 7. Chain of custody agrees with sample labels? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 8. Samples in proper container/bottle? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 9. Sample containers intact? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 10. Sufficient sample volume for indicated test? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 11. All samples received within holding time? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 12. Temperature of rep sample or Temp Blank within acceptable limit? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/> |
| 13. Water - VOA vials have zero headspace? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/> |
| 14. Water - pH acceptable upon receipt?
Example: pH > 12 for (CN,S); pH<2 for Metals | Yes <input type="checkbox"/> | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/> |
| 15. Did the bottle labels indicate correct preservatives used? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/> |
| 16. Were there Non-Conformance issues at login?
Was Client notified? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/> |
| | Yes <input type="checkbox"/> | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/> |

Comments: See Client Correspondence.

Checklist Completed By: GGJ GGarcia 12/23/2021

Reviewed By:  12/24/2021

ASSET Sample Control LV

From: Marlon Cartin <marlon@assetlaboratories.com>
Sent: Thursday, December 23, 2021 9:40 AM
To: 'Sample Control LV'; yoandra@assetlaboratories.com
Subject: FW: Honolulu BWS Red Hill
Attachments: Assetlabs_BWS_976775.pdf

Importance: High

Flag Status: Flagged

Forwarding instruction for the 1 day rush samples that came in this morning. Please check and follow instruction accordingly.

Marlon Cartin

Sr. Project Manager

California: 11110 Artesia Blvd., Ste. B, Cerritos, CA 90703 | P: 562.219.7435 | F: 562.219.7436

Nevada: 3151 W. Post Road, Las Vegas, NV 89118 | P: 702.307.2659 Ext. 410 | F: 702.307.2691 | M: 702.439.0421

www.assetlaboratories.com

From: Frank, Debbie <Debbie.Frank@eurofinset.com>
Sent: Wednesday, December 22, 2021 6:26 PM
To: Haley, Davis <Davis.Haley@eurofinset.com>; Marlon Cartin <marlon@assetlaboratories.com>
Cc: Eaton - Monrovia Sub Contract <Eaton-MonroviaSubContract@eurofinset.com>
Subject: RE: Honolulu BWS Red Hill
Importance: High

FEDEX 549140317288

should be there 0800 for 1d TAT if possible (Results Monday)

976775

202112220436 HALAWA WELLS UNITS P2 (331-024-WL064)	12/20/2021 0953
202112220437 AIEA WELLS PUMPS P2 (260) (331-004-WL103)	12/20/2021 1036
202112220438 TB: HALAWA WELLS UNITS P2 (331-024-WL064)	12/20/2021 0953
202112220439 TB: AIEA WELLS PUMPS P2 (260) (331-004-WL103)	12/20/2021 1036

Sample dates on 3 of the sites on the Sub COC were incorrect (defaulted to 1/1/1900)

testing

Purgeable 8015 Gas (C6-C10)

and

Extractable 8015 Gas range organics C8-C10, Extractable Diesel range C10-C28, and Extractable Oil range C28-C40
quoted RLs

Flagged If pattern isn't a fuel pattern

This client does not want to see the Individual Carbon breakdown on their report.

These are Thiosulfate preserved, also

quoted RLs

JOB TAT: 2 Day RUSH
 Max Deliverable Level: II
 Earliest Deliverable Due: 12/17/2021

Bill To: Eurofins Eaton Analytical
 Accounts Payable
 750 Royal Oaks Drive
 Suite 100
 Monrovia, CA 91016

Login 570-78899

Sample Receipt: 12/15/2021 10:20:00 AM
 Method of Delivery: FedEx Priority Overnight
 Number of Coolers: 1
 Cooler Temperature(s) (C°): 3.5;

Method	Method Description	Rpt Basis			Units	Sample #s Applicable
		Total	MDL	RL		
8015B_DRO	C6-C44 w/CC + GRO/DRO/O groups					1
	C11-C12		36.02	50	ug/L	
	C13-C14		36.02	50	ug/L	
	C15-C16		36.02	50	ug/L	
	C17-C18		36.02	50	ug/L	
	C19-C20		36.02	50	ug/L	
	C21-C22		36.02	50	ug/L	
	C23-C24		36.02	50	ug/L	
	C25-C28		36.02	50	ug/L	
	C29-C32		36.02	50	ug/L	
	C33-C36		36.02	50	ug/L	
	C37-C40		36.02	50	ug/L	
	C41-C44		36.02	50	ug/L	
	C6 as C6		36.02	50	ug/L	
	C6-C44		36.02	50	ug/L	
	C7 as C7		36.02	50	ug/L	
	C8 as C8		36.02	50	ug/L	
	C9-C10		36.02	50	ug/L	
	Diesel Range Organics (C10-C28)		36.02	50	ug/L	
	Gasoline Range Organics (GRO)-C6-C10		36.02	50	ug/L	
	Oil Range Organics (C28-C40)		36.02	50	ug/L	

FYI:
 This is what has been done historically for these sites. These samples are historically ND (Gas and Diesel to extra low RL (0.02 mg/L)), since 2014.

- Gas (C6-C10)
- Diesel (C10-C24)
- Motor Oil (C24-C36)
- JP5 (C8-C18)
- JP8 (C8-C18)

if not a fuel pattern not reported. must have a typical fuel pattern.

Sincerely,
Debbie Frank
 Senior Analytical Services Manager
 stay healthy and stay free!



Eurofins Eaton Analytical, LLC. (EEA-Monrovia, CA, USA)
 750 Royal Oaks Drive, Suite 100
 Monrovia, CA, USA 91016
 Phone: +1 626 386 1149
 Mobile: +1 310 918 4308
 internal *20 1149
 Website: <http://www.eurofinsus.com/Eaton>

ASSET Laboratories

WORK ORDER Summary

24-Dec-21

WorkOrder: N048553

Client ID: EUROF01

Project:

QC Level: RTNE

Date Received: 12/23/2021

Comments:

Sample ID	Client Sample ID	Date Collected	Date Due	Matrix	Test No	Test Name	Hld	MS	Sub	Storage
N048553-001A	976775_202112220436_HAL A W E T T C D I M D C D 7 / 2 2 1	12/20/2021 9:53:00 AM	12/27/2021	Drinking Water	EPA 3510C	SEPARATORY FUNNEL EXTRACTION: EXTRACTABLE FUELS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WW
N048553-002A	976775_202112220437_AIE A W E T T C D I M D C D 7 / 2 2 1	12/20/2021 10:36:00 AM	12/27/2021		EPA 8015B(M)	TPH Carbon Chain EPA 8015	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WW
N048553-003A	976775_202112220438_TB H A T A W A W E T T C D I M D C D 7	12/20/2021 9:53:00 AM	12/27/2021		EPA 8015B	GASOLINE RANGE ORGANICS BY GC/FID	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	VW
N048553-004A	976775_202112220439_TB A I E A W E T T C D I M D C D 7 / 2 2	12/20/2021 10:36:00 AM	12/27/2021		EPA 8015B	GASOLINE RANGE ORGANICS BY GC/FID	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	VW
N048553-005A	FOLDER	12/27/2021	12/27/2021		Folder	Folder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	LAB
			12/27/2021		Folder	Folder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	LAB

