

Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Terri Choy AECOM 1001 Bishop Street Honolulu, Hawaii 96813 Generated 2/14/2023 4:43:13 PM

JOB DESCRIPTION

Red Hill - AFFF Assessment Sampling

JOB NUMBER

580-123231-1

Eurofins Seattle 5755 8th Street East Tacoma WA 98424





Eurofins Seattle

Job Notes

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The data in the report relate to the field sample(s) as received by the laboratory and associated QC. All results have been reviewed and have been found to be compliant with laboratory and accreditation requirements, with the exception of the noted deviation(s). For questions, please contact the Project Manager.

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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Job ID: 580-123231-1

Laboratory: Eurofins Seattle

Narrative

CASE NARRATIVE Client: AECOM Project: Red Hill - AFFF Assessment Sampling Report Number: 580-123231-1

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

Four samples were received on 2/8/2023 11:00 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 5.4° 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-RHMW225401-WGN01B-2301W5 (580-123231-1), AF-RHMW06-WGN01LF-2301W5 (580-123231-2), AF-RHMW16-WGN01LF-2301W5 (580-123231-3) and AF-RHMW04-WGN01LF-2301W5 (580-123231-4) were analyzed for glycols in accordance with EPA SW-846 Method 8015B - DAI. The samples were analyzed on 02/10/2023 and 02/11/2023.

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

Definitions/Glossary

Client: AECOM Project/Site: Red Hill - AFFF Assessment Sampling

Job ID: 580-123231-1

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Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
М	Manual integrated compound.
U	Undetected at the Limit of Detection.

Glossary

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
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

Client: AECOM Project/Site: Red Hill - AFFF Assessment Sampling Job ID: 580-123231-1

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Client Sample ID: AF-RHMW225401-WGN01B-2301W5 Lab Sample ID: 580-123231-1 Date Collected: 02/02/23 12:10 Matrix: Water Date Received: 02/08/23 11:00 Method: SW846 8015C GLY - Glycols- Direct Injection (GC/FID) Result Qualifier Analyte LOQ DL Unit D Prepared Analyzed Dil Fac 3.0 U M 2-(2-Butoxyethoxy)ethanol 5.0 1.1 mg/L 02/10/23 23:37 1

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5.0

1.1 mg/L

Job ID: 580-123231-1

Analyzed

02/11/23 00:01

Matrix: Water

Dil Fac

1

Client: AECOM Project/Site: Red Hill - AFFF Assessment Sampling

2-(2-Butoxyethoxy)ethanol

Client Sample ID: AF-RHMW06-WGN01LF-2301W5 Lab Sample ID: 580-123231-2 Date Collected: 02/02/23 11:15 Date Received: 02/08/23 11:00 Method: SW846 8015C GLY - Glycols- Direct Injection (GC/FID) Analyte Result Qualifier LOQ DL Unit D Prepared

3.0 U M

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Job ID: 580-123231-1

Matrix: Water

Lab Sample ID: 580-123231-3

Client: AECOM Project/Site: Red Hill - AFFF Assessment Sampling

Client Sample ID: AF-RHMW16-WGN01LF-2301W5 Date Collected: 02/02/23 10:20 Date Received: 02/08/23 11:00

Method: SW846 8015C GLY - G	lycole- Dir	ect Injection								
Analyte	-	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac	5
2-(2-Butoxyethoxy)ethanol	3.0	UM	5.0	1.1	mg/L			02/11/23 00:24	1	

Job ID: 580-123231-1

Matrix: Water

Client: AECOM Project/Site: Red Hill - AFFF Assessment Sampling

Client Sample ID: AF-RHMW04-WGN01LF-2301W5 Lab Sample ID: 580-123231-4 Date Collected: 02/02/23 09:15 Date Received: 02/08/23 11:00 .

Method: SW846 8015C GLY	- Giycols- Dir	ect injectior	1 (GC/FID)							
Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac	5
2-(2-Butoxyethoxy)ethanol	3.0	UM	5.0	1.1	mg/L			02/11/23 01:34	1	6

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QC Sample Results

Client: AECOM Project/Site: Red Hill - AFFF Assessment Sampling

Job ID: 580-123231-1

5 6 7

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

Lab Sample ID: MB 680-76 Matrix: Water	j 2871/10						С	lient Sar	nple ID: Mo		
									Prep Ty	pe: Tot	al/IN/
Analysis Batch: 762871		ИВ МВ									
Analyte		ult Qualifier		LOQ	DL Unit		D	Prepared	Analyz	zed	Dil Fac
2-(2-Butoxyethoxy)ethanol	;	3.0 U M		5.0	1.1 mg/L				02/10/23		1
Lab Sample ID: LCS 680-7	62871/6					Cli	ent S	ample II	D: Lab Con	ntrol Sa	imple
Matrix: Water									Prep Ty		
Analysis Batch: 762871										-	
-			Spike	LCS	LCS				%Rec		
Analyte			Added	Result	Qualifier	Unit	I	D %Rec	Limits		
2-(2-Butoxyethoxy)ethanol			20.0	19.8		mg/L		99	50 - 150		
Lab Sample ID: LCSD 680-	-762871/7					Client S	amp	le ID: La	b Control S	Sample	e Dur
Matrix: Water									Prep Ty		
Analysis Batch: 762871											
-			Spike	LCSD	LCSD				%Rec		RPD
Analyte			Added	Result	Qualifier	Unit	I	D %Rec	Limits	RPD	Limi
2-(2-Butoxyethoxy)ethanol			20.0	18.4		mg/L		92	50 - 150	7	50
	1.3 MS										
Lab Sample ID: 580-12323					Client S	ample	ID: Al	KHWW	10-WGNU	1LF-23	01W:
-					Client S	ample	ID: AI	F-RHMW	Prep Ty		
Matrix: Water	1-5 1015				Client S	ample	ID: AI	F-RHMW			
Matrix: Water	Sample S	Sample	Spike	MS		ample	ID: AI	F-RHMW			
Matrix: Water Analysis Batch: 762871		•	Spike Added			Unit		F-RHMW	Prep Ty		
Matrix: Water Analysis Batch: 762871 ^{Analyte}	Sample S	Qualifier	•		MS Qualifier				Prep Tyj %Rec		
Matrix: Water Analysis Batch: 762871 Analyte 2-(2-Butoxyethoxy)ethanol	Sample S Result C 3.0 t	Qualifier	Added	Resul	MS Qualifier	Unit mg/L	I	D <u>%Rec</u> 103	Prep Typ %Rec Limits 50 - 150	pe: Tot	al/N/
Matrix: Water Analysis Batch: 762871 Analyte 2-(2-Butoxyethoxy)ethanol Lab Sample ID: 580-12323	Sample S Result C 3.0 t	Qualifier	Added	Resul	MS Qualifier	Unit mg/L	I	D <u>%Rec</u> 103	Bigs Bigs <th< td=""><td>pe: Tot</td><td>al/N/</td></th<>	pe: Tot	al/N/
Matrix: Water Analysis Batch: 762871 Analyte 2-(2-Butoxyethoxy)ethanol Lab Sample ID: 580-12323 Matrix: Water	Sample S Result C 3.0 t	Qualifier	Added	Resul	MS Qualifier	Unit mg/L	I	D <u>%Rec</u> 103	Prep Typ %Rec Limits 50 - 150	pe: Tot	al/N/
Matrix: Water Analysis Batch: 762871 Analyte 2-(2-Butoxyethoxy)ethanol Lab Sample ID: 580-12323 Matrix: Water	Sample S Result C 3.0 t	Qualifier	Added	Resul	MS Qualifier Client S	Unit mg/L	I	D <u>%Rec</u> 103	Bigs Bigs <th< td=""><td>pe: Tot</td><td>al/NA 01W al/NA</td></th<>	pe: Tot	al/NA 01W al/NA
Lab Sample ID: 580-12323 Matrix: Water Analysis Batch: 762871 Analyte 2-(2-Butoxyethoxy)ethanol Lab Sample ID: 580-12323 Matrix: Water Analysis Batch: 762871 Analyte	Sample S Result C 3.0 C	Qualifier J M Sample	Added 20.0	Result 20.6	MS Qualifier Client S	Unit mg/L	ID: AI	D <u>%Rec</u> 103	Prep Tyj %Rec Limits 50 - 150 /16-WGN07 Prep Tyj	pe: Tot	al/NA

Date Receive	Batch	Batch		Dilution	Batch			Prepared	
Prep Type	Туре	Method	Run	Factor		Analyst	Lab	or Analyzed	
Total/NA	Analysis	8015C GLY		1	762871		EET SAV	02/10/23 23:37	
Client Sam	ple ID: AF-	RHMW06-WC	GN01LF-2	2301W5			Lab	Sample ID:	580-123231-2
Date Collecte Date Receive									Matrix: Wate
-	Batch	Batch		Dilution	Batch			Prepared	
D	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed	
Prep Type	Type								
	Analysis	8015C GLY		1	762871	JCK	EET SAV	02/11/23 00:01	
Total/NA	Analysis		GN01LF-2	2301W5	762871	JCK		02/11/23 00:01 Sample ID: {	580-123231-3
Total/NA Client Sam Date Collecte	Analysis ple ID: AF- d: 02/02/23 1	8015C GLY RHMW16-WC 0:20	GN01LF-2	2301W5	762871	JCK			
Total/NA Client Sam Date Collecte	Analysis ple ID: AF- d: 02/02/23 1	8015C GLY RHMW16-WC 0:20	GN01LF-2	2301W5	762871 Batch	JCK			580-123231-3 Matrix: Wate
Total/NA Client Sam Date Collecte	Analysis ple ID: AF- d: 02/02/23 1 d: 02/08/23 1	8015C GLY RHMW16-WC 0:20 1:00	GN01LF-2		Batch	JCK		Sample ID: (
Total/NA Client Sam Date Collecte Date Received Prep Type	Analysis ple ID: AF- d: 02/02/23 1 d: 02/08/23 1 Batch	8015C GLY RHMW16-WC 0:20 1:00 Batch		Dilution	Batch	Analyst	Lab	Sample ID:	
Total/NA Client Sam Pate Collecte Date Received Prep Type Total/NA	Analysis ple ID: AF- d: 02/02/23 1 d: 02/08/23 1 Batch Type Analysis	8015C GLY RHMW16-WC 0:20 1:00 Batch Method 8015C GLY	Run	Dilution Factor 1	Batch Number	Analyst	Lab EET SAV	Prepared or Analyzed 02/11/23 00:24	Matrix: Wate
Total/NA Client Sam pate Collecte pate Receive Prep Type Total/NA Client Sam	Analysis ple ID: AF- d: 02/02/23 1 d: 02/08/23 1 Batch Type Analysis ple ID: AF-	8015C GLY RHMW16-WC 0:20 1:00 Batch Method 8015C GLY RHMW04-WC	Run	Dilution Factor 1	Batch Number	Analyst	Lab EET SAV	Sample ID: Prepared or Analyzed	Matrix: Wate
Total/NA Client Sam Date Collecte Date Received Prep Type Total/NA Client Sam Date Collecte	Analysis ple ID: AF- d: 02/02/23 1 d: 02/08/23 1 Batch Type Analysis ple ID: AF- d: 02/02/23 0	8015C GLY RHMW16-WC 0:20 1:00 Batch Method 8015C GLY RHMW04-WC 9:15	Run	Dilution Factor 1	Batch Number	Analyst	Lab EET SAV	Prepared or Analyzed 02/11/23 00:24	Matrix: Wate
Total/NA Client Sam Date Collecte Date Received Prep Type Total/NA Client Sam Date Collecte	Analysis ple ID: AF- d: 02/02/23 1 d: 02/08/23 1 Batch Type Analysis ple ID: AF- d: 02/02/23 0 d: 02/08/23 1	8015C GLY RHMW16-WC 0:20 1:00 Batch Method 8015C GLY RHMW04-WC 9:15 1:00	Run	Dilution - Factor 1 2301W5	Batch Number 762871	Analyst	Lab EET SAV	Prepared or Analyzed 02/11/23 00:24 Sample ID: \$	Matrix: Wate
Total/NA Client Sam Date Collecte Date Received Prep Type Total/NA	Analysis ple ID: AF- d: 02/02/23 1 d: 02/08/23 1 Batch Type Analysis ple ID: AF- d: 02/02/23 0	8015C GLY RHMW16-WC 0:20 1:00 Batch Method 8015C GLY RHMW04-WC 9:15	Run	Dilution Factor 1	Batch Number 762871 Batch	Analyst	Lab EET SAV	Prepared or Analyzed 02/11/23 00:24	Matrix: Wate

Lab Chronicle

Laboratory References:

Client: AECOM

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

Eurofins Seattle

Job ID: 580-123231-1

Accreditation/Certification Summary

Client: AECOM 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 ANAB	Program Dept. of Defense ELAP	Identification Number	Expiration Date 09-22-24
The following analytes are included in this the agency does not offer certification.	report, but the laboratory is not ce	rtified 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

Client: AECOM Project/Site: Red Hill - AFFF Assessment Sampling

Job ID: 580-123231-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-123231-1	AF-RHMW225401-WGN01B-2301W5	Water	02/02/23 12:10	02/08/23 11:00
580-123231-2	AF-RHMW06-WGN01LF-2301W5	Water	02/02/23 11:15	02/08/23 11:00
580-123231-3	AF-RHMW16-WGN01LF-2301W5	Water	02/02/23 10:20	02/08/23 11:00
580-123231-4	AF-RHMW04-WGN01LF-2301W5	Water	02/02/23 09:15	02/08/23 11:00

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

Chain of Custody Record

Controline Environment Testing America

Client Information	Sampler Matt Vin	Lab PM Elaine	Walker	Carrier Tracking No(s): FedEx	COC No: 2301W5AFEA07	
	Phone: 807340-4739		E-Mail: M. Elaine. Walker@EurofinsET.com	State of Origin: Hawaii	Page: Page 1 of 1	
Company: AECOM		PWSID:	Analysis Requested	uested	Job #:	
hop St. Suite 1600	Due Date Requested: see subcontract					
City: Honolulu	TAT Requested (days): Rush - ASAP				B - NaOH N - None C - Zn Acetate O - AsNaO2	
State, Zip: Hawaii 96813	Compliance Project: Δ Yes Δ No		onsdîs			
Phone: 808-954-4512 / 770-331-0794	PO#			<u> </u>		
Emait: Watson Tanji (watson.tanji@aecom.com)/ Mark Kromis (mark.kromis@aecom.com)	:# OM		(on			
Project Name: CTO N6274223F0104	Project #: 60697810		(0 80)	nistro	¥ ¥	
Site: RHSF	:#MOSS			r of cc	Other:	
	Sample	Matrix (w=water, s=solid, 0=wasteroll,	field Filtered Percentia 115C_DAI_GL 015C_DAI_GL		Snacial Instructions (Note-	
			1 >			
よい AF-HDMW225401-WGN01B-2301W5	(^ I2)	8		~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~		
KU						
	7					
	14					
					a series and the series of the	
Possible Hazard Identification		cal	Sample Disposal (A fee may be	assessed if samples are retair Disposal Bv Lab	stained longer than 1 month) Archive For Months	
Other (specify)	Prelim data (Level 1or2)=see TAT above. DoD Stage 4 remote thand and TAT AFCOM FOurie FDD	AT above. DoD Stage	Special Instructions/QC Requirem			
Empty Kit Relinquished by:	Date:		Time:	Method of Shipment:		
Relinquished by Marth Yim Wath you	Date/Time_UL/US 1415		Received by: COMPLETO ALEY	$\int Date/Time: -2.23$	1415 Company	
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Relinquished by:	Date/Time:	Company	Received by:	Dáte/Time:/	Company	
Custody Seals Intact Custody Seal No.:			Cooler Temperature(s) C and Other Remarks		6.4/5.4	
					Ver: 01/16/2019	

Seattle		
ofins FGS,	Street East	WA 98424
Eurofi	5755 8th	Tacoma,

Chain of Custody Record

Curofins Environment Testing

Client Information	Fagern Summert	Lau rwi: Elaine Walker	FedEX	2301W5AFEA09
Client Contact:	Physe 595 6607	E-Mail: M.Elaine.Waiker@EurofinsET.com	State of Origin: Hawaii	Page: Page 1 of 1
	PWSID:	Analysis	Analysis Requested	Job #:
nop St. Suite 1600	Due Date Requested: see subcontract			č
	TAT Requested (days): Rush - ASAP	14		B - NaOH N - None C - Zn Acetate O - AsNaO2
State, Zip: Hawaii 96813	Compliance Project: 🛆 Yes 🛆 No	Dredla	Ź	
Phone: 808-954-4512 / 770-331-0794	PO#:		X	P
Email: Watson Tanji (watson.tanji@aecom.com)/ Mark Kromis (mark.kromis@aecom.com)	# OM	(on		- Ice - DI Water
Project Name: CTO N6274223F0104	Project #. 60697810	lo 89,		
Site: RHSF	SSOW#:	() asv		Other:
	Sample C=comp,	Matrix Matrix (Phreater, Second Billeced (Phreater, Second Billeced Constation, 1995	otal Number	
Sample Identification	Sample Date I ime G=grap) [BTFItssue, And Preservation Code:			
AF-RHMW06-WGN01LF-2301W5	2/2/23 1115 0	z	8 	
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	1 ala Ma Atta			
	>			
Possible Hazard Identification		Sample Disposal (A fee ma	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) — Return To Client	ed longer than 1 month) ve For Months
sted: I, II, III, IV, Other (specify)	la i	DoD Stage 4 Special Instructions/QC Requ		
Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:	
Relinquistred by: Reserved Shire Mark	123 1325	Company Received by:	0	3 1325 Company
þ,	216123 1045 A	Cord	1 Date Time /23	UCO Company
Relinquished by:		Company Received by:	Date/Time/	Company
Custody Seals Intact. Custody Seal No.:		Cooler Temperatury(s) & and Other Remarks.	ther Remarks: $\mathcal{S}\mathcal{A}$	15.4
				Ver. 01/16/2019

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Chain of Custody Record

🔅 eurofins

	Sampler.	5 1 2	Lab PM:	101-11-0			Carrier Tracking No(s):	i(s)oN Gu			
	Phone:	20202	Eldine F-Mail	vvalkel			State of Orioin		Page	V EXNO	
	254502122	732	M.Elair	ie.Walker@E	M.Elaine.Walker@EurofinsET.com		Hawaii		Page 1 of 1	-	
Company: AECOM		PWSID:			Anal	Analysis Requested	uested		Job #:		
hop St. Suite 1600	Due Date Requested: see subcontract								Preservati	Preservation Codes: A - HCL M - Hexane	đ
	TAT Requested (days): Rus	s): Rush - ASAP		1					B - NaOH C - Zn Acetate		
State, Zip: Hawaii 96813	Compliance Project: Δ Yes	es 🛆 No		onsdfe				\angle	D - Nitric A E - NaHSO	cid P - Na204S 4 Q - Na2S03	
Phone: 808-954-4512 / 770-331-0794	PO#:						ġ		r - MeOn G - Amchlor H - Ascorbic Acid	Ţ	к - NazSzO3 S - H2SO4 T - TSP Dodecahvdrate
Email: Watson Tanji (watson.tanji@aecom.com)/ Mark Kromis (mark.kromis@aecom.com)	#0M			(on		24	<u> </u>		20052580		Ø
	Project #: 60697810		5 <u>7</u>) 6[10 80 /		0					pecify)
	SSOW#:		Ims2	() asy		$\overline{\mathbf{X}}$			of co		
Samnle Identification	Sample Time	Sample Type (C=comp,	Matrix Matrix (Wimwater, E S=solid, S=solid, Omwateloid, Omwateloid,	4/2M ແກວກອ ⁵ ມອ_IAG_ວະເໜ					redmuñ Istol	Snecial Instructions Mote	.Note
		Preserva		X						Ň	
AF-RHMW16-WGN01LF-2301W5	2.2.23 1020	0	z S	×					e		
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Possible Hazard Identification		Radiological		Sample Dis	ole Disposal (A fe Return To Client	e may be a	e assessed if san Disposal Bv Lab	samples an	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	than 1 month) Months	S
sted: I, II, IV, Other (specify)	Prelim data	ו (Level 1or2)=see TAT above. Dol מלפות דעד עבריסא בסיוויג בחח	DoD Stage		Special Instructions/QC Requirements: DOD QSM project	Requiremer	tts: DOD 0	SM project.			
by:	Date:			Time:			Method	Method of Shipment:			
504	Date/Time: 10	(420 AE	Company AECOM	Received by	THOLET	Arren		Date/Time:	alt 8	Company	S NOS
Auer		1045	Company Actum	Received by:	No.	1		Date/Tme:/	1001	Company	
		-	Company	Received by:	py: //			Date/Tinje:	. ,	Company	
Custody Seals Intact. Custody Seal No.:				Cooler Te	Cooler Temperature(s) °C and Other Remarks:	and Other Re	marks:	5.2	15.4		
										Ver: 01/16/2019	5/2019

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

Chain of Custody Record

🖏 eurofins Environment Testing America

Client Information	NOMH TURNER	Elaine	Lab PM: Elaine Walker	Carner Tracking No(s): FedEX	COC No: 2301W5AFEA08
Client Contact:	60	7 E-Mail: M.Elaír	E-Mail: M.Elaíne.Walker@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:
City: Honolulu	TAT Requested (days): Rush - ASAP		1	<u> </u>	B - NaOH N - None C - Zn Acetate O - AsNaO2
State, Zp: Hawaii 96813	Compliance Project: Δ Yes Δ No		onsdie	<u>\</u>	D - Nitric Acid P - Na204S E - NaHSO4 Q - Na2SO3
Phone: 808-954-4512 / 770-331-0794	PO#;				F - MeCH K - Na2S2O3 G - Amchlor S - H2SO4 U - Accordio Acid T TSD Dodominatio
Emait Watson Tanji (watson.tanji@aecom.com)/ Mark Kromis (mark.kromis@aecom.com)	:# OM		(on		
Project Name: CTO N6274223F0104	Project #: 60697810	9 <u>7</u>) elc	io 8 0/	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	K - EDTA W - pH 4-5 L - EDA Z - other (specify)
Site: RHSF	:#MOSS	Ime2	z /sa-		Other:
	Sample	Sample Matrix 8 Type Matrix 8 (C=comp, 0=wasteolt, 0		nedmuV Ista	
Sample Identification	Sample Uate 11me G=0				Special Instructions/Note:
AF-RHMW04-WGN01LF-2301W5	2/2/2023 0915	N N U	z	8 	
	1/K				
	2/2/2023				
Possible Hazard Identification	B Unknown Kadiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client Nanon Nanon Nanon Nanon	assessed if samples are retain	stained longer than 1 month) Archive For Months
ested: I, II, III, IV, Other (specify)	Prelim data (Level 1or2	T above. DoD Stage	Requirem		
Empty Kit Relinquished by:	4 report standard 1A1. AE-CUM Date:		Time:	Method of Shipment:	
Wet	Date/Time: 2/2/20 23 / 1325	Company AECOM	Received by: James Ma	MESON 2/2/202	23 1325 AFTON
imes Hessy	DaterTime: 2/w/23 1045	Company	Received by A	Date/Time	1/30
		Company	Received by:	Daté/Tifne:	Company
Custody Seals Intact: Custody Seal No.:			Cooler Temperature(s) ⁶ C and Other Remarks:	emarks: S: イ/	6.4
					Ver: 01/16/2019

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Eurofins FGS, Seattle 5755 8th Street East Tacoma WA 93424

Chain of Custody Record

🖧 eurofins

Cliant Information	Sampler Mart Y. M.	Lab PM Elaine Walker	alker	Carrier Tracking No(s). FedEx	COC N₀: 2301W5AFEA07	
Client Contact	12	E-Mail: M Flaine	E-Mait: M Flaine Waiker@FurofinsFT.com	State of Origin. Hawaii	Page: Page 1 of 1	
Company A ECOM	-		l iš	Requested	Job #:	
Address: 1001 Bishop St. Suite 1600	Due Date Requested see subcontract				Preservation Codes	es M Hexane
City Honolulu	TAT Requested (days). Rush - ASAP				B NaOH C - Zn Acetate D Nitric Acid	N None O - AsNaO2 D Nooce
State Zip. Hawaii 96813	Compliance Project: ∆ Yes ∆ No		nsrite			г - ма2043 Q - Na2SO3 P - Na2S2O3
Phone: 808-954-4512 / 770-331-0794	PO #;	(01	-(/ xol	<u> </u>		S H2SO4 T - TSP Dodecahydrate
Email: Watson Tanji (watson.tanji@aecom.com)/ Mark Kromis (mark.kromis@aecom.com)	# 0M					U - Acetone V MCAA
Project Name CTO N6274235F0104	Project #: 60697810				K - EDTA L - EDA	W - pH 4-5 Z - other (specify)
Site ⁻ RHSF	SSOW#:			r of cc	Other	
Samulo Idantification	Type Sample Sample (C=comp. Samole Date Time (C=comp.	Matrix Matrix (W=water, =sold, =seteoll, C=merce facilit	1012C_DVI_GL	United Control of Cont	Spec	
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Possible Hazard Identification			Sample Disposal (A fee may be assessed if samples are retained longer th [!] — Return To Client 11 Disposal By Lab	assessed if samples are retain Disposal By Lab	etained longer tha	Months
sted I II IV Other (specify)	Prelim data (Level 10	_	Requirem			
Empty Kit Relinquished by	Date	Time:	i.i	Method of Shipment:		
Relinquished by Matt Vin IMatto your	Date/Time ULIV3 14/5	Company AECOM	Received by CAPALLER ALCA	レ Date/Time: ・2・23	(LAS)	company
Relinquished by CATABRIER ALCEN	Date/Time: 2/0/23 1/04/5	COMPANY CON	Received by Control		00//	Company
Relinquished by	Date/Time.	Company	Received by	Date Time /		Company
Custody Seals Intact: Custody Seal No			Cooler Temperature(s) C and Other Remarks		りいん う	
						Ver 01/16/2019

Chain of Custody Record

🐝 eurofins 🛛 Envronment Testing America

I acollia VVA 30424				
Client Information	Sampler Shinnet	Lab PM Elaine Walker	Carrier Tracking No(s). FedEx	COC No: 2301W5AFEA09
	Phone 7593 6607	E-Mail: M.Elaine Walker@EurofinsET.com	State of Origin Hawaii	Page: Page 1 of 1
Company AECOM	Clisma	Analysis Requested	quested	Job #,
Address: 1001 Bishop St. Suite 1600	Due Date Requested see subcontract			e e
city Honolulu	TAT Requested (days) Rush - ASAP	lo		B - NaOH N N - N - N - N - N - N - N - N - N -
State Zp. Hawaii 96813	Compliance Project: 🛆 Yes 🛆 No		Ź	
Phone: 808-954-4512 / 770-331-0794	PO#		Jr.	ς ο F
Email: Watson Tanji (watson.tanji@aecom.com)/ Mark Kromis (mark.kromis@aecom.com)	:# OM	(oN		I - Ice J - DI Water
	Project #: 60697810	JO 89/		K EDIA W - PH 4-5 L EDA Z other (specify)
	SSOW#:	n) ası		Other
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Possible Hazard Identification		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client Mont	assessed if samples are retained lon	ied longer than 1 month) we For Months
ested I II IV Other (specify)		Prelim data (Level 1or2)=see 1AT above DoD Stage 4 Special Instructions/QC Requirements DOD QSM project.		
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James Masch	23 1045	۲ ₀	Date Time: Date 208/23	100
	Date/Time Company		Date/Time/	Company
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				Ver 01/16/2019

Eurofins FGS, Seattle 5755 8th Street East Tacoma WA 93424

Chain of Custody Record

🐝 eurofins Envronment Testing America

Client Information	Sampler Man ah	Manah Gas Une	Lab PM: Elaine	Lab PM: Elaine Walker			Carrier Tra FedEx	Carrier Tracking No(s) FedEx	0 0	COC No: 2301W5AFEA06	6	
Client Contact:	Phone 224 508 9732	9732	E-Mail M.Ela	iine Walk	er@Eurofi	E-Mail: M.Elaine Walker@EurofinsET com	State of Origin: Hawaii	igin:	<u>מ</u> ת	Page⁻ Page 1 of 1		
Company AECOM	-	-OISM4				Analysi	Analysis Requested		ř.	Job #:		
hop St. Suite 1600	Due Date Requested see subcontract									Preservation Codes	des M - Hexane	
	TAT Requested (days) ⁻ R) [.] Rush - ASAP		e I						B - NaOH C - Zn Acetate	N - None O AsNaO2	
State, Zip: Hawaıı 96813	iance Project:	A Yes A No		onsdie				$\overline{\ }$		0 - Nitric Acid - NaHSO4	P Na204S Q Na2SO3 P N22SO3	
Phone: 808-954 4512 / 770-331-0794	PO#;						Ď			G Amchlor H - Ascorbic Acid	R Na2S2O3 S - H2SO4 T TSP Dodecahvdrate	
Email: Watson Tanji (watson tanji@aecon.com)/ Mark Kromis (mark kromis@aecon.com)	,# OW			(0N .			- An		 516	l - Ice J - Di Water	U Acetone V MCAA	
Project Name: CTO N6274223F0104	Project #. 60697810			io s ə <i>j</i>		27	·/			K - EDTA L - EDA	W - pH 4-5 Z - other (specify)	
	SSOW#:) asv		\geq				Other		
Sample Identification		Sample Type Sample (C=comp, Time G=grab)	Matrix (W=water S=solid, O=watelol, BT=TIssue, A=Air)	Field Filtered Perform MS/N A/SM monsel					iedmuN IsioT I	Special Ir	Special Instructions/Note:	
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Possible Hazard Identification				Sampl	le Disposal (A f Petrum To Client	l (A fee m Cliant	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	if samples ar ^{1, t} ah	Te retained lon	d longer than a Eor	1 month) Months	
isted I II IV Other (specify)		or2)=see TAT at	ove. DoD Stage	_	Instructio	ns/QC Req	Special Instructions/QC Requirements. DOD QSM project.	QSM project.		5	24404	
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Auer	Date/Time: 2/10/23	1045	ACLOM		eived by	×		Date/Time:	22	100	Company	
	Date/Time:		Company	Rec	Received by	11		Date/Time:	,		Company	
Custody Seals Intact: Custody Seal No.				ő	ler Temper	we(s) °C and	Cooler Temperature(s) °C and Other Remarks:	5:4	1/5.7	7		
					Ì						Ver 01/16/2019	1

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

Chain of Custody Record

🔆 eurofins Amenca

Client Information	Sampler NOAH TURNER	Lab PM. Elaine Walker	Valker	Carrier Tracking No(s) FedEx	COC No: 2301W5AFEA08	
		E-Mail: <u>M Elain</u> e	E-Mail: M Elaine Walker@EurofinsET.com	State of Origin: Hawaıı	Page Page 1 of 1	
ompany AECOM	.CISMd		Analysis Requested	tuested	Job #:	_
/ddress: 1001 Bishop St. Surte 1600	Due Date Requested see subcontract				Preservation Codes	
Xiy Honolulu	TAT Requested (days) Rush - ASAP]1		H cetate	
itate Zip: Hawaii 96813	Compliance Project: Δ Yes Δ No		onsdie		D - Nitric Acid P - Na2O4S E - NaHSO4 Q Na2SO3 E MOOU D NOSSO3	
/ 770-331-0794	PO#:	(0)	-{\\$x01		F - MeOn K - Na25203 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahvdrate	
fmail: Vatson Tanji (watson.tanji@aecom.com)/ Mark Kromis (mark kromis@aecom.com)	:# OM					
	Project #: 60697810	eY) el		2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2		
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ossible Hazard Identification	Unknown Kadiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	assessed if samples are retai Disposal Bv Lab	stained longer than 1 month) Archive For Months	
Other (specify)	ata (Level 10		: Requirem			T
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voalt Turver Nat	Date/Time: 2/2/2023 / 1325	Company AECOM	Received by James M	MESON BALTIME.	23 1325 AECOM	
ames Meson	Date/Time. 21/0/23 1045	Company	Received by A	Date/Fund 2/2/23		
	Date/Time:	Company	Received by	Daté/Tifne: ဳ	Company	
Custody Seals Intact: Custody Seal No.			Cooler Temperature(s) C and Other Remarks	semarks: St	19.4	
			2		Ver 01/16/2019	

Login Sample Receipt Checklist

Client: AECOM

Login Number: 123231 List Number: 2 Creator: Johnson, Corey M

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.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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List Source: Eurofins Savannah

List Creation: 02/09/23 12:16 PM