

ACCREDITED

CERTIFICATE #'s 5890.01 & 5890.02

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
02/18/2022

Lew Frank
EUROFINS ATON
ANALYTICAL, LLC

DEB: Debbie L Frank

Project Manager



Report: 984843 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.
- $^{\star}$  This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.



## STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number	
Alabama	41060	Montana	Cert 0035	
Arizona	AZ0778	Nebraska	NE-OS-21-13	
Arkansas	CA00006	Nevada	CA00006	
California	2813	New Hampshire *	2959	
Colorado	CA00006	New Jersey *	CA 008	
Connecticut	PH-0107	New Mexico	CA00006	
Delaware	CA 006	New York *	11320	
Florida *	E871024	North Carolina	06701	
Georgia	947	North Dakota	R-009	
Guam	21-008R	Ohio - 537.1	87786	
Hawaii	CA00006	Oregon *	4034	
Idaho	CA00006	Pennsylvania *	68-00565	
Illinois	200033	Puerto Rico	CA00006	
Indiana			LAO00326	
Iowa – Asbestos	413	South Carolina	87016	
Kansas *	<b>Kansas</b> * E-10268		CA11320	
Kentucky	Kentucky 90107		TN02839	
Louisiana *	Louisiana * LA008		T104704230-20-18	
Maine	Maine CA00006		CA00006	
Maryland	Maryland 224		VT0114	
Marianas Islands	Marianas Islands MP0004		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)  Enterococci  Enterolert  SM 9221 B.1  (Enumeration)  Fecal Coliform (P/A and Enumeration)  Legionella  Enterococci  Heterotrophic Bacteria  Endexx Pseudomonas aeruginosa  Total Coliform (P/A and Enumeration)  Total Coliform (P/A and Enumeration)  SM 9221 C.  (MTF/EC), SM 9221  EMTF/EC)  SM 9230 B  X  X  X  Method(s)  Water * Water  X  X  M 9221 B.1  X  X  X  X  X  X  X  X  X  X  X  X  X	
Enterococci	er
Escherichia coli (Enumeration) Fecal Coliform (P/A and Enumeration) Fecal Streptococci and Enterococci Heterotrophic Bacteria Pseudomonas aeruginosa Total Coliform (P/A and Enumeration) Total Coliform, Total Coliform with Chlorine Present Total Coliform/Ec, SM 9221 x x x x x x x x x x x x x x x x x x	
Escherichia coli (Enumeration) Fecal Coliform (P/A and Enumeration) Fecal Streptococci and Enterococci Heterotrophic Bacteria Pseudomonas aeruginosa Total Coliform (P/A and Enumeration) Total Coliform, Total Coliform with Chlorine Present Total Coliform/Ec, SM 9221 x x x x x x x x x x x x x x x x x x	
(Enumeration)  Fecal Coliform (P/A and Enumeration)  Fecal Streptococci and Enterococci  Heterotrophic Bacteria  Legionella  Pseudomonas aeruginosa  Total Coliform (P/A and Enumeration)  Total Coliform, Total  Coliform with Chlorine Present  Total Coliform/E, coli (P/A and Enumeration, Idexx Colilert, Idexx Colilert 18, Colisure)  Total Microcystins and Nodularins  SM 9221 F  SM 9221 C  SM 9221 B  X  X  X  X  X  X  X  X  X  X  X  X  X	
Fecal Coliform (P/A and Enumeration)  Fecal Streptococci and Enterococci  Heterotrophic Bacteria  Legionella  Pseudomonas aeruginosa  Total Coliform (P/A and Enumeration)  Total Coliform, Total  Coliform with Chlorine  Present  Total Coliform/Ec, coli (P/A and Enumeration, Idexx Colilert, Idexx Colilert, Idexx Colilert 18, Colisure)  Total Microcystins and Nodularins  SM 9221 C  MF/EC, SM 9221 C  X  X  X  X  X  X  X  X  X  X  X  X  X	
Enumeration)  Fecal Streptococci and Enterococci  Heterotrophic Bacteria  Legionella  Legiolert®  Pseudomonas aeruginosa  Total Coliform (P/A and Enumeration)  Total Coliform, Total  Coliform with Chlorine Present  Total Coliform/E. coli (P/A and Enumeration, Idexx Colliert, Idexx Colliert, Idexx Colliert, Idexx Colliert 18, Colisure)  Total Microcystins and Nodularins  KM 9221 B  KM 9221 B  KM 9223  KM 9223  KM 9223  KM 9223  KM 9223  KM 9224  KM 9223  KM 9223  KM 9223  KM 9223  KM 9223  KM 9223  KM 9224  KM 9223  KM 9224  KM 9225  KM 9226  KM 9227  KM 9227  KM 9228	
Fecal Streptococci and Enterococci SM 9230 B X X X  Heterotrophic Bacteria SM 9215 B X  Legionella Legiolert® X  Pseudomonas aeruginosa Pseudalert X  Total Coliform (P/A and Enumeration) 9221B, SM 9221 C X X  Total Coliform, Total Coliform with Chlorine Present SM 9221 B X X  Total Coliform/E. coli (P/A and Enumeration, Idexx Colilert, Idexx Colilert 18, Colisure) Total Microcystins and Nodularins EPA 546 X	
Enterococci  Heterotrophic Bacteria  Legionella  Legiolert®  X  Pseudomonas aeruginosa  Pseudalert  Total Coliform (P/A and Enumeration)  Total Coliform, Total  Coliform with Chlorine Present  Total Coliform/E. coli (P/A and Enumeration, Idexx Colilert, Idexx Colilert 18, Colisure)  Total Microcystins and Nodularins  SM 9215 B  X  X  X  X  X  X  X  X  X  X  X  X  X	
Heterococci  Heterotrophic Bacteria  Legionella  Legiolert®  X  Idexx Pseudalert  Total Coliform (P/A and Enumeration)  Present  Total Coliform, Total  Coliform with Chlorine Present  Total Coliform/E. coli (P/A and Enumeration, Idexx Colilert, Idexx Colilert, Idexx Colilert, Idex Colilert 18, Colisure)  Total Microcystins and Nodularins  EM 9215 B  X  X  X  X  X  X  X  X  X  X  X  X  X	
Heterotrophic Bacteria SM 9215 B x  Legionella Legiolert® x  Pseudomonas aeruginosa Pseudalert x  Total Coliform (P/A and Enumeration) 9221B, SM 9221 C	
Legionella Legiolert® X Pseudomonas aeruginosa Pseudalert X  Total Coliform (P/A and Enumeration) 9221B, SM 9221 C X X  Total Coliform, Total Coliform with Chlorine Present Sender Send	
Pseudomonas aeruginosa  Total Coliform (P/A and Enumeration)  Total Coliform, Total Coliform with Chlorine Present  Total Coliform/E. coli (P/A and Enumeration, Idexx Colilert, Idexx Colilert 18, Colisure)  Total Microcystins and Nodularins  Idexx Pseudalert  X  X  X  X  X  X  X  X  X  X  X  X  X	
Pseudomonas aeruginosa Pseudalert  Total Coliform (P/A and Enumeration)  Total Coliform, Total Coliform with Chlorine Present  Total Coliform/E. coli (P/A and Enumeration, Idexx Colilert, Idexx Colilert 18, Colisure)  Total Microcystins and Nodularins  Pseudalert  X  X  X  X  X  X  X  X  X  X  X  X  X	
Total Coliform (P/A and Enumeration)  Total Coliform, Total Coliform with Chlorine Present  Total Coliform/E. coli (P/A and Enumeration, Idexx Colilert, Idexx Colilert 18, Colisure)  Total Microcystins and Nodularins  Psedudalert  SM 9221A, SM 9221 C  X  X  X  X  X  X  X  X  X  X  X  X  X	
Enumeration) 92218, SM 9221 C X X  Total Coliform, Total Coliform with Chlorine Present  Total Coliform/E. coli (P/A and Enumeration, Idexx Colilert, Idexx Collert 18, Colisure)  Total Microcystins and Nodularins  EPA 546  X	
Total Coliform, Total Coliform with Chlorine Present  Total Coliform/E. coli (P/A and Enumeration, Idexx Colilert, Idexx Colilert 18, Colisure)  Total Microcystins and Nodularins  EN 9221 B  X  X  X  EN 9223  X  EPA 546  X	
Total Coliform, Total Coliform with Chlorine Present Total Coliform/E. coli (P/A and Enumeration, Idexx Colilert, Idexx Colilert 18, Colisure) Total Microcystins and Nodularins  EPA 546 X	
Coliform with Chlorine Present  Total Coliform/E. coli (P/A and Enumeration, Idexx Colilert, Idexx Colilert 18, Colisure)  Total Microcystins and Nodularins  SM 9223  x  EPA 546  X	
Present SM 9221 B  Total Coliform/E. coli (P/A and Enumeration, Idexx Colilert, Idexx Colilert 18, Colisure)  Total Microcystins and Nodularins  EPA 546 X	
Total Coliform/E. coli (P/A and Enumeration, Idexx Colilert, Idexx Colilert 18, Colisure)  Total Microcystins and Nodularins  EPA 546  X	
Enumeration, Idexx Colilert, Idexx Colliert 18, Colisure)  Total Microcystins and Nodularins  EPA 546  X	
Idexx Colilert 18, Colisure)  Total Microcystins and Nodularins  EPA 546  X	
Total Microcystins and Nodularins EPA 546 X	
Nodularins EPA 546 X	
reast and word Sivi 9610 X	
1,2,3-Trichloropropane CA SRL 524M-	
(TCP) at 5 PPT TCP	
1,4-Dioxane EPA 522 x	
2.3.7.8-TCDD Modified EPA X	
2,3,7,8-TCDD 1613 B X	
Acrylamide †LCMS 2440) x	
Alkalinity SM 2320B x x	
EPA 350.1,	
Ammonia SM 4500-NH3 x	
Н	
Asbestos EPA 100.2 x x	
Bicarbonate Alkalinity as SM 2330 B	
HCO3 ^ ^	
BOD/CBOD SM 5210 B x	
Bromate <sup>+</sup> LCMS- 2447 x	
Carbonate as CO3 SM 2330 B x x	
Carbonyls EPA 556 x x	
EPA 410.4,	
Chemical Oxygen Demand SM 5220D x	
Chlorinated Acids EPA 515.4 x	
Palin Test	
Chloring Diovide Chlordio X Plus,	
Chlorine Dioxide SM 4500-CLO2 x	
D D	
Chlorine, Free, Combined,	
5 N 4500-G G	
Total Residual, x	
Chloramines	
Color SM2120B x	
EPA 120.1,	
Conductivity SM 2510B x x	
Corrosivity (Langelier	
Index) Carbonate as CO3	
Hydroxide as OH SM 2330 B x	
Calculated	
Cyanide (Amenable) SM 4500-CN x x	
· · · · · · · · · · · · · · · · · · ·	
Cyanide (Free) SM 4500CN F x x	
Cyanide (Total) EPA 335.4 x x	
Cyanogen Chloride + 335 Mod	
(Screen) (WC-24467) ^	
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 EPA 551.1 x	
Disinfection Byproducts	
EDTA and NTA + WC-2454 x	
EDA 5/18 1	
Endothall EPA 548.1,	
Endothall	
Endothall	
Endothall	
Endothall	

Test(s)	Method(s)	Potable Water *	Waste Water
Gross Alpha coprecipitation	SM 7110 C	х	Х
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	X	Х
Norganic Anions and DBPs	EPA 300.1	X	
Kjeldahl Nitrogen	EPA 351.2		Х
Metals	EPA 200.7, EPA200.8	х	х
Nitrosamines	EEA-Agilent 521.1 (GCMS-24250)	х	
Nitrate/Nitrite Nitrogen	EPA 353.2	Х	Х
Odor	SM2150B	Х	
Organohalide Pesticides and PCB	EPA 505	х	
Ortho Phosphate	SM 4500P E	Х	
Oxyhalides Disinfection	EPA 317.0		
Byproducts		Х	
Perchlorate	EPA 331.0	X	
Perchlorate (Low and High Levels)	EPA 314.0	x	
Perfluorinated Alkyl Acids	EPA 533, EPA 537, EPA 537.1	X	
PPCP and EDC	*LCMS-2443	Х	
pН	EPA 150.1 SM 4500-H+ B	х	х
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	X	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	X	Х
Surfactants	SM 5540C	Х	Х
Taste and Odor	SM 6040 E	X	
Total Organic Carbon	SM 5310 C	X	X
Total Phenols	EPA 420.1		X
Total Phenols Triazine Pesticides and	EPA 420.4	Х	Х
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	X	
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 #: 984843 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
202202021472	HALAWA SHAFT-331-241-TP40	1		01/31/2022 0925
	(SUB)Gas Fraction Hydrocarbons TPH 8015 Jef Fuel 8	TPH 8015 Diesel and Motor Oil	TPH 8015 Jet Fuel 5	
202202021473	TRAVEL BLANK::HALAWA SHA	FT-331-241-TP401		01/31/2022 0925
	(SUB)Gas Fraction Hydrocarbons			

#### **Test Description**

Reported: 02/18/2022



Eaton Analytical

# CHAIN OF CUSTODY RECORD

EUROFINS EATON ANALYTICAL USE ONLY:

Temp Blank: 0.0 °C (check for yes) O = Other - Please Identify list ANALYSES REQUIRED (enter number of bottles sent for each test for each sample) 1 OF 1 PECIAL CONFIRMATION (eg. SDWA, Phase V, NPDES, FDA,.. (check for yes) COMMENTS 200 SAMPLER x (check for yes), OR PAGE\_ NON-COMPLIANCE SAMPLES 1-1-2027 SAMPLES REC'D DAY OF COLLECTION? SAMPLES LOGGED IN BY: REGULATION INVOLVED: SAMPLES CHECKED AGAINST COC BY No Ice SO = Soil SL = Sludge SEE ATTACHED BOTTLE ORDER FOR ANALYSES METHOD OF SHIPMENT: Pick-Up / Walk-In //FedEx/ / UPS / DHL / Area Fast / Top Line / Other: Wet Ice Honolulu Board of Water Supply Honolulu Board of Water Supply **BW** = Bottled Water **SW** = Storm Water (check for yes) ROUTINE - Requires state forms COMPLIANCE SAMPLES Thawed °C (Compliance: 4±2°C) °C (Compliance: 4 ± 2 °C) Type of samples (circle one): SEAW = Sea Water WW = Waste Water Partially Frozen × Weekly Red Hill Derek Dotson Derek Dotson TAG GJEI CFW = Chlor(am)inated Finished Water 1 day CONDITION OF BLUE ICE: Frozen ATAG GJEIF Colton / No. California / Arizona 2 day SAMPLE TEMP RECEIVED AT: CFW FW = Other Finished Water · XIATAM Red Hill 1 wk \_X\_ 3 day LOGIN COMMENTS: SAMPLE GROUP: CLIENT LAB ID PROJECT CODE: HI0000331-241 Monrovia STD RSW = Raw Surface Water RGW = Raw Ground Water **Temperature Blank** HALAWA SHAFT COC ID: SAMPLE ID SIGNATURE TAT requested: rush by adv notice only 750 Royal Oaks Drive, Suite 100 **BWS HONOLULU** 800 566 LABS (800 566 5227) Monrovia, CA 91016-3629 TO BE COMPLETED BY SAMPLER: COMPANY/AGENCY NAME: Phone: 626 386 1100 Fax: 626 386 1101 MATRIX TYPES: Honolulu EEA CLIENT CODE: Ses RELINQUISHED BY: RELINQUISHED BY **TIME** SAMPLE RECEIVED BY: RECEIVED BY: SAMPLED BY: 3.2 **DATE** SAMPLE

Page 5 of 45 pages

ODY RECORD	SAMPLE TEMP RECEIVED: Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not. SAMPLES REC'D DAY OF COLLECTION? Yes! No	(0,	Partially Frozen Thawed N/A			sample collection, within 8 hours)		Z = (Observation* 'C) (Corr.Factor 'C) (Final = 'C)  4 = (Observation* 'C) (Corr.Factor 'C) (Final = 'C)	mple collection)	Expiration Date Results:	Results	Samples with Headspace (see below):  don Internal COFC for additional bottles)  specific 536, Anatoxin, LCMS methods using 40 mi vials, International clients:  specific 336, Anatoxin, LCMS methods using 40 mi vials, International clients:  specific 336, Anatoxin, LCMS methods using 40 mi vials, International clients:  specific 336, Anatoxin, LCMS methods using 40 mi vials, International clients:  specific 336, Anatoxin, LCMS methods using 40 mi vials, International clients:  specific 336, Anatoxin, LCMS methods using 40 mi vials, International clients:  specific 336, Anatoxin, LCMS methods using 40 mi vials, International clients:  specific 336, Anatoxin, LCMS methods using 40 mi vials, International clients:			DATE	nalytical 2 · 2 · 2 · 2 / 1947	LE DATE TIME	nalytical
INTERNAL CHAIN OF CUSTODY RECORD	SAMPLE TEMP RECEIVED:  Note: If samples are out of temperature range, let the ASMs know, ASMs will determine v  SAMPLES REC'D DAY OF COLLECTION? Yes / No	(Observation= $\frac{5.2}{5.0}$ °C) (Corr.Factor $\frac{012}{5.0}$ °C) (Final = $\frac{5.0}{5.0}$	lce CONDITION OF ICE: Frozen K Pa	Walk-In / FedEx/ UPS / DHL / Area Fast / Top Line / Other:	pliance Acceptance Criteria: 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)	< 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)	1 = (Observation= 'C) (Corr.Factor 'C) (Final = 'C) 2 = (C	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)	Lot Number:pH strip type: 0 - 14 or	Expiration Date:	A and Radon  No Samples with Headspace:  Adspace:  Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)  Example from headspace concerns: Methods \$15.4, HAA(6251,552), 505, SPME @CH, 532LCMS, \$565, \$56, \$56, \$78, Matoxin, LCMS methods using 40 mi vials, International clients:  None/c6 Comman Parks None/c6	D Bottle # mm Youth 1881		PRINT NAME COMPANYTITLE	When You Eurolins Eaton Analytical	PRINT NAME COMPANY/ITILE	Eurofins Eaton Analytical
्री eurofins	EEA Folder Number:    CANANA   CANANA	IR Gun ID = $2/01$ (Observation	TYPE OF ICE: Real Synthetic No Ice_	METHOD OF SHIPMENT: Pick-Up / Walk-In /	Compliance Acceptance Criteria: 1) Chemistry: >0, ≤ 6°C, not frozen (NELA	2) Microbiology, Distribution: < 10°C, not	3) Microbiology, Surface Water: < 10°C (ii	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 quadrants	4 Dioxin (1613 or 2,3,7,8 TCDD): must be	5) pH Check. Manufacturer:	6) Chlorine check. Manufacturer: Sansafe. Lot No.:	VOA and Radon No Sample:  Headspace:  Headspace Docum  Exempt from headspace concerns: Methods 5	Samp ID Bottle # mm >6mm Test Samp	Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors):	SIGNATURE	RECEIVED BY:	SIGNATURE	SAMPLES CHECKED AGAINST COC BY:



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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.



1 800 566 LABS (1 800 566 5227)

**Laboratory Comments** 

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

**Group:** Red-Hill Expanded List (Albuquerque+)

**Report:** 984843

Project: RED-HILL

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



**Laboratory Hits** 

Report: 984843 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





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

1 800 566 LABS (1 800 566 5227)

Report: 984843 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
HALAW	A SHAFT-33	1-241-TP40	1 (202202021472	2)		Sam	pled on 01/31	/2022 092	5
		SW 8015B	- (SUB)Gas Frac	ction Hydroca	rbons				
02/04/22	02/04/22 13:53			(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 14:56			(SW 8015B)	TPH Diesel	ND	mg/L	0.026	1
02/07/22	02/08/22 14:56			(SW 8015B)	TPH Motor Oil	ND	mg/L	0.052	1
		EPA 8015 -	Jet Fuel 5 C8-C	:18					
02/07/22	02/08/22 14:56			(EPA 8015)	Jet Fuel 5	ND	mg/L	0.052	1
		EPA 8015 -	Jet Fuel 8 C8-C	:18					
	02/08/22 14:56			(EPA 8015)	Jet Fuel 8	ND	mg/L	0.052	1
TRAVEL	_BLANK::HA	ALAWA SHA	AFT-331-241-TP4	<u>401 (20220202</u>	21473)	Sam	pled on 01/31	/2022 092	5
		SW 8015B	- (SUB)Gas Frac	ction Hydroca	rbons				
02/04/22	02/04/22 15:43			(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.: 22B027

Attn: Jackie Contreras

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

Subject: Laboratory Report

Project: 984843

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
202202021472	B027-01 01/31/22	WATER	TPH GASOLINE
202202021473 202202021472MS	B027-02 01/31/22 B027-01M 01/31/22	WATER WATER	TPH GASOLINE TPH GASOLINE TPH
202202021472MSD	B027-01\$ 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.

Sincered

⊈aspar 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** 

72 B 027

Date: 2/3/2022

\*REPORTING REQUIRMENTS: *Do Not Combine Reports with any other samples submitted under different Folder Numbers!* Report & Invoice must have the Folder# 984843 Job # 1000014

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

EMAIL TO: Eaton-MonroviaSubContract@eurofinset.com Eurofins Eaton Analytical, LLC 750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016 Reports: Jackie Contreras Sub-Contracting Administrator Phone (626) 386-1165 Fax (626) 386-1122

Accounts Payable 2425 New Holland Pike, Lancaster, PA 17605

Invoices to: Eurofins Eaton Analytical, LLC

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

Samples from: HAWAII

Fax: 310-618-0818

Phone: 310-618-8889

Report Due: 02/07/2022

Folder #:

984843

2-3 day rush

Sample ID 202202021472         Client Sample ID for reference on I HALAWA SHAFT-331-241-TP401         Sample Event: Sample type:         Facility ID: Sample bype:         Sample Point ID: Sample bype:         Sample Date & Time Matrix         Clip Code         PWSID         JLS           Sample bype:         Client Sample ID for reference on I 202202021473         JET Put Sample Event: Sample bype:         Sample Date & Time Matrix O1/31/22 0925 DW         Clip Code         PWSID         JLS           Sample bype:         Sample Event: Sample bype:         Facility ID: Sample bype:         Sample Event: Facility ID: Sample bype:         Sample Point ID: Sample bype:         Static ID: Sample bype:				The state of the s		
Frep Method         Analysis Requested         Sample Event:         Facility ID:         Sample Point ID:         Static ID:           Prep Method         Analysis Requested         Analysis Requested         Analysis Requested         Analysis Requested           EPA 5030C         (SUB)Gas Fraction Hydrocarbons         TPH 8015 Diesel and Motor Oil         Apple Follows In the Brank Coll         Apple Follows In the Brank Coll           EPA 5030C         (SUB)Gas Fraction Hydrocarbons         Jet Fuel 5 C8-C18         Apple Follows In the Brank Coll         Apple Follows In the Brank Coll           1473         TRAVEL BLANK: HALAWA SHAFT-331-241-TP401         Sample Foint ID:         Static ID:           Sample Event:         Facility ID:         Sample Point ID:         Static ID:	Sample ID 202202021472	Client Sample II HALAWA SHAFT-3	D for reference on! 131-241-TP401	Sample Date & Time Matrix 01/31/22 0925 DW	Clip Code	
Prep MethodAnalysis RequestedEPA 5030C(SUB)Gas Fraction HydrocarbonsEPA 350BTPH 8015 Diesel and Motor OilEPA 8015Jet Fuel 5 C8-C18Jet Fuel 8 C8-C18Jet Fuel 8 C8-C18Jet Fuel B C8-C18Sample ID for reference onl TRAVIEL BLANK::HALAWA SHAFT-331-241-TP4011473Sample Event:Facility ID:Sample Event:Facility ID:	Sample type:	S		Sample Point ID:	Static	:ID:
EPA 5030C         (SUB)Gas Fraction Hydrocarbons         EPA 5030C         (SUB)Gas Fraction Hydrocarbons           EPA 3550B         TPH 8015 Diesel and Motor Oil         Seample Diesel and Motor Oil         Sample Diesel and Motor Oil           EPA 8015         Jet Fuel 8 C8-C18         Sample Diesel and Motor Oil         Sample Diesel and Motor Oil           1473         TRAVIEL BLANK::HALAWA SHAFT-331-241-TP401         Sample Point ID:         Static ID:           Sample Event:         Facility ID:         Sample Point ID:         Static ID:	Method	Prep Method	Analysis Requested			
EPA 8015         TPH 8015 Diesel and Motor Oil         Sample ID for reference on I         Sample Date & Time Matrix         Clip Code OI/31/22 0925 DW         PWSID OI/31/22 0925 DW           1473         Sample Event:         Facility ID:         Sample Point ID:         Static ID:	SW 8015B	EPA 5030C	(SUB)Gas Fraction Hydrocarbons			
EPA 8015         Jet Fuel 5 C8-C18         Sample Date & Time Matrix         Clip Code         PWSID           1473         TRAVEL BLANK::HALAWA SHAFT-331-241-TP401         Facility ID:         Sample Point ID:         Static ID:	SW 8015B	EPA 3550B				
Client Sample ID for reference on I TRAVEL BLANK::HALAWA SHAFT-331-241-TP401 Facility ID: Sample Point ID: Static ID: Sta	EPA 8015	EPA 8015	Jet Fuel 5 C8-C18			
Client Sample ID for reference onl TRAVEL BLANK::HALAWA SHAFT-331-241-TP401 Sample Doint ID: Sample Event: Facility ID: Sample Point ID: Static ID:	EPA 8015		Jet Fuel 8 C8-C18			
Sample Event: Facility ID: Sample Point ID:	Sample ID 202202021473	Client Sample II TRAVEL BLANK:H	D for reference on! - ALAWA SHAFT-331-241-TP401	Sample Date & Time Matrix 01/31/22 0925 DW	Clip Code	
	Sample type:	Š		Sample Point ID:	Static	: ID:

(SUB)Gas Fraction Hydrocarbons Analysis Requested **Prep Method EPA 5030C** Method SW 8015B

NOTIFICATION RECUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS Date **2(3/2/** Time **12:30** Date 3751 Sample Control

An Acknowledgement of Receipt is requested to attn. Jackie Contreras

0.00 3.06 temp: @1.9

Page 5 of 5

Time

Date

Date

Sample Control

Relinguished by:

Received by:

Page 12 of 45 pages

Received by:

Relinquished by:

REPORT ID: 22B02750 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	livery	Ĭ	Airbill / Tracki	ng Number	ECN 22B027				
	□ Others				Recipient Man Ramus				
□ EMAX Courier □ Client Deliv	very				Date 02/03/22	Time 12:30			
COC INSPECTION  Client Name	D Client DM/EC		Complex Name	Sampling Date/Time	Sample ID	Matrix			
1 / /	Client PM/FC		☐ Sampler Name	Analysis Required	/ "	TAT			
Address	7 Tel # / Fax #		☐ Courier Signature	,	☐ Preservative (if any)	IAI M			
Safety Issues (if any)	☐ High concentrations exp	ected	☐ From Superfund Site	☐ Rad screening required		•			
Note:									
PACKAGING INSPECTIO	N,								
Container	Cooler Cooler		□ Box	☐ Other					
Condition	Custody Seal		☐ Intact	☐ Damaged					
Packaging	🗷 Bubble Pack		☐ Styrofoam	□ Popcom -	☐ Sufficient				
Temperatures	Cooler 1 1.9 °C	Z Coc	oler 2 <b>0</b> . <b>Ø</b> °C	Cooler 3 <u>0.8</u> °C	Cooler 4°C	☐ Cooler 5 °C			
(Cool, ≤6 °C but not frozen)	Cooler 6 °C	/ Coc	oler 7 °C	☐ Cooler 8°C	Cooler 9°C	□ Cooler 10 °C			
Thermometer:	☐ Cooler 1 1.9 °C ☐ Cooler 6 °C A - S/N 210191066 ~ 12	John 1	B-S/N 210271396	C-S/N 21027 1399	D - S/N				
Comments:   Temperature is ou	t of range. PM was informe	d IMM	EDIATELY.		Port of the Port o				
Note:									
DISCOPPANCIES									
DISCREPANCIES	LabSampleContainerID	Code	CliantComula Ta	bel ID / Information	Corrective	Action			
LabSampleID	8, 11		label reads "Th		Offictive	Action			
	· · · · · · · · · · · · · · · · · · ·								
1	4-7,9,10,12	DZ	Jet Fuel Bis	not inalcated					
		-10	on label						
2	13,14	010							
				·					
			1						
				- Adv		an allha			
DpH holding time requirement	for water samples is 15 mi	ins. W	ater samples for pH analys	1/ -1 C/ -1	inutes from sampling time.	- MS 4916			
					······································				
NOTES/OBSERVATIONS:									
LEGEND:					☐ Continue to next pag	ge.			
Code Description-Sample Mana	ngement	Code	Description-Sample Mana	gement	Code Description-Sample Mana	gement			
D1 Analysis is not indicated in	,	D13	Out of Holding Time		R1 Proceed as indicated in  CO	C □ 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 i	n	D16	Preservation not indicated in	n	R4 Use vial with smallest bubble first				
D5 Container -[improper] [leak		D17 Preservation mismatch COC vs label			R4 Use vial with smallest bubble first R5 Log-in with latest sampling date and time+1 min				
D6 Date/Time is not indicated it		D18	Insufficient chemical preser	vative	R6 Adjust pH as necessary	<i>t</i> h			
D7 Date/Time mismatch COC			Insufficient Sample		R7 Filter and preserved as negessa	ary 1/ < 1/			
D8 Sample listed in COC is not			No filtration info for dissolv	ed analysis	R8 Met Med	I Vers .			
D9 Sample received is not listed			No sample for moisture determ		R9	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			
(D10) No initial/date on correction		D22			R10				
DII Container count mismatch (		D23			RII	-			
D12 Container size mismatch CC	•	D24			R12				
REVIEWS:	JOCELYNP //	/ -	7	1/2		(A)			
Sample Labeling	Solls-Ramos Legge	w	SRF	Ulgille	PM	Monn			
	02/03/22 /3/2/2	2	Date	Poliv	Date	216/11			
				77		101			

#### **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**

984843

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

SDG#: 22B027

Client : EUROFINS EATON ANALYTICAL

Project: 984843

SDG : 22B027

#### 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	: : EUROFINS EATON ANALYTICAL	ANALYTICAL							SDG NO.	: 228027
	: 984843								Instrument ID : GCT039	: GCT039
	**************************************		                   	                			)) 			
					WATER	ER				
Client		Laboratory	Dilution	%	Analysis	Extraction	Sample	Calibration Prep.	n Prep.	
Sample ID		Sample ID	Factor	Moist	DateTime	DateTime	Data FN	Data FN	Batch Notes	S
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		VG39B02B	-	ΑN	02/04/2212:04	02/04/2212:04	EB04005A	EB04003A	22VG39B02 Method Blank	nod Blank
LCS1W		VG39B02L	_	N	02/04/2212:40	02/04/2212:40	EB04006A	EB04003A	22VG39B02 Lab	22VG39BO2 Lab Control Sample (LCS)
LCD1W		VG39B02C	<b>~</b>	NA	02/04/2213:17	02/04/2213:17	EB04007A	EB04003A	22VG39B02 LCS Duplicate	Duplicate
2022020147	Ω.	B027-01	<u>,                                    </u>	NA	02/04/2213:53	02/04/2213:53	EB04008A	EB04003A	22VG39B02 Field Sample	ld Sample
202202021472MS	ZMS	B027-01M	-	N N	02/04/2214:30	02/04/2214:30	EB04009A	EB04003A	22VG39B02 Mati	22VG39B02 Matrix Spike Sample (MS)
202202021472MSE	ZMSD	B027-01S	_	W	02/04/2215:06	02/04/2215:06	EB04010A	EB04003A	22VG39B02 MS L	22VG39BO2 MS Duplicate (MSD)
202202021473	2	8027-02	<b>-</b>	NA	02/04/2215:43	02/04/2215:43	EB04011A	EB04003A	22VG39B02 Field Sample	ld Sample

FN - Filename % Moist - Percent Moisture

# **SAMPLE RESULTS**

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

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

Client : EUROFINS EATON ANALYTICAL Date Collected: 01/31/22 09:25

 Project
 : 984843
 Date Received: 02/03/22

 Batch No.
 : 22B027
 Date Extracted: 02/04/22 13:53

 Sample ID
 : 202202021472
 Date Analyzed: 02/04/22 13:53

Sample ID : 202202021472 Date Analyzed: 02/04/22 13:53
Lab Samp ID: B027-01 Dilution Factor: 1
Lab File ID: EB04008A Matrix: WATER

Ext Btch ID: 22VG39B02 % Moisture: NA Calib. Ref.: EB04003A Instrument ID: 39

SURROGATE PARAMETERS RESULT SPK\_AMT %RECOVERY QC LIMIT

Bromofluorobenzene 0.0336 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 : 5ml Final Volume : 5ml

Prepared by : SCerva Analyzed by : SCerva

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

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

Client : EUROFINS EATON ANALYTICAL Date Collected: 01/31/22 09:25

Batch No. : 22B027 Date Extracted: 02/04/22 15:43 Sample ID : 202202021473 Date Analyzed: 02/04/22 15:43

Lab Samp ID: B027-02
Lab File ID: EB04011A
Ext Btch ID: 22VG39B02
Calib. Ref.: EB04003A
Dilution Factor: 1
Matrix: WATER
% Moisture: NA
Instrument ID: 39

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

 PARAMETERS
 RESULTS
 RL
 MDL

 (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 : 5ml Final Volume : 5ml

Prepared by : SCerva Analyzed by : SCerva

REPORT ID: 22B027

Page 10 of 35 Page 20 of 45 pages

# **QC SUMMARIES**

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

Client : EUROFINS EATON ANALYTICAL Date Collected: 02/04/22 12:04
Project : 984843 Date Received: 02/04/22

Lab Samp ID: VG39B02B Dilution Factor: 1
Lab File ID: EB04005A Matrix: WATER
Ext Btch ID: 22VG39B02 % Moisture: NA
Calib. Ref.: EB04003A Instrument 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 0.0340 0.0400 85 60-140

Notes:

Parameter H-C Range Gasoline C6-C10

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount : 5ml Final Volume : 5ml

Prepared by : SCerva Analyzed by : SCerva

#### EMAX QUALITY CONTROL DATA LAB CONTROL SAMPLE ANALYSIS

CLIENT

: EUROFINS EATON ANALYTICAL

PROJECT BATCH NO. : 984843 : 22B027

METHOD

: 5030B/8015B

MATRIX DILUTION FACTOR: 1

: WATER

% MOISTURE:NA

SAMPLE ID : MBLK1W

LCS1W

LCD1W

LAB FILE ID

LAB SAMPLE ID : VG39B02B : EB04005A VG39B02L EB04006A

VG39B02C EB04007A

DATE PREPARED : 02/04/22 12:04 DATE ANALYZED : 02/04/22 12:04

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

PREP BATCH : 22VG39B02 CALIBRATION REF: EB04003A

22VG39B02 EB04003A

22VG39B02 EB04003A

ACCESSION:

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

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

METHOD

: 22B027 : 5030B/8015B

MATRIX DILUTION FACTOR: 1

: WATER

% MOISTURE:NA

SAMPLE ID : 202202021472

202202021472MS

202202021472MSD

LAB SAMPLE ID : B027-01

B027-01M

B027-01S

LAB FILE ID : EB04008A

EB04009A

EB04010A

DATE PREPARED : 02/04/22 13:53

02/04/22 14:30

02/04/22 15:06

DATE ANALYZED : 02/04/22 13:53

02/04/22 14:30

02/04/22 15:06 22VG39B02

PREP BATCH : 22VG39B02

22VG39B02

CALIBRATION REF: EB04003A

EB04003A

EB04003A

ACCESSION:

PARAMETERS	PSResult	SpikeAmt	MSResult	MSRec	SpikeAmt	MSDResult	MSDRec	RPD	QCLimit	MaxRPD
	(mg/L)	(mg/L)	(mg/L)	(%)	(mg/L)	(mg/L)	(%)	(%)	(%)	(%)
Gasoline	ND	0.500	0.458	92	0.500	0.497	99	8	50-130	30

SpikeAmt MSResult MSRec SpikeAmt MSDResult MSDRec QCLimit (%) (mg/L) (%) SURROGATE PARAMETER (mg/L) (mg/L) (mg/L) (%) 100 60-140 0.0400 0.0399 0.0400 0.0456 114 Bromofluorobenzene

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

### LABORATORY REPORT FOR

## **EUROFINS EATON ANALYTICAL**

984843

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

SDG#: 22B027

Client: EUROFINS EATON ANALYTICAL

Project: 984843

SDG : 22B027

# 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

Matrix spike sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of MS/MSD was analyzed. Diesel was within MS QC limits in 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: 984843

SDG : 22B027

#### 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

Matrix spike sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of MS/MSD was analyzed. JP5 was within MS QC limits in 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: 984843

SDG : 22B027

#### 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

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. 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: 22B027

LAB CHRONICLE TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	ANALYTICAL							SDG NO.	: 228027
Project	: 984843								Instrument 1D : D5	10 : 05
		)) 	## ## ## ## ## ##	             	***************************************	=======================================	13 13 11 11 11 11 11 11 11 11 11 11			
					WATER	ER				
Client		Laboratory	aboratory Dilution	%	Analysis	Extraction	Sample	Calibration Prep.	n Prep.	
Sample ID		Sample ID	Factor	Moist	DateTime	DateTime	Data FN	Data FN	Batch No	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	: : : : : : : : : : : : : : : : : : : :	111111111111111111111111111111111111111
MBLK1W		DSB009WB	-	Ν	02/08/2213:42	02/07/2210:15	LB08011A	LB08004A	22DSB009W Method Blank	thod Blank
LCS1W		DSB009WL	_	Ν	02/08/2214:00	02/07/2210:15	LB08012A	LB08004A	22DSB009W La	22DSB009W Lab Control Sample (LCS)
202202021472	.72	B027-01	_	N	02/08/2214:56	02/07/2210:15	LB08015A	LB08004A	22DSB009W Field Sample	eld Sample
202202021472MS	72MS	B027-01M	<b>,</b>	N	02/08/2215:32	02/07/2210:15	LB08017A	LB08004A	22DSB009W Ma	2DSB009W Matrix Spike Sample (MS)
202202021472MSD	72MSD	B027-01S	-	NA	02/08/2215:51	02/07/2210:15	LB08018A	LB08004A	22DSB009W MS	22DSB009W MS Duplicate (MSD)

LAB CHRONICLE
PETROLEUM HYDROCARBONS BY EXTRACTION

Client	Client : FURDFINS EATON ANALYTICAL							SDG NO.	: 228027
	343							Instrument ID : D5	: 05
				WATER	ËR				
Client	Laboratory	aboratory 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 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	J5B009WL	-	NA	02/08/2214:19	02/07/2210:15	LB08013A	LB08005A	22DSB009W Lab Co	22DSB009W Lab Control Sample (LCS)
202202021472	B027-01	-	NA	02/08/2214:56	02/07/2210:15	LB08015A	LB08005A	22DSB009W Field Sample	Sample
202202021472MS	B027-01M	-	N	02/08/2216:09	02/07/2210:15	LB08019A	LB08005A	22DSB009W Matrix	22DSB009W Matrix Spike Sample (MS)
202202021472MSD	8027-018	<b>-</b>	NA	02/08/2216:27	02/07/2210:15	LB08020A	LB08005A	22DSB009W MS Duplicate (MSD)	licate (MSD)

LAB CHRONICLE
PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFI	Client : EUROFINS EATON ANALYTICAL							SDG NO. : 22B027
								Instrument ID : D5
	***************************************	#######################################	# 	=======================================				
				WATER	ER			
Client	Laboratory	aboratory 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	_	A A	02/08/2213:42	02/07/2210:15	LB08011A	LB08006A	22DSB009W Method Blank
LCS1W	J8B009WL	_	NA	02/08/2214:37	02/07/2210:15	LB08014A	LB08006A	22DSB009W Lab Control Sample (LCS)
202202021472	B027-01	_	ΑN	02/08/2214:56	02/07/2210:15	LB08015A	LB08006A	220SB009W Field Sample
202202021472MS	B027-01M	_	NA	02/08/2216:46	02/07/2210:15	LB08021A	LB08006A	22DSB009W Matrix Spike Sample (MS)
202202021472MSD	B027-01S	-	NA	02/08/2217:04	02/07/2210:15	LB08022A	LB08006A	22DSB009W MS Duplicate (MSD)

# **SAMPLE RESULTS**

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

Client : EUROFINS EATON ANALYTICAL Date Collected: 01/31/22 09:25

 Project
 : 984843
 Date Received: 02/03/22

 Batch No.
 : 22B027
 Date Extracted: 02/07/22 10:15

 Sample ID
 : 202202021472
 Date Analyzed: 02/08/22 14:56

Lab Samp ID: 22B027-01 Dilution Factor: 1
Lab File ID: LB08015A Matrix: WATER
Ext Btch ID: 22DSB009W % Moisture: NA

Calib. Ref.: LB08004A Instrument ID: D5

RESULTS RL MDL
PARAMETERS (mg/L) (mg/L) (mg/L)

 Diesel
 ND
 0.026
 0.013

 Motor Oil
 ND
 0.052
 0.026

 SURROGATE PARAMETERS
 RESULT
 SPK\_AMT
 %RECOVERY
 QC LIMIT

 Bromobenzene
 0.394
 0.525
 75
 60-130

 Hexacosane
 0.120
 0.131
 92
 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 : 950ml Final Volume : 5ml

Prepared by : JMuert Analyzed by : SDeeso

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

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Client : EUROFINS EATON ANALYTICAL Date Collected: 01/31/22 09:25

Project : 984843 Batch No. : 22B027

Date Received: 02/03/22

Sample ID : 202202021472

Date Extracted: 02/07/22 10:15

Lab Samp ID: 22B027-01

Date Analyzed: 02/08/22 14:56

Lab File ID: LB08015A

Dilution Factor: 1 Matrix: WATER

Ext Btch ID: 22DSB009W

% Moisture: NA

Calib. Ref.: LB08005A

Instrument ID: D5

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	RESULTS	RL	MDL
PARAMETERS	(mg/L)	(mg/L)	(mg/L)
JP5	ND	0.052	0.026

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.394	0.525	75	60-130
Hexacosane	0.120	0.131	92	60-130

Notes:

: Reporting Limit RL

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 : 950ml

Final Volume : 5ml

Prepared by

: JMuert

Analyzed by : SDeeso

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

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Client : EUROFINS EATON ANALYTICAL Date Collected: 01/31/22 09:25

Date Received: 02/03/22

Project : 984843 Batch No. : 22B027 Sample ID : 202202021472

Date Extracted: 02/07/22 10:15 Date Analyzed: 02/08/22 14:56

Lab Samp ID: 22B027-01 Lab File ID: LB08015A

Dilution Factor: 1 Matrix: WATER

Ext Btch ID: 22DSB009W Calib. Ref.: LB08006A

% Moisture: NA Instrument ID: D5

PARAMETERS	RESULTS	RL	MDL
	(mg/L)	(mg/L)	(mg/L)
JP8	ND	0.052	0.026

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene Hexacosane	0.394 0.120	0.525 0.131	75 92	60-130 60-130

Notes:

RL : Reporting Limit H-C Range Parameter c8-c18

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount : 950ml

Final Volume : 5ml

Analyzed by : SDeeso

Prepared by : JMuert

# **QC SUMMARIES**

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

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

 Project
 : 984843
 Date Received: 02/07/22

 Batch No.
 : 22B027
 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

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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
	0.319	0.125	96	60-130

Hexacosane U.114 U.125 Yo 6U-13U

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

MATRIX DILUTION FACTOR: 1

: WATER

% MOISTURE:NA

SAMPLE ID : MBLK1W

LAB SAMPLE ID : DSB009WB

LCS1W DSB009WL

CALIBRATION REF: LB08004A

LB08004A

ACCESSION:

MBResult SpikeAmt LCSResult LCSRec QCLimit PARAMETERS (mg/L) (mg/L) (mg/L) (%) (%) Diesel 2.50 2.42 50-130

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SURROGATE PARAMETERS	SpikeAmt	LCSResult	LCSRec	QCLimit
	(mg/L)	(mg/L)	(%)	(%)
Bromobenzene	0.500	0.405	81	60-130
Hexacosane	0.125	0.117	94	60-130

MB: Method Blank sample LCS: Lab Control Sample

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

CLIENT

: EUROFINS EATON ANALYTICAL

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

: 984843

MATRIX : WATER DILUTION FACTOR: 1

% MOISTURE:NA

SAMPLE ID : 202202021472 LAB SAMPLE ID : 22B027-01

202202021472MS 22B027-01M

202202021472MSD 22B027-01S

LAB FILE ID : LB08015A DATE PREPARED : 02/07/22 10:15 DATE ANALYZED : 02/08/22 14:56

LB08017A 02/07/22 10:15 02/08/22 15:32 LB08018A 02/07/22 10:15 02/08/22 15:51

PREP BATCH : 22DSB009W CALIBRATION REF: LB08004A

22DSB009W LB08004A

22DSB009W 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
	=========	=========	=======================================		========	=======================================			that has the bud bad true boy tops for the	======
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	

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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
 : 984843
 Date Received: 02/07/22

 Batch No.
 : 22B027
 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

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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

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Notes:

: Reporting Limit Parameter H-C Range C8-C18

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

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

#### EMAX QUALITY CONTROL DATA LAB CONTROL SAMPLE ANALYSIS

CLIENT

: EUROFINS EATON ANALYTICAL

PROJECT

: 984843

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

MATRIX : WATER DILUTION FACTOR: 1

% MOISTURE:NA

SAMPLE ID : MBLK1W

LCS1W

J5B009WL

LB08013A

LAB SAMPLE ID : DSB009WB
LAB FILE ID : LB08011A
DATE PREPARED : 02/07/22 10:15

DATE ANALYZED : 02/08/22 13:42

02/07/22 10:15

02/08/22 14:19

PREP BATCH : 22DSB009W

22DSB009W

CALIBRATION REF: LB08005A

LB08005A

ACCESSION:

PARAMETERS			LCSResult (mg/L)		QCLimit (%)
JP5	ND	2.50	2.40	96	30-160
		=========	==========		
					001 554

SURROGATE PARAMETERS	SpikeAmt	LCSResult	LCSRec	QCLimit
	(mg/L)	(mg/L)	(%)	(%)
Bromobenzene	0.500	0.456	91	60-130
Hexacosane	0.125	0.113	90	60-130

MB: Method Blank sample LCS: Lab Control Sample

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

CLIENT

: EUROFINS EATON ANALYTICAL

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

: 984843

DILUTION FACTOR: 1

% MOISTURE:NA

202202021472MS 22B027-01M

202202021472MSD 22B027-01s

SAMPLE ID : 202202021472 LAB SAMPLE ID : 22B027-01 LAB FILE ID : LB08015A DATE PREPARED : 02/07/22 10:15

LB08019A 02/07/22 10:15

LB08020A 02/07/22 10:15 02/08/22 16:27

PREP BATCH : 22DSB009W CALIBRATION REF: LB08005A

DATE ANALYZED : 02/08/22 14:56

02/08/22 16:09 22DSB009W LB08005A

22DSB009W 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

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

Project : 984843 Batch No. : 22B027 Sample ID : MBLK1W Date Received: 02/07/22 Date Extracted: 02/07/22 10:15 Date Analyzed: 02/08/22 13:42

Lab Samp ID: DSB009WB Dilution Factor: 1 Matrix: WATER Lab File ID: LB08011A % Moisture: NA Ext Btch ID: 22DSB009W Calib. Ref.: LB08006A 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	0.371	0.500 0.125	74 96	60-130 60-130

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Notes:

: Reporting Limit H-C Range Parameter

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

: EUROFINS EATON ANALYTICAL CLIENT

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

: WATER MATRIX % MOISTURE:NA

DILUTION FACTOR: 1 LCS1W SAMPLE ID : MBLK1W 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 22DSB009W PREP BATCH : 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
			=======================================	=========	========
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

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

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MATRIX : WATER % MOISTURE:NA

DILUTION FACTOR: 1 1

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