eurofins | Eaton Analytical

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

A2LA ACCREDITED
CERTIFICATE #'s 5890.01 & 5890.02

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
02/14/2022

EUROFINS EATON
ANALYTICAL, LLC

NELAP ACCREDITED TNI LABORATORY
Utah ELCP CA00006

Report: 978210
Project: RED-HILL
Group: Red-Hill Expanded List (Albuquerque+)

DEB: Debbie L Frank

Project Manager

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.
* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.
* As applicable, this report consists of the cover page, State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms.
* Test results relate only to the sample(s) tested.
* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).
* This report shall not be reproduced except in full, without the written approval of the laboratory.
* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

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

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025:2917 Accredited Method List

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

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

https://www.eurofinsus.com/Eaton

Test(s)	Method(s)	Potable Water *	Waste Water
Enterococci	Enterolert	x	x
Escherichia coli (Enumeration)	SM 9221 B.1 SM 9221 F	x	
Fecal Coliform (P/A and Enumeration)	SM 9221 C (MTF/EC), SM 9221 E (MTF/EC)	x	x
Fecal Streptococci and Enterococci	SM 9230 B	x	x
Heterotrophic Bacteria	SM 9215 B	x	
Legionella	Legiolert®	x	
Pseudomonas aeruginosa	Idexx Pseudalert	x	
Total Coliform (P/A and Enumeration)	SM 9221A, SM 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)	SM 9223	x	
Total Microcystins and Nodularins	EPA 546	X	
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	
Algal Toxins/Microcystin	+ LCMS 3570	x	
Alkalinity	SM 2320B	x	x
Ammonia	EPA 350.1, SM 4500-NH3 H		x
Asbestos	EPA 100.2	x	x
Bicarbonate Alkalinity as HCO3	SM 2330 B	x	x
BOD/CBOD	SM 5210 B		x
Bromate	+LCMS- 2447	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	
Chlorine Dioxide	Palin Test 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	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 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/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	
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	x
Hardness	SM 2340 B	x	x
Hexavalent Chromium	EPA 218.6,	x	x
Hexavalent Chromium	EPA 218.7,	x	
Hexavalent Chromium	SM 3500-Cr B		x
Inorganic Anions and DBPs	EPA 300.0	x	x
Norganic Anions and DBPs	EPA 300.1	x	
Kjeldahl Nitrogen	EPA 351.2		x
Metals	EPA 200.7, EPA200.8	x	x
Nitrosamines	EEA-Agilent 521.1 (GCMS-24250)	x	
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x
Odor	SM2150B	x	
Organohalide Pesticides and PCB	EPA 505	x	
Ortho Phosphate	SM 4500P E	x	
Oxyhalides Disinfection Byproducts	EPA 317.0	x	
Perchlorate	EPA 331.0	x	
Perchlorate (Low and High Levels)	EPA 314.0	x	
Perfluorinated Alkyl Acids	EPA 533, EPA 537, EPA 537.1	x	
PPCP and EDC	+LCMS-2443	x	
pH	EPA 150.1 SM 4500-H+ B	x	x
Phenolics – Low Level	+WC 2493 (EPA 420.2 and EPA 420.4 MOD)	x	x
Phenylurea Pesticides/Herbicides	+LCMS-2448	x	
Radium-226, Radium-228	GA Tech (Rad-2374)	x	
Radon-222	SM 7500RN	x	
Residue (Filterable)	SM 2540C	x	x
Residue (Non-Filterable)	SM 2540D		x
Residue (Total)	SM 2540B		x
Residue (Volatile)	EPA 160.4		x
Semi-Volatile Compounds	EPA 525.2	x	
Silica	SM 4500-SiO2 C	x	x
Sulfide	SM 4500-S D		x
Sulfite	SM 4500-SO3 B	x	x
Surfactants	SM 5540C	x	x
Taste and Odor	SM 6040 E	x	
Total Organic Carbon	SM 5310 C	x	x
Total Phenols	EPA 420.1		x
Total Phenols	EPA 420.4	x	x
Triazine Pesticides and their Degradates	+LCMS-3617	x	
Turbidity	EPA 180.1	x	x
Uranium by ICP/MS	EPA 200.8	x	
UV 254 Organic Constituents	SM 5910B	x	
VOCs	EPA 524.2	x	
VOCs	+(GCMS 2412) by EPA 524.2 modified	x	

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

(+) In-House Method

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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 #: 978210
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 **January 04, 2022** at **1223**. 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
202201040139	HALAWA SHAFT-331-241-TP401	01/03/2022 0940
	(SUB)Gas Fraction Hydrocarbons TPH 8015 Diesel and Motor Oil TPH 8015 Jet Fuel 5 TPH 8015 Jef Fuel 8	
202201040140	TRAVEL BLANK::HALAWA SHAFT-331-241-TP401	01/03/2022 0940
	(SUB)Gas Fraction Hydrocarbons	

Test Description

CHAIN OF CUSTODY RECORD

978210

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, CA 91016-3629

Phone: 626 386 1100
Fax: 626 386 1101

800 566 LABS (800 566 5227)

EUROFINS EATON ANALYTICAL USE ONLY:

LOGIN COMMENTS: _____

SAMPLES CHECKED AGAINST COC BY: (initials)

SAMPLES LOGGED IN BY:

SAMPLES REC'D DAY OF COLLECTION? ☐ (check for yes)

SAMPLE TEMP RECEIVED AT:

☐ Colton / No. California / Arizona _____ °C (Compliance: 4 ± 2 °C)

☒ Monrovia 1.5 °C (Compliance: 4 ± 2 °C)

CONDITION OF BLUE ICE: Frozen X Partially Frozen _____ Thawed _____ Wet Ice _____ No Ice _____

METHOD OF SHIPMENT: Pick-Up / Walk-In / (FedEx) / UPS / DHL / Area Fast / Top Line / Other: _____

TO BE COMPLETED BY SAMPLER:

COMPANY/AGENCY NAME:	PROJECT CODE:
BWS HONOLULU	Red Hill

EEA CLIENT CODE:	COC ID:	SAMPLE GROUP:
Honolulu		

TAT requested: rush by adv notice only STD ___ 1 wk _X_ 3 day ___ 2 day ___ 1 day ___

COMPLIANCE SAMPLES (check for yes) ☐ - Requires state forms ☐

NON-COMPLIANCE SAMPLES (check for yes) ☒ REGULATION INVOLVED: _____

Type of samples (circle one): ROUTINE (SPECIAL) CONFIRMATION (eg. SDWA, Phase V, NPDES, FDA,...)

SEE ATTACHED BOTTLE ORDER FOR ANALYSES ☒ (check for yes), ***OR***

list ANALYSES REQUIRED (enter number of bottles sent for each test for each sample)

SAMPLE DATE	SAMPLE TIME	SAMPLE ID	CLIENT LAB ID	MATRIX *	FIELD DATA	FIELD DATA	Weekly Red Hill												SAMPLER COMMENTS
1-3-22	0940	HALAWA SHAFT	HI0000331-241	CFW			x												Raining
		Temperature Blank																	Temp Blank: 0.5 °C

*** MATRIX TYPES:** **RSW** = Raw Surface Water; **RGW** = Raw Ground Water; **CFW** = Chlor(am)inated Finished Water; **FW** = Other Finished Water; **SEAW** = Sea Water; **WW** = Waste Water; **BW** = Bottled Water; **SW** = Storm Water; **SO** = Soil; **SL** = Sludge; **O** = Other - Please Identify

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
SAMPLED BY:		Derek Dotson	Honolulu Board of Water Supply	1-3-2022	
RELINQUISHED BY:		Derek Dotson	Honolulu Board of Water Supply	1-3-2022	1200
RECEIVED BY:			EDA	1.14.22	1223
RELINQUISHED BY:					
RECEIVED BY:					

PAGE 1 OF 1

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Kit Order for Honolulu Board of Water Supply

Debbie L Frank is your Eurofins Eaton Analytical, LLC Service Manager

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
(626) 386-1100 FAX (866) 988-3757

Created Date & Time: 12/10/2021 7:10:31PM

Note: Sampler Please return this paper with your samples

Kit #: 307670

Client ID: HONOLULU

Project Code: RED-HILL Bottle Orders
Group Name: Red-Hill Expanded List (Albuquerque+)
PO#/JOB#: C20525101 exp 05312023
Description: HALAWA SHAFT - Every 1 week o

Created By: - [AutoGenerated]
Deliver By: 12/22/2021
STG: Bottle Orders
Ice Type: G
Pre Registered

Ship Sample Kits to
Honolulu Board of Water Supply
630 South Beretania Street
Chemistry Lab
Honolulu, HI 96843

Attn: Ron Fenstemacher
Phone: 808-748-5841
Fax: 808-550-5572

Send Report to
Honolulu Board of Water Supply
630 South Beretania Street
Public Service Bldg." Room 308
Honolulu, HI 96843

Attn: Erwin Kawata
Phone: 808-748-5091
Fax: 808-550-5018

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

Attn: Erwin Kawata
Phone: 808-748-5091
Fax: 808-550-5018

# of Sample	Tests	Bottle Qty - Type [preservative information]	Total	UN DOT #
~~1~~	~~@625A_Physis C, @625BN_Physis C, @625PAH_Physis_TICS_C~~	~~8 - 1L amber glass [1 ml Thio 8%]~~	~~8~~	
1	TPH 8015 Diesel and Motor Oil_C, TPH 8015 Jet Fuel 5_C, TPH 8015 Jet Fuel 8_C	~~9~~ 4 - 1L amber glass [1 ml Thio 8%]	9	
1	8015 Gas_C	3 - 40ml amber glass vial [1 drop Thio (8%)]	3	
1	8015 Gas_C TB	2 - 40ml amber glass vial [1 drop Thio (8%) + H20]	2	
~~1~~	~~@VOASDWA C-plus-plus TICs TBC~~	~~3 - 40ml amber glass vial [25mg AA+ H20+10 drop 1:1 HCL]~~	~~3~~	~~UN1789~~
~~1~~	~~@VOASDWA C-plus-plus TICs C~~	~~3 - 40ml amber glass vial [25mg Ascorbic+drop 2ml 1:1 HCL]~~	~~3~~	~~UN1789~~
~~1~~	~~@8015 Ethanol_Subbed~~	~~4 - 40ml amber glass vial [no preservative]~~	~~4~~	

Sum Tests: 7

Sum Bottles: 32

Comments

2nd MS/MSD
SITE ID:
331-241 HALAWA SHAFT

SAMPLER: Eight 1 LITER AMBER GLASS BOTTLES FOR 625 SERIES and Nine1 LITER AMBER GLASS BOTTLES FOR TPH 8015 SERIES.

Code | Status | Date Shipped | Via | Tracking # | # of Coolers | Prepared By

eurofins | Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 978210

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

IR Gun ID = 401 (Observation= 1.7 °C) (Corr.Factor -0.2 °C) (Final = 1.5 °C)

TYPE OF ICE: Real ____ Synthetic X No Ice ____ CONDITION OF ICE: Frozen X Partially Frozen ____ Thawed ____ N/A ____

METHOD OF SHIPMENT: Pick-Up / Walk-In / (FedEx) / UPS / DHL / Area Fast / Top Line / Other: ____________

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 same day as sample collection, within 8 hours)

3) **Microbiology, Surface Water:** < 10°C (if received after 2 hours of sample collection)

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

1 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)	2 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)
3 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)	4 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °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)

5) **pH Check.** Manufacturer: ____________ Lot Number: ________ pH strip type: 0 - 14 or ________ Expiration Date ________ Results: ________

6) **Chlorine check.** Manufacturer: Sansafe. Lot No.: ________ Expiration Date: ________ Results ____________

7) VOA and Radon Headspace: No Samples with Headspace: ☐ Samples with Headspace (see below): ☐

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

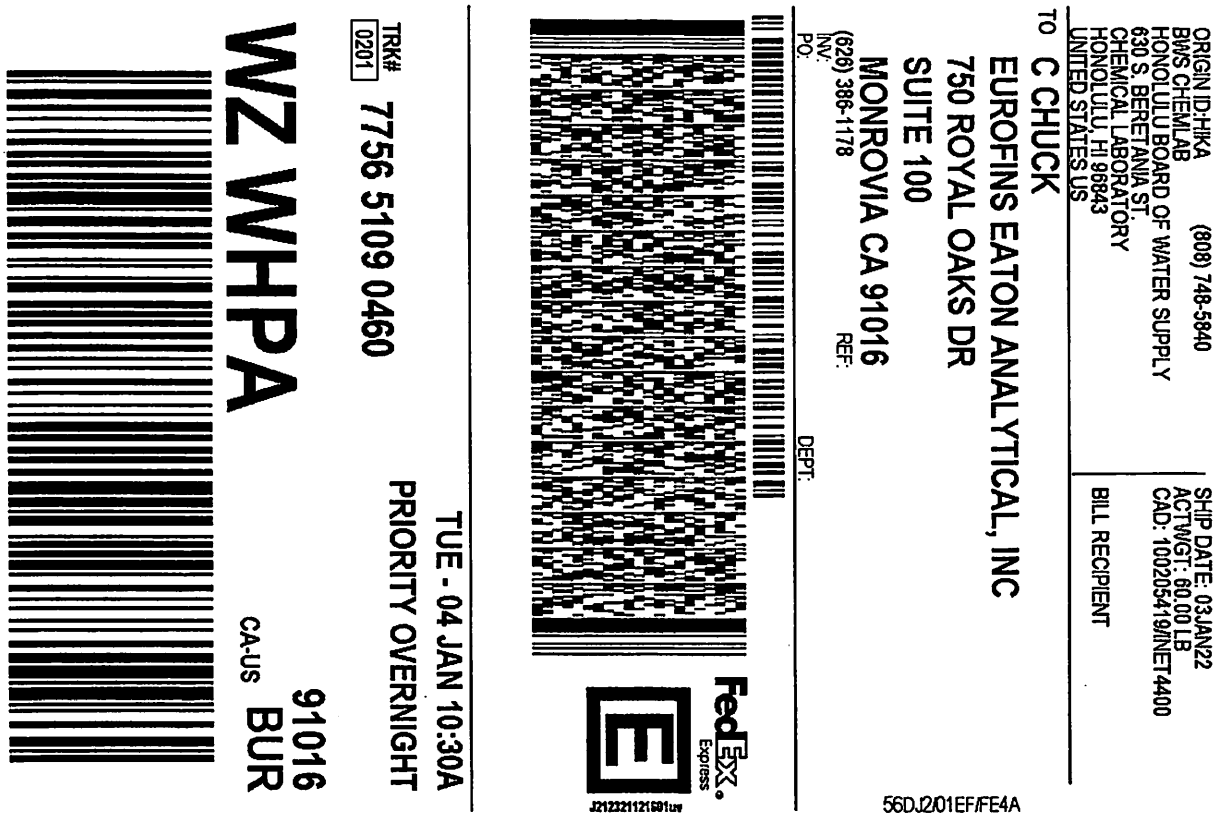
Samp ID	Bottle #	None/<6 mm	>6mm	Test	Samp ID	Bottle #	None/<6 mm	>6mm	Test	Samp ID	Bottle #	None/<6 mm	>6mm	Test	Samp ID	Bottle #	None/<6 mm	>6mm	Test

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): ____________

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RECEIVED BY	[signature]	Chuck Brock	Eurofins Eaton Analytical	1.4.22	1223
SAMPLES CHECKED AGAINST COC BY:			Eurofins Eaton Analytical		

QA FO-FRM5504 (9.28.21) Ver 9

Page ___ of ___



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

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, 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.

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

Laboratory Comments

Report: 978210
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 Gas, TPH Diesel, Motor Oil and Jet Fuels are submitted by Emax Laboratories

The Comments Report may be blank if there are no comments for this report.

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

Laboratory Hits

Report: 978210
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:
01/04/2022 1223

Analyzed	Analyte	Sample ID	Result	HI Limit	Units	MRL

SUMMARY OF POSITIVE DATA ONLY

eurofins | Eaton Analytical

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

Laboratory Data

Report: 978210
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:
01/04/2022 1223

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
HALAWA SHAFT-331-241-TP401 (202201040139)							**Sampled on 01/03/2022 0940**		
				SW 8015B - (SUB)Gas Fraction Hydrocarbons					
01/06/22	01/06/22 17:22			(SW 8015B)	(SUB)Gas Fraction Hydrocarbons	ND	mg/L	0.02	1
				SW 8015B - TPH 8015 Diesel and Motor Oil					
01/06/22	01/07/22 14:59			(SW 8015B)	TPH Diesel	ND	mg/L	0.027	1
01/06/22	01/07/22 14:59			(SW 8015B)	TPH Motor Oil	ND	mg/L	0.055	1
				EPA 8015 - Jet Fuel 5 C8-C18					
01/06/22	01/07/22 14:59			(EPA 8015)	Jet Fuel 5	ND	mg/L	0.055	1
				EPA 8015 - Jet Fuel 8 C8-C18					
	01/07/22 14:59			(EPA 8015)	Jet Fuel 8	ND	mg/L	0.055	1
TRAVEL BLANK::HALAWA SHAFT-331-241-TP401 (202201040140)							**Sampled on 01/03/2022 0940**		
				SW 8015B - (SUB)Gas Fraction Hydrocarbons					
01/06/22	01/06/22 19:05			(SW 8015B)	(SUB)Gas Fraction Hydrocarbons	ND	mg/L	0.02	1

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

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Tel: (626) 386-1100
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Laboratory QC Summary

Report: 978210
Project: RED-HILL
Group: Red-Hill Expanded List (Albuquerque+)

Honolulu Board of Water Supply

Analytical Batch:

Analysis Date:

Analyzed by:

eurofins | Eaton Analytical

Tel: (626) 386-1100
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Honolulu Board of Water Supply

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%

by

Analytical Batch: **Analysis Date:**

Spike recovery is already corrected for native results.
Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.
Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.
RPD not calculated for LCS2 when different a concentration than LCS1 is used.
RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).
(S) - Indicates surrogate compound.
(I) - Indicates internal standard compound.

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Laboratory Hits

Report: 978210
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:
01/04/2022 1223

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL

SUMMARY OF POSITIVE DATA ONLY

EMAX
LABORATORIES, INC.
3051 Fujita Street
Torrance, CA 90505
Tel: (310)-618-8889

Date: 01-18-2022
EMAX Batch No.: 22A033

Attn: Jackie Contreras

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

Subject: Laboratory Report
Project: 978210

Enclosed is the Laboratory report for samples received on 01/06/22.
The data reported relate only to samples listed below :

Sample ID	Control #	Col Date	Matrix	Analysis
202201040139	A033-01	01/03/22	WATER	TPH GASOLINE
				TPH
202201040140	A033-02	01/03/22	WATER	TPH GASOLINE
202201040139MS	A033-01M	01/03/22	WATER	TPH GASOLINE
				TPH DIESEL & MOTOR OIL
202201040139MSD	A033-01S	01/03/22	WATER	TPH GASOLINE
				TPH DIESEL & MOTOR OIL

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

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

eurofins | Eaton Analytical

22A033

Submittal Form

Date: 1/6/2022

Ship To:
`EMAX Laboratories, Inc.
3051 Fujita St.

Torrance, CA 90505

Phone: 310-618-8889 Fax: 310-618-0818

REPORTING REQUIRMENTS:** ***Do Not Combine Reports with any other samples submitted under different Folder Numbers!
Report & Invoice must have the Folder # **978210** 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.

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

Provide in each Report the Specified StateCertification # and Exp Date for requested tests + matrix.
Samples from: **HAWAII**

Folder #: **978210**
Report Due: **01/07/2022**

RUSH 3 day

1

Sample ID	Client Sample ID for reference onl	Sample Date & Time	Matrix	Clip Code	PWSID
202201040139	HALAWA SHAFT-331-241-TP401	01/03/22 0940	DW		JLS

Sample type:	Sample Event:	Facility ID:	Sample Point ID:	Static ID:

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

2

Sample ID	Client Sample ID for reference onl	Sample Date & Time	Matrix	Clip Code	PWSID
202201040140	TRAVEL BLANK: HALAWA SHAFT-331-241-TP401	01/03/22 0940	DW		JLS

Sample type:	Sample Event:	Facility ID:	Sample Point ID:	Static ID:

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

Temp: (1) 5.6 (2) 5.1

Relinquished by: _____ Sample Control Date 1/6/22 Time 1105

Received by: Alan R. Date 1/6/22 Time 11:05

Relinquished by: _____ Sample Control Date _____ Time _____

Received by: _____ Date _____ Time _____

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS

An Acknowledgement of Receipt is requested to attn: Jackie Contreras

Type of Delivery	Airbill / Tracking Number	ECN 22A033
☐ Fedex ☐ UPS ☐ GSO ☐ Others		Recipient Jocelyne 1/6/22 Alan Ramos
☐ EMAX Courier ☑ Client Delivery		Date 01/06/22 Time 11:05

COC INSPECTION

☑ Client Name	☑ Client PM/FC	☐ Sampler Name	☑ Sampling Date/Time	☑ Sample ID	☑ Matrix
☑ Address	☑ Tel # / Fax #	☐ Courier Signature	☑ Analysis Required	☐ Preservative (if any)	☑ TAT
Safety Issues (if any)	☐ High concentrations expected	☐ From Superfund Site	☐ Rad screening required		

Note: _____

PACKAGING INSPECTION

Container	☑ Cooler	☐ Box	☐ Other		
Condition	☐ Custody Seal	☐ Intact	☐ Damaged		
Packaging	☑ Bubble Pack	☐ Styrofoam	☐ Popcorn	☐ Sufficient	☐ _____
Temperatures (Cool, ≤6 °C but not frozen)	☑ Cooler 1 5.6 °C	☑ Cooler 2 5.1 °C	☐ Cooler 3 _____ °C	☐ Cooler 4 _____ °C	☐ Cooler 5 _____ °C
	☐ Cooler 6 _____ °C	☐ Cooler 7 _____ °C	☐ Cooler 8 _____ °C	☐ Cooler 9 _____ °C	☐ Cooler 10 _____ °C
Thermometer:	A - S/N ~~210191066~~ a 14/14	(B) S/N 210271396	C - S/N 21027139 9	D - S/N _____	

Comments: ☐ **Temperature is out of range. PM was informed IMMEDIATELY.**

Note: _____

DISCREPANCIES

LabSampleID	LabSampleContainerID	Code	ClientSample Label ID / Information	Corrective Action
1	4-7	D2	Jet Fuel B is not indicated on label	

☐ pH holding time requirement for water samples is 15 mins. Water samples for pH analysis are received beyond 15 minutes from sampling time.

NOTES/OBSERVATIONS:

LEGEND:

☐ **Continue to next page.**

Code	Description- Sample Management
D1	Analysis is not indicated in _____
(D2)	Analysis mismatch COC vs label
D3	Sample ID mismatch COC vs label
D4	Sample ID is not indicated in _____
D5	Container -[improper] [leaking] [broken]
D6	Date/Time is not indicated in _____
D7	Date/Time mismatch COC vs label
D8	Sample listed in COC is not received
D9	Sample received is not listed in COC
D10	No initial/date on corrections in COC/label
D11	Container count mismatch COC vs received
D12	Container size mismatch COC vs received

Code	Description-Sample Management
D13	Out of Holding Time
D14	Bubble is >6mm
D15	No trip blank in cooler
D16	Preservation not indicated in _____
D17	Preservation mismatch COC vs label
D18	Insufficient chemical preservative
D19	Insufficient Sample
D20	No filtration info for dissolved analysis
D21	No sample for moisture determination
D22	_____
D23	_____
D24	_____

Code	Description-Sample Management
R1	Proceed as indicated in ☐ COC ☐ Label
R2	Refer to attached instruction
R3	Cancel the analysis
R4	Use vial with smallest bubble first
R5	Log-in with latest sampling date and time+1 min
R6	Adjust pH as necessary
R7	Filter and preserved as necessary
R8	_____
R9	_____
R10	_____
R11	_____
R12	_____

REVIEWS:

Sample Labeling Jocelyne Solis-Ramos Date 01/06/22 1/6/22

SRF _____ Date 1/6/22

PM _____ Date 1/7/22

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.
B	B	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

978210

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

SDG#: 22A033

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 978210

SDG : 22A033

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

A total of two(2) water samples were received on 01/06/22 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. VGH7A02B - 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. VGH7A02L/VGH7A02C 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 A033-01M/A033-01S. 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
Project : 978210

SDG NO. : 22A033
Instrument ID : H7

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	VGH7A02B	1	NA	01/06/2215:39	01/06/2215:39	AA06005A	AA06003A	22VGH7A02	Method Blank
LCS1W	VGH7A02L	1	NA	01/06/2216:14	01/06/2216:14	AA06006A	AA06003A	22VGH7A02	Lab Control Sample (LCS)
LCD1W	VGH7A02C	1	NA	01/06/2216:48	01/06/2216:48	AA06007A	AA06003A	22VGH7A02	LCS Duplicate
202201040139	A033-01	1	NA	01/06/2217:22	01/06/2217:22	AA06008A	AA06003A	22VGH7A02	Field Sample
202201040139MS	A033-01M	1	NA	01/06/2217:57	01/06/2217:57	AA06009A	AA06003A	22VGH7A02	Matrix Spike Sample (MS)
202201040139MSD	A033-01S	1	NA	01/06/2218:31	01/06/2218:31	AA06010A	AA06003A	22VGH7A02	MS Duplicate (MSD)
202201040140	A033-02	1	NA	01/06/2219:05	01/06/2219:05	AA06011A	AA06003A	22VGH7A02	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

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

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	01/03/22 09:40
Project	: 978210	Date Received:	01/06/22
Batch No.	: 22A033	Date Extracted:	01/06/22 17:22
Sample ID	: 202201040139	Date Analyzed:	01/06/22 17:22
Lab Samp ID:	A033-01	Dilution Factor:	1
Lab File ID:	AA06008A	Matrix:	WATER
Ext Btch ID:	22VGH7A02	% Moisture:	NA
Calib. Ref.:	AA06003A	Instrument ID:	H7

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
GASOLINE	ND	0.020	0.010

SURROGATE PARAMETERS	RESULT	SPK_AMT.	%RECOVERY	QC LIMIT
Bromofluorobenzene	0.0347	0.0400	87	60-140

Notes:
Parameter H-C Range
Gasoline C6-C10
Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.
Sample Amount : 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:	01/03/22 09:40
Project	: 978210	Date Received:	01/06/22
Batch No.	: 22A033	Date Extracted:	01/06/22 19:05
Sample ID	: 202201040140	Date Analyzed:	01/06/22 19:05
Lab Samp ID:	A033-02	Dilution Factor:	1
Lab File ID:	AA06011A	Matrix:	WATER
Ext Btch ID:	22VGH7A02	% Moisture:	NA
Calib. Ref.:	AA06003A	Instrument ID:	H7

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
GASOLINE	ND	0.020	0.010

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromofluorobenzene	0.0354	0.0400	88	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

QC SUMMARIES

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

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	01/06/22 15:39
Project	: 978210	Date Received:	01/06/22
Batch No.	: 22A033	Date Extracted:	01/06/22 15:39
Sample ID	: MBLK1W	Date Analyzed:	01/06/22 15:39
Lab Samp ID:	VGH7A02B	Dilution Factor:	1
Lab File ID:	AA06005A	Matrix:	WATER
Ext Btch ID:	22VGH7A02	% Moisture:	NA
Calib. Ref.:	AA06003A	Instrument ID:	H7

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
GASOLINE	ND	0.020	0.010

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromofluorobenzene	0.0364	0.0400	91	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 : 978210
BATCH NO. : 22A033
METHOD : 5030B/8015B

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR:	1	1	1
SAMPLE ID	: MBLK1W	LCS1W	LCD1W
LAB SAMPLE ID	: VGH7A02B	VGH7A02L	VGH7A02C
LAB FILE ID	: AA06005A	AA06006A	AA06007A
DATE PREPARED	: 01/06/22 15:39	01/06/22 16:14	01/06/22 16:48
DATE ANALYZED	: 01/06/22 15:39	01/06/22 16:14	01/06/22 16:48
PREP BATCH	: 22VGH7A02	22VGH7A02	22VGH7A02
CALIBRATION REF:	AA06003A	AA06003A	AA06003A

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	SpikeAmt (mg/L)	LCDResult (mg/L)	LCDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
Gasoline	ND	0.500	0.457	91	0.500	0.467	93	2	60-130	30

SURROGATE PARAMETER	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	SpikeAmt (mg/L)	LCDResult (mg/L)	LCDRec (%)	QCLimit (%)
Bromofluorobenzene	0.0400	0.0478	120	0.0400	0.0456	114	70-130

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 : 978210
BATCH NO. : 22A033
METHOD : 5030B/8015B

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: 202201040139	202201040139MS	202201040139MSD
LAB SAMPLE ID	: A033-01	A033-01M	A033-01S
LAB FILE ID	: AA06008A	AA06009A	AA06010A
DATE PREPARED	: 01/06/22 17:22	01/06/22 17:57	01/06/22 18:31
DATE ANALYZED	: 01/06/22 17:22	01/06/22 17:57	01/06/22 18:31
PREP BATCH	: 22VGH7A02	22VGH7A02	22VGH7A02
CALIBRATION REF	: AA06003A	AA06003A	AA06003A

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	0.438	88	0.500	0.449	90	2	50-130	30

SURROGATE PARAMETER	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromofluorobenzene	0.0400	0.0447	112	0.0400	0.0439	110	60-140

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

LABORATORY REPORT FOR

EUROFINS EATON ANALYTICAL

978210

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

SDG#: 22A033

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 978210

SDG : 22A033

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

One(1) water sample was received on 01/06/22 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. DSA004WB - 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 DSA004WL. 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 22A033-01M/22A033-01S. 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.

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 978210

SDG : 22A033

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

One(1) water sample was received on 01/06/22 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. DSA004WB - 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 J5A004WL. 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 22A034-01M/22A034-01S. 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.

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 978210

SDG : 22A033

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

One(1) water sample was received on 01/06/22 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. DSA004WB - 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 J8A004WL. 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 22A034-03M/22A034-03S. Refer to Matrix QC summary form for details.

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

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

LAB CHRONICLE
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATON ANALYTICAL
Project : 978210

SDG NO. : 22A033
Instrument ID : D5

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	DSA004WB	1	NA	01/07/2213:48	01/06/2214:45	LA07009A	LA07003A	22DSA004W	Method Blank
LCS1W	DSA004WL	1	NA	01/07/2214:06	01/06/2214:45	LA07010A	LA07003A	22DSA004W	Lab Control Sample (LCS)
202201040139	A033-01	1	NA	01/07/2214:59	01/06/2214:45	LA07013A	LA07003A	22DSA004W	Field Sample
202201040139MS	A033-01M	1	NA	01/07/2215:16	01/06/2214:45	LA07014A	LA07003A	22DSA004W	Matrix Spike Sample (MS)
202201040139MSD	A033-01S	1	NA	01/07/2215:34	01/06/2214:45	LA07015A	LA07003A	22DSA004W	MS Duplicate (MSD)

FN - Filename
% Moist - Percent Moisture

LAB CHRONICLE
PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATON ANALYTICAL
Project : 978210

SDG NO. : 22A033
Instrument ID : D5

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	DSA004WB	1	NA	01/07/2213:48	01/06/2214:45	LA07009A	LA07004A	22DSA004W	Method Blank
LCS1W	J5A004WL	1	NA	01/07/2214:23	01/06/2214:45	LA07011A	LA07004A	22DSA004W	Lab Control Sample (LCS)
202201040139	A033-01	1	NA	01/07/2214:59	01/06/2214:45	LA07013A	LA07004A	22DSA004W	Field Sample

FN - Filename
% Moist - Percent Moisture

LAB CHRONICLE
PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATON ANALYTICAL
Project : 978210

SDG NO. : 22A033
Instrument ID : D5

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	DSA004WB	1	NA	01/07/2213:48	01/06/2214:45	LA07009A	LA07005A	22DSA004W	Method Blank
LCS1W	J8A004WL	1	NA	01/07/2214:41	01/06/2214:45	LA07012A	LA07005A	22DSA004W	Lab Control Sample (LCS)
202201040139	A033-01	1	NA	01/07/2214:59	01/06/2214:45	LA07013A	LA07005A	22DSA004W	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	01/03/22 09:40
Project	: 978210	Date Received:	01/06/22
Batch No.	: 22A033	Date Extracted:	01/06/22 14:45
Sample ID	: 202201040139	Date Analyzed:	01/07/22 14:59
Lab Samp ID:	22A033-01	Dilution Factor:	1
Lab File ID:	LA07013A	Matrix:	WATER
Ext Btch ID:	22DSA004W	% Moisture:	NA
Calib. Ref.:	LA07003A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Diesel	ND	0.027	0.014
Motor Oil	ND	0.055	0.027

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.490	0.545	90	60-130
Hexacosane	0.126	0.136	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	: 920ml	Final Volume	: 5ml
Prepared by	: JMuert	Analyzed by	: SDeeso

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	01/03/22 09:40
Project	: 978210	Date Received:	01/06/22
Batch No.	: 22A033	Date Extracted:	01/06/22 14:45
Sample ID	: 202201040139	Date Analyzed:	01/07/22 14:59
Lab Samp ID:	22A033-01	Dilution Factor:	1
Lab File ID:	LA07013A	Matrix:	WATER
Ext Btch ID:	22DSA004W	% Moisture:	NA
Calib. Ref.:	LA07004A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
JP5	ND	0.055	0.027

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.490	0.545	90	60-130
Hexacosane	0.126	0.136	92	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 : 920ml Final Volume : 5ml
Prepared by : JMuert Analyzed by : SDeeso

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	01/03/22 09:40
Project	: 978210	Date Received:	01/06/22
Batch No.	: 22A033	Date Extracted:	01/06/22 14:45
Sample ID	: 202201040139	Date Analyzed:	01/07/22 14:59
Lab Samp ID:	22A033-01	Dilution Factor:	1
Lab File ID:	LA07013A	Matrix:	WATER
Ext Btch ID:	22DSA004W	% Moisture:	NA
Calib. Ref.:	LA07005A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
JP8	ND	0.055	0.027

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.490	0.545	90	60-130
Hexacosane	0.126	0.136	92	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	: 920ml	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:	01/06/22 14:45
Project	: 978210	Date Received:	01/06/22
Batch No.	: 22A033	Date Extracted:	01/06/22 14:45
Sample ID	: MBLK1W	Date Analyzed:	01/07/22 13:48
Lab Samp ID:	DSA004WB	Dilution Factor:	1
Lab File ID:	LA07009A	Matrix:	WATER
Ext Btch ID:	22DSA004W	% Moisture:	NA
Calib. Ref.:	LA07003A	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	0.406	0.500	81	60-130
Hexacosane	0.117	0.125	93	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 : 978210
BATCH NO. : 22A033
METHOD : 3520C/8015B

MATRIX	: WATER	% MOISTURE:NA
DILUTION FACTOR	: 1	1
SAMPLE ID	: MBLK1W	LCS1W
LAB SAMPLE ID	: DSA004WB	DSA004WL
LAB FILE ID	: LA07009A	LA07010A
DATE PREPARED	: 01/06/22 14:45	01/06/22 14:45
DATE ANALYZED	: 01/07/22 13:48	01/07/22 14:06
PREP BATCH	: 22DSA004W	22DSA004W
CALIBRATION REF	: LA07003A	LA07003A

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Diesel	ND	2.50	2.29	92	50-130

SURROGATE PARAMETERS	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Bromobenzene	0.500	0.536	107	60-130
Hexacosane	0.125	0.122	98	60-130

MB: Method Blank sample LCS: Lab Control Sample

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	01/06/22 14:45
Project	: 978210	Date Received:	01/06/22
Batch No.	: 22A033	Date Extracted:	01/06/22 14:45
Sample ID	: MBLK1W	Date Analyzed:	01/07/22 13:48
Lab Samp ID:	DSA004WB	Dilution Factor:	1
Lab File ID:	LA07009A	Matrix:	WATER
Ext Btch ID:	22DSA004W	% Moisture:	NA
Calib. Ref.:	LA07004A	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	0.406	0.500	81	60-130
Hexacosane	0.117	0.125	93	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 : 978210
BATCH NO. : 22A033
METHOD : 3520C/8015B

MATRIX	: WATER	% MOISTURE:NA
DILUTION FACTOR	: 1	1
SAMPLE ID	: MBLK1W	LCS1W
LAB SAMPLE ID	: DSA004WB	J5A004WL
LAB FILE ID	: LA07009A	LA07011A
DATE PREPARED	: 01/06/22 14:45	01/06/22 14:45
DATE ANALYZED	: 01/07/22 13:48	01/07/22 14:23
PREP BATCH	: 22DSA004W	22DSA004W
CALIBRATION REF	: LA07004A	LA07004A

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
JP5	ND	2.50	2.16	86	30-160

SURROGATE PARAMETERS	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Bromobenzene	0.500	0.541	108	60-130
Hexacosane	0.125	0.121	97	60-130

MB: Method Blank sample LCS: Lab Control Sample

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	01/06/22 14:45
Project	: 978210	Date Received:	01/06/22
Batch No.	: 22A033	Date Extracted:	01/06/22 14:45
Sample ID	: MBLK1W	Date Analyzed:	01/07/22 13:48
Lab Samp ID:	DSA004WB	Dilution Factor:	1
Lab File ID:	LA07009A	Matrix:	WATER
Ext Btch ID:	22DSA004W	% Moisture:	NA
Calib. Ref.:	LA07005A	Instrument ID:	D5

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	0.406	0.500	81	60-130
Hexacosane	0.117	0.125	93	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 : 978210
BATCH NO. : 22A033
METHOD : 3520C/8015B

MATRIX	: WATER	% MOISTURE:NA
DILUTION FACTOR	: 1	1
SAMPLE ID	: MBLK1W	LCS1W
LAB SAMPLE ID	: DSA004WB	J8A004WL
LAB FILE ID	: LA07009A	LA07012A
DATE PREPARED	: 01/06/22 14:45	01/06/22 14:45
DATE ANALYZED	: 01/07/22 13:48	01/07/22 14:41
PREP BATCH	: 22DSA004W	22DSA004W
CALIBRATION REF	: LA07005A	LA07005A

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
JP8	ND	2.50	2.08	83	30-160

SURROGATE PARAMETERS	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Bromobenzene	0.500	0.499	100	60-130
Hexacosane	0.125	0.119	95	60-130

MB: Method Blank sample LCS: Lab Control Sample

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 978210
BATCH NO. : 22A033
METHOD : 3520C/8015B

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: 202201040139	202201040139MS	202201040139MSD
LAB SAMPLE ID	: 22A033-01	22A033-01M	22A033-01S
LAB FILE ID	: LA07013A	LA07014A	LA07015A
DATE PREPARED	: 01/06/22 14:45	01/06/22 14:45	01/06/22 14:45
DATE ANALYZED	: 01/07/22 14:59	01/07/22 15:16	01/07/22 15:34
PREP BATCH	: 22DSA004W	22DSA004W	22DSA004W
CALIBRATION REF	: LA07003A	LA07003A	LA07003A

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
Diesel	ND	2.78	2.56	92	2.85	2.69	94	5	50-130	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromobenzene	0.555	0.573	103	0.570	0.593	104	60-130
Hexacosane	0.139	0.142	102	0.142	0.144	101	60-130

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

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 978568
BATCH NO. : 22A034
METHOD : 3520C/8015B

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: 202201050306	202201050306MS	202201050306MSD
LAB SAMPLE ID	: 22A034-01	22A034-01M	22A034-01S
LAB FILE ID	: LA07016A	LA07017A	LA07018A
DATE PREPARED	: 01/06/22 14:45	01/06/22 14:45	01/06/22 14:45
DATE ANALYZED	: 01/07/22 15:52	01/07/22 16:10	01/07/22 16:27
PREP BATCH	: 22DSA004W	22DSA004W	22DSA004W
CALIBRATION REF	: LA07004A	LA07004A	LA07004A

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
JP5	ND	2.72	2.36	87	2.78	2.51	90	6	30-160	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromobenzene	0.545	0.681	125	0.555	0.552	99	60-130
Hexacosane	0.136	0.173	127	0.139	0.125	90	60-130

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

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 978568
BATCH NO. : 22A034
METHOD : 3520C/8015B

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: 202201050308	202201050308MS	202201050308MSD
LAB SAMPLE ID	: 22A034-03	22A034-03M	22A034-03S
LAB FILE ID	: LA07019A	LA07021A	LA07022A
DATE PREPARED	: 01/06/22 14:45	01/06/22 14:45	01/06/22 14:45
DATE ANALYZED	: 01/07/22 16:45	01/07/22 17:21	01/07/22 17:39
PREP BATCH	: 22DSA004W	22DSA004W	22DSA004W
CALIBRATION REF	: LA07005A	LA07005A	LA07005A

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
JP8	ND	2.95	2.77	94	2.85	2.70	95	3	30-160	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromobenzene	0.590	0.596	101	0.570	0.576	101	60-130
Hexacosane	0.148	0.131	89	0.142	0.132	93	60-130

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