**Eaton Analytical** 

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

**Date of Issue** 05/23/2022 1 Jeddas **EUROFINS EATON ANALYTICAL, LLC** 

DEB: Debbie L Frank

Project Manager

Report: 990423 Project: RED-HILL Group: Red-Hill Expanded List (Albuquerque+)

\* 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.

ORAT Utah ELCP CA00006



Eaton Analytical

## 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

Eurofins Eaton Analytical, LLC

750 Royal Oaks Drive, Suite 100 Monrovia, CA 91016-3629 T | 626-386-1100 F | 866-988-3757 www.EurofinsUS.com/Eaton

## ISO/IEC 17025:2917 Accredited Method List

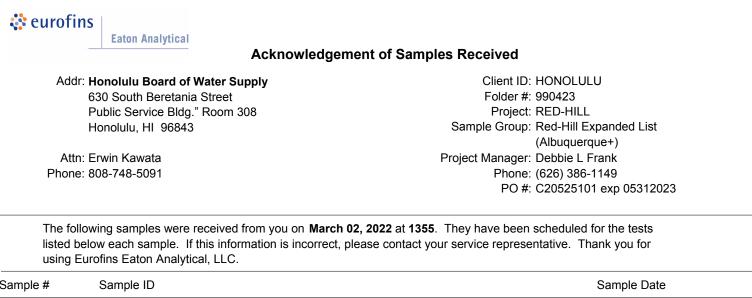
The test listed below are accredited and met the requirements of ISO/IEC 17025 as verify by A2LA. Refer to our certificates and scope of accreditations (no. 5890-1 and 5890-2) found at: n

https://	www.e	urofins	us.com	h/Eaton

	1		www.eu
Test(s)	Method(s)	Potable	Waste
		Water *	Water
Enterococci	Enterolert	Х	Х
Escherichia coli	SM 9221 B.1	х	
(Enumeration)	SM 9221 F SM 9221 C		
Fecal Coliform (P/A and	(MTF/EC), SM 9221	х	x
Enumeration)	E (MTF/EC)		
Fecal Streptococci and	SM 9230 B	х	x
Enterococci			
Heterotrophic Bacteria	SM 9215 B	X	
Legionella	Legiolert® Idexx	Х	
Pseudomonas aeruginosa	Pseudalert	х	
Total Coliform (P/A and			
Enumeration)	SM 9221A, SM 9221B, SM 9221 C	х	х
Total Coliform. Total			
Coliform with Chlorine	014 000 / D	х	x
Present	SM 9221 B		
Total Coliform/E. coli (P/A and			
Enumeration, Idexx Colilert,	SM 9223	х	
Idexx Colilert 18, Colisure) Total Microcystins and			
Nodularins	EPA 546	Х	
Yeast and Mold	SM 9610	х	
1,2,3-Trichloropropane	CA SRL 524M-	х	
(TCP) at 5 PPT	TCP		
1,4-Dioxane	EPA 522	X	
2,3,7,8-TCDD	Modified EPA	х	
	1613 B		
Acrylamide	+ LCMS 2440)	X	
Algal Toxins/Microcystin	+ LCMS 3570	X	
Alkalinity	SM 2320B	X	Х
A mana a min	EPA 350.1,		
Ammonia	SM 4500-NH3 H		х
Asbestos	EPA 100.2	×	×
Bicarbonate Alkalinity as	SM 2330 B	X	Х
HCO3	SIVI 2330 D	х	x
BOD/CBOD	SM 5210 B		х
Bromate	+LCMS- 2447	X	^
Carbonate as CO3	SM 2330 B	x	х
Carbonyls	EPA 556	x	X
	EPA 410.4,	~	
Chemical Oxygen Demand	SM 5220D		х
Chlorinated Acids	EPA 515.4	х	
	Palin Test		
Chloring Diswide	Chlordio X Plus,		
Chlorine Dioxide	SM 4500-CLO2	х	
	D		
Chlorine, Free, Combined,	SM 4500-CI G		
Total Residual,	01014000-010	х	
Chloramines			
Color	SM2120B	Х	
Conductivity	EPA 120.1,	x	x
	SM 2510B		
Corrosivity (Langelier			
Index), Carbonate as CO3, Hydroxide as OH	SM 2330 B	х	
Calculated			
	SM 4500-CN		
Cyanide (Amenable)	G	х	х
Cyanide (Free)	SM 4500CN F	х	х
Cyanide (Total)	EPA 335.4	X	X
Cyanogen Chloride	+ 335 Mod		~
(Screen)	(WC-24467)	х	
Diquat and Paraquat	EPA 549.2	х	
DBP and HAA	SM 6251 B	x	
Dissolved Organic Carbon	SM 5310 C	X	
Dissolved Oxygen	SM 4500-O G		х
EDB/DCBP/TCP	EPA 504.1	x	
EDB/DBCP and			
Disinfection Byproducts	EPA 551.1	х	
EDTA and NTA	<sup>+</sup> WC-2454	х	
Endothall	EPA 548.1,	х	
Endoundli	+(LCMS-2445)	Χ	
Fluoride	SM 4500F C	х	Х
Glyphosate	EPA 547	х	
Glyphosate and AMPA	+ LCMS-3618	х	
Gross Alpha and Gross Beta	EPA 900.0	х	Х

s.com/Eaton		Potable	Weete
Test(s)	Method(s)	Water *	Waste Water
Gross Alpha coprecipitation	SM 7110 C	x	x
Hardness	SM 2340 B	х	х
Hexavalent Chromium	EPA 218.6,	х	х
Hexavalent Chromium	EPA 218.7,	х	
Hexavalent Chromium	SM 3500-Cr B		х
Inorganic Anions and DBPs	EPA 300.0	Х	Х
Norganic Anions and DBPs	EPA 300.1	Х	
Kjeldahl Nitrogen	EPA 351.2		X
Metals	EPA 200.7, EPA200.8	x	x
Nitrosamines	EEA-Agilent 521.1 (GCMS-24250)	x	
Nitrate/Nitrite Nitrogen	EPA 353.2	х	х
Odor	SM2150B	X	
Organohalide Pesticides and PCB	EPA 505	x	
Ortho Phosphate	SM 4500P E	х	
Oxyhalides Disinfection Byproducts	EPA 317.0	x	
Perchlorate	EPA 331.0	x	
Perchlorate (Low and High Levels)	EPA 314.0	x	
Perfluorinated Alkyl Acids	EPA 533, EPA	х	
	537, EPA 537.1		
PPCP and EDC	+LCMS-2443	X	
рН	EPA 150.1 SM 4500-H+ B	x	x
Phenolics – Low Level	<sup>+</sup> WC 2493 (EPA 420.2 and EPA 420.4 MOD)	x	x
Phenylurea Pesticides/Herbicides	+ LCMS-2448	x	
Radium-226, Radium-228	GA Tech (Rad- 2374)	x	
Radon-222	SM 7500RN	х	
Residue (Filterable)	SM 2540C	х	х
Residue (Non-Filterable)	SM 2540D		х
Residue (Total)	SM 2540B		х
Residue (Volatile)	EPA 160.4		х
Semi-Volatile Compounds	EPA 525.2	Х	
Silica	SM 4500-SiO2 C	х	х
Sulfide	SM 4500-S D		Х
Sulfite	SM 4500-SO3 B	х	Х
Surfactants	SM 5540C	х	Х
Taste and Odor	SM 6040 E	x	
Total Organic Carbon	SM 5310 C	Х	X
Total Phenols	EPA 420.1		X
Total Phenols	EPA 420.4	X	Х
Triazine Pesticides and their Degradates	+LCMS-3617	х	
Turbidity	EPA 180.1	X	Х
Uranium by ICP/MS	EPA 200.8	X	
UV 254 Organic Constituents	SM 5910B	x	
VOCs	EPA 524.2	х	
VOCs	<sup>+</sup> (GCMS 2412) by EPA 524.2 modified	x	
	moullieu		

(\*) includes: Bottled Water, Drinking Water and Water as Component of Food & Beverage. (+) In-House Method



Sample #	Sample ID		Sample Date	9
202203020785	AIEA WELLS PUMP 2 (331-004	4-WL103)	02/28/2022	1042
	(SUB)Gas Fraction Hydrocarbons	TPH 8015 Diesel and Motor Oil	TPH 8015 Jet Fuel 5	
	TPH 8015 Jef Fuel 8			

**Test Description** 

Page 1 of 1

🐝 eurofins			CH	AIN C	<b>DF CUST</b>	CHAIN OF CUSTODY RECORD	(m.d	5
Eator	Eaton Analytical	EUROFINS EATON ANALYTICAL		USE ONLY:			4160417	67
750 Royal Oaks Drive, Suite 100 Monrovia, CA 01016, 3620	100	LOGIN COMMENTS:		۲		SAMPLES CHECKE SAMI	SAMPLES CHECKED AGAINST COC BY: US SAMPLES CHECKED AGAINST COC BY:	
Phone: 626 386 1100		SAMPLE TEMP RECEIVED AT:	VED AT: ia / Arizoni	m l	°C ( Complian	( Compliance: 4 ± 2 °C )		(check for yes)
Pax: 626 386 1101	í Li	Monrovia		2.9		( Compliance: $4 \pm 2$ °C )		
(1776 996 NUS) SARJ 996 NUS	()	CONDITION OF BLUE ICE: Frozen	UE ICE: F	rozen 🗙	Partially Prozen	Thawed Wet Ice	e No Ice	
		METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx	PMENT: P	ick-Up / V	Valk-In / FedEx / U	/ UPS / DHL / Area Fast / Top Line / Other:	/ Other:	
TO BE COMPLETED BY SAMPLER:						(check for yes)	(chec	(check for yes)
COMPANY/AGENCY NAME:		PROJECT CODE:			COMP	and the second		X
BWS HONOLULU	D	REI	RED HILL		- Requires sta Type of samples (circle one):	te forms	SPECIAL CONFIRMATION 100 SUMMA Press V NUMES FILD	NDDES EDA
EEA CLIENT CODE: CO	COC ID:	SAMPLE GROUP:			SEE ATTACHE	E ORDER		s), <u>OR</u>
					list ANALYSES	list ANALYSES REQUIRED (enter number of bottles sent for each test for each sample)	tles sent for each test for ea	ich sample)
TAT requested: rush by adv notice only	only	STD 1 wk X 3 day	, 2 day _	1 day				
SAMPLE ID DATE SAMPLE ID SAMPLE ID	EID	CLIENT LAB ID	• XIATAN	атаа ала атаа ала	ed Hill 2022		SANCOM	SAMPLER COMMENTS
1 00/8	C.d.	H10000331-004	CEW	-	K F			
141	1		\$		<			
•								
							Temp Blank:	ik: °C
* MATRIX TYPES: RSW = Raw Surface Water RGW = Raw Ground Water	RSW = Raw Surface Water RGW = Raw Ground Water	<b>CFW</b> = Chlor(am)inated Fini <b>FW</b> = Other Finished Water	ated Finishe Mater	shed Water	SEAW = Sea Water WW = Waste Water	<b>BW</b> = Bottled Water <b>SW</b> = Storm Water	SO = Soil O = Other - F SL = Sludge	= Other - Please Identify
SIGNATURE	URE		đ	PRINT NAME		COMPANY/TITLE	DATE	TIME
SAMPLED BY:			Ľ	Lew Bailey		Honolulu Board of Water Supply	February 28, 2022	
		¢	Ľ	Lew Bailey	*	Honolulu Board of Water Supply		
RECEIVED BY:	-ynan	T	2~	reelv		60	22.2.2	1555
RECEIVED BY:				1				
		_			-		PAGE	1 OF 1

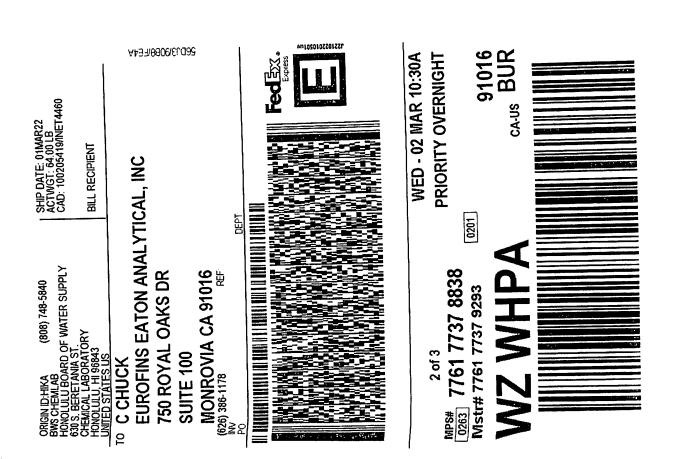
4

Page 5 of 46 pages

	Results:	- 6 - 6 - 6 - 6 - 6 - 6 - 6 - 6 - 6 - 6	
N/A		lonal clients: Bottle # None/<6	TIME TIME
CORD whether to proceed with ar	ection, within 8 hours) 	al bottles) a 40 ml vials, Internati	DATE 3. 2. 22 DATE
INTERNAL CHAIN OF CUSTODY RECORD SAMPLE TEMP RECEIVED: Note: If samples are out of temperature ange, let the ASMs know. ASMs will determine whether to proceed with analysis or not. SAMPLES REC'D DAY OF COLLECTION? Yes / No         O       •C) (Corr. Factor OLC OC) (Final = D.Q. °C)         •C) (Corr. Factor OLC °C) (Final = D.Q. °C)       •C)         •C) UPS / DHL / Area Fast / Top Line / Other:       •C)         •If received after 24 hrs of sample collection)       •C) (Intertion)	2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours) 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection) If emperature range for both Chemistry and Microbiology If entry of each quadrant and record each temperature of the and send tend for the measure the antis of each quadrant and record each temperature of the antis of each quadrant and record each temperature of the antis of each quadrant and record each temperature of the antis of each quadrant and record each temperature of the antis of each quadrant and record each temperature of the antis of each quadrant and record each temperature of the antis of each quadrant and record each temperature of the antis of each quadrant and record each temperature of the antis of each quadrant and record each temperature of the antis of each quadrant and record each temperature of the antis of each quadrant and record each temperature of the antis of each quadrant and record each temperature of the antis of each quadrant and record each temperature of the antis of the antis of each quadrant and record each temperature of the antis	A and Radon       No Samples with Headspace:       Samples with Headspace (see below):         Idspace:       Headspace (see below):       Samples with Headspace (see below):         Idspace:       Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)         Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatokin, LCMS methods using 40 ml vials, International clients:         e #       Nonel/<6	COMPANYTITLE Eurofins Eaton Analytical COMPANYTITLE Eurofins Eaton Analytical
INTERNAL CHAIN OF CUST         SAMPLE TEMP RECEIVED:         Note: If samples are out of temperature range, let the ASMS know         SAMPLES REC'D DAY OF COLLECTIO         Solution       OIL Corr. Factor         OC)       (Corr. Factor       OIL C       Pal         C       OC)       (Corr. Factor       OIL C       Pal         Edeb       UPS / DHL / Area Fast / Top Line / Other:       Pal         (If received after 24 hrs of sample collection)	ed on ice the same da ble collection) 	Samples wit d Radon Internal LCMS, 556, 536, Anato Samp ID Bottle #	CoMPL Eurofins Ea comPL Eurofins Ea
<b>VAL CHAIN OF</b> SAMPLE TEMP RECEIVED: Note: If samples are out of temperature range. SAMPLES REC'D DAY OF CO Corr.Factor <u>012</u> °C) (Final Corr.Factor <u>012</u> °C) (Final CONDITION OF ICE: Frozer / DHL / Area Fast / Top Lin ter 24 hrs of sample collection)	210°C if received on ice the thours of sample collectic (head	ce: dditional VOC an 505, SPME, @CH, 532 >6mm Test rest	PRINT NAME PRINT NAME
	ont frozen (can be ≥10°C if received on ice the (if received after 2 hours of sample collection) (if received after 2 hours of sample collection) 1 = (observations ····································	No Samples with Headspace: ace Documentation (use additional VOC ar ns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 53 Samp ID Bottle # Nonel/c6 >6mm Test mm far headspace (i.e. potential sampling errors):	PRINT PRINT
Eaton Analytical EEA Folder Number: EEA Folder Number: IR Gun ID = <u>401</u> (Observation= <u>3.1</u> TYPE OF ICE: Real Synthetic <u>A</u> No Ice METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx MeTHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx 1) Chemistry: >0, ≤ 6°C, not frozen (NELAP) (if rec	<ul> <li>2) Microbiology, Distribution: &lt; 10°C, not frozen (can 3) Microbiology, Surface Water: &lt; 10°C (if received af frout of temperature range for both Chemistry and Microbiology samples and lamoerature does not confirm, then measure the temperature of each quadrant and record each temperature of the 3 (Observed a duadrants)</li> <li>4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4</li> <li>5) pH Check. Manufacturer: Sansafe. Lot No.:</li> </ul>	7) VOA and Radon No Samp Pheadspace: Headspace Docu Exempt from headspace concerns: Method Samp ID Bottle # None/c6 Somm Test Sa Mana Test Sample IDs which have dissimilar heads	~
Eaton An EEA Folder Number: EA Folder Number: IR Gun ID = TYPE OF ICE: Real Syntheti TYPE OF ICE: Real Syntheti METHOD OF SHIPMENT: Pick-Up METHOD OF SHIPMENT: Pick-Up T) Chemistry: >0, ≤ 6°C, not fi	<ol> <li>Microbiology, Distribution: &lt;10°C,</li> <li>Microbiology, Surface Water: &lt;10°</li> <li>Microbiology, Surface Water: &lt;10°</li> <li>If out of temperature ange for both Chemistry and Microbiology samples and isomerature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants</li> <li>Dioxin (1613 or 2,3,7,8 TCDD): musi 5) pH Check. Manufacturer: Se</li> <li>Chlorine check. Manufacturer: Se</li> </ol>	VOA and Radon Headspace: Exempt from headsp Bottle # Nonel<6 >6mm mm	RECEIVED BY SIGNATURE SIGNATURE SAMPLES CHECKED AGAINST COC BY:
EEA Folder Number: EEA Folder Number: IR Gun ID = _ TYPE OF ICE: Real METHOD OF SHIPM METHOD OF SHIPM Compliance Accept 1) Chemistry: >	<ol> <li>Mic</li> <li>Mic</li> <li>Mic (and of temper</li> <li>asomples and to temper temperature of quadrants</li> <li>quadrants</li> <li>pH</li> <li>Ch</li> </ol>	7) He.	RECEIVED BY

OA FO-FRM5504 (9.28.21) Ver 9

Page \_\_\_\_ of \_\_\_\_



After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.

3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

be responsible for any claim in excess or \$100 per package, whenher the result of loss, damage, detay, non-derivery,misderivery,or mismiormation, bevice Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current precious metals. Agoins for the limits, see current items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current precious metals. Reportable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current precious metals. Reportable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current precious metals. Reportable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current precious metals. Reportable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current precious metals. Reportable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current precious metals. Reportable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current precious metals. Reportable instruments and other items must be filed within strict time limits, see current precious metals. Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in ot additional billing charges, along with the cancellation of your FedEx account number. Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, the detex section of your FedEx econd to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, the current FedEx section of your agreement to the service data actual loss and file a timely claim.Limitations for misinformation, the current FedEx section approach actual the current FedEx section delay.

FedEx Service Guide.

	Debbi	e L Frank is your	Debbie L Frank is your Eurofins Eaton Analytical, LLC Service Manager	e Manager		
750 Royal Oaks Drive, Suite 100 Monrovia. California 91016-3629 (626) 386-1100 FAX (866) 988-3757		Note: Sampler Ple	Please return this paper with your samples	samples	Created Date & Time. 1/10/2022 12:06:27AM	10/2022 12-06·27AM
Kit #: 310070 (MM) Created By: - [AutoGenerated] Deliver By: 02/09/2022 STG: Bottle Orders Ice Type: G Pre Registered	Kit #: 310070 (Kit) (Ki)	Projec Group POur Desc	Client ID: HONOLULU International International International International International International International International International Internation International Internationa	(		
	Ship Sample Kits to Honolulu Board of Water Supply 630 South Beretania Street Chemistry Lab Honolulu. HI 96843		Send Report to Honolulu Board of Water Supply 630 South Beretania Street Public Service Bldg." Room 308 Honolulu, HI 96843	Billing Address Honolulu Board of Water Supply 630 South Beretarina Street Public Service Bidg.' Room 308 Honolulu, HI 96843	Water Supply na Street 13* Room 308	
	Attn. Ron Fenstemacher Phone: 808-748-5841 Fax: 808-550-5572		Attr: Enwin Kawata Phone: 808-748-5091 Fax: 808-550-5018	Attr: Erwin Kawata Phone: 808-748-5091 Fax: 808-550-5018	8 091 8	
# of Sample Tests		Bottle Gty - Ty	Type [ preservative information ]	Total	UN DOT #	
TPH 8015 Diesel and Motor Oil 8015 Jet Fuel 8 C	TPH 8015 Diesel and Motor Oil_C, TPH 8015 Jet Fuel 5_C. TPH 8015 Jet Firel 8_C	6 - 1L amber g	6 - 1L amber glass [ 1 ml Thio 8% ]	Q		
1 8015 Gas C	C H	3 - 40ml ambe	3 - 40ml amber glass vial [ 1 drop Thio (8%) ]	ന	ł	
Sum Tests: 3	<u>-</u>		_	Sum Bottles: 11		
Comments	<b>203 TP400</b> )					
SAMPLER: Four 1 LITER AMBER GLASS BOTTL	ES FOR 625 SERIES AND Six 1 L	ITER AMBER GL	SAMPLER: Four 1 LITER AMBER GLASS BOTTLES FOR 625 SERIES AND Six 1 LITER AMBER GLASS BOTTLES FOR TPH 8015 SERIES.			
SHIPPING: Travel Blanks - TBA/MTBE, VOASDWA - Prepare TBs in the VOA LAB. Label Cooler on TOP and right below both Handles with Site description of contents ( use extra Contaienr Labels)	A - Prepare TBs in the VOA LAB. both Handles with Site description	of contents ( use (	extra Contaienr Labels)			
ASM: Be sure to coordinate Follow-up as needed for any new delections in Field samples. Acetone - follow-ups need to use EPA 624	, as needed for any new delections	in Field samples.				
Pag						

3

Kit Order for BOARD OF WATER SUPPLY, CITY AND COUNTY OF

....eurofins

Status

Code

Date Shinned

ei>

Trackino #

# of Coolers

Prenared Bv



**Eaton Analytical** 

Tel: (626) 386-1100 Fax: (866) 988-3757 1 800 566 LABS (1 800 566 5227) Report: 990423 Project: RED-HILL Group: Red-Hill Expanded List (Albuquerque+)

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

## Folder Comments

Results for TPH Gas, Diesel, Motor Oil and Jet Fuels are submitted by Emax Laboratories



**Eaton Analytical** 

Tel: (626) 386-1100 Fax: (866) 988-3757 1 800 566 LABS (1 800 566 5227) Report: 990423 Project: RED-HILL Group: Red-Hill Expanded List (Albuquerque+)

Ei 63 Pi	onolulu Board of W. win Kawata 30 South Beretania S ublic Service Bldg." F onolulu, HI 96843	Street			Samples Rec 03/02/2022 1	
Analyzed	Analyte	Sample ID	Result	HI Limit	Units	MRL

SUMMARY OF POSITIVE DATA ONLY

🛟 eurofins

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
AIEA W	ELLS PUMP	2 (331-004-	-WL103) (202203	020785)		Sam	pled on 02/28	/2022 104	2
		SW 8015B	- (SUB)Gas Frac	tion Hydroca	rbons				
03/03/22	03/03/22 19:02			(SW 8015B)	(SUB)Gas Fraction Hydrocarbons	ND	mg/L	0.02	1
		SW 8015B	- TPH 8015 Dies	el and Motor	Oil				
03/07/22	03/08/22 16:40			(SW 8015B)	TPH Diesel	ND	mg/L	0.025	1
03/07/22	03/08/22 16:40			(SW 8015B)	TPH Motor Oil	ND	mg/L	0.051	1
		EPA 8015 -	Jet Fuel 5 C8-C	18					
03/07/22	03/08/22 16:40			(EPA 8015)	Jet Fuel 5	ND	mg/L	0.051	1
		EPA 8015 -	Jet Fuel 8 C8-C	18					
	03/08/22 16:40			(EPA 8015)	Jet Fuel 8	ND	mg/L	0.051	1

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

1 800 566 LABS (1 800 566 5227)

Tel: (626) 386-1100

Fax: (866) 988-3757

**Eaton Analytical** 

Report: 990423 Project: RED-HILL Group: Red-Hill Expanded List (Albuquerque+)

> Samples Received on: 03/02/2022 1355

Rounding on totals after summation.



Tel: (626) 386-1100 Fax: (866) 988-3757 1 800 566 LABS (1 800 566 5227) Report: 990423 Project: RED-HILL Group: Red-Hill Expanded List (Albuquerque+)

Honolulu Board of Water Supply Erwin Kawata	Samples Received or 03/02/2022 1355
630 South Beretania Street	00/02/2022 1000
Public Service Bldg." Room 308	
Honolulu, HI 96843	

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
•	-	•				

SUMMARY OF POSITIVE DATA ONLY



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

Date: 03-14-2022 EMAX Batch No.: 22C034

Attn: Jackie Contreras

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

Subject: Laboratory Report Project: 990423

Enclosed is the Laboratory report for samples received on 03/03/22. The data reported relate only to samples listed below :

Sample ID	Control # Col Date	Matrix	Analysis
202203020785	C034-01 02/28/22	WATER	TPH GASOLINE TPH

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 CA002912021-19 ANAB Accredited DoD ELAP and ISO/IEC 17025 Certificate Number L2278 Testing California ELAP Accredited Certificate Number 2672

Submittal Form     こしている       *REPORTING REQUIRMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers!     Date: 3/3/2022       *Report & Invoice must have the Folder # 990423 Job # 1000014     Date: 3/3/2021       Report all quality control data according to Method Include dates analyzed. Date extracted (if extracted) and Method reference on the report.     Reports: Jackie Contrects Sub-Contracting Administrator       Results must have Complete data & QC with Approval Signature.     Reports: Jackie Contracting Administrator     Expression (if extracted) and Method reference on the report.       Results must have Complete data & Bub-Contracting Administrator     Reports: Jackie Contracting Administrator     Expression (if extracted) and Method reference on the report.       Results must have Complete data & Bub-Contracting Administrator     Reports: Jackie Contracting Administrator     Expression (if extracted) and Method reference on the report.       Results must have Complete data & Bub-Contracting Administrator     Reports: Jackie Contracting Administrator     Expression (if extracted) and Method reference on the report.       Reports: Lic 750 Royal States Total LLC     Reports: Lic 750 Royal States Total Royal Roya	erence on Sample Date & Time Matrix Clip Code PWSID 004-WL103) 02/28/22 1042 DW ont Eaclity ID: Sample Point ID: Static ID:	is Requested Gas Fraction Hydrocarbons Of 5 Desel and Motor Oil el 5 C8-C18 el 8 C8-C18 el 8 C8-C18 Date 23 7 Time A3 6 NOTIFICATION REQUIRED IF RECEIV Date Time A3 2 6 7 1 1 0 3 6 7 1 0 3 6 7 1 0 1 0 7 6 1 7 0 7 1 0 1 0 1	91016 Te
616 CA Si	Report Due: 03/09/2022 <i>Client Sample ID for reference onl</i> AIEA WELLS PUMP 2 (331-004-WL103) Samnis Event	Prep Method     EPA 5030C       EPA 8015     EPA 8015       EPA 8015     Sample Control	REPORT ID: 22C034 <sup>750</sup> Royal Oaks Drive, Suite 100, Monrovia, CA
Curofins Eaton Ship To: 'EMAX Laboratorie 3051 Fujita St. Torrance, CA 9050 Phone: 310-618-8889	Folder #: 990423 Sample ID 202203020785	Method SW 8015B SW 8015B EPA 8015 EPA 8015 EPA 8015 EPA 8015 EPA 8015 Received by Received by	

## SAMPLE RECEIPT FORM 1

Reference: Addendum SM02.11.1

Form: SM02F1

Type of D	elivery	Airbill	/ Tracking Number	ECN 226034	
□ Fedex □ UPS □ GSO		Alloin			havez
EMAX Courier Client Deli				Date 03 03 22	Time 12:36
		I	······································		
COC INSPECTION	- 1				
Client Name	Client PM/FC	□ Sampler Nam	11	Sample ID	Matrix
4 Address	( <b>p</b> ) Tel # / Fax #	🗆 Courier Signa		□ Preservative (if any)	TAT
Safety Issues (if any)	High concentrations exp	ected 🛛 From Superfu	nd Site 🗍 Rad screening required		
Note:					
PACKAGING INSPECTIO	ON		· · · · · · · · · · · · · · · · · · ·		}
Container	D Cooler	Box	□ Other		
Condition	Custody Seal	□ Intact	Damaged		
Packaging Wrection	Bubble Pack	□ Styrofoam		Sufficient	
Temperatures FACTOR - 0.5	Cooler 13.0 3.1 °C	$\oint \text{Cooler } 2 \frac{1 \cdot 0}{1 \cdot 3}  ^{\circ}\text{C}$	$\mathbf{\varphi}_{\text{Cooler 3}}^{2.5} 2.0_{^{\circ}\text{C}}^{\circ}$	$\Box$ Cooler 4°C	Cooler 5°C
(Cool, ≤6 °C but not frozen)	$\Box \text{ Cooler } 6\_\_\_^{\circ}C$	$\frac{1}{2} \operatorname{Cooler} 2 - \frac{1}{2} \operatorname{Cooler} 2$	$\Box$ Cooler 8 $\Box$ °C	□ Cooler 9 °C	□ Cooler 10°C
Thermometer:	A - S/N 21019106 a 1	$\Box \text{ Cooler 7} \overset{\circ}{=} \overset{\circ}{$	71396 C S/N 210271399	D - S/N	
Comments: D Temperature is ou	A - SITI A - A - A - A - A - A - A - A - A - A	194		<i>D</i> - 3/19	
	it of range. Five was morme	d IMMEDIA I EL I.			
Note:	• • • • • • • • • • • • • • • • • • • •		N		
				······································	
DISCREPANCIES	······				
LabSampleID	LabSampleContainerID		ample Label ID / Information	Corrective	Action
1	4-0	02/010 Jet Fuel	b is not indicated	R.S.	
-		onlabe		IFO	
			and the second se		
					· .
		<			
		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	(	
			(		
				1	- AB 3/4/22
□ pH holding time requiremen	it for water samples is 15 mi	ns. Water samples for j	oH analysis are received beyond 15	minutes from sampling time.	
NOTES/OBSERVATIONS	:				
	·	······································	······································		· · · · · · · · · · · · · · · · · · ·
			<u></u>	·····	
• • • • • • • • • • • • • • • • • • •	· · · · · · · · · · · · · · · · · · ·			un stärtetet, (, , , , , , , , , , , , , , , , , ,	· · · · · · · · · · · · · · · · · · ·
				·	
LEGEND:				Continue to next page	
Code Description-Sample Man	0	Code Description-Sam	-	Code Description-Sample Mana	0
D1 Analysis is not indicated in		D13 Out of Holding Ti	me	R1 Proceed as indicated in CO	C 🗆 Label
(D2) Analysis mismatch COC vs	s label	D14 Bubble is >6mm		R2 Refer to attached instruction	
<b>D3</b> Sample ID mismatch COC	vs label	D15 No trip blank in co		R3 Cancel the analysis	
D4 Sample ID is not indicated	in	D16 Preservation not in	ndicated in	R4 Use vial with smallest bubble	first
D5 Container -[improper] [leak	king] [broken]	D17 Preservation mism		R5 Log-in with latest sampling da	te and time+1 min
D6 Date/Time is not indicated	in	D18 Insufficient chemi	cal preservative	R6 Adjust pH as necessary	
D7 Date/Time mismatch COC	vs label	D19 Insufficient Sampl	e	R7 Filter and preserved as necessa	my A L
D8 Sample listed in COC is no	t received	D20 No filtration info f	or dissolved analysis	R8_ homed	Ulen .
D9 Sample received is not liste	ed in COC	D21 No sample for mois	ure determination	R9	·
(D10) No initial/date on correction	ns in COC(label)	D22		R10 V	
D11 Container count mismatch		D23		R11	
D12 Container size mismatch C		, D24		R12	
REVIEWS:	Jocelyne ///			· · · · · · · · · · · · · · · · · · ·	nA
Sample Labeling	Solis-Romes Kalial	La j	SRF Ulifle	РМ	Mb .
	03/03/12 2/3/2		Date 322	Date	314/22

REPORT ID: 22C034

## Pageage of 3446 pages

## **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.
Е	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

## <u>DATES</u>

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

## 990423

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

SDG#: 22C034

REPORT ID: 22C034

Pagea of 3446 pages

Client : EUROFINS EATON ANALYTICAL

Project: 990423

SDG : 22C034

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

One(1) water sample was received on 03/03/22 to be analyzed for Total Petroleum Hydrocarbons by Purge and Trap in accordance with Method 5030B/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. VG39C01B - 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. VG39C01L/VG39C01C 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 C036-01M/C036-01S. 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 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.

	AND TRAP
	PURGE
LAB CHRONICLE	HYDROCARBONS BY
	OTAL PETROLEUM
	P

FN - Filename % Moist - Percent Moisture

# SAMPLE RESULTS

REPORT ID: 22C034

Pageage of 3446 pages

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

=======================================		=======================================			=====
Client : EUROFINS EATO	ANALYTICAL	Date	Collected:	02/28/22	10:42
Project : 990423		Date	e Received:	03/03/22	
Batch No. : 22CO34		Date	Extracted:	03/03/22	19:02
Sample ID : 202203020785		Date	e Analyzed:	03/03/22	19:02
Lab Samp ID: CO34-01		Dilut	ion Factor:	1	
Lab File ID: EC03013A			Matrix:	WATER	
Ext Btch ID: 22VG39C01		a /	% Moisture:	NA	
Calib. Ref.: EC03003A		Inst	trument ID:	39	
					=====
	RESULTS	RL	MDL		
PARAMETERS	(mg/L)	(mg/L)	(mg/L)		
				-	
GASOLINE	ND	0.020	0.010		
OUDDOGATE DADAMETEDO	DEOLU T	ODK ANT	MPC POUEDV	00 1 11	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIM	11
Bromofluorobenzene	0.0318	0.0400	80	60-14	0 0
	0.0310				

Notes:

aad

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

REPORT ID: 22C034

.

## **QC SUMMARIES**

ani.

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

		===========		
Client : EUROFINS EAT	ON ANALYTICAL	Date	Collected:	03/03/22 13:31
Project : 990423		Date	e Received:	03/03/22
Batch No. : 22C034		Date	Extracted:	03/03/22 13:31
Sample ID : MBLK1W		Date	e Analyzed:	03/03/22 13:31
Lab Samp ID: VG39C01B		Ðiluti	on Factor:	1
Lab File ID: EC03004A			Matrix:	WATER
Ext Btch ID: 22VG39CO1		9	6 Moisture:	NA
Calib. Ref.: EC03003A		Inst	rument ID:	39
		=======================================		
	RESULTS	RL	MDL	
PARAMETERS	(mg/L)	(mg/L)	(mg/L)	
				-
GASOLINE	ND	0.020	0.010	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromofluorobenzene	0.0334	0.0400	84	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 : 5mlFinal Volume : 5mlPrepared by : SCervaAnalyzed by : SCerva

REPORT ID: 22C034

.

.

CLIENT	: EUROFINS EATON ANALYTICAL
PROJECT	: 990423
BATCH NO.	: 22C034
METHOD	: 5030B/8015B
============	

	018 04A 722 13:31 722 13:31 9001		1 LCS1W VG39C01L EC03005A 03/03/22 1 03/03/22 1 22VG39C01 EC03003A			% MOISTURE 1 LCD1W VG39C01C EC03006A 03/03/22 1 03/03/22 1 22VG39C01 EC03003A	4:44			
ACCESSION:										
PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	SpikeAmt (mg/L)	LCDResult (mg/L)	LCDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
Gasoline	ND	0.500	0.466	93	0.500	0.465	93	0	60-130	30
*********************										
SURROGATE PARAMETER		SpikeAmt (mg/L)	LCSResult (mg/L)	(%)	SpikeAmt (mg/L)	LCDResult (mg/L)	LCDRec (%)		QCLimit (%)	
Bromofluorobenzene		0.0400	0.0400	100	0.0400	0.0413	103		70-130	

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

ISDRoc RP (%) (% 92		MaxRPE (%) 30
		MaxRPC (%)
	·	
18		
18		
MSD		
A		
1	MSD	MSD

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

LABORATORY REPORT FOR

## EUROFINS EATON ANALYTICAL

990423

## METHOD 3520C/8015B TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

SDG#: 22C034

REPORT ID: 22C034

Client : EUROFINS EATON ANALYTICAL

Project: 990423

SDG : 22C034

## METHOD 3520C/8015B TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

One(1) water sample was received on 03/03/22 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. DSC008WB - 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) LCS was analyzed. Percent recovery for Diesel was within LCS QC limits in DSC008WL. Refer to LCS summary form for details.

Matrix QC Sample Matrix spike sample was prepared and analyzed at a frequency required by the project. One(1) set of MS/MSD was analyzed. Diesel was within MS QC limits in 22C036-01M/22C036-01S. Refer to Matrix QC summary form for details.

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

Sample Analysis

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.

Client : EUROFINS EATON ANALYTICAL

Project: 990423

SDG : 22C034

## METHOD 3520C/8015B PETROLEUM HYDROCARBONS BY EXTRACTION

One(1) water sample was received on 03/03/22 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. DSC008WB - 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) LCS was analyzed. Percent recovery for JP5 was within LCS QC limits in J5C008WL. Refer to LCS summary form for details.

Matrix QC Sample Matrix spike sample was prepared and analyzed at a frequency required by the project. One(1) set of MS/MSD was analyzed. JP5 was within MS QC limits in 22C036-01M/22C036-01S. Refer to Matrix QC summary form for details.

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

Sample Analysis

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.

Client : EUROFINS EATON ANALYTICAL

Project: 990423

SDG : 22C034

## METHOD 3520C/8015B PETROLEUM HYDROCARBONS BY EXTRACTION

One(1) water sample was received on 03/03/22 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. DSC008WB - 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) LCS was analyzed. Percent recovery for JP8 was within LCS QC limits in J8C008WL. Refer to LCS summary form for details.

Matrix QC Sample Matrix spike sample was prepared and analyzed at a frequency required by the project. One(1) set of MS/MSD was analyzed. JP8 was within MS QC limits in 22C036-01M/22C036-01S. Refer to Matrix QC summary form for details.

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

Sample Analysis

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	: EUROFINS EATON ANALYTICAL	ANALYTICAL							SDG NO. : 22C034
	: 990423								Instrument ID : D5
		****							
					WATER	ER			
Client		Laboratory Dilution	Dílution	%	Analysis	Extraction	Sample	Calibraticn Prep.	n Prep.
Sample ID		Sample ID	Factor	Moïst	DateTime	DateTime	Data FN	Data FN	Bstch Notes
1 1 1 1 1 1 1 1					6 5 1 1 1 1 1 5 8 8	3 		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
MRI K1W		DSC008WB	~	NA	03/08/2215:08	03/07/2211:45	LC08009A	LC08003A	22DSC008W Method Blank
I CS1U		DSC008WL	-	NA	03/08/2215:26	03/07/2211:45	LC08010A	LC08003A	22DSC008W Lab Control Sample (LCS)
202203020785	85	C034-01	1	NA	03/08/2216:40	03/07/2211:45	LC08014A	LC08003A	22DSC008W Field Sample

FN - Filename % Moist - Percent Moisture

,

,

LAB CHRONICLE PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	ANALYTICAL							SDG NO. : 22C034	
Project	: 990423									
****										11
					WATER	ER				
Client		Laboratory	Dilution	%	Analysis	Extraction	Sample	Calibration Prep.	n Prep.	
Sample ID		Sample ID Factor	Factor	Moist	DateTīme	DateTime	Data FN	Data FN	Batch Notes	
			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1			* * * * *			
MBLK1W		DSC008WB	~	NA	03/08/2215:08	03/07/2211:45	LC08009A	LC08004A	22DSC008W Method Blank	
LCS1W		J5C008WL	-	NA	03/08/2215:45	03/07/2211:45	LC08011A	LC08004A	22DSC008W Lab Control Sample (LCS)	~
202203020785	785	co34-01	-	NA	03/08/2216:40	03/07/2211:45	LC08014A	LC08004A	22DSC008W Field Sample	

FN - Filename % Moist - Percent Moisture

•

,

	EXTRACTION
Щ	BΥ
LAB CHRONICLE	HYDROCARBONS BY
	PETROLEUM

					***					
Client	: EUROFINS EATON ANALYTICAL	<b>ANALYTICAL</b>								
Project	: 990423								cu : UI Instrument I	
*****										
					WATER	ER				
Client		Laboratory Dilution	Dilution	%	Analysis	Extraction	Sample	Calibration Prep.	l Prep.	
Sample ID		Sample ID	Factor	Moist	Datelime	DateTime	Data FN	Data FN	Batch Notes	
				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
<b>MBLK1W</b>		DSC008WB	1	NA	03/08/2215:08	03/07/2211:45	LC08009A	LC08005A	22DSC008W Method Blank	
LCS1W		<b>J8C008ML</b>	ſ	NA	03/08/2216:03	03/07/2211:45	LC08012A	LC08005A	22DSC008W Lab Control Sample (LCS)	(SC) e
202203020785	35	c034-01	-	NA	03/08/2216:40	03/07/2211:45	LC08014A	LC08005A	22DSC008W Field Sample	

FN - Filename % Moist - Percent Moisture

% MOIST - Percent Moist

٠

Page 32 of 46 pages

.

i.

# SAMPLE RESULTS

REPORT ID: 22C034

Pagerage of 3446 pages

## METHOD 3520C/8015B TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

		============		
Client : EUROFINS EATON	ANALYTICAL	Date	Collected:	02/28/22 10:42
Project : 990423		Date	e Received:	03/03/22
Batch No. : 22C034		Date	Extracted:	03/07/22 11:45
Sample ID : 202203020785		Date	e Analyzed:	03/08/22 16:40
Lab Samp ID: 22C034-01		Dilut	ion Factor:	1
Lab File ID: LCO8014A			Matrix:	WATER
Ext Btch ID: 22DSC008W		2	% Moisture:	NA
Calib. Ref.: LCO8003A		Inst	trument ID:	D5
	RESULTS	RL	MDL	
PARAMETERS	(mg/L)	(mg/L)	(mg/L)	
Diesel	ND	0.025	0.013	-
Motor Oil	ND	0.051	0.025	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
-				
Bromobenzene			69	
Hexacosane	0.144	0.126	114	60-130
		==========	=======================================	

Notes:

Parameter		H۰	•C Range			
Diesel		C	0-C24			
Motor Oil		C2	24-036			
Reported ND	at	RL	quantitated	per	pattern	recognition.

Detection limits are reported relative to sample result significant figures.Sample Amount : 990mlFinal Volume : 5mlPrepared by : POretoAnalyzed by : SDeeso

.

#### METHOD 3520C/8015B PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATON					10-/2
Project : 990423	ANALTIICAL		Collected: e Received:		10:42
Batch No. : 22C034			Extracted:		11-45
Sample ID : 202203020785			e Analyzed:		
Lab Samp ID: 22C034-01			ion Factor:	•	
Lab File ID: LC08014A			Matrix:	WATER	
Ext Btch ID: 22DSC008W			% Moisture:	NA	
Calib. Ref.: LCO8004A		Inst	trument ID:	D5	
		=================	====================	========	
	RESULTS	RL	MD L.		
PARAMETERS	(mg/L)	(mg/L)	(mg/L)		
		(119/17	(119/2)	-	
JP5	ND	0.051	0.025		
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIM	IIT
Bromobenzene	0.351	0.505	69	60-13	50
Hexacosane	0.144	0.126	114	60-13	50
	و الله هو هو الله وي الله وي الله وي الله الله الله الله				=====

Notes:

und.

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 : 990ml Final Volume : 5ml Prepared by : POreto Analyzed by : SDeeso

REPORT ID: 22C034

### METHOD 3520C/8015B PETROLEUM HYDROCARBONS BY EXTRACTION

	tern bind dard bern berd berd bind bind bind bind bind bind bind bin			
Client : EUROFINS EATON	ANALYTICAL	Date	Collected:	02/28/22 10:42
Project : 990423		Date	e Received:	03/03/22
Batch No. : 22C034		Date	Extracted:	03/07/22 11:45
Sample ID : 202203020785		Date	Analyzed:	03/08/22 16:40
Lab Samp ID: 22C034-01		Dilut	ion Factor:	1
Lab File ID: LCO8014A			Matrix:	WATER
Ext Btch ID: 22DSC008W		a /	6 Moisture:	NA
Calib. Ref.: LC08005A		Inst	rument ID:	D5
=======================================				
	RESULTS	RL	MDL	
PARAMETERS	(mg/L)	(mg/L)	(mg/L)	
				-
JP8	ND	0.051	0.025	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.351	0.505	69	60 1 <b>3</b> 0
Hexacosane	0.144	0.126	114	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 : 990mlFinal Volume : 5mlPrepared by : POretoAnalyzed by : SDeeso

REPORT ID: 22C034

.

## **QC SUMMARIES**

REPORT ID: 22C034

Page 25 of 3446 pages

## METHOD 3520C/8015B TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATON	ANALYTICAL	Date	Collected:	03/07/22 11:45
Project : 990423		Date	e Received:	03/07/22
Batch No. : 22C034		Date	Extracted:	03/07/22 11:45
Sample ID : MBLK1W		Date	e Analyzed:	03/08/22 15:08
Lab Samp ID: DSC008WB		Dilut	ion Factor:	1
Lab File ID: LCO8009A			Matrix:	WATER
Ext Btch ID: 22DSC008W		0	% Moisture:	NA
Calib. Ref.: LCO8003A		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	SPKAMT	%RECOVERY	QC LIMIT
			**********	
Bromobenzene		0.500		60-130
Hexacosane	0.134	0.125	107	60~130

Notes:

: : :::\$

Parameter	H-C Range	
Diesel	C10-C24	
Motor Oil	C24-C36	
Reported ND	at RL quantitated per pattern	recognition.

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

.

## EMAX QUALITY CONTROL DATA LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROF PROJECT : 99042 BATCH NO. : 22C03 METHOD : 3520C	3 4 /8015в	LYTICAL			
MATRIX : WATER DILUTION FACTOR: 1 SAMPLE ID : MBLK1 LAB SAMPLE ID : DSCOO LAB FILE ID : LCO80 DATE PREPARED : 03/07 DATE ANALYZED : 03/08 PREP BATCH : 22DSC CALIBRATION REF: LCO80	W BWB 09A /22 11:45 /22 15:08 008W		11:45 15:26		
ACCESSION:					
PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Diesel	ND	2.50	2.50	100	50-130
=======================================		=======================================		==========	
SURROGATE PARAMETERS		SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Bromobenzene Hexacosane			0.432 0.147		
					==========

MB: Method Blank sample LCS: Lab Control Sample

.

4

.

.

60-130

CLIENT	: EUROFINS EATON ANALYTICAL
PROJECT	: 990425
BATCH NO.	: 22036
METHOD	: 3520C/8015B
=======================================	

DILUTION FACTOR SAMPLE ID LAB SAMPLE ID LAB FILE ID DATE PREPARED DATE ANALYZED	202203020788 22C036-01 LC08016A 03/07/22 11:45 03/08/22 17:16 22DSC008W	220 LCC 037 037 220	2203020788MS 2036-01M 08017A 707722 11:45 708/22 17:35 DSCO08W D8003A			1 2022 22CC LC08 03/C 03/C 22DS	03020788M 36-015 018A 7/22 11:4 8/22 17:5 C008W 003A	5		
PARAMETERS Diesel	PSResul (mg/L N	) (mg/L)	MSResult (mg/L) 2.37	MSRcc (%) 	SpikeAmt (mg/L) 2.53	MSDResult (mg/L) 2.44	MSDRec (%) 97	RPD (%) 3	QCLimit (%) 50-130	MaxRPD (%) 
SURROGATE PARAM	ETERS	SpikeAmt (mg/L) 	MSResult (mg/L) 	MSRec (%)  89	SpikeAmt (mg/L) 0.505	MSDResult (mg/L) 	MSDRec (%) 		QCLimit (%) 60-130	

0.147 116

0.152

0.126

120

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

0.126

Hexacosane

## METHOD 3520C/8015B PETROLEUM HYDROCARBONS BY EXTRACTION

		===========		
Client : EUROFINS EATO	ON ANALYTICAL	Date	Collected:	03/07/22 11:45
Project : 990423		Date	e Received:	03/07/22
Batch No. : 22C034		Date	Extracted:	03/07/22 11:45
Sample ID : MBLK1W			03/08/22 15:08	
Lab Samp ID: DSC008WB		Dilution Factor:		1
Lab File ID: LCO8009A			Matrix:	WATER
Ext Btch ID: 22DSC008W		a /	% Moisture:	NA
Calib. Ref.: LCO8004A		Inst	trument ID:	D5
	RESULTS	RL	MDL	
PARAMETERS	(mg/L)	(mg/L)	(mg/L)	
				-
JP5	ND	0.050	0.025	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene				60-130
Hexacosane	0.134	0.125	107	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 : 1000mlFinal Volume : 5mlPrepared by : POretoAnalyzed by : SDeeso

## EMAX QUALITY CONTROL DATA LAB CONTROL SAMPLE ANALYSIS

CLIENT PROJECT BATCH NO. METHOD	: 990423 : 22C034 : 3520C/80	15в				
MATRIX DILUTION FACTOR SAMPLE ID LAB SAMPLE ID LAB FILE ID DATE PREPARED DATE ANALYZED PREP BATCH CALIBRATION REF	:: 1 : MBLK1W : DSC008WE : LC080094 : 03/07/22 : 03/08/22 : 22DSC008	11:45 15:08 W	% MOISTUR 1 LCS1W J5C008WL LC08011A 03/07/22 03/08/22 22DSC008V LC08004A	11:45 15:45		
ACCESSION:						
PARAMETERS		(mg/L)	(mg/L)	LCSResult (mg/L) 2.69	(%)	(%)
SURROGATE PARAM	IETERS			LCSResult (mg/L)	(%)	
Bromobenzene Hexacosane				0.471 0.146	94	
==================					==========	==========

MB: Method Blank sample LCS: Lab Control Sample

and i

.

.

.

	Bromobenzene Hexacosane		0.500 0.125	0.398 0.146	80 117	0.500 0.125	0.459 0.141	92 113		60-130 60-130	
DILUTION FACTOR: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SURROGATE PARAME	ETERS						(%)		(%)	
DILUTION FACTOR: 1 1 1 1 SAMPLE ID : 202203020788 202203020788MS 202203020788MSD LAB SAMPLE ID : 22C036-01 22C036-01M 22C036-01S LAB FILE ID : LC08016A LC08019A LC08020A DATE PREPARED : 03/07/22 11:45 03/07/22 11:45 03/07/22 11:45 DATE ANALYZED : 03/08/22 17:16 03/08/22 18:12 03/08/22 18:30 PREP BATCH : 22DSC008W 22DSC008W 22DSC008W CALIBRATION REF: LC08004A LC08004A LC08004A ACCESSION: PSResult SpikeAmt MSResult MSRec SpikeAmt MSDResult MSDRec RPD QCLimit Max	JP5	ND	2.50	2.26	90	2.50	2.71	108	18	30-160	30
DILUTION FACTOR: 1       1       1         SAMPLE ID       : 202203020788       202203020788MSD         LAB SAMPLE ID       : 22C036-01       22C036-01M       22C036-01S         LAB FILE ID       : LC08016A       LC08019A       LC08020A         DATE PREPARED       : 03/07/22 11:45       03/07/22 11:45       03/07/22 11:45         DATE ANALYZED       : 03/08/22 17:16       03/08/22 18:12       03/08/22 18:30         PREP BATCH       : 22DSC008W       22DSC008W       22DSC008W						,					MaxRPD (%)
	DILUTION FACTOR SAMPLE ID LAB SAMPLE ID LAB FILE ID DATE PREPARED DATE ANALYZED PREP BATCH	: 1 : 202203020788 : 22C036-01 : LC08016A : 03/07/22 11:45 : 03/08/22 17:16 : 22DSC008W	22C LC0 03/ 03/ 22D	036-01M 8019A 07/22 11:45 08/22 18:12 sc008W			1 2022 2200 LC08 03/0 03/0 22Ds	203020788M 136-01S 1020A 17/22 11:45 18/22 18:30 12008W	5		

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

CLIENT : EUROFINS EATON ANALYTICAL

## METHOD 3520C/8015B PETROLEUM HYDROCARBONS BY EXTRACTION

=======================================	================		=======================================	=============
Client : EUROFINS EATO	N ANALYTICAL	Date	Collected:	03/07/22 11:45
Project : 990423		Date	e Received:	03/07/22
Batch No. : 22C034		Date	Extracted:	03/07/22 11:45
Sample ID : MBLK1W		Date	e Analyzed:	03/08/22 15:08
Lab Samp ID: DSC008WB		Dilut	ion Factor:	1
Lab File ID: LC08009A			Matrix:	WATER
Ext Btch ID: 22DSC008W		/	6 Moisture:	NA
Calib. Ref.: LC08005A		Inst	rument ID:	D5
د د د د د د د د د د د د د د د د د د د				
	RESULTS	RL	MDL	
PARAMETERS	(mg/L)	(mg/L)	(mg/l)	
******************				-
JP8	ND	0.050	0.025	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.375	0.500	75	60-130
Hexacosane	0.134	0.125	107	60- <b>13</b> 0
	===============================	=========================	================================	

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

REPORT ID: 22C034

## EMAX QUALITY CONTROL DATA LAB CONTROL SAMPLE ANALYSIS

PROJECT : C BATCH NO. : C METHOD : C					
MATRIX : DILUTION FACTOR: SAMPLE ID : LAB SAMPLE ID : LAB FILE ID : DATE PREPARED : DATE ANALYZED : PREP BATCH : CALIBRATION REF:	1 MBLK1W DSC008WB LC08009A 03/07/22 11:45 03/08/22 15:08 22DSC008W	% MOISTUF 1 LCS1W J8C008WL LC08012A 03/07/22 03/08/22 22DSC008W LC08005A	11:45 16:03		
ACCESSION:					
PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
JP8	ND	2.50	2.48	99	30-160
=======================================				=========	
SURROGATE PARAMETI	ERS		LCSResult (mg/L)		QCLimit (%)
Bromobenzene Hexacosane			0.484 0.145		
=======================================		=======================================		=======================================	

MB: Method Blank sample LCS: Lab Control Sample

.

CLIENT	: EUROFINS EATON ANALYTICAL
PROJECT	: 990425
BATCH NO.	: 22C036
METHOD	: 3520C/8015B
==============	

MATRIX : WATER DILUTION FACTOR: 1 SAMPLE ID : 202203020788 LAB SAMPLE ID : 22C036-01 LAB FILE ID : LC08016A DATE PREPARED : 03/07/22 11:45 DATE ANALYZED : 03/08/22 17:16 PREP BATCH : 22DSC008W CALIBRATION REF: LC08005A	1 202203020788MS 22C036-01M LC08021A 03/07/22 11:45 03/08/22 18:49 22DSC008W LC08005A		% MOISTURE:NA 1 202203020788MS 22C036-01S LC08022A 03/07/22 11:45 03/08/22 19:07 22DSC008W LC08005A	-	
ACCESSION:					
PSResult PARAMETERS (mg/L)	SpikeAmt MSResult (mg/L) (mg/L)	MSRec SpikeAmt (%) (mg/L)	MSDResult MSDRec (mg/L) (%)		MaxRPD (%)
JP8 ND	2.75 2.96	108 2.78	2.86 103	3 30-160	30
					:======

SURROGATE PARAMETERS	SpikeAmt	MSResult	MSRec	SpikeAmt	MSDResult	MSDRec	QCLimit
	(mg/L)	(mg/L)	(%)	(mg/L)	(mg/L)	(%)	(%)
Bromobenzene	0.550	0.639	116	0.555	0.548	99	60-130
Hexacosane	0.138	0.156	113	0.139	0.153	110	60-130

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