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# PREPARED FOR

Attn: Terri Choy AECOM 1001 Bishop Street Honolulu, Hawaii 96813 Generated 5/10/2023 2:51:49 PM

### **JOB DESCRIPTION**

Red Hill - AFFF Assessment Sampling

**ANALYTICAL REPORT** 

# **JOB NUMBER**

580-126799-1

Eurofins Seattle 5755 8th Street East Tacoma WA 98424



# **Eurofins Seattle**

#### **Job Notes**

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northwest, LLC Project Manager.

#### **Authorization**

M. Elaine Walker

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Authorized for release by Marie Walker, Senior Project Manager M.Elaine.Walker@et.eurofinsus.com (253)248-4972

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Client: AECOM

Laboratory Job ID: 580-126799-1

Project/Site: Red Hill - AFFF Assessment Sampling

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#### **Case Narrative**

Client: AECOM Job ID: 580-126799-1

Project/Site: Red Hill - AFFF Assessment Sampling

Job ID: 580-126799-1

**Laboratory: Eurofins Seattle** 

Narrative

#### **CASE NARRATIVE**

Client: AECOM **Project: Red Hill - AFFF Assessment Sampling** Report Number: 580-126799-1

This case narrative is in the form of an exception report, where only the anomalies related to this report, method specific performance and/or QA/QC issues are discussed. If there are no issues to report, this narrative will include a statement that documents that there are no relevant data issues.

It should be noted that samples with elevated Reporting Limits (RLs) resulting from a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the RLs are an unavoidable but acceptable consequence of sample dilution that enables quantification of target analytes within the calibration range of the instrument or that reduces the interferences thereby enabling the quantification of target analytes.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

#### **RECEIPT**

Five samples were received on 5/3/2023 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.2° C.

Note: All samples which require thermal preservation are considered acceptable if the arrival temperature is within 2C of the required temperature or method specified range. For samples with a specified temperature of 4C, samples with a temperature ranging from just above freezing temperature of water to 6C shall be acceptable. Samples that are hand delivered immediately following collection may not meet these criteria, however they will be deemed acceptable according to NELAC standards, if there is evidence that the chilling process has begun, such as arrival on ice, etc.

#### **GLYCOLS**

Samples AF-RHMW12A-WGN01LF-2305W1 (580-126799-1), AF-RHMW12A-WGFD01LF-2305W1 (580-126799-2), AF-RHMW16-WGN01LF-2305W1 (580-126799-3), AF-RHMW06-WGN01LF-2305W1 (580-126799-4) and AF-RHMW04-WGN01LF-2305W1 (580-126799-5) were analyzed for glycols in accordance with EPA SW-846 Method 8015B - DAI. The samples were analyzed on 05/07/2023.

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

#### **Definitions/Glossary**

Client: AECOM Job ID: 580-126799-1

Project/Site: Red Hill - AFFF Assessment Sampling

#### **Qualifiers**

#### **GC Semi VOA**

 Qualifier
 Qualifier Description

 M
 Manual integrated compound.

 U
 Undetected at the Limit of Detection.

#### **Glossary**

DLC

Abbreviation	These commonly used abbreviations may or may not be present in this report.							
¤	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							

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)

Decision Level 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
POL Present Operation | Operation |

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

**Eurofins Seattle** 

Page 5 of 23 5/10/2023

Client: AECOM Job ID: 580-126799-1

Project/Site: Red Hill - AFFF Assessment Sampling

Client Sample ID: AF-RHMW12A-WGN01LF-2305W1 Lab Sample ID: 580-126799-1

Date Collected: 05/01/23 09:45 Matrix: Water

Date Received: 05/03/23 10:30

Analyte	Result Q	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac	
2-(2-Butoxyethoxy)ethanol	30 U	J	5.0	11	ma/l			05/07/23 13:00	1	

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Client: AECOM Job ID: 580-126799-1

Project/Site: Red Hill - AFFF Assessment Sampling

Client Sample ID: AF-RHMW12A-WGFD01LF-2305W1 Lab Sample ID: 580-126799-2

Date Collected: 05/01/23 09:45 Matrix: Water

Date Received: 05/03/23 10:30

Analyte	Result Qualifie	er LOQ	DL Unit	D	Prepared	Analyzed	Dil Fac	
2-(2-Butoxyethoxy)ethanol	30 UM	5.0	1.1 mg/l			05/07/23 13:23	1	

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Client: AECOM Job ID: 580-126799-1

Project/Site: Red Hill - AFFF Assessment Sampling

Client Sample ID: AF-RHMW16-WGN01LF-2305W1 Lab Sample ID: 580-126799-3

Date Collected: 05/01/23 12:15 Matrix: Water

Date Received: 05/03/23 10:30

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac	
2-(2-Butoxyethoxy)ethanol	3.0	U M	5.0	1.1	ma/L			05/07/23 13:46	1	

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Client: AECOM Job ID: 580-126799-1

Project/Site: Red Hill - AFFF Assessment Sampling

Client Sample ID: AF-RHMW06-WGN01LF-2305W1 Lab Sample ID: 580-126799-4

Date Collected: 05/01/23 11:40 Matrix: Water

Date Received: 05/03/23 10:30

Method: SW846 8015C GLY - Glycols- Direct Injection (GC/FID)

Analyte		alifier LOC	) DL	Unit E	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	30 UN	vi 5 (	11	ma/l			05/07/23 14:09	1

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Client: AECOM Job ID: 580-126799-1

Project/Site: Red Hill - AFFF Assessment Sampling

Client Sample ID: AF-RHMW04-WGN01LF-2305W1 Lab Sample ID: 580-126799-5

Date Collected: 05/01/23 10:15 Matrix: Water

Date Received: 05/03/23 10:30

Method: SW846 8015C GLY - Glycols- Direct Injection (GC/FID)										
	Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	2-(2-Butoxyethoxy)ethanol	3.0	U	5.0	1.1	mg/L			05/07/23 14:32	1

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#### **QC Sample Results**

Client: AECOM Job ID: 580-126799-1

Project/Site: Red Hill - AFFF Assessment Sampling

Method: 8015C GLY - Glycols- Direct Injection (GC/FID)

Lab Sample ID: MB 680-777342/18 **Client Sample ID: Method Blank Prep Type: Total/NA** 

**Matrix: Water** 

**Analysis Batch: 777342** 

	IVID IVID							
Analyte	Result Qualifier	LOQ	DL U	Init	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0 U	5.0	1.1 m	ng/L			05/07/23 04:05	1

Lab Sample ID: LCS 680-777342/12 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

Analysis Batch: 777342

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
2-(2-Butoxyethoxy)ethanol	20.0	19.1		mg/L		96	50 - 150	 Τ

Lab Sample ID: LCSD 680-777342/13 **Client Sample ID: Lab Control Sample Dup** Prep Type: Total/NA

**Matrix: Water** 

Analysis Batch: 777342

, ,	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
2-(2-Butoxyethoxy)ethanol	20.0	19.3		mg/L		97	50 - 150	1	50

5/10/2023

Job ID: 580-126799-1

Project/Site: Red Hill - AFFF Assessment Sampling

Client Sample ID: AF-RHMW12A-WGN01LF-2305W1

Lab Sample ID: 580-126799-1

Date Collected: 05/01/23 09:45 Date Received: 05/03/23 10:30

**Matrix: Water** 

Batch Dilution Batch Batch Prepared Method Number Analyst or Analyzed **Prep Type** Type Run **Factor** Lab Total/NA 8015C GLY 777342 GEM EET SAV 05/07/23 13:00 Analysis

Client Sample ID: AF-RHMW12A-WGFD01LF-2305W1

Lab Sample ID: 580-126799-2

Date Collected: 05/01/23 09:45 **Matrix: Water** 

Date Received: 05/03/23 10:30

Client: AECOM

Batch Batch Dilution Batch **Prepared Prep Type** Type Method Run **Factor Number Analyst** Lab or Analyzed Total/NA Analysis 8015C GLY 777342 GEM EET SAV 05/07/23 13:23

Client Sample ID: AF-RHMW16-WGN01LF-2305W1 Lab Sample ID: 580-126799-3 Date Collected: 05/01/23 12:15 **Matrix: Water** 

Date Received: 05/03/23 10:30

Batch Batch Dilution Batch Prepared **Number Analyst** or Analyzed **Prep Type** Method **Factor** Type Run Lab 05/07/23 13:46 EET SAV Total/NA Analysis 8015C GLY 777342 GEM

Client Sample ID: AF-RHMW06-WGN01LF-2305W1 Lab Sample ID: 580-126799-4

Date Collected: 05/01/23 11:40 **Matrix: Water** 

Date Received: 05/03/23 10:30

Batch Batch Dilution Batch **Prepared Prep Type** Method **Number Analyst** or Analyzed Type Run **Factor** Lab Analysis 8015C GLY 777342 GEM EET SAV 05/07/23 14:09 Total/NA

Client Sample ID: AF-RHMW04-WGN01LF-2305W1 Lab Sample ID: 580-126799-5

Date Collected: 05/01/23 10:15 **Matrix: Water** 

Date Received: 05/03/23 10:30

Batch Batch Dilution Batch Prepared Method Factor Number Analyst or Analyzed **Prep Type** Type Run Lab 05/07/23 14:32 Total/NA Analysis 8015C GLY 777342 GEM **EET SAV** 

**Laboratory References:** 

EET SAV = Eurofins Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

### **Accreditation/Certification Summary**

Client: AECOM Job ID: 580-126799-1

Project/Site: Red Hill - AFFF Assessment Sampling

#### **Laboratory: Eurofins Savannah**

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority		Program	Identification Number	Expiration Date
ANAB		Dept. of Defense ELAP	L2463	09-22-24
The following analyte the agency does not		port, but the laboratory is not	certified by the governing authority.	This list may include analytes for which
Analysis Method	Prep Method	Matrix	Analyte	
8015C GLY		Water	2-(2-Butoxyethoxy)ethanol	

**Eurofins Seattle** 

### **Sample Summary**

Client: AECOM Job ID: 580-126799-1

Project/Site: Red Hill - AFFF Assessment Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-126799-1	AF-RHMW12A-WGN01LF-2305W1	Water	05/01/23 09:45	05/03/23 10:30
580-126799-2	AF-RHMW12A-WGFD01LF-2305W1	Water	05/01/23 09:45	05/03/23 10:30
580-126799-3	AF-RHMW16-WGN01LF-2305W1	Water	05/01/23 12:15	05/03/23 10:30
580-126799-4	AF-RHMW06-WGN01LF-2305W1	Water	05/01/23 11:40	05/03/23 10:30
580-126799-5	AF-RHMW04-WGN01LF-2305W1	Water	05/01/23 10:15	05/03/23 10:30

Environment Testing

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America

#### **Chain of Custody Record**

**Eurofins FGS. Seattle** 

5755 8th Street East

Tacoma, WA 98424

COC No: 2305W1AFEA05 Carrier Tracking No(s): sampler 1244 Vin FedEx Elaine Walker Client Information State of Origin: Page: F-Mail: Client Contact: 303-349-4728 M.Elaine.Walker@EurofinsET.com Page 1 of 1 Hawaii Company: **Analysis Requested AECOM** Preservation Codes: Due Date Requested: Address: see subcontract A - HCL M - Haxana 1001 Bishop St. Suite 1600 B - NaOH N - None FAT Requested (days): O - AsNaO2 C - Zn Acetate Rush - 5 Day Honolulu D - Nitric Acid P - Na2O4S 8015C\_DAI\_GL\_D5/2-(2-butoxyethoxy)-etheno State, Zip: E - NaHSO4 Q - Na2SO3 Compliance Project A Yes A No Hawaii 96813 F - MeOH R - Na2S2O3 S - H2SQ4 G - Amchior Phone: T - TSP Dodecahydrate H - Ascorbic Acid 808-954-4512 / 770-331-0794 - Ice U - Acetone V - MCAA J - D∤ Water Watson Tanji (watson.tanji @aecom.com)/ Mark Kromis (mark.kromis @aecom.com) W - pH 4-5 K - EDTA Project #: 60697810 Z - other (specify) Project Name: L - EDA CTO N6274223F0104 SSOW#: RHSF Sample Matrix Type Sample (C=Comp. Special Instructions/Note: Sample Date Time G=grab) Sample Identification Preservation Code: A W N Х 5/1/23 DAYC AF-RHMW12A-WGN01LF-2305W1 5/1/23 G W N Х 0945 AF-RHMW12A-WGFD01LF-2305W1 n x 5/1/23 580-126799 Chain of Custody Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month) Possible Hazard Identification Radiological Disposal By Lab Archive For Return To Client Flammable Skin Imitant Prelim data (Level 1or2)=see TAT above. DoD Stage | Special Instructions/QC Requirements: DOD QSM project. Deliverable Requested: I, II, III, IV, Other (specify) 4 report standard TAT. AECOM EQuIS EDD. Empty Kit Religauished by AEron AECOM 1340 received by Edmond Relinquished by: Mult Yim Wood your Company カム 1030 Company Cooler Temper fure(s) °C and Other Remarks: Custody Seals Intact: Custody Seal No.: Ver: 01/16/2019

## **Chain of Custody Record**

**Eurofins FGS, Seattle** 

5755 8th Street East

Tacoma, WA 98424

eurofins Environment Testing America

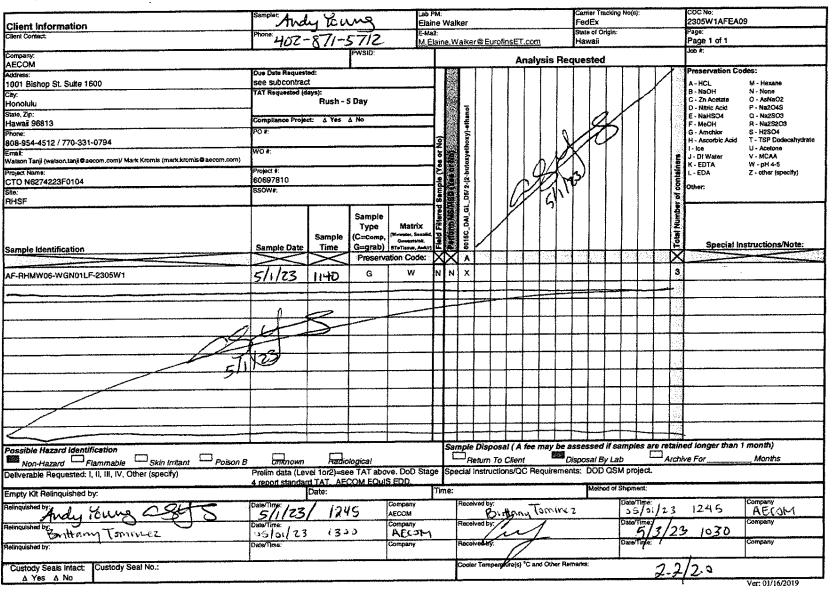
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#### **Eurofins FGS, Seattle**

5755 8th Street East Tacoma, WA 98424

#### **Chain of Custody Record**

💸 eurofins Environment Testing America



#### **Eurofins FGS, Seattle**

5755 8th Street East Tacoma, WA 98424

### **Chain of Custody Record**

eurofins Environment Testing America

Client Information	Sampler:	You	A S	Lab I Elai	Рм: ne Wa	lker					Carri Fed	er Track Ex	ing No(s	<b>)</b> :		COC No: 2305W1AFEAC	8
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Company: AECOM		<u></u>	PWSID:					A	nalys	is Re	ques	ted				Job #:	
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hone: 08-954-4512 / 770-331-0794	PG#:				2	hoxy					1	7				G - Amchior H - Ascorbic Acid	S - H2SO4 T - TSP Dodecahydra
mail: /atson Tanji (watson.tanji@aecom.com)/ Mark Kromis (mark.kromis@aecom.com)	WO #: Project #:				ample (Yes or No D (Yes britis)	loxyet				, x	17					I - Ice J - DI Water K - EDTA	U - Acetone V - MCAA W - pH 4-5
roject Name: TO N6274223F0104 lie:	60697810 SSOW#:				ample (Ye.	2, (2, b,			h	X.	M				confeiners	L - EDA Other:	Z - other (specify)
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iample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Wavester, Sencific, Overzete/oli, SToThesse, AuAir)	Field Filtered : Fartain Man	8015C_DAL_D5/2-(2-buloxyethoxy)-ethenoi	/								Total Number	Special In	structions/Nate:
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seattle	<u> </u>	ustody Ro	y Record	Carrier Tracking No(s)		1	En runne. Te, n <sub>s</sub> umenca
Client Information Client Contact:	Phone: 457-871-871	7	Elaine Walker E-Mail.			2305W1AFEA09 Page:	
Company	ISMd	7	ne Walker@ EurofinsE	com		Page 1 of 1	
W			4	Analysis Requested			
Address: 1001 Bishop St. Suite 1600	Due Date Requested. See Subcontract					eservation Codes.	Hexane
n	TAT Requested (days) Rush - 5 Day				1	20	None AsNaO2
State, Zip: Hawaii 96813	Compilance Project: △ Yes △ No		lonsdf			Nitric Acid P NaHSO4 Q	Na2O4S Na2SO3
/ 770-331-0794	-# Od					MeOH Amchlor S Ascorbic Acid T	azszus 2SO4 SP Dodecahydrate
m)/ Mark Kromis (mark.kromis@aecom.com)	WO#-		(oN			lce U	Acetone
Project Name: CTO N6274223F0104	Project #* 60697810	10-1	10 59		,,,,	\$ N	pH 4-5 other (specify)
	**************************************		v) asv			Other	
		Matrix (W=water, S=solid,	id Filtered form MS/W sc_DAL_aL_	3	isi Mumber		
Sample Identification	-	BT=Tissue, A=Air)	ЮД		101	Special Instructions/Note	tions/Note:
	X X	Preservation Code	X X		<		
AF-RHMW06-WGN01LF-2305W1	5 0411 82/1/5	М	×		Ø.		
						ALLEGAÇA GALLANIA DE LA CALLANIA DE	
	50						
			580-12	186-126799 Chain of Custour	-		
			\   	+			
Identification			Sample Disposal ( A	fee may be	samples are retaine	ed longer than 1 mor	ıth)
Other (specify)	Pre	above DoD Stage		Heturn 10 Cilent Uisposal by Lab Special Instructions/QC Requirements: DOD QSM project.	SM project.		Monus
Empty Kit Relinguished by:	4 report standard TAT. AECOM FOulS EDD. Date:		Time	Method	Method of Shipment:		
X 480 M	Date/Time: 172 / 124 C	Company	Received by:	James	Date/Time:	124 & Company	pany
	2 6	Company	Received by:	1	0	(20)	
		Company	Receive@by-		J	3	pany
Custody Seals Intact: Custody Seal No.			Cooler Temperadre(s	Cooler Temperature(s) °C and Other Remarks:	7.0	12.0	
Δ Yes Δ No					4.4		Ver 01/16/2019

Phone	MATITY   Analysis Req	Seater Tracking Nots) Seater Tracking Nots) Hawaii  Lested Total Mumber of containers	2305W1AFEA08 Page: Page 1 of 1 Job #:  North Hexane B NaOH North North Askna02 C An Acetare O Askna02 C Nitric Acid P Na2SQ3 E NaHSQ4 C Narchor R Na2SQ3 E NaHSQ4 C Anchor S HSSQ4 E NaHSQ4 C Anchor S HSSQ4 C Anchor S Anchor S C Other (specify) Other	
tot A Yes A No  Sample (C=comp, C= Time (G=comp, C= Time (G=comp) or Time	Matrix  Matrix  Matrix  Seadold, Intered Sample (Yes of No)  Field Fillered Sample (Yes of No)	Analysis Req	lĝiu:	Page: Page 1 of 1 Job #: Preservation Codes A HCL M B NadOH N N C NA Acetale P C NA HSO4 P C NAHSO4
Rush - £	Martin Ma	Analysis Requeste		Preservation Codes Preservation Codes A HCL M B NaOH NIC Acid P D Nitric Acid P D Nitric Acid P D Natic Acid P C A McDlon P C A McDlon P C EDA Z Other
ample Time	Y Frield Friffered Sample (Yes or No) Perform MS/MSD (Yes or No)			Preservation Codes A HCL M B NaOH N C Zn Acetate O C Zn Acetate O C Zn Acetate O E NaHSO4 P E NaHSO4 P F MeOH R G MeOH R I LEDA T I LEDA Z Other Special Instr
ample Time	Y Field Filipred Sample (Yes or No.) Perform MS/MSD (Yes or No.)	3	arenteiner of containers	A HCL M C Zn Acetate O C Zn Acetate O D Nitric Acid P D Nitric Acid I I C E D J Water V J D I Water V J D I Water V J D I Water V J C EDA Z Other Z Other
Rush - : 6	Field Filtered Sample (Yes or No.)	3	Total Number of containers	C Z A Acetate O D Nitric Acid F E NaHSO4 R F MacOH S G Amchior S H Ascorbic Acid T I I I I I I I I I I I I I I I I I I
∆ Yes	Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No)	3	arenteinos to tedmuM tetoT	E NaHSOA F MeOH F MeOH F Ascorbio Acid T T I Ice I DI Water V K EDTA Z Other Z
	Field Filtered Sample (Yes or No)	3	Total Number of containers	G Amelion ST H Ascorbic Acid T T L EDA DI Water W L EDA Z Other Special Instru
	Field Filipred Sample (Yes or No)	3	Total Number of containers	l ice U J Di Water V L EDA Z Other  Special Instr
	Ferd Filtered Sample (Yes or	3	Total Number of containe	Other ED
1 1 1	Field Filtered Sample		no to tedmun letoT	Other
	Field Fillered S		Total Number o	
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		Return To Client Disposal	1 By Lab	Archive For Months
vel 1or2)=see TAT above.	DoD Stage Special	al Instructions/QC Requirements DO		
rd 1A1. AECOM EQUIS E Date:	Γ	Met	athod of Shipment:	
			Date/Time	Company
「メイジ AE		Some January	42/0/50	1245 AECONI
34	>	ceived by:	13/2	3 (630 Company
Ö		ceived.by	Date/Time. /	Company
	Coo	oler Temperature(s) °C and Other Remarks:	7	2/20
				Ver 01/16/2019
Time:	Fadiological Fraction Four Early Fraction Four Early Fraction Four Early Fraction Four Early Fraction	Prelim data (Level 10/2)=see TAT above. DoD Stage Specir Date/Time.  Date/Time:  Date/Time:  Date/Time:  Company  Re  Company  Re	D Stage	Sample Disposal ( A fee may be assessed if samples are replaced by the may be assessed if an increased by the may be assessed if an increased in the may be assessed in the may be ass

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**Chain of Custody Record** 

.urofins FGS, Seattle 5755 8th Street East Tacoma, WA 98424

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		a	PM:		Carrier Tracking No(s):	Vo(s):	COC No:	
Client Information	デモー	Ö	Elaine Walker		FedEx		2305W1AFEA05	
Client Contact:	Phone: 308-349-4-28		E-Mail: M Elaine.Walker@EurofinsET com	EurofinsET com	State of Origin: Hawaii		Page: Page 1 of 1	
Company: AECOM		PWSID:		Analysis Requested	quested		Job #•	
Address: 1001 Bishop St. Suite 1600	Due Date Requested. see subcontract						Preservation Codes	is. M Hexane
City Honolulu	TAT Requested (days): Rush - 5 Day	Day				1	B NaOH C Zn Acetate	N None O AsNaO2
State Zip: Наман 96813	Compliance Project: A Yes 4	Δ No	lonsdi			_		P Na204S Q Na2SO3 R Na2S2O3
Phone: 808-954-4512 / 770-331-0794	PO #-							S H2SO4
om)/ Mark Kromis (mark.kromis@aecom.com)	.# OM		(oN			sye		
Project Name: CTO N6274223F0104	Project #* 60697810		e2 ot	1	2	onletn	r EDA L EDA	w pri 4-5 Z other (specify)
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Commit I donest contract	Sample Comple Time	Sample Matrix Type (Wayner Sasolid, Carcomp, Carrach) or Transcript (Carrach)	Field Filtered Perform MS/M MS/C_DAI_GL_			) j Total Number	Speciallos	Special Instructions/Note:
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	7 511/20							
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Possible Hazard Identification			Sample Dis	Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)	assessed ıf sa	mples are retain	ed longer than 1	month)
Non-Hazard Flammable Skin Irritant Poison B	Unknown		Retur	Return To Client	Disposal By Lab	٦	Archive For	Months
Deliverable Requested. I, II, III, IV, Other (specify)	Prelim data (Level 1or2)=see TAT above. DoD Stage 4 report standard TAT AECOM EQuIS EDD	e TAT above. DoD S SOM EQuIS EDD		Special Instructions/QC Requirements. DOD QSM project.	ants. DOD QSN	/ project.		
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2	1 2	Company	Received by	3		Date/Time:  23	1030	Company
Reinquished by:				6y.		Date/Time*		Company
Custody Seals Intact:   Custody Seal No			Cooler Te	Cooler Temper (ure(s) °C and Other Remarks:	lemarks:	~		0.000
					(	700		Ver- 01/16/2019

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**Chain of Custody Record** 

Eurofins FGS, Seattle 5755 8th Street East Tacoma, WA 98424

Eurofins FGS, Seattle 5755 8th Street East Tacoma, WA 98424	Chain	Chain of Custody Record	Record			🐈 eurofins	E, ronmen Tes eg Ame,ca
	`	Acien	Lab PM: Elaine Walker		No(s)	COC No 2305W1AFEA06	
Client Contact:	Phone: 308 -659 -3454		:-Mail: 4 Elaine Walker@Eurofii	State of Origin:		Page: Page 1 of 1	
Company AECOM		PWSID:		Analysis Requested		-# qop	
hop St. Suite 1600	Due Date Requested: see subcontract				paca	Preservation Codes: A HCL M	M Hexane
	TAT Requested (days): Rush - 5 Day	Day				B NaOH C Zn Acetate	N None O AsNaO2
State, Zip Hawaii 96813	Compliance Project: A Yes A No	No	lonsd		Minarioscoph	E NaHSO4	Nazo4s Q Nazso3 H Na2so3
/770-331-0794	# Od		andreas	{ ( )		G Amchlor H Ascorbic Acid	S H2SO4 T TSP Dodecahydrate
m)/ Mark Kromis (mark kromis@aecom.com)	.# O.M		(ON	;\ {}	SJ	J DI Water	U Acetone V MCAA W 2H 4-5
Project Name: CTO N6274223F0104	Project #* 60697810		10 88		) () l	L EDA	Z other (specify)
	-#MOSS		A) ası		01 00	Other	
	Sample	Sample Matrix Type Matrix (C=comp, (M=water Set)	A giltered MSM mrofi In In I		Mal Number		
Sample Identification	Sample Date Time	G=grab) ST=Tissue, A=Air)	614 Pe	7	01 	Special Ins	Special Instructions/Note:
	X	Preservation Code:	k X X K		< 		
AF-RHMW16-WGN01LF-2305W1	D/20/23 1215	M ⊙	×		3		
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11/10/30							
Identification		Jooin	Sample Dispos	Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)	amples are retained lon	d longer than 1 n	nonth) Months
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Empty Kit Relinquished by:	report standard (AL. AECC.)	IN EQUIS FOR	Time	Method o	Method of Shipment:		
IN MILLE	23 /12	Company	Received by	Ednords	Date/Time:	1391	Company FIECO 1
Baby Edicon	7	Company	# K		Date/Time: 13/23	0601 0	Corripány Company
				3 50			
Custody Seals Intact: Custody Seal No.			Cooler Temper	Cooler Temperature(s) "C and Other Remarks.	2-2/	2.0	
		Larrie de la constante de la c	-				Ver 01/16/2019

Client: AECOM Job Number: 580-126799-1

Login Number: 126799

List Source: Eurofins Savannah

List Number: 2

List Creation: 05/05/23 11:46 AM

Creator: Drake, Victoria

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	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	N/A	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	