



ANALYTICAL REPORT

PREPARED FOR

Attn: Terri Choy
AECOM
1001 Bishop Street
Honolulu, Hawaii 96813
Generated 4/20/2023 3:22:13 PM

JOB DESCRIPTION

Red Hill - AFFF Assessment Sampling

JOB NUMBER

580-125947-1

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



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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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Case Narrative

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

Job ID: 580-125947-1

Job ID: 580-125947-1

Laboratory: Eurofins Seattle

Narrative

CASE NARRATIVE

Client: AECOM
Project: Red Hill - AFFF Assessment Sampling
Report Number: 580-125947-1

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 4/12/2023 10:15 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 4.1° 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-RHMW17D-WGN01LF-2304W1 (580-125947-1), AF-RHMW17D-WQFB01-2304W1 (580-125947-2), AF-RHMW17S-WGN01LF-2304W1 (580-125947-3), AF-RHMW17S-WQEB01-2304W1 (580-125947-4) and AF-RHMW17-WGN01LF-2304W1 (580-125947-5) were analyzed for glycols in accordance with EPA SW-846 Method 8015B - DAI. The samples were analyzed on 04/17/2023.

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

Definitions/Glossary

Client: AECOM

Job ID: 580-125947-1

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

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

Client Sample Results

Client: AECOM

Job ID: 580-125947-1

Project/Site: Red Hill - AFFF Assessment Sampling

Client Sample ID: AF-RHMW17D-WGN01LF-2304W1

Lab Sample ID: 580-125947-1

Date Collected: 04/07/23 11:15

Matrix: Water

Date Received: 04/12/23 10:15

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 M	5.0	1.1	mg/L			04/17/23 01:21	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Client Sample Results

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

Job ID: 580-125947-1

Client Sample ID: AF-RHMW17D-WQFB01-2304W1

Lab Sample ID: 580-125947-2

Date Collected: 04/07/23 10:35

Matrix: Water

Date Received: 04/12/23 10:15

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 M	5.0	1.1	mg/L			04/17/23 01:44	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Client Sample Results

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

Job ID: 580-125947-1

Client Sample ID: AF-RHMW17S-WGN01LF-2304W1

Lab Sample ID: 580-125947-3

Date Collected: 04/07/23 09:50

Matrix: Water

Date Received: 04/12/23 10:15

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 M	5.0	1.1	mg/L			04/17/23 02:07	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Client Sample Results

Client: AECOM

Job ID: 580-125947-1

Project/Site: Red Hill - AFFF Assessment Sampling

Client Sample ID: AF-RHMW17S-WQEB01-2304W1

Lab Sample ID: 580-125947-4

Date Collected: 04/07/23 10:20

Matrix: Water

Date Received: 04/12/23 10:15

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 M	5.0	1.1	mg/L			04/17/23 02:30	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Client Sample Results

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

Job ID: 580-125947-1

Client Sample ID: AF-RHMW17-WGN01LF-2304W1

Lab Sample ID: 580-125947-5

Date Collected: 04/07/23 12:25

Matrix: Water

Date Received: 04/12/23 10:15

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			04/17/23 02:54	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

QC Sample Results

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

Job ID: 580-125947-1

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

Lab Sample ID: MB 680-773617/16
Matrix: Water
Analysis Batch: 773617

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-(2-Butoxyethoxy)ethanol	3.0	U	5.0	1.1	mg/L			04/17/23 00:34	1

Lab Sample ID: LCS 680-773617/12
Matrix: Water
Analysis Batch: 773617

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-(2-Butoxyethoxy)ethanol	20.0	19.0		mg/L		95	50 - 150

Lab Sample ID: LCSD 680-773617/13
Matrix: Water
Analysis Batch: 773617

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-(2-Butoxyethoxy)ethanol	20.0	21.3		mg/L		106	50 - 150	11	50

Lab Chronicle

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

Job ID: 580-125947-1

Client Sample ID: AF-RHMW17D-WGN01LF-2304W1

Lab Sample ID: 580-125947-1

Date Collected: 04/07/23 11:15

Matrix: Water

Date Received: 04/12/23 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	773617	GEM	EET SAV	04/17/23 01:21

Client Sample ID: AF-RHMW17D-WQFB01-2304W1

Lab Sample ID: 580-125947-2

Date Collected: 04/07/23 10:35

Matrix: Water

Date Received: 04/12/23 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	773617	GEM	EET SAV	04/17/23 01:44

Client Sample ID: AF-RHMW17S-WGN01LF-2304W1

Lab Sample ID: 580-125947-3

Date Collected: 04/07/23 09:50

Matrix: Water

Date Received: 04/12/23 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	773617	GEM	EET SAV	04/17/23 02:07

Client Sample ID: AF-RHMW17S-WQEB01-2304W1

Lab Sample ID: 580-125947-4

Date Collected: 04/07/23 10:20

Matrix: Water

Date Received: 04/12/23 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	773617	GEM	EET SAV	04/17/23 02:30

Client Sample ID: AF-RHMW17-WGN01LF-2304W1

Lab Sample ID: 580-125947-5

Date Collected: 04/07/23 12:25

Matrix: Water

Date Received: 04/12/23 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	773617	GEM	EET SAV	04/17/23 02:54

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 580-125947-1

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 analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015C GLY		Water	2-(2-Butoxyethoxy)ethanol

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

Sample Summary

Client: AECOM

Job ID: 580-125947-1

Project/Site: Red Hill - AFFF Assessment Sampling

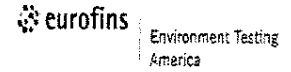
Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-125947-1	AF-RHMW17D-WGN01LF-2304W1	Water	04/07/23 11:15	04/12/23 10:15
580-125947-2	AF-RHMW17D-WQFB01-2304W1	Water	04/07/23 10:35	04/12/23 10:15
580-125947-3	AF-RHMW17S-WGN01LF-2304W1	Water	04/07/23 09:50	04/12/23 10:15
580-125947-4	AF-RHMW17S-WQEB01-2304W1	Water	04/07/23 10:20	04/12/23 10:15
580-125947-5	AF-RHMW17-WGN01LF-2304W1	Water	04/07/23 12:25	04/12/23 10:15

- 1
- 2
- 3
- 4
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- 7
- 8
- 9
- 10
- 11

Eurofins FGS, Seattle

5755 8th Street East
Tacoma, WA 98424

Chain of Custody Record



Client Information		Sampler: <u>TESSA MURPHY</u>	Lab PM: <u>Elaine Walker</u>	Carrier Tracking No(s): <u>FedEx</u>	COC No: <u>2304W1AFEAO2</u>							
Client Contact		Phone: <u>978-352-5209</u>	E-Mail: <u>M.Elaine.Walker@EurofinsET.com</u>	State of Origin: <u>Hawaii</u>	Page: <u>Page 1 of 1</u>							
Company: <u>AECOM</u>		PWSID:	Analysis Requested									
Address: <u>1001 Bishop St. Suite 1600</u>		Due Date Requested: <u>see subcontract</u>	Job #:									
City: <u>Honolulu</u>		TAT Requested (days): <u>Rush - ASAP</u>	Preservation Codes:									
State, Zip: <u>Hawaii 96813</u>		Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify)									
Phone: <u>808-954-4512 / 770-331-0794</u>		PO #:	<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Field Filtered Sample (Yes or No)</div> <div style="text-align: center;"> <p><i>TM 4/7/23</i></p> <p>580-125947 Chain of Custody</p> </div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Total Number of Containers</div> </div>									
Email: <u>Watson Tanji (watson.tanji@aecom.com) / Mark Kromis (mark.kromis@aecom.com)</u>		WO #:										
Project Name: <u>CTO N6274223F0104</u>		Project #: <u>60697810</u>										
Site: <u>RHSF</u>		SSOW#:										
Other:												
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=sediment, O=organic/solid, BT=Tissue, A=Air)	Preservation Code:	Field Filtered	DAI	GL	DS/2-(2-butoxyethoxy)-ethanol	Total Number of Containers	Special Instructions/Note:
AF-RHMMW17D-WGN01LF-2304W1		4/7/23	1115	G	W	N	X	X	X	X	3	
AF-RHMMW17D-WQFB01-2304W1		4/7/23	1035	G	W	N	X	X	X	X	3	

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological
 Deliverable Requested: I, II, III, IV, Other (specify) Prelim data (Level 1 or 2) = see TAT above. DoD Stage 4 report standard TAT AECOM EQUS FDD.

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: <u>Tess Murphy</u>	Date/Time: <u>4/7/23 1335</u>	Company: <u>AECOM</u>	Received by: <u>James Mason</u> Date/Time: <u>4/7/23 1335</u> Company: <u>AECOM</u>
Relinquished by: <u>James Mason</u>	Date/Time: <u>4/10/23 1430</u>	Company: <u>AECOM</u>	Received by: <u>[Signature]</u> Date/Time: <u>4/12/23 10:15</u> Company: _____
Relinquished by:	Date/Time:	Company:	Received by:

Custody Seals Intact: Yes No Custody Seal No.: _____ Cooler Temperature(s) °C and Other Remarks: 4-1

Ver: 01/16/2019

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

Chain of Custody Record

eurofins Environment Testing America

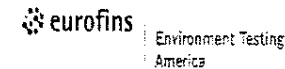
Client Information				Sampler: TESSA MURPHY		Lab PM: Elaine Walker		Carrier Tracking No(s): FedEx		COC No: 2304W1AFE03					
Client Contact				Phone: 978-322-5209		E-Mail: M.Elaine.Walker@EurofinsET.com		State of Origin: Hawaii		Page: Page 1 of 1					
Company: AECOM				Address: 1001 Bishop St. Suite 1600		City: Honolulu		State, Zip: Hawaii 96813		Project Name: CTO N6274223F0104					
Phone: 808-954-4512 / 770-331-0794				Email: Watson Tanji (watson.tanji@aecom.com) / Mark Kromis (mark.kromis@aecom.com)		Site: RH5F		Analysis Requested		Job #:					
Due Date Requested: see subcontract				TAT Requested (days): Rush - ASAP		Compliance Project: Δ Yes Δ No		PO #:		WD F:					
Project #: 60697810				SSOW#:		Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> P/L from QSM/QC (Yes or No) <input checked="" type="checkbox"/> 8016C_DAL_GL_DS/2-(2-butylxythoxy)ethanol 4/4/23 Total Number of Containers: 3		Preservation Codes:		A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify) Other:					
Sample Identification				Sample Date	Sample Time			Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=organic/SL, B=toxic, A=air)			Preservation Code:	Special Instructions/Note:		
AF-RH5W17S-WGN01LF-2304W1				4/7/23	0950			G	W			N N X	3		
AF-RH5W17S-WQEB01-2304W1				4/7/23	1020			G	W			N N X	3		
Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> 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.				Special Instructions/QC Requirements: DOD QSM project.							
Empty Kit Relinquished by:			Date:		Time:		Method of Shipment:								
Relinquished by: Tessa Murphy			Date/Time: 4/7/23 1335		Company: AECOM		Received by: James Mason			Date/Time: 4/7/23 1335					
Relinquished by: James Mason			Date/Time: 4/10/23 1430		Company: AECOM		Received by: [Signature]			Date/Time: 4/12/23 10:15					
Custody Seals Intact: Δ Yes Δ No						Custody Seal No.:									
Cooler Temperature(s) °C and Other Remarks:						4-1									

Ver: 01/16/2019

4.5

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

Chain of Custody Record




Client Information		Sampler: TESSA MURPHY		Lab PM: Elaine Walker		Center Tracking No(s): FedEx		COC No: 2304W1AFEAD1			
Client Contact:		Phone: 978-362-5209		E-Mail: M.Elaine.Walker@EurofinsET.com		State of Origin: Hawaii		Page: Page 1 of 1			
Company: AECOM				PWSID:		Analysis Requested					
Address: 1001 Bishop St. Suite 1600		Due Date Requested: see subcontract		Field Filtered Sample (Yes or No) Perform MS/MS (Yes or No) 8015C_DAL_GL_D572-(2-butylthioxy)-ethanol		Total Number of Containers		Job #:			
City: Honolulu		TAT Requested (days): Rush - ASAP						Preservation Codes:			
State, Zip: Hawaii 96813		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No						A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
Phone: 808-954-4512 / 770-331-0794		PO #:						Other:			
Email: Watson Tanji (watson.tanji@aecom.com)/ Mark Kromis (mark.kromis@aecom.com)		WO #:		Project #: 60697810		SSOW#:		Site: RHSF			
Project Name: CTO N6274223F0104		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=organic, T=Trace, A=Air)			
Site: RHSF		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=organic, T=Trace, A=Air)			
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=organic, T=Trace, A=Air)			
AF-RHMW17-WGN01LF-2304W1		4/7/23		1225		G W		N N X			
Special Instructions/Note:		TIN 4/7/23						3			
Possible Hazard Identification					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)						
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological					<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months						
Deliverable Requested: I, II, III, IV, Other (specify)					Prelim data (Level 1 or 2)=see TAT above. DoD Stage 4 report standard TAT. AECOM EQUS EDD.						
Special Instructions/QC Requirements: DOD QSM project											
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:					
Relinquished by: JESSA MURPHY		Date/Time: 4/7/23 1335		Company: AECOM		Received by: James Mason		Date/Time: 4/7/23 1335		Company: AECOM	
Relinquished by: James Mason		Date/Time: 4/10/23 1430		Company: AECOM		Received by: [Signature]		Date/Time: 04/12/23 10:15		Company:	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 4.1							

4.5

Ver: 01/16/2019

Chain of Custody Record

Client Information		Sampler: <u>TESSA MURPHY</u>		Lab PM: <u>Elaine Walker</u>	Carrier/Tracking No(s):	COC No: <u>2304W1AFE02</u>			
Client Contact:		Phone: <u>779-552-5207</u>	E-Mail: <u>M.Elaine.Walker@EurofinsET.com</u>	State of Origin: <u>Hawaii</u>	Page: <u>Page 1 of 1</u>				
Company: <u>AECOM</u>		PWSID:		Job #:					
Address: <u>1001 Bishop St. Suite 1600</u>		Due Date Requested: <u>see subcontract</u>		Analysis Requested					
City: <u>Honolulu</u>		TAT Requested (days): <u>Rush - ASAP</u>		<p style="font-size: 2em; opacity: 0.5;">TOTAL CONTAINERS</p> <p style="font-size: 2em; opacity: 0.5;">580-125947 Chain of Custody</p>					
State/Zip: <u>Hawaii 96813</u>		Compliance Project: <u>Δ Yes Δ No</u>							
Phone: <u>808-954-4512 / 770-331-0794</u>		PO #:							
Email: <u>Watson.Tanji@aecom.com / Mark.Kromis@aecom.com</u>		WO #:							
Project Name: <u>CTO N6274229F0104</u>		Project #: <u>60697810</u>							
Site: <u>RHSF</u>		SSOW#:		Preservation Codes					
Sample Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Upprotown <input type="checkbox"/> Radiological Deliverable Requested I, II, III, IV Other (specify)		Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Upprotown <input type="checkbox"/> Radiological		Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> A Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> A Total Number of Containers: <u>3</u>					
AF-RHMMW17D-WGN01LF-2304W1 AF-RHMMW17D-WQFB01-2304W1		Sample Date: <u>4/7/23</u> Sample Time: <u>1115</u> <u>4/7/23</u> <u>1035</u> <u>4/7/23</u>		Sample Type (C=Comp, G=grab): <u>G</u> Preservation Code: <u>W</u> <u>G</u> <u>W</u>		Special Instructions/Note: <div style="border: 1px solid black; padding: 5px; text-align: center;">  580-125947 Chain of Custody </div>			
Relinquished by: <u>James Mason</u> Relinquished by: <u>James Mason</u> Relinquished by:		Date/Time: <u>4/7/23 1:35</u> Date/Time: <u>4/7/23 1430</u> Date/Time:		Received by: <u>James Mason</u> Received by: <u>[Signature]</u> Received by:		Date/Time: <u>4/7/23 1335</u> Date/Time: <u>04/12/23 10:15</u> Date/Time:			
Empty Kit Relinquished by:		Date:		Method of Shipment:		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Prelim data (Level 1 or 2) - see TAT above DoD Stage 4 report standard TAT, AECOM EQUIS, EDD.		Prelim data (Level 1 or 2) - see TAT above DoD Stage 4 report standard TAT, AECOM EQUIS, EDD.		Special Instructions/QC Requirements: <u>DOD QSM project.</u>			Cooler Temperature(s) °C and Other Remarks: <u>4-1</u> <u>4-5</u>		
Custody Seals Intact: <u>Δ Yes Δ No</u>		Custody Seal No:		Cooler Temperature(s) °C and Other Remarks:			Ver: 01/16/2019		



Client Information Client Contact: TESSA MURPHY Phone: 253-382-5209		Lab PM: Elaine Walker E-Mail: M.Elaine.Walker@EurofinsET.com		Carrier Tracking No(s): FedEX State of Origin: Hawaii		COC No: 2304W1AFE01 Page: Page 1 of 1 Job #:	
Analysis Requested							
Due Date Requested: see subcontract		TAT Requested (days): Rush - ASAP		Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/>		Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/>	
Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		PO #:		8015C DAL_GL_DS/2-(2-butylhexyloxy)-ethanol		Total Number of Containers: 3	
WO #:		Project #: 60697810		Preservation Code: A		Special Instructions/Note:	
Project Name: CTO N6274223F0104		Site: RHSF		Matrix: Water		Preservation Codes: A HCl M Hexane N None O ASNaO2 P Na2OAS Q Na2SO3 R Na2SO4 S H2SO4 T TSP Dodecahydrate U Acetone V MCAA W pH 4-5 Z other (specify)	
Sample Identification AF-RHMMW17-WGN01LF-2304W1		Sample Date: 4/12/23		Sample Time: 225		Sample Type (C=Comp, G=grab): G	
Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Radiological		Deliverable Requested I, II, III, IV, Other (specify)		Empty Kit Relinquished by:		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Relinquished by: TESSA MURPHY		Date/Time: 4/12/23 1335		Relinquished by: James Mason		Date/Time: 4/12/23 1335	
Relinquished by: James Mason		Date/Time: 4/10/23 1430		Relinquished by:		Date/Time:	
Relinquished by:		Date/Time:		Relinquished by:		Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks: 4.1		Ver: 01/16/2019	



4.5

Login Sample Receipt Checklist

Client: AECOM

Job Number: 580-125947-1

Login Number: 125947

List Number: 2

Creator: Johnson, Corey M

List Source: Eurofins Savannah

List Creation: 04/14/23 03:01 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= 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.	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	

