

## ANALYTICAL REPORT

Eurofins Calscience LLC  
7440 Lincoln Way  
Garden Grove, CA 92841  
Tel: (714)895-5494

Laboratory Job ID: 570-78120-1

Client Project/Site: 974254 - RED-Hill-INCIDENT (WALAWA  
SHAFT)

For:

Eurofins Eaton Analytical  
750 Royal Oaks Drive  
Monrovia, California 91016

Attn: Jaclyn Contreras



Authorized for release by:  
12/14/2021 2:21:09 AM

Xuan Dang, Project Manager I  
(714)895-5494  
[Xuan.Dang@eurofinset.com](mailto:Xuan.Dang@eurofinset.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



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[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*



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# Definitions/Glossary

Client: Eurofins Eaton Analytical  
Project/Site: 974254 - RED-Hill-INCIDENT (WALAWA SHAFT)

Job ID: 570-78120-1

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

# Case Narrative

Client: Eurofins Eaton Analytical  
Project/Site: 974254 - RED-Hill-INCIDENT (WALAWA SHAFT)

Job ID: 570-78120-1

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**Job ID: 570-78120-1**

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**Laboratory: Eurofins Calscience LLC**

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**Narrative**

**Job Narrative  
570-78120-1**

**Comments**

No additional comments.

**Receipt**

The sample was received on 12/9/2021 10:15 AM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.9° C.

**GC Semi VOA**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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# Detection Summary

Client: Eurofins Eaton Analytical  
Project/Site: 974254 - RED-Hill-INCIDENT (WALAWA SHAFT)

Job ID: 570-78120-1

**Client Sample ID: 202112100072**

**Lab Sample ID: 570-78120-1**

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins Calscience LLC

# Client Sample Results

Client: Eurofins Eaton Analytical  
 Project/Site: 974254 - RED-Hill-INCIDENT (WALAWA SHAFT)

Job ID: 570-78120-1

## Method: 8015B - Diesel Range Organics (DRO) (GC)

**Client Sample ID: 202112100072**  
**Date Collected: 12/07/21 12:30**  
**Date Received: 12/09/21 10:15**

**Lab Sample ID: 570-78120-1**  
**Matrix: Water**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6 as C6	ND		48	ug/L		12/09/21 15:55	12/10/21 19:04	1
C7 as C7	ND		48	ug/L		12/09/21 15:55	12/10/21 19:04	1
C8 as C8	ND		48	ug/L		12/09/21 15:55	12/10/21 19:04	1
C9-C10	ND		48	ug/L		12/09/21 15:55	12/10/21 19:04	1
C11-C12	ND		48	ug/L		12/09/21 15:55	12/10/21 19:04	1
C13-C14	ND		48	ug/L		12/09/21 15:55	12/10/21 19:04	1
C15-C16	ND		48	ug/L		12/09/21 15:55	12/10/21 19:04	1
C17-C18	ND		48	ug/L		12/09/21 15:55	12/10/21 19:04	1
C19-C20	ND		48	ug/L		12/09/21 15:55	12/10/21 19:04	1
C21-C22	ND		48	ug/L		12/09/21 15:55	12/10/21 19:04	1
C23-C24	ND		48	ug/L		12/09/21 15:55	12/10/21 19:04	1
C25-C28	ND		48	ug/L		12/09/21 15:55	12/10/21 19:04	1
C29-C32	ND		48	ug/L		12/09/21 15:55	12/10/21 19:04	1
C33-C36	ND		48	ug/L		12/09/21 15:55	12/10/21 19:04	1
C37-C40	ND		48	ug/L		12/09/21 15:55	12/10/21 19:04	1
C41-C44	ND		48	ug/L		12/09/21 15:55	12/10/21 19:04	1
C6-C44	ND		48	ug/L		12/09/21 15:55	12/10/21 19:04	1
Gasoline Range Organics (GRO)-C6-C10	ND		48	ug/L		12/09/21 15:55	12/10/21 19:04	1
Diesel Range Organics [C10-C28]	ND		48	ug/L		12/09/21 15:55	12/10/21 19:04	1
Oil Range Organics (C28-C40)	ND		48	ug/L		12/09/21 15:55	12/10/21 19:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	111		53 - 151			12/09/21 15:55	12/10/21 19:04	1

# Surrogate Summary

Client: Eurofins Eaton Analytical  
Project/Site: 974254 - RED-Hill-INCIDENT (WALAWA SHAFT)

Job ID: 570-78120-1

**Method: 8015B - Diesel Range Organics (DRO) (GC)**

**Matrix: Water**

**Prep Type: Total/NA**

## Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	OTCSN1 (53-151)
570-78120-1	202112100072	111
LCS 570-199903/2-A	Lab Control Sample	119
LCSD 570-199903/3-A	Lab Control Sample Dup	110
MB 570-199903/1-A	Method Blank	107

### Surrogate Legend

OTCSN = n-Octacosane (Surr)

# QC Sample Results

Client: Eurofins Eaton Analytical  
 Project/Site: 974254 - RED-Hill-INCIDENT (WALAWA SHAFT)

Job ID: 570-78120-1

## Method: 8015B - Diesel Range Organics (DRO) (GC)

**Lab Sample ID: MB 570-199903/1-A**  
**Matrix: Water**  
**Analysis Batch: 200119**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 199903**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C6 as C6	ND		50	ug/L		12/09/21 15:55	12/10/21 14:47	1
C7 as C7	ND		50	ug/L		12/09/21 15:55	12/10/21 14:47	1
C8 as C8	ND		50	ug/L		12/09/21 15:55	12/10/21 14:47	1
C9-C10	ND		50	ug/L		12/09/21 15:55	12/10/21 14:47	1
C11-C12	ND		50	ug/L		12/09/21 15:55	12/10/21 14:47	1
C13-C14	ND		50	ug/L		12/09/21 15:55	12/10/21 14:47	1
C15-C16	ND		50	ug/L		12/09/21 15:55	12/10/21 14:47	1
C17-C18	ND		50	ug/L		12/09/21 15:55	12/10/21 14:47	1
C19-C20	ND		50	ug/L		12/09/21 15:55	12/10/21 14:47	1
C21-C22	ND		50	ug/L		12/09/21 15:55	12/10/21 14:47	1
C23-C24	ND		50	ug/L		12/09/21 15:55	12/10/21 14:47	1
C25-C28	ND		50	ug/L		12/09/21 15:55	12/10/21 14:47	1
C29-C32	ND		50	ug/L		12/09/21 15:55	12/10/21 14:47	1
C33-C36	ND		50	ug/L		12/09/21 15:55	12/10/21 14:47	1
C37-C40	ND		50	ug/L		12/09/21 15:55	12/10/21 14:47	1
C41-C44	ND		50	ug/L		12/09/21 15:55	12/10/21 14:47	1
C6-C44	ND		50	ug/L		12/09/21 15:55	12/10/21 14:47	1
Gasoline Range Organics (GRO)-C6-C10	ND		50	ug/L		12/09/21 15:55	12/10/21 14:47	1
Diesel Range Organics [C10-C28]	ND		50	ug/L		12/09/21 15:55	12/10/21 14:47	1
Oil Range Organics (C28-C40)	ND		50	ug/L		12/09/21 15:55	12/10/21 14:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	107		53 - 151	12/09/21 15:55	12/10/21 14:47	1

**Lab Sample ID: LCS 570-199903/2-A**  
**Matrix: Water**  
**Analysis Batch: 200119**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 199903**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	4000	4765		ug/L		119	70 - 131

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>n</i> -Octacosane (Surr)	119		53 - 151

**Lab Sample ID: LCSD 570-199903/3-A**  
**Matrix: Water**  
**Analysis Batch: 200119**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 199903**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	4000	4463		ug/L		112	70 - 131	7	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>n</i> -Octacosane (Surr)	110		53 - 151



# QC Association Summary

Client: Eurofins Eaton Analytical  
Project/Site: 974254 - RED-Hill-INCIDENT (WALAWA SHAFT)

Job ID: 570-78120-1

## GC Semi VOA

### Prep Batch: 199903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-78120-1	202112100072	Total/NA	Water	3510C	
MB 570-199903/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-199903/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-199903/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

### Analysis Batch: 200119

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
570-78120-1	202112100072	Total/NA	Water	8015B	199903
MB 570-199903/1-A	Method Blank	Total/NA	Water	8015B	199903
LCS 570-199903/2-A	Lab Control Sample	Total/NA	Water	8015B	199903
LCSD 570-199903/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	199903

# Lab Chronicle

Client: Eurofins Eaton Analytical  
Project/Site: 974254 - RED-Hill-INCIDENT (WALAWA SHAFT)

Job ID: 570-78120-1

**Client Sample ID: 202112100072**

**Lab Sample ID: 570-78120-1**

**Date Collected: 12/07/21 12:30**

**Matrix: Water**

**Date Received: 12/09/21 10:15**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			259 mL	2.5 mL	199903	12/09/21 15:55	UFLU	ECL 1
Total/NA	Analysis	8015B		1			200119	12/10/21 19:04	N5Y3	ECL 1

Instrument ID: GC48

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494

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# Accreditation/Certification Summary

Client: Eurofins Eaton Analytical  
Project/Site: 974254 - RED-Hill-INCIDENT (WALAWA SHAFT)

Job ID: 570-78120-1

## Laboratory: Eurofins Calscience LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2944	09-30-22
Oregon	NELAP	CA300001	01-30-22

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# Method Summary

Client: Eurofins Eaton Analytical  
Project/Site: 974254 - RED-Hill-INCIDENT (WALAWA SHAFT)

Job ID: 570-78120-1

Method	Method Description	Protocol	Laboratory
8015B	Diesel Range Organics (DRO) (GC)	SW846	ECL 1
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ECL 1

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

ECL 1 = Eurofins Calscience LLC Lincoln, 7440 Lincoln Way, Garden Grove, CA 92841, TEL (714)895-5494



# Sample Summary

Client: Eurofins Eaton Analytical  
Project/Site: 974254 - RED-Hill-INCIDENT (WALAWA SHAFT)

Job ID: 570-78120-1

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
570-78120-1	202112100072	Water	12/07/21 12:30	12/09/21 10:15

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Eaton Analytical

Ship To:  
Eurofins CalScience  
7440 Lincoln Way

Garden Grove, CA 92641-1432

Phone: 714-895-5494 Fax: 714-894-7501

Folder #: 974254 Report Due: 12/14/2021

Sample ID: 202112100072 Client Sample ID for reference on: Walawa Shaft PWSID: JGS

Sample type: Sample Event: Analysis Requested: 6257\_8015B(M) C6-C44

Method: 8015B M Prep Method: EPA 3510C

Static ID: Extractable

Date: 12/10/2021

### Submittal Form

\*REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers! Report & Invoice must have the Folder # 974254 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@eurofinsat.com  
Eurofins Eaton Analytical, LLC 760 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 State Certification # and Exp. Date for requested tests + matrix. Samples from: HAWAII

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
Relinquished by: \_\_\_\_\_ 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

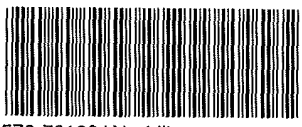


NON ID NANA (000) 500-7200  
SILA ARONI  
DEPARTMENT OF HEALTH/SDWB  
85 WAIMANO HOME RD  
HAKUPO BLDG. 4  
HAWAII CITY, HI 96782  
UNITED STATES US

SHIP DATE: 09DEC21  
ACTWGT 15.00 LB  
CAD 101971153/NET4400  
BILL SENDER

78120 1

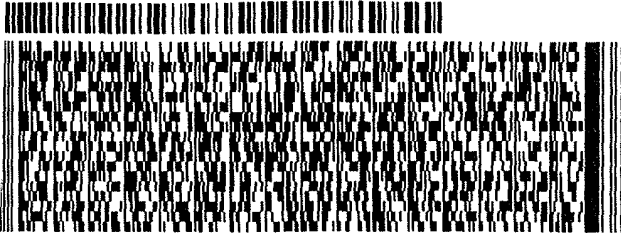
**XUAN DANG**  
**EUROFINS CALSCIENCE**  
**7440 LINCOLN WAY**



570-78120 Waybill

**GARDEN GROVE CA 92641**

(714) 895-5494 REF DEPT

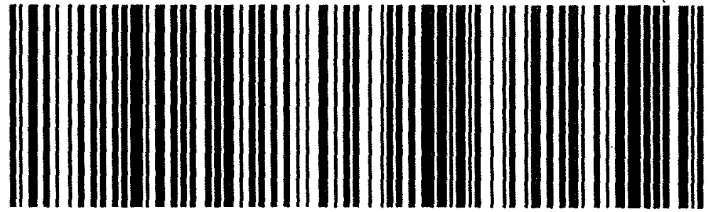


1 of 4  
RK# 7754 3415 5120  
0201  
## MASTER ##

THU - 09 DEC 11:30A  
PRIORITY OVERNIGHT

**WZ APVA**

92641  
CA-US SNA



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## Login Sample Receipt Checklist

Client: Eurofins Eaton Analytical

Job Number: 570-78120-1

**Login Number: 78120**

**List Number: 1**

**Creator: Vitente, Precy**

**List Source: Eurofins Calscience LLC**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	