

ACCREDITED

CERTIFICATE #'s 5890.01 & 5890.02

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#### **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
02/18/2022

Lew Frank
EUROFINS ATON
ANALYTICAL, LLC

DEB: Debbie L Frank

Project Manager



Report: 984838 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.



## 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	Idaho CA00006		68-00565
Illinois	Illinois 200033		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

<sup>\*</sup> 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)   Water				WWW.Eui
Enterococi	Tost(s)	Method(s)	Potable	Waste
Escherichia coli	Test(s)	wethou(s)	Water *	Water
Escherichia coli	Enterococci	Enterolert	Y	Y
CEnumeration				
Fecal Coliform (P/A and Enumeration)			X	
Renumeration	,			
Entimeration		(MTF/FC) SM 9221	v	v
Enterococci	Enumeration)	E (MTF/EC)	^	^
Enterococci	Fecal Streptococci and			
Heterotrophic Bacteria		SM 9230 B	X	X
Legionella		OM 0045 D		
Desire		<del></del>		
Pseudomonas aeruginosa	Legionella	Legiolert®	X	
Total Coliform (P/A and Enumeration)		Idexx		
Total Coliform (P/A and Enumeration)	Pseudomonas aeruginosa	Pseudalert	X	
Enumeration   S2218, SM 9221 C	Total Caliform (D/A and			
Total Coliform, Total Coliform with Chlorine Present	· · · · · · · · · · · · · · · · · · ·		х	х
Coliform with Chlorine   Present   Present		9221B, SM 9221 C		
Coliform with Chlorine   Present   Present	Total Coliform, Total			
Present	Coliform with Chlorine	01100015	х	х
Total Coliforn/E. coli (P/A and Enumeration, Ideax Colient, Idea		SM 9221 B		
Enumeration, Idexx Colliert, Idexx Colliert 18, Collier				
Idex		CM 0222	v	
Total Microcystins and Nodularins   SM 9610   X		31VI 9223	^	
Nodularins				
Yeast and Mold         SM 9610         x           1,2,3-Trichloropropane (TCP) at 5 PPT         CA SRL 524M-TCP         x           1,4-Dioxane         EPA 522         x           2,3,7,8-TCDD         Modified EPA 1613 B         x           Acrylamide         *LCMS 2440)         x           Alkalinity         SM 2320B         x           Alkalinity         SM 2320B         x           Ammonia         SM 4500-NH3         x           Ammonia         SM 4500-NH3         x           Absestos         EPA 350.1,         x           Asbestos         EPA 100.2         x         x           Bicarbonate Alkalinity as HCO3         SM 2330 B         x         x           HCO3         SM 5210 B         x         x           BoD/CBOD         SM 5210 B         x         x           Carbonate as CO3         SM 2330 B         x         x           Carbonate as CO3         SM 2330 B         x         x           Chlorinated Acids         EPA 410.4, SM 5220D         x         x           Chlorine, Free, Combined, Total Residual, Chloramines         SM 4500-CLO2         x           Color         SM 2300 B         x         x		EPA 546	Χ	
1,2,3-Trichloropropane		011.0010		
TCP	Yeast and Mold	SM 9610	X	
TCP				
CICP) at 5 PP1		CA SRL 524M-	v	
Acrylamide	(TCP) at 5 PPT	TCP	^	
Acrylamide			Х	
Acrylamide	1,1 Dioxano		^	
Acrylamide	2,3,7,8-TCDD		X	
Algal Toxins/Microcystin	_,=,=,=====	1613 B		
Alkalinity	Acrylamide	+LCMS 2440)	X	
Alkalinity	Algal Toxins/Microcystin	+ LCMS 3570	X	
Ammonia				V
Ammonia	Alkalifity		^	^
H				
Asbestos	Ammonia	SM 4500-NH3		Х
Bicarbonate Alkalinity as		H		
Bicarbonate Alkalinity as	Ashestos	FPA 100 2	Y	Y
HCO3			^	^
BOD/CBOD	-	SIVI 2330 B	X	x
Bromate				
Carbonate as CO3         SM 2330 B         x         x           Carbonyls         EPA 556         x         x           Chemical Oxygen Demand         EPA 410.4, SM 5220D         x           Chlorinated Acids         EPA 515.4         x           Palin Test Chlordio X Plus, SM 4500-CLO2 D         x           Chlorine, Free, Combined, Total Residual, Chloramines         SM 4500-CL G         x           Conductivity         EPA 120.1, SM 2510B         x           Conductivity         EPA 120.1, SM 2510B         x           Corrosivity (Langelier Index), Carbonate as CO3, Hydroxide as OH Calculated         SM 2330 B         x           Cyanide (Amenable)         SM 4500-CN G         x         x           Cyanide (Total)         EPA 335.4         x         x           Cyanogen Chloride (Screen)         (WC-24467)         x         x           Diquat and Paraquat EPA 549.2         x         x           DBP and HAA         SM 6251 B         x           Dissolved Organic Carbon Dissolved Oxygen         SM 4500-O G         x           EDB/DCBP/TCP         EPA 504.1         x           EDB/DBP/TCP         EPA 548.1, *(LCMS-24445)         x           EDTA and NTA         *WC-2454         x <t< td=""><td>BOD/CBOD</td><td>SM 5210 B</td><td></td><td>X</td></t<>	BOD/CBOD	SM 5210 B		X
Carbonate as CO3         SM 2330 B         x         x           Carbonyls         EPA 556         x         x           Chemical Oxygen Demand         EPA 410.4, SM 5220D         x           Chlorinated Acids         EPA 515.4         x           Palin Test Chlordio X Plus, SM 4500-CLO2 D         x           Chlorine, Free, Combined, Total Residual, Chloramines         SM 4500-CL G         x           Conductivity         EPA 120.1, SM 2510B         x           Conductivity         EPA 120.1, SM 2510B         x           Corrosivity (Langelier Index), Carbonate as CO3, Hydroxide as OH Calculated         SM 2330 B         x           Cyanide (Amenable)         SM 4500-CN G         x         x           Cyanide (Total)         EPA 335.4         x         x           Cyanogen Chloride (Screen)         (WC-24467)         x         x           Diquat and Paraquat EPA 549.2         x         x           DBP and HAA         SM 6251 B         x           Dissolved Organic Carbon Dissolved Oxygen         SM 4500-O G         x           EDB/DCBP/TCP         EPA 504.1         x           EDB/DBP/TCP         EPA 548.1, *(LCMS-24445)         x           EDTA and NTA         *WC-2454         x <t< td=""><td>Bromate</td><td>+LCMS- 2447</td><td>X</td><td></td></t<>	Bromate	+LCMS- 2447	X	
Carbonyls         EPA 556         x         x           Chemical Oxygen Demand         EPA 410.4, SM 5220D         x           Chlorinated Acids         EPA 515.4         x           Palin Test Chlordio X Plus, SM 4500-CLO2 D         x           Chlorine, Free, Combined, Total Residual, Chloramines         SM 4500-CL G         x           Corductivity         EPA 120.1, SM 2510B         x           Corrosivity (Langelier Index), Carbonate as CO3, Hydroxide as OH Calculated         SM 2330 B         x           Cyanide (Amenable)         SM 4500-CN G         x         x           Cyanide (Total)         EPA 335.4         x         x           Cyanogen Chloride (Screen)         (WC-24467)         x         x           Diquat and Paraquat EPA 549.2         x         x           Dissolved Organic Carbon Dissolved Oxygen         SM 4500-C G         x         x           EDB/DCBP/TCP         EPA 549.2         x         x           EDB/DCBP/TCP         EPA 549.2         x         x           EDB/DCBP/TCP         EPA 549.1         x         x           EDB/DCBP/TCP         EPA 504.1         x         x           EDB/DCBP/TCP         EPA 551.1         x         x           EDTA and NT				
Chemical Oxygen Demand Chlorinated Acids Chlorinated Acids EPA 515.4 Palin Test Chloridio X Plus, SM 4500-CLO2 D Chlorine, Free, Combined, Total Residual, Chloramines Color SM2120B Conductivity SM 2510B  Corrosivity (Langelier Index), Carbonate as CO3, Hydroxide as OH Calculated Cyanide (Amenable) Cyanide (Free) SM 4500-CN G Cyanide (Total) Cyanogen Chloride (Screen) Cyacreen) Cyacreen Diquat and Paraquat Dissolved Organic Carbon Dissolved Oxygen EDB/DCBP/TCP EDB/DBCP and Disinfection Byproducts EPA 547 EIndoride SM 4500-C SM 2330 B X X X X X X X X X X X X X X X X X X X				
Chlorinated Acids  Chlorine Dioxide  Chlorine, Free, Combined, Total Residual, Chloramines  Color  Conductivity  Corrosivity (Langelier Index), Carbonate as CO3, Hydroxide as OH Calculated  Cyanide (Free)  Cyanide (Total)  Cyanogen Chloride  (Screen)  Diguat and Paraquat  Dissolved Organic Carbon  Dissolved Organic Carbon  Dissolved Organic Carbon  Dissolved Organic Carbon  Disinfection Byproducts  EPA 5481, *(LCMS-24445)  EPA 5487, *(LCMS-2445)  EPA 5487, *(LCMS-2648)  EPA 5487, *(LCMS-2618)  EPA 5487, *(LCMS-3618)  EPA 5487, *	Carbonyis		X	X
Chlorinated Acids	Chamical Owigan Damand	EPA 410.4,		v
Chlorinated Acids  EPA 515.4  Palin Test Chlorine Dioxide  Chlorine, Free, Combined, Total Residual, Chloramines  Color  SM 4500-CLO2 D  Conductivity  EPA 120.1, SM 2510B  Corrosivity (Langelier Index), Carbonate as CO3, Hydroxide as OH Calculated  Cyanide (Amenable)  Cyanide (Free)  SM 4500-CN G X  X  X  X  X  X  X  X  X  X  X  X  X	Chemical Oxygen Demand	SM 5220D		X
Palin Test   Chlorine Dioxide	Chlorinated Acids		Y	
Chlorine Dioxide         Chlordio X Plus, SM 4500-CLO2 D         X           Chlorine, Free, Combined, Total Residual, Chloramines         SM 4500-Cl G         X           Color         SM2120B         X           Conductivity         EPA 120.1, SM 2510B         X           Corrosivity (Langelier Index), Carbonate as CO3, Hydroxide as OH Calculated         SM 2330 B         X           Cyanide (Amenable)         SM 4500-CN G         X         X           Cyanide (Free)         SM 4500-CN G         X         X           Cyanide (Total)         EPA 335.4         X         X           Cyanogen Chloride (Screen)         (WC-24467)         X         X           Diquat and Paraquat EPA 549.2         X         X           Dissolved Organic Carbon Dissolved Organic Carbon SM 5310 C         X         X           Dissolved Oxygen EDB/DCBP/TCP EPA 504.1         X         X           EDB/DBP/TCP EPA 551.1         X         EPA 551.1         X           EDTA and NTA         * WC-2454         X         X           EPA 548.1, *(LCMS-2445)         X         X           Fluoride SM 4500F C         X         X         X           Glyphosate and AMPA         * LCMS-3618         X	Onionnatod / toldo		Α	
Chilorine Dioxide				
SM 4500-CLO2	Chlorine Diovide		Y	
Chlorine, Free, Combined, Total Residual, Chloramines         SM 4500-CI G         x           Color         SM2120B         x           Conductivity         EPA 120.1, SM 2510B         x           Corrosivity (Langelier Index), Carbonate as CO3, Hydroxide as OH Calculated         SM 2330 B         x           Cyanide (Amenable)         SM 4500-CN G         x         x           Cyanide (Free)         SM 4500-CN G         x         x           Cyanide (Total)         EPA 335.4         x         x           Cyanogen Chloride (Screen)         (WC-24467)         x         x           Diquat and Paraquat EPA 549.2         x         x         x           Dissolved Organic Carbon Dissolved Organic Carbon SM 5310 C         x         x           Dissolved Oxygen EDB/DCBP/TCP EPA 504.1         x         x           EDB/DCBP/TCP EPA 551.1         x         x           EDTA and NTA         * WC-2454         x           EPA 548.1, *(LCMS-2445)         x         x           Fluoride Slyphosate         EPA 547         x           Glyphosate and AMPA         * LCMS-3618         x	Chlonne Dioxide	SM 4500-CLO2	^	
Total Residual, Chloramines		D		
Total Residual, Chloramines	Chlorine Free Combined	_		
Chloramines         Color         SM2120B         x           Conductivity         EPA 120.1, SM 2510B         x         x           Corrosivity (Langelier Index), Carbonate as CO3, Hydroxide as OH Calculated         SM 2330 B         x         x           Cyanide (Amenable)         SM 4500-CN G SW XW		SM 4500-CI G		
Color         SM2120B         x           Conductivity         EPA 120.1, SM 2510B         x         x           Corrosivity (Langelier Index), Carbonate as CO3, Hydroxide as OH Calculated         SM 2330 B         x         x           Cyanide (Amenable)         SM 4500-CN G         x         x           Cyanide (Free)         SM 4500CN F         x         x           Cyanide (Total)         EPA 335.4         x         x           Cyanogen Chloride (Screen)         (WC-24467)         x         x           Diquat and Paraquat         EPA 549.2         x         x           DBP and HAA         SM 6251 B         x         x           Dissolved Organic Carbon         SM 5310 C         x         x           Dissolved Oxygen         SM 4500-O G         x         x           EDB/DCBP/TCP         EPA 504.1         x         EPA 551.1         x           EDTA and NTA         * WC-2454         x         EPA 548.1, *         *           *(LCMS-24445)         x         x         EPA 547         x           Glyphosate and AMPA         * LCMS-3618         x			Х	
Conductivity         EPA 120.1, SM 2510B         x         x           Corrosivity (Langelier Index), Carbonate as CO3, Hydroxide as OH Calculated         SM 2330 B         x         x           Cyanide (Amenable)         SM 4500-CN G         x         x         x           Cyanide (Free)         SM 4500-CN F         x         x         x           Cyanide (Total)         EPA 335.4         x         x         x           Cyanogen Chloride         † 335 Mod (WC-24467)         x         x         x         x           Diquat and Paraquat         EPA 549.2         x	Chloramines			
Conductivity         EPA 120.1, SM 2510B         x         x           Corrosivity (Langelier Index), Carbonate as CO3, Hydroxide as OH Calculated         SM 2330 B         x         x           Cyanide (Amenable)         SM 4500-CN G         x         x         x           Cyanide (Free)         SM 4500-CN F         x         x         x           Cyanide (Total)         EPA 335.4         x         x         x           Cyanogen Chloride         † 335 Mod (WC-24467)         x         x         x         x           Diquat and Paraquat         EPA 549.2         x	Color	SM2120B	X	
Contactivity				
Corrosivity (Langelier Index), Carbonate as CO3, Hydroxide as OH Calculated	Conductivity		X	Х
Index), Carbonate as CO3, Hydroxide as OH Calculated		31VI 23 10D		
Hydroxide as OH Calculated   SM 2330 B   X				
Calculated   Calculated   Calculated   Cyanide (Amenable)   G		SM 2330 B	v	
Cyanide (Amenable)         SM 4500-CN G         X         X           Cyanide (Free)         SM 4500CN F         X         X           Cyanide (Total)         EPA 335.4         X         X           Cyanogen Chloride (Screen)         + 335 Mod (WC-24467)         X           Diquat and Paraquat         EPA 549.2         X           DBP and HAA         SM 6251 B         X           Dissolved Organic Carbon         SM 5310 C         X           Dissolved Oxygen         SM 4500-O G         X           EDB/DCBP/TCP         EPA 504.1         X           EDB/DBP/TCP         EPA 551.1         X           EDTA and NTA         + WC-2454         X           EPA 548.1, +(LCMS-2445)         X           Fluoride         SM 4500F C         X         X           Glyphosate         EPA 547         X           Glyphosate and AMPA         + LCMS-3618         X	Hydroxide as OH	OW 2000 D	^	
Cyanide (Amenable)         SM 4500-CN G         X         X           Cyanide (Free)         SM 4500CN F         X         X           Cyanide (Total)         EPA 335.4         X         X           Cyanogen Chloride (Screen)         + 335 Mod (WC-24467)         X           Diquat and Paraquat         EPA 549.2         X           DBP and HAA         SM 6251 B         X           Dissolved Organic Carbon         SM 5310 C         X           Dissolved Oxygen         SM 4500-O G         X           EDB/DCBP/TCP         EPA 504.1         X           EDB/DBP/TCP         EPA 551.1         X           EDTA and NTA         + WC-2454         X           EPA 548.1, +(LCMS-2445)         X           Fluoride         SM 4500F C         X         X           Glyphosate         EPA 547         X           Glyphosate and AMPA         + LCMS-3618         X				
Cyanide (Amenable)         G         X         X           Cyanide (Free)         SM 4500CN F         X         X           Cyanide (Total)         EPA 335.4         X         X           Cyanogen Chloride (Screen)         *335 Mod (WC-24467)         X           Diquat and Paraquat         EPA 549.2         X           DBP and HAA         SM 6251 B         X           Dissolved Organic Carbon         SM 5310 C         X           Dissolved Oxygen         SM 4500-0 G         X           EDB/DCBP/TCP         EPA 504.1         X           EDB/DBP/TCP and Disinfection Byproducts         EPA 551.1         X           EDTA and NTA         * WC-2454         X           EPA 548.1, *(LCMS-2445)         X           Fluoride         SM 4500F C         X         X           Glyphosate         EPA 547         X           Glyphosate and AMPA         * LCMS-3618         X	Carouratou	CM 4500 CN		
Cyanide (Free) SM 4500CN F X X  Cyanide (Total) EPA 335.4 X X  Cyanogen Chloride +335 Mod (Screen) (WC-24467) X  Diquat and Paraquat EPA 549.2 X  DBP and HAA SM 6251 B X  Dissolved Organic Carbon SM 5310 C X  Dissolved Oxygen SM 4500-O G X  EDB/DCBP/TCP EPA 504.1 X  EDB/DBCP and Disinfection Byproducts  EDTA and NTA +WC-2454 X  Endothall EPA 548.1, *(LCMS-2445) X  Fluoride SM 4500F C X X  Glyphosate and AMPA *LCMS-3618 X	Cyanide (Amenable)		X	Х
Cyanide (Total)         EPA 335.4         x         x           Cyanogen Chloride (Screen)         +335 Mod (WC-24467)         x           Diquat and Paraquat         EPA 549.2         x           DBP and HAA         SM 6251 B         x           Dissolved Organic Carbon         SM 5310 C         x           Dissolved Oxygen         SM 4500-O G         x           EDB/DCBP/TCP         EPA 504.1         x           EDB/DBCP and Disinfection Byproducts         EPA 551.1         x           EDTA and NTA         + WC-2454         x           EPA 548.1, *(LCMS-2445)         x           Fluoride         SM 4500F C         x         x           Glyphosate         EPA 547         x           Glyphosate and AMPA         + LCMS-3618         x	· · · · · · · · · · · · · · · · · · ·	<del></del>		
Cyanide (Total)         EPA 335.4         x         x           Cyanogen Chloride (Screen)         + 335 Mod (WC-24467)         x         x           Diquat and Paraquat         EPA 549.2         x         x           DBP and HAA         SM 6251 B         x         x           Dissolved Organic Carbon         SM 5310 C         x         x           Dissolved Oxygen         SM 4500-O G         x         x           EDB/DCBP/TCP         EPA 504.1         x         EPA 551.1         x           EDTA and NTA         + WC-2454         x         EPA 548.1, +(LCMS-2445)         x           Fluoride         SM 4500F C         x         x           Glyphosate         EPA 547         x           Glyphosate and AMPA         + LCMS-3618         x	Cyanide (Free)	SM 4500CN F	X	Х
Cyanogen Chloride (Screen)         + 335 Mod (WC-24467)         x           Diquat and Paraquat         EPA 549.2         x           DBP and HAA         SM 6251 B         x           Dissolved Organic Carbon         SM 5310 C         x           Dissolved Oxygen         SM 4500-O G         x           EDB/DCBP/TCP         EPA 504.1         x           EDB/DBCP and Disinfection Byproducts         EPA 551.1         x           EDTA and NTA         + WC-2454         x           EPA 548.1, *(LCMS-2445)         x           Fluoride         SM 4500F C         x         x           Glyphosate         EPA 547         x           Glyphosate and AMPA         + LCMS-3618         x	Cyanide (Total)			
(Screen)         (WC-24467)         X           Diquat and Paraquat         EPA 549.2         x           DBP and HAA         SM 6251 B         x           Dissolved Organic Carbon         SM 5310 C         x           Dissolved Oxygen         SM 4500-O G         x           EDB/DCBP/TCP         EPA 504.1         x           EDB/DBCP and Disinfection Byproducts         EPA 551.1         x           EDTA and NTA         † WC-2454         x           EPA 548.1, †(LCMS-2445)         x           Fluoride         SM 4500F C         x           Glyphosate         EPA 547         x           Glyphosate and AMPA         † LCMS-3618         x				- '
Diquat and Paraquat         EPA 549.2         x           DBP and HAA         SM 6251 B         x           Dissolved Organic Carbon         SM 5310 C         x           Dissolved Oxygen         SM 4500-O G         x           EDB/DCBP/TCP         EPA 504.1         x           EDB/DBCP and Disinfection Byproducts         EPA 551.1         x           EDTA and NTA         * WC-2454         x           Endothall         EPA 548.1, *(LCMS-2445)         x           Fluoride         SM 4500F C         x         x           Glyphosate         EPA 547         x           Glyphosate and AMPA         * LCMS-3618         x			X	
DBP and HAA         SM 6251 B         X           Dissolved Organic Carbon         SM 5310 C         X           Dissolved Oxygen         SM 4500-0 G         X           EDB/DCBP/TCP         EPA 504.1         X           EDB/DBCP and Disinfection Byproducts         EPA 551.1         X           EDTA and NTA         * WC-2454         X           Endothall         EPA 548.1, *(LCMS-24445)         X           Fluoride         SM 4500F C         X         X           Glyphosate         EPA 547         X           Glyphosate and AMPA         * LCMS-3618         X				
Dissolved Organic Carbon         SM 5310 C         x           Dissolved Oxygen         SM 4500-O G         x           EDB/DCBP/TCP         EPA 504.1         x           EDB/DBCP and Disinfection Byproducts         EPA 551.1         x           EDTA and NTA         * WC-2454         x           Endothall         EPA 548.1, +(LCMS-24445)         x           Fluoride         SM 4500F C         x         x           Glyphosate         EPA 547         x           Glyphosate and AMPA         * LCMS-3618         x			X	
Dissolved Organic Carbon         SM 5310 C         x           Dissolved Oxygen         SM 4500-O G         x           EDB/DCBP/TCP         EPA 504.1         x           EDB/DBCP and Disinfection Byproducts         EPA 551.1         x           EDTA and NTA         * WC-2454         x           Endothall         EPA 548.1, +(LCMS-24445)         x           Fluoride         SM 4500F C         x         x           Glyphosate         EPA 547         x           Glyphosate and AMPA         * LCMS-3618         x	DBP and HAA	SM 6251 B	Х	
Dissolved Oxygen         SM 4500-O G         x           EDB/DCBP/TCP         EPA 504.1         x           EDB/DBCP and Disinfection Byproducts         EPA 551.1         x           EDTA and NTA         † WC-2454         x           Endothall         EPA 548.1, †(LCMS-2445)         x           Fluoride         SM 4500F C         x         x           Glyphosate         EPA 547         x           Glyphosate and AMPA         † LCMS-3618         x				
EDB/DCBP/TCP         EPA 504.1         x           EDB/DBCP and Disinfection Byproducts         EPA 551.1         x           EDTA and NTA         + WC-2454         x           Endothall         EPA 548.1, +(LCMS-2445)         x           Fluoride         SM 4500F C         x         x           Glyphosate         EPA 547         x           Glyphosate and AMPA         + LCMS-3618         x			^	V
EDB/DBCP and Disinfection Byproducts         EPA 551.1         X           EDTA and NTA         † WC-2454         x           Endothall         EPA 548.1, †(LCMS-2445)         x           Fluoride         SM 4500F C         x         x           Glyphosate         EPA 547         x           Glyphosate and AMPA         † LCMS-3618         x				X
Disinfection Byproducts         EPA 581.1         X           EDTA and NTA         † WC-2454         x           Endothall         EPA 548.1, †(LCMS-2445)         x           Fluoride         SM 4500F C         x         x           Glyphosate         EPA 547         x           Glyphosate and AMPA         † LCMS-3618         x		EPA 504.1	X	
Disinfection Byproducts         EPA 581.1         X           EDTA and NTA         † WC-2454         x           Endothall         EPA 548.1, †(LCMS-2445)         x           Fluoride         SM 4500F C         x         x           Glyphosate         EPA 547         x           Glyphosate and AMPA         † LCMS-3618         x	EDB/DBCP and	EDA FE4 4		7
EDTA and NTA         † WC-2454         x           Endothall         EPA 548.1, †(LCMS-24445)         x           Fluoride         SM 4500F C         x         x           Glyphosate         EPA 547         x           Glyphosate and AMPA         * LCMS-3618         x		EPA 551.1	X	
Endothall         EPA 548.1,		+ \\\\C 2454	V	
+(LCMS-2445)	LDTA dIU IVTA	<del></del>	Α	
Tluoride	Endothall		¥	
Glyphosate EPA 547 x Glyphosate and AMPA +LCMS-3618 x	Endotriali	+(LCMS-2445)	^	
Glyphosate EPA 547 x Glyphosate and AMPA +LCMS-3618 x	Fluoride	SM 4500F C	X	Х
Glyphosate and AMPA + LCMS-3618 x				
Gross Alpha and Gross Beta EPA 900.0 x x				
	Gross Alpha and Gross Beta	EPA 900.0	X	X

Test(s)	Method(s)	Potable Water *	Waste Water
Gross Alpha coprecipitation	SM 7110 C	X	х
Hardness	SM 2340 B	Х	Х
Hexavalent Chromium	EPA 218.6,	X	X
Hexavalent Chromium	EPA 218.7,	X	
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		Х
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	х	
Ortho Phosphate	SM 4500P E	Х	
Oxyhalides Disinfection			
Byproducts	EPA 317.0	X	
Perchlorate	EPA 331.0	Х	
Perchlorate (Low and High Levels)	EPA 314.0	х	
Perfluorinated Alkyl Acids	EPA 533, EPA 537, EPA 537.1	х	
PPCP and EDC	*LCMS-2443	X	
рН	EPA 150.1 SM 4500-H+ B	x	x
Phenolics – Low Level	*WC 2493 (EPA 420.2 and EPA 420.4 MOD)	х	х
Phenylurea Pesticides/Herbicides	+LCMS-2448	х	
Radium-226, Radium-228	GA Tech (Rad- 2374)	х	
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	X	Х
Total Phenols	EPA 420.1		Х
Total Phenols	EPA 420.4	Х	Х
Triazine Pesticides and their Degradates	+LCMS-3617	Х	
Turbidity	EPA 180.1	X	Х
Uranium by ICP/MS	EPA 200.8	Х	
UV 254 Organic Constituents	SM 5910B	Х	
VOCs VOCs	EPA 524.2 + (GCMS 2412) by EPA 524.2 modified	X X	

<sup>(\*)</sup> includes: Bottled Water, Drinking Water and Water as Component of Food & Beverage.

<sup>(+)</sup> 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 #: 984838 Project: RED-HILL

Sample Group: Red-Hill Expanded List

(Albuquerque+)

Project Manager: Debbie L Frank Phone: (626) 386-1149

PO #: C20525101 exp 05312023

The following samples were received from you on **February 02**, **2022** at **1947**. 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

202202021463 MOANALUA WELLS (331-223-TP202) 01/31/2022 1004

SDWIS PWSID: HI0000331
SDWIS FACILITY ID: TP202
SDWIS SAMPLE POINT ID: 223

(SUB)Gas Fraction Hydrocarbons TPH 8015 Diesel and Motor Oil TPH 8015 Jet Fuel 5

TPH 8015 Jef Fuel 8

20220201464 TRAVEL BLANK::MOANALUA WELLS (331-223-TP202) 01/31/2022 1004

(SUB)Gas Fraction Hydrocarbons

#### **Test Description**

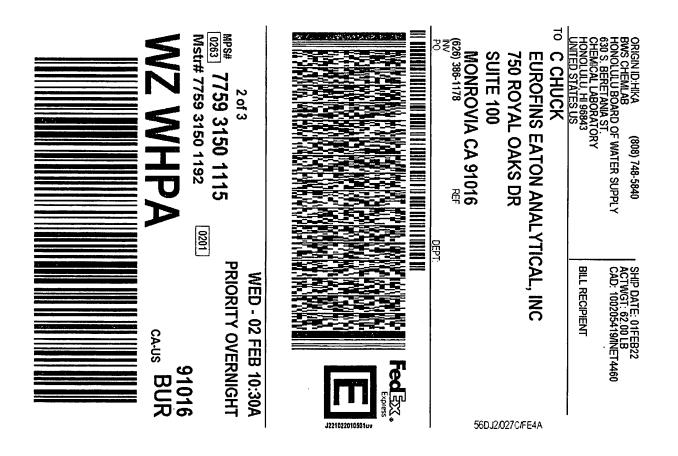
Reported: 02/18/2022 Page 1 of 1

SAMPLES REC'D DAY OF COLLECTION? SAMPLES LOGGED IN BY: SAMPLES CHECKED AGAINST COC BY: No Ice METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx // UPS / DHL / Area Fast / Top Line / Other: Wet Ice CHAIN OF CUSTODY RECORD Thawed °C (Compliance: 4 ± 2 °C) °C (Compliance: 4 ± 2 °C) Partially Prozen 5.5 EUROFINS EATON ANALYTICAL USE ONLY: CONDITION OF BLUE ICE: Frozen Colton / No. California / Arizona SAMPLE TEMP RECEIVED AT: LOGIN COMMENTS: Monrovia Eaton Analytical 750 Royal Oaks Drive, Suite 100 Monrovia, CA 91016-3629 800 566 LABS (800 566 5227) Phone: 626 386 1100 Fax: 626 386 1101 . eurofins

(check for yes)

SEE ATT  SEE ATT  Ist ANA  day 2 day 1 day  list ANA  day 2 day 1 day  Ist ANA  list ANA  SEAW = S  whed Water  Lew Bailey  Lew Bailey  A.M	TO BE COMPLETED BY SAMPLER:		ck for yes)	(check for yes)
DE: Requires state forms    Coc ID:   Sample GROUP:   Type of samples Circle one)   Requires State Construction INVOID   Sample GROUP:   SEE ATTACHED BOTTLE ORDER FOR AMALYSES   X   Iist ANALYSES REQUIRED (enter number of bottles sent for each property of the construction of the constr	ANY/AGENCY NAME:	PROJECT CODE:	COMPLIANCE SAMPLES NON-COMPLI	- 1
SAMPLE GROUP:   SAMPLE GROUP:   SEE ATTACHED BOTTLE ORDER FOR ANALYSES   X	BWS HONOLULU	RED HILL	e forms ROUTINE	I INVOLVED:  ON (eg. SDWA, Phase V, NPDES, FDA)
Sample in   StD   1 wk   X   3 day   2 day   1 day		SAMPLE GROUP:	SEE ATTACHED BOTTLE ORDER FOR ANALYSES list ANALYSES REQUIRED (enter number of bottles sent	(check for yes), <u>OR</u>
SAMPLE ID   CLIENT LAB ID	l equested: rush by adv notice only	1 wk X 3 day 2 day		
PES: RSW = Raw Surface Water   FW = Chlor(am)inated Finished Water   SEAW = Sea Water   Supply   Sickarture   Companyintitie   Companyintiti	ЭМІТ	* XIRTAM ATAO OJEIF		SAMPLER
PES: RSW = Raw Surface Water  RGW = Chlor(am)inated Finished Water  RGW = Raw Ground Water  FW = Other Finished Water  PRINT NAME  Lew Bailey  Honolulu Board of Water Supply  Honolulu Board of Water Supply  Lew Bailey  Honolulu Board of Water Supply  Lew Bailey  Honolulu Board of Water Supply  2.22	1004	CFW	X	
PES: RSW = Raw Surface Water CFW = Chlor(am)inated Finished Water RGW = Waste Water FW = Other Finished Water PRINT NAME COMPANYITITE  Lew Bailey Honolulu Board of Water Supply Olff  Lew Bailey Honolulu Board Olff  Lew Bai				
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PES: RSW = Raw Surface Water CFW = Chlor(am)inated Finished Water SEAW = Sea Water RW = Bottled Water SO = Soil WW = Waste Water Storm Water SL = Sludge    CompanyInter   CFW = Chlor(am)inated Finished Water   SEAW = Sea Water Storm Water SL = Sludge				
PES: RSW = Raw Surface Water CFW = Chlor(am)inated Finished Water RGW = Sea Water RGW = Bottled Water SO = Soil WW = Waste Water SIGNATURE COMPANYITILE COMPANYIT				
PES: RSW = Raw Surface Water CFW = Chlor(am)inated Finished Water SEAW = Sea Water RW = Bottled Water SU = Soil RGW = Raw Ground Water FW = Other Finished Water PRINT NAME COMPANYTITLE COMPANYTITLE Lew Bailey Honolulu Board of Water Supply Olf Amount Recut RW = Chlor(am)inated Finished Water Supply Signature RGW = Raw Storm Water Storm Water Supply Signature CFW = Chlor(am)inated Finished Water Supply Signature RGW = Storm Water Supply Signature RGW = Storm Water Supply Signature RGW = Sig	¥			
PES: RSW = Raw Surface Water CFW = Chlor(am)inated Finished Water SEAW = Sea Water SW = Bottled Water SO = Soil RGW = Raw Ground Water Finished Water Finished Water WW = Waste Water SW = Storm Water SL = Sludge COMPANYITILE COMPANYITILE Lew Bailey Honolulu Board of Water Supply OID COMPANYITILE COMPANYI				
Lew Bailey Honolulu Board of Water Supply January 31, 2022  Lew Bailey Honolulu Board of Water Supply January 31, 2022  Lew Bailey Honolulu Board of Water Supply O1 (2) 2022  Why Specific Chury Rocch WB	TRIX TYPES: RSW = Raw Surface Water RGW = Raw Ground Water	CFW = Chlor(am)inated Finished Water FW = Other Finished Water	<b>BW</b> = Bottled Water <b>SW</b> = Storm Water	
Honolulu Board of Water Supply  Lew Bailey Honolulu Board of Water Supply  Chun The Bailey Honolulu Board of Water Supply  Chun The Man		PRINT NAME	COMPANY/TITLE	
Mux Bectin Chun Brock	ED BY:	Lew Bailey	Honolulu Board of Water Supply	January 31, 2022
UMA Greate Chan Breeze	NUSHED BY:	Lew Bailey	Honolulu Board of Water Supply	01/4-2022 1200
VUSHED BY:	FED BY: ( MAL Specify	7		1.2.2.2
	UISHED BY:			
	ED BY:			

	analysis or not.	. V/A			6	in (C)		Results:		llonaf clients:  Bottle # None/<6 >6mm		TIME	1952	TIME	
XECO KD	, will determine whether to proceed with ${\sf SYRS}/{\sf RS}$	zenThawed		d didition	ollection, within a noun		ction)	Expiration Date		(see below):   Iltional bottles   s using 40 ml vials, Internal		DATE	2.2-22	DATE	
JOE CUSTODY	let the ASMs know. ASMs OLLECTION?	C) (Final = $5 \cdot 4$ °C)  Frozen $\frac{1}{X}$ Partially Frozen	/ Top Line / Other:	sollection)	ice the same day as sample of ection)	(5.	'c) (Final = 'C)   4 = (Observation = 'C) (Final = 'C) (F	pH strip type: 0 - 14 or	ate:Results	Samples with Headspace (see below): Radon Internal COFC for additional bottli As, 556, 536, Anatoxin, LCMS methods using 40 ml vi	www.	COMPANYITILE	Eurofins Eaton Analytical	COMPANY/TITLE	Eurofins Eaton Analytical
INTERNAL CHAIN OF CUSIODY RECOKD	SAMPLE TEMP RECEIVED: Note: If samples are out of temperature range, SAMPLES REC'D DAY OF G	(Observation= $S$ : $O$ °C) (Corr.Factor $C$ $O$ $C$ $C$ (Final = $S$ . Its $C$ No Ice CONDITION OF ICE: Frozen $C$	PedEx) / UPS / DHL / Area Fast	) (if received after 24 hrs of sample c	0°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within o mouts) والمراقبة المتعالمة والمالية والمتعالمة والمتعالمة والمتعالمة والمتعالمة والمتعالمة والمتعالمة والمتعالمة والم	1 = (Observation* 'C) (Corr.Fector 'C)	3 = (Observation 'C) (Contribution 'C) between 0-4 °C, not frozen (if receive	Lot Number:pH stri	fe. Lot No.: Expiration Date:	Samples with Headspace:  Documentation (use additional VOC and Radon Internal COFC for additional bottles)  Methods 515.4, HAA(6251,522), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:  Samp ID Bottle # None Act	D Bottle # mm >omm lest	headspace (i.e. potential sampling errors):	InverBroch	PRINT NAME	
eurorins	EEA Folder Number: 154576	IR Gun ID = \(\lambdo{U}\rightarrow\) (Observation=\(\frac{2}{2}\)	ENT:	Compliance Acceptance Criteria: 1) Chemistry: >0, ≤ 6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)	2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the	If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the numberature.	4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)	5) pH Check, Manufacturer:	6) Chlorine check. Manufacturer: Sansafe. Lot No.:	VOA and Radon No Headspace: Headspace Exempt from headspace concerns:	Samp ID Bottle # 10000 >6mm Test Samp I	Note Sample IDs which have dissimilar headspace	RECEIVED BATY	SIGNATURE	SAMPLES CHECKED AGAINST COC BY:



#### After printing this label:

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

2. Fold the printed page along the horizontal line.

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.

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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, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service 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 authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is \$1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.



**Laboratory Comments** 

Tel: (626) 386-1100 Fax: (866) 988-3757

1 800 566 LABS (1 800 566 5227)

Report: 984838 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 Fuel are submitted by Emax Laboratories



**Laboratory Hits** 

Report: 984838 Project: RED-HILL

Group: Red-Hill Expanded List

(Albuquerque+)

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

**Honolulu Board of Water Supply** 

Erwin Kawata 630 South Beretania Street Public Service Bldg." Room 308 Honolulu, HI 96843 Samples Received on: 02/02/2022 1947

Analyzed	Analyte	Sample ID	Result	HI Limit	Units	MRL





Tel: (626) 386-1100 Fax: (866) 988-3757

1 800 566 LABS (1 800 566 5227)

Report: 984838 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 Samples Received on: 02/02/2022 1947

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
MOANAL	UA WELLS	(331-223-T	P202) (20220202	1463)		Sam	pled on 01/31	/2022 100	4
	Faci	lity ID: TP202							
	Sample Po								
	P\	WSID: HI00003	331						
		SW 8015B	- (SUB)Gas Frac	tion Hydroca	ırbons				
02/04/22	02/04/22 18:08			(SW 8015B)	(SUB)Gas Fraction Hydrocarbons	ND	mg/L	0.02	1
		SW 8015B	- TPH 8015 Dies	el and Motor	Oil				
02/07/22	02/08/22 17:41			(SW 8015B)	TPH Diesel	ND	mg/L	0.027	1
02/07/22	02/08/22 17:41			(SW 8015B)	TPH Motor Oil	ND	mg/L	0.053	1
		EPA 8015 -	Jet Fuel 5 C8-C	18					
02/07/22	02/08/22 17:41			(EPA 8015)	Jet Fuel 5	ND	mg/L	0.053	1
		EPA 8015 -	Jet Fuel 8 C8-C	18					
(	02/08/22 17:41			(EPA 8015)	Jet Fuel 8	ND	mg/L	0.053	1
TRAVEL	BLANK::M	DANALUA V	WELLS (331-223	-TP202) (2022	<u>202021464)</u>	Sam	pled on 01/31	/2022 100	4
		SW 8015B	- (SUB)Gas Frac	tion Hydroca	irbons				
02/04/22	02/04/22 18:45		•	(SW 8015B)	(SUB)Gas Fraction Hydrocarbons	ND	mg/L	0.02	1



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

Date: 02-15-2022

EMAX Batch No.: 22B029

Attn: Jackie Contreras

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

Subject: Laboratory Report

Project: 984838

Enclosed is the Laboratory report for samples received on 02/03/22. The data reported relate only to samples listed below:

Sample ID	Control # Col Date	Matrix	Analysis
202202021463	B029-01 01/31/22	WATER	TPH GASOLINE TPH
202202021464	B029-02 01/31/22	WATER	TPH GASOLINE

The results are summarized on the following pages.

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

Sincerely yours,

Caspar J. Pang Laboratory Director

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

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

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

**EMAX Laboratories, Inc.** 

Ship To:

3051 Fujita St.

Torrance, CA 90505

Submittal Form

228029

Date: 2/3/2022

\*REPORTING REQUIRMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbersl Report & Invoice must have the Folder# 984838 Joo # 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.

Eurofins Eaton Analytical, LLC 750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016 Accounts Payable 2425 New Holland Pike, Lancaster, PA 17605 Reports: Jackie Contreras Sub-Contracting Administrator EMAIL TO: Eaton-MonroviaSubContract@eurofinset.com Invoices to: Eurofins Eaton Analytical, LLC Phone (626) 386-1165 Fax (626) 386-1122

Provide in each Report the Specified StateCertification # and Exp Date for requested tests + matrix.

Samples from: HAWAII

2-3 day rush

Fax: 310-618-0818

Phone: 310-618-8889

Report Due:

Folder #:

984838

02/07/2022

SI **PWSID** Static ID Clip Code Sample Date & Time Matrix 01/31/22 1004 DW Sample Point ID: Facility ID: Client Sample ID for reference onl MOANALUA WELLS (331-223-TP202) Sample Event: 202202021463 Sample type:

Method	Prep Method	Analysis Requested
SW 8015B	EPA 5030C	(SUB)Gas Fraction Hydrocarbons
SW 8015B	EPA 3550B	TPH 8015 Diesel and Motor Oil
EPA 8015	EPA 8015	Jet Fuel 5 C8-C18
EPA 8015		Jet Fuel 8 C8-C18

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Sample Date & Time Matrix 01/31/22 1004 DW	≅∣	
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Client Sample ID for reference onl TRAVEL BLANK::MOANALUA WELLS (3)		
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(SUB)Gas Fraction Hydrocarbons **Analysis Requested** Prep Method **EPA 5030C** SW 8015B Method

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS 2 10 :30 Date 2 Sample Control

An Acknowledgement of Receipt is requested to attn. Jackie Contreras

() (2) (3) 0 @ Temp. 1.9,0.8, Time Date Date

ample Control

Relinquished by:

Received by:

Page 12 of 45 pages

Relinquished by:

Received by:

Page 3 of 5

REPORT ID: 22B02950 Royal Oaks Drive, Suite 100, Monrovia, CA 91016 Tel (626) 386-1100 Fax (866) 988-3757 www.EurofinsUS.com/Eaton

Page 2 of 35

Reference: Addendum SM02.11.1

Form: SM02F1

Type of De	elivery		Airbill / Tracki	ing Number	ECN 22 B029			
□ Fedex □ UPS □ GSO □ Others					Recipient Alan Famus			
☐ EMAX Courier Client Deli	very				Date 02/63/22	Time /2.'30		
COC INSPECTION			·					
Client Name	Client PM/FC		☐ Sampler Name	Sampling Date/Time	Sample ID	<b>V</b> Matrix		
DAddress	B.Tel#/Fax#		☐ Courier Signature	Analysis Required	☐ Preservative (if any)	STAT		
Safety Issues (if any)	☐ High concentrations exp	ected	☐ From Superfund Site	☐ Rad screening required	(			
Note:	,		•					
		·						
DA CWA CINIC DIODECTIC	>NI							
PACKAGING INSPECTIO	DN Cooler		□ Box	□ Other				
Condition	Custody Seal		□ Intact	□ Damaged				
Packaging	Bubble Pack		□ Styrofoam	□ Popcom	☐ Sufficient			
1		N Co	oler 2 <u>0 8</u> °C	Topler 3 0,8 °C	☐ Cooler 4°C			
Temperatures (Cool, ≤6 °C but not frozen)		□ Cooler 7 °C		Cooler 3_0,8 °C	☐ Cooler 9 °C			
Thermometer:	A - S/N 210191066	Cooler 7 °C  1/1/4 B S/N 210271396		C-S/N 21027 13 99	D - S/N	Li Cooler 10 C		
Comments:   Temperature is ou	nt of range PM was informe	7 <i>74</i> \	EDIATELY.	0	<i>D</i> - 1///	•		
Note:	N of range. The was morne		DDM LDDX.	******				
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in bu noming time tedutremen	i for water samples is 15 in	u15. W	ater samples for pri analy	sis are received beyond 15 i	natutes from sampling time.	, ,		
NOTES/OBSERVATIONS:						<u> </u>		
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LEGEND:					☐ Continue to next p	age.		
Code Description- Sample Mana	agement	Code	Description-Sample Mana	gement	Code Description-Sample Man	nagement		
D1 Analysis is not indicated in		D13	Out of Holding Time		R1 Proceed as indicated in  C	OC 🗆 Label		
D2 Analysis mismatch COC vs	label	D14	Bubble is >6mm		R2 Refer to attached instruction			
D3 Sample ID mismatch COC	vs label	D15	No trip blank in cooler		R3 Cancel the analysis			
D4 Sample ID is not indicated	in	D16	Preservation not indicated in	n	R4 Use vial with smallest bubbl	e first		
D5 Container -[improper] [leak	ting] [broken]	D17	Preservation mismatch COC	vs label	R5 Log-in with latest sampling	date and time+1 min		
D6 Date/Time is not indicated in	in	D18	Insufficient chemical preser	vative	R6 Adjust pH as necessary			
D7 Date/Time mismatch COC	vs label	D19	Insufficient Sample		R7 Filter and preserved as neces	sary		
D8 Sample listed in COC is not			No filtration info for dissolv		R8 Informed	wen,		
D9 Sample received is not liste	d in COC		No sample for moisture determ		R9			
D10 No initial/date on correction	4		) Jet Fuel 8 Ana	lysis not indicated	R10			
D11 Container count mismatch (	COC vs received	D23		in label	R11			
D12 Container size mismatch Co	OC vs received	D24		<u> </u>	R12			
	maria //			1/2 1		NL		
Sample Labeling		سرم	SRF		PN			
Date	62/03/22 8/2/0	-	Date	2/0/00	Dat	e 2/b/2-C		
	1 1/ 1			v I				

#### **REPORTING CONVENTIONS**

#### **DATA QUALIFIERS:**

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

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

#### **ACRONYMS AND ABBREVIATIONS:**

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

#### **DATES**

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

## LABORATORY REPORT FOR

## **EUROFINS EATON ANALYTICAL**

984838

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

SDG#: 22B029

Client : EUROFINS EATON ANALYTICAL

Project: 984838

SDG : 22B029

#### METHOD 5030B/8015B

TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

A total of two(2) water samples were received on 02/03/22 to be analyzed for Total Petroleum Hydrocarbons by Purge and Trap in accordance with Method 5030B/8015B and project specific requirements.

#### Holding Time

Samples were analyzed within the prescribed holding time.

#### Calibration

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

#### Method Blank

Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. VG39B02B - 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. VG39B02L/VG39B02C 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 B027-01M/B027-01S. Refer to Matrix QC summary form for details.

#### Surrogate

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

#### Sample Analysis

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

LAB CHRONICLE TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

Client	Client : EUROFINS EATON ANALYTICAL	NALYTICAL							SDG NO.	: 228029
Project									Instrumeni	Instrument ID : GC U39
									; ; ; ; ; ; ; ;	
					WATER	ER				
Client		Laboratory Dilution	Dilution	%	Analysis	Extraction	Sample	Calibration Prep.	n Prep.	
Sample ID		Sample ID	Factor	Moist	DateTime	DateTime	Data FN	Data FN	Betch N	Notes
		1 1 1 1	\$ \$ 1 1	1 1 1	: : : : : : : : : : : : : : : : : : : :	: : : : : : : : : : : : : : : : : : :		1 1 1 1		
MBLK1W		VG39B02B	_	NA	02/04/2212:04	02/04/2212:04	EB04005A	EB04003A	22VG39B02 N	22VG39B02 Method Blank
LCS1W		VG39B02L	_	N	02/04/2212:40	02/04/2212:40	EB04006A	EB04003A	22VG39B02 L	22VG39B02 Lab Control Sample (LCS)
LCD 1W		VG39B02C	_	NA	02/04/2213:17	02/04/2213:17	EB04007A	EB04003A	22VG39B02 L	2VG39B02 LCS Duplicate
20220202146	63	B029-01	-	NA	02/04/2218:08	02/04/2218:08	EB04015A	EB04014A	22VG39B02 I	22VG39B02 Field Sample
202202021464	79	B029-02	-	NA	02/04/2218:45	02/04/2218:45	EB04016A	EB04014A	22VG39B02 I	22VG39BO2 Field Sample

# **SAMPLE RESULTS**

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

: EUROFINS EATON ANALYTICAL Date Collected: 01/31/22 10:04 Client

Project : 984838 Date Received: 02/03/22 Batch No. : 22B029 Sample ID : 202202021463 Date Extracted: 02/04/22 18:08 Date Analyzed: 02/04/22 18:08

Lab Samp ID: B029-01 Dilution Factor: 1

Lab File ID: EB04015A Matrix: WATER % Moisture: NA Ext Btch ID: 22VG39B02 Instrument ID: 39 Calib. Ref.: EB04014A

\_\_\_\_\_\_

RESULTS MDL **PARAMETERS** (mg/L) (mg/L) (mg/L) \_\_\_\_\_ GASOLINE 0.020 0.010

SURROGATE PARAMETERS RESULT SPK AMT %RECOVERY ........

0.0338 0.0400 Bromofluorobenzene 

Notes:

H-C Range Parameter C6-C10 Gasoline

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Final Volume: 5ml Sample Amount : 5ml

Analyzed by : SCerva Prepared by : SCerva

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

\_\_\_\_\_

Client : EUROFINS EATON ANALYTICAL Date Collected: 01/31/22 10:04

 Project
 : 984838
 Date Received: 02/03/22

 Batch No.
 : 22B029
 Date Extracted: 02/04/22 18:45

 Sample ID
 : 202202021464
 Date Analyzed: 02/04/22 18:45

Sample ID : 202202021464 Date Analyzed: 02/04/22 18:45
Lab Samp ID: B029-02 Dilution Factor: 1
Lab File ID: EB04016A Matrix: WATER

Ext Btch ID: 22VG39B02 % Moisture: NA Calib. Ref.: EB04014A Instrument ID: 39

\_\_\_\_\_\_

 RESULTS
 RL
 MDL

 PARAMETERS
 (mg/L)
 (mg/L)

 GASOLINE
 ND
 0.020
 0.010

SURROGATE PARAMETERS RESULT SPK\_AMT %RECOVERY QC LIMIT
Bromofluorobenzene 0.0319 0.0400 80 60-140

Notes:

Parameter H-C Range Gasoline C6-C10

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount : 5ml Final Volume : 5ml Applying the Score

Prepared by : SCerva Analyzed by : SCerva

# **QC SUMMARIES**

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

Client : EUROFINS EATON ANALYTICAL Date Collected: 02/04/22 12:04

Project : 984838 Batch No. : 22B029 Sample ID : MBLK1W Date Received: 02/04/22 Date Extracted: 02/04/22 12:04 Date Analyzed: 02/04/22 12:04

Lab Samp ID: VG39B02B Dilution Factor: 1 Lab File ID: EB04005A Matrix: WATER Ext Btch ID: 22VG39B02 % Moisture: NA Instrument ID: 39 Calib. Ref.: EB04003A

\_\_\_\_\_\_

RESULTS RL MDL RESULTS RL MDL (mg/L) (mg/L) PARAMETERS \_\_\_\_\_ ND 0.020 0.010 GASOLINE QC LIMIT RESULT SPK\_AMT %RECOVERY SURROGATE PARAMETERS

0.0400 0.0340 60-140 Bromofluorobenzene

Notes:

H-C Range Parameter Gasoline C6-C10

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount : 5ml Final Volume: 5ml

Analyzed by : SCerva : SCerva Prepared by

# EMAX QUALITY CONTROL DATA LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL

PROJECT : 984838 BATCH NO. : 22B029 METHOD : 5030B/8015B

MATRIX: WATER % MOISTURE:NA DILUTION FACTOR: 1 1 1

 SAMPLE ID
 : MBLK1W
 LCS1W
 LCD1W

 LAB SAMPLE ID
 : VG39B02B
 VG39B02L
 VG39B02C

 LAB FILE ID
 : EB04005A
 EB04006A
 EB04007A

LAB FILE ID : EB04005A EB04006A EB04007A

DATE PREPARED : 02/04/22 12:04 02/04/22 12:40 02/04/22 13:17

DATE ANALYZED : 02/04/22 12:04 02/04/22 12:40 02/04/22 13:17

PREP BATCH : 22VG39B02 22VG39B02 22VG39B02

CALIBRATION REF: EB04003A EB04003A EB04003A

ACCESSION:

QCLimit MaxRPD MBResult SpikeAmt LCSResult LCSRec SpikeAmt LCDResult LCDRec RPD PARAMETERS (%) (%) (%) (%) (mg/L) (mg/L) (mg/L) (mg/L) (mg/L) (%) 30 ND 0.500 0.495 99 0.500 0.529 106 60-130 Gasoline

SpikeAmt LCSResult LCSRec SpikeAmt LCDResult LCDRec QCLimit SURROGATE PARAMETER (mg/L) (mg/L) (%) (mg/L) (mg/L) (%) (%) ...... 0.0400 0.0447 112 0.0400 0.0468 117 70-130 Bromofluorobenzene

\_\_\_\_\_\_\_

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

# EMAX QUALITY CONTROL DATA MS/MSD ANALYSIS

CLIENT

: EUROFINS EATON ANALYTICAL

PROJECT BATCH NO. : 984843 : 22B027

METHOD

: 5030B/8015B

\_\_\_\_\_\_

MATRIX	:	WATER
DILUTION	FACTOR:	1

WATER

1 1 202202021472MS 202202021472MSD

% MOISTURE:NA

SAMPLE ID : 202202021472

LAB SAMPLE ID : B027-01

LAB FILE ID : EB04008A

DATE PREPARED : 02/04/22 13:53

B027-01M B027-01S EB04009A EB04010A 02/04/22 14:30 02/04/22 15:06 02/04/22 14:30 02/04/22 15:06

PREP BATCH : 22VG39B02 CALIBRATION REF: EB04003A

DATE ANALYZED : 02/04/22 13:53

22VG39B02 22VG39B02 EB04003A EB04003A

#### ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
Gasoline	ND	0.500	0.458	92	0.500	0.497	99	8	50-130	30
=======================================	=======================================		=======		========	**********	======	======	:========	=======
SURROGATE PARAMETER		SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)		QCLimit (%)	
Bromofluorobenzene		0.0400	0.0399	100	0.0400	0.0456	114		60-140	

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

#### LABORATORY REPORT FOR

## **EUROFINS EATON ANALYTICAL**

984838

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

SDG#: 22B029

Client : EUROFINS EATON ANALYTICAL

Project: 984838

SDG : 22B029

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

One(1) water sample was received on 02/03/22 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. DSB009WB - 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 DSB009WL. Refer to LCS summary form for details.

#### Matrix QC Sample

No matrix QC sample was provided on this SDG. One(1) set of MS/MSD was analyzed. Diesel was within MS QC limits in 22B027-01M/22B027-01S. 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: 984838

SDG : 22B029

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

One(1) water sample was received on 02/03/22 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. DSB009WB - 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 J5B009WL. Refer to LCS summary form for details.

#### Matrix QC Sample

No matrix QC sample was provided on this SDG. one (1) set of MS/MSD was analyzed. JP5 was within MS QC limits in 22B027-01M/22B027-01S. 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: 984838

SDG : 22B029

# METHOD 3520C/8015B PETROLEUM HYDROCARBONS BY EXTRACTION

One(1) water sample was received on 02/03/22 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. DSB009WB - 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 J8B009WL. Refer to LCS summary form for details.

#### Matrix QC Sample

No matrix QC sample was provided on this SDG. One (1) set of MS/MSD was analyzed. JP8 was within MS QC limits in 22B027-01M/22B027-01S. 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.

**REPORT ID: 22B029** 

LAB CHRONICLE TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

				H					
Client	: EUROFINS EATON ANALYTICAL	ANALYTICAL							SDG NO. : 22B029
	: 984838								Instrument ID : D5
					WAT	WATER			
Client		Laboratory Dilution	Dilution	%	Analysis	Extraction	Sample	Calibration Prep.	n Prep.
Sample ID		Sample ID	Factor	Moist	DateTime	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	
MBLK1W		DSB009WB	-	AN	02/08/2213:42	02/07/2210:15	LB08011A	LB08004A	22DSB009W Method Blank
LCS1W		DSB009WL	_	AN	02/08/2214:00	02/07/2210:15	LB08012A	LB08004A	22DSB009W Lab Control Sample (LCS)
20220201463	63	B029-01	-	NA	02/08/2217:41	02/07/2210:15	LB08024A	LB08004A	22DSB009W Field Sample

LAB CHRONICLE
PETROLEUM HYDROCARBONS BY EXTRACTION

	THE SECTION OF SECTION OF SECTION AND CASE OF SECTION O		11 11 11 11 11					SDG NO	· 228029
Client :	: EUKUFINS EAJUN ANALTIICAL : 984838							nt 1D	: D5
			## 	#=====================================	#		ii 		
client	Laborato	aboratory Dilution	%	Analysis	Extraction	Sample	Calibration Prep.	n Prep.	
Sample ID	Sample ID	ID Factor	Moist	DateTime	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		!	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		
MBLK1W	DSB009WB		NA	02/08/2213:42	02/07/2210:15	LB08011A	LB08005A	22DSB009W Method Blank	Blank
LCS1W	J58009WL	_	NA	02/08/2214:19	02/07/2210:15	LB08013A	LB08005A	22DSB009W Lab Co	22DSB009W Lab Control Sample (LCS)
202202021463		_	Ν	02/08/2217:41	02/07/2210:15	LB08024A	LB08005A	22DSB009W Field Sample	Sample

# LAB CHRONICLE PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	NALYTICAL							SDG NO.	: 228029
Project	: 984838								Instrume	Instrument ID : D5
			:: :: :: :: :: :: :: :: :: :: :: :: ::							
					MA	WATER				
Client		Laboratory Dilution	Dilution	%	Analysis	Extraction	Sample	Calibration Prep.	n Prep.	
Sample ID		Sample ID	Factor	Moist	DateTime	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 1 1 1 1 1 1 1 1	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	1 1 1 1 1	
MBLK1W		DSB009WB	_	AN	02/08/2213:42	02/07/2210:15	LB08011A	LB08006A	22DSB009W	22DSB009W Method Blank
LCS1W		18B009WL	-	NA	02/08/2214:37	02/07/2210:15	LB08014A	LB08006A	22DSB009W	22DSB009W Lab Control Sample (LCS)
2022021463	63	B029-01	_	ΑN	02/08/2217:41	02/07/2210:15	LB08024A	LB08006A	22DSB009W	22DSB009W Field Sample

# **SAMPLE RESULTS**

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

\_\_\_\_\_\_

: EUROFINS EATON ANALYTICAL Date Collected: 01/31/22 10:04

Project : 984838
Batch No. : 22B029
Sample ID : 202202021463 Date Received: 02/03/22 Date Extracted: 02/07/22 10:15 Date Analyzed: 02/08/22 17:41

Lab Samp ID: 22B029-01 Dilution Factor: 1 Lab File ID: LB08024A Matrix: WATER

Ext Btch ID: 22DSB009W % Moisture: NA Calib. Ref.: LB08004A Instrument ID: D5

\_\_\_\_\_\_

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)	
Diesel	ND	0.027	0.013	
Motor Oil	ND	0.053	0.027	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.390	0.530	74	60-130
Hexacosane	0.121	0.132	91	60-130

H-C Range Parameter 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 : 940ml Final Volume : 5ml

: JMuert Analyzed by : SDeeso Prepared by

# METHOD 3520C/8015B PETROLEUM HYDROCARBONS BY EXTRACTION

\_\_\_\_\_\_

Lab Samp ID: 22B029-01
Lab File ID: LB08024A
Ext Btch ID: 22DSB009W
Calib. Ref.: LB08005A

Dilution Factor: 1
Matrix: WATER
% Moisture: NA
Instrument ID: D5

\_\_\_\_\_\_\_

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)	
JP5	ND	0.053	0.027	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene Hexacosane	0.390 0.121	0.530 0.132	74 91	60-130 60-130

Notes:

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

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount : 940ml Final Volume : 5ml
Prepared by : JMuert Analyzed by : SDeeso

# METHOD 3520C/8015B PETROLEUM HYDROCARBONS BY EXTRACTION

\_\_\_\_\_

Client : EUROFINS EATON ANALYTICAL Date Collected: 01/31/22 10:04
Project : 984838 Date Received: 02/03/22
Batch No. : 22B029 Date Extracted: 02/07/22 10:15
Sample ID : 202202021463 Date Analyzed: 02/08/22 17:41

 Lab Samp ID: 228029-01
 Dilution Factor: 1

 Lab File ID: LB08024A
 Matrix: WATER

 Ext Btch ID: 22DSB009W
 % Moisture: NA

 Calib. Ref.: LB08006A
 Instrument ID: D5

\_\_\_\_\_\_

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)	
JP8	ND	0.053	0.027	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.390	0.530	74 01	60-130

Notes:

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

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount : 940ml Final Volume : 5ml
Prepared by : JMuert Analyzed by : SDeeso

# **QC SUMMARIES**

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

Client : EUROFINS EATON ANALYTICAL Date Collected: 02/07/22 10:15

 Project
 : 984838
 Date Received: 02/07/22

 Batch No.
 : 22B029
 Date Extracted: 02/07/22 10:15

 Sample ID
 : MBLK1W
 Date Analyzed: 02/08/22 13:42

 Lab Samp ID: DSB009WB
 Dilution Factor: 1

 Lab File ID: LB08011A
 Matrix: WATER

 Ext Btch ID: 22DSB009W
 % Moisture: NA

 Calib. Ref.: LB08004A
 Instrument ID: D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)	
Diesel	ND	0.025	0.012	
Motor Oil	ND	0.050	0.025	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.371	0.500	74	60-130
Hexacosane	0.119	0.125	96	60-130

\_\_\_\_\_\_

Notes:

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

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount : 1000ml

Final Volume : 5ml

Prepared by : JMuert

Analyzed by : SDeeso

# EMAX QUALITY CONTROL DATA LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL

PROJECT : 984838 BATCH NO. : 22B029 METHOD : 3520C/8015B

MATRIX : WATER % MOISTURE:NA

DILUTION FACTOR: 1 1

SAMPLE ID : MBLK1W LCS1W

LAB SAMPLE ID : DSB009WB DSB009WL

LAB FILE ID : LB08011A LB08012A

DATE PREPARED : 02/07/22 10:15 02/07/22

DATE PREPARED : 02/07/22 10:15 02/07/22 10:15
DATE ANALYZED : 02/08/22 13:42 02/08/22 14:00
PREP BATCH : 22DSB009W 22DSB009W
CALIBRATION REF: LB08004A LB08004A

#### ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Diesel	ND	2.50	2.42	97	50-130
		.========		=======	========
SURROGATE PARAMETERS		SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Bromobenzene Hexacosane		0.500 0.125	0.405 0.117	81 94	60-130 60-130

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MB: Method Blank sample LCS: Lab Control Sample

# EMAX QUALITY CONTROL DATA MS/MSD ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL

PROJECT : 984843 BATCH NO. : 22B027 METHOD : 3520C/8015B

MATRIX: WATER % MOISTURE:NA

DILUTION FACTOR: 1 1 1

SAMPLE ID : 202202021472 202202021472MS 202202021472MSD LAB SAMPLE ID : 22B027-01 22B027-01S 22B027-01M LAB FILE ID : LB08015A LB08017A LB08018A DATE PREPARED : 02/07/22 10:15 02/07/22 10:15 02/07/22 10:15 02/08/22 15:32 02/08/22 15:51 DATE ANALYZED : 02/08/22 14:56 PREP BATCH : 22DSB009W 22DSB009W 22DSB009W LB08004A LB08004A CALIBRATION REF: LB08004A

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
Diesel	ND	2.70	2.65	98	2.65	2.65	100	0	50-130	30
=======================================	=======================================			======	========				.=======	
SURROGATE PARAMETERS		SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)		QCLimit (%)	
Bromobenzene Hexacosane		0.540 0.135	0.474 0.128	88 95	0.530 0.132	0.414 0.126	78 95		60-130 60-130	

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

# METHOD 3520C/8015B PETROLEUM HYDROCARBONS BY EXTRACTION

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Client : EUROFINS EATON ANALYTICAL Date Collected: 02/07/22 10:15
Project : 984838 Date Received: 02/07/22
Batch No. : 22B029 Date Extracted: 02/07/22 10:15
Sample ID : MBLK1W Date Analyzed: 02/08/22 13:42

Lab Samp ID: DSB009WB Dilution Factor: 1
Lab File ID: LB08011A Matrix: WATER
Ext Btch ID: 22DSB009W % Moisture: NA
Calib. Ref.: LB08005A Instrument ID: D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)	
JP5	ND	0.050	0.025	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene Hexacosane	0.371 0.119	0.500 0.125	74 96	60-130 60-130

Notes

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

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

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

# EMAX QUALITY CONTROL DATA LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL

PROJECT : 984838
BATCH NO. : 228029
METHOD : 3520C/8015B

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MATRIX : WATER % MOISTURE:NA

DILUTION FACTOR: 1 1

SAMPLE ID : MBLK1W LCS1W

LAB SAMPLE ID : DSB009WB J5B009WL

LAB FILE ID : LB08011A LB08013A

DATE PREPARED : 02/07/22 10:15 02/07/22 10:15

DATE PREPARED : 02/07/22 10:15 02/07/22 10:15
DATE ANALYZED : 02/08/22 13:42 02/08/22 14:19
PREP BATCH : 22DSB009W 22DSB009W
CALIBRATION REF: LB08005A LB08005A

#### ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
JP5	ND	2.50	2.40	96	30-160
		==========	=======================================		
SURROGATE PARAMETERS		SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Bromobenzene Hexacosane		0.500 0.125	0.456 0.113	91 90	60-130 60-130

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MB: Method Blank sample LCS: Lab Control Sample

#### EMAX QUALITY CONTROL DATA MS/MSD ANALYSIS

: EUROFINS EATON ANALYTICAL CLIENT

PROJECT : 984843 : 22B027 BATCH NO. : 3520C/8015B METHOD

% MOISTURE:NA MATRIX : WATER

DILUTION FACTOR: 1

SAMPLE ID : 202202021472 202202021472MS 202202021472MSD LAB SAMPLE ID : 22B027-01
LAB FILE ID : LB08015A
DATE PREPARED : 02/07/22 10:15 22B027~01s 22B027-01M LB08020A LB08019A 02/07/22 10:15 02/07/22 10:15 02/08/22 16:27 DATE ANALYZED : 02/08/22 14:56 02/08/22 16:09 22DSB009W 22DSB009W

PREP BATCH : 22DSB009W LB08005A CALIBRATION REF: LB08005A LB08005A

#### ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
JP5	ND	2.60	2.30	88	2.70	2.60	96	12	30-160	30
		========	.=======	======	========	========			========	======
SURROGATE PARAMETERS		SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)		QCLimit ·(%)	
Bromobenzene Hexacosane		0.520 0.130	0.458 0.115	88 88	0.540 0.135	0.491 0.122	91 90		60-130 60-130	

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

# METHOD 3520C/8015B PETROLEUM HYDROCARBONS BY EXTRACTION

 Client
 : EUROFINS EATON ANALYTICAL
 Date Collected: 02/07/22 10:15

 Project
 : 984838
 Date Received: 02/07/22

 Batch No.
 : 228029
 Date Extracted: 02/07/22 10:15

 Sample ID
 : MBLK1W
 Date Analyzed: 02/08/22 13:42

Lab Samp ID: DSB009WB
Lab File ID: LB08011A
Ext Btch ID: 22DSB009W
Calib. Ref.: LB08006A
Dilution Factor: 1
Matrix: WATER
% Moisture: NA
Instrument ID: D5

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PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)	
JP8	ND	0.050	0.025	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene Hexacosane	0.371 0.119	0.500 0.125	74 96	60~130 60~130

Notes:

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

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

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

# EMAX QUALITY CONTROL DATA LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL

PROJECT : 984838
BATCH NO. : 22B029
METHOD : 3520C/8015B

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MATRIX : WATER % MOISTURE:NA

DILUTION FACTOR: 1 1

SAMPLE ID : MBLK1W LCS1W

LAB SAMPLE ID : DSB009WB J8B009WL

LAB FILE ID : LB08011A LB08014A

DATE PREPARED : 02/07/22 10:15 02/07/22 10:15

DATE ANALYZED : 02/08/22 13:42 02/08/22 14:37

PREP BATCH : 22DSB009W 22DSB009W

CALIBRATION REF: LB08006A LB08006A

#### ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
JP8	ND	2.50	2.04	82	30-160
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SURROGATE PARAMETERS		SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Bromobenzene Hexacosane		0.500 0.125	0.478 0.110	96 88	60-130 60-130

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MB: Method Blank sample LCS: Lab Control Sample

# EMAX QUALITY CONTROL DATA MS/MSD ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL

PROJECT : 984843 BATCH NO. : 22B027 METHOD : 3520C/8015B

MATRIX: WATER % MOISTURE:NA
DILUTION FACTOR: 1 1 1

SAMPLE ID : 202202021472 LAB SAMPLE ID : 22B027-01 202202021472MSD 202202021472MS 22B027-01M 22B027-01S LAB FILE ID : LB08015A
DATE PREPARED : 02/07/22 10:15 LB08021A LB08022A 02/07/22 10:15 02/07/22 10:15 DATE ANALYZED : 02/08/22 14:56 02/08/22 17:04 02/08/22 16:46 PREP BATCH : 22DSB009W 22DSB009W 22DSB009W LB08006A LB08006A CALIBRATION REF: LB08006A

#### ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
JP8	ND	2.38	2.03	85	2.38	2.07	87	2	30-160	30
=======================================	=========	=========	=========		=======				=========	
SURROGATE PARAMETERS		SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)		QCLimit (%)	
Bromobenzene Hexacosane		0.475 0.119	0.489 0.108	103 91	0.475 0.119	0.484 0.107	102 90		60-130 60-130	

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