



ANALYTICAL REPORT

PREPARED FOR

Attn: Terri Choy
AECOM
1001 Bishop Street
Honolulu, Hawaii 96813
Generated 2/22/2023 3:03:13 PM

JOB DESCRIPTION

Red Hill - AFFF Assessment Sampling

JOB NUMBER

580-123622-1

Job Notes

This report is issued solely for the use of the person or company to whom it is addressed. Any use, copying or disclosure other than by the intended recipient is unauthorized. If you have received this report in error, please notify the sender and destroy this report immediately. This report shall not be reproduced except in full, without prior express written approval by the laboratory.

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



Generated
2/22/2023 3:03:13 PM

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



Table of Contents

Cover Page	1
Table of Contents	3
Case Narrative	4
Definitions	5
Client Sample Results	6
QC Sample Results	11
Chronicle	12
Certification Summary	13
Sample Summary	14
Chain of Custody	15

Case Narrative

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

Job ID: 580-123622-1

Job ID: 580-123622-1

Laboratory: Eurofins Seattle

Narrative

CASE NARRATIVE

Client: AECOM

Project: Red Hill - AFFF Assessment Sampling

Report Number: 580-123622-1

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 2/16/2023 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 5.0° 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-RHMW10-WGN01LF-2302W2 (580-123622-1), AF-RHMW16-WGN01LF-2302W2 (580-123622-2), AF-RHMW12A-WGN01LF-2302W2 (580-123622-3), AF-RHMW12A-WGFD01LF-2302W2 (580-123622-4) and AF-HDMW225303-WGN01LF-2302W2 (580-123622-5) were analyzed for glycols in accordance with EPA SW-846 Method 8015B - DAI. The samples were analyzed on 02/21/2023.

The closing continuing calibration verification (CCV) associated with batch 680-764187 recovered above the upper control limit for 2-(2-Butoxyethoxy)ethanol. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data has been reported. The associated samples are impacted: AF-HDMW225303-WGN01LF-2302W2 (580-123622-5) and (CCV 680-764187/44).

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

Definitions/Glossary

Client: AECOM

Job ID: 580-123622-1

Project/Site: Red Hill - AFFF Assessment Sampling

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
M	Manual integrated compound.
Q	One or more quality control criteria failed.
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: 580-123622-1

Project/Site: Red Hill - AFFF Assessment Sampling

Client Sample ID: AF-RHMW10-WGN01LF-2302W2

Lab Sample ID: 580-123622-1

Date Collected: 02/14/23 12:40

Matrix: Water

Date Received: 02/16/23 11:00

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			02/21/23 02:55	1

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

Client Sample Results

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

Job ID: 580-123622-1

Client Sample ID: AF-RHMW16-WGN01LF-2302W2

Lab Sample ID: 580-123622-2

Date Collected: 02/14/23 11:55

Matrix: Water

Date Received: 02/16/23 11:00

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			02/21/23 04:05	1

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

Client Sample Results

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

Job ID: 580-123622-1

Client Sample ID: AF-RHMW12A-WGN01LF-2302W2

Lab Sample ID: 580-123622-3

Date Collected: 02/14/23 09:45

Matrix: Water

Date Received: 02/16/23 11:00

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			02/21/23 04:29	1

1

2

3

4

5

6

7

8

9

10

Client Sample Results

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

Job ID: 580-123622-1

Client Sample ID: AF-RHMW12A-WGFD01LF-2302W2

Lab Sample ID: 580-123622-4

Date Collected: 02/14/23 09:45

Matrix: Water

Date Received: 02/16/23 11:00

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			02/21/23 04:52	1

Client Sample Results

Client: AECOM

Job ID: 580-123622-1

Project/Site: Red Hill - AFFF Assessment Sampling

Client Sample ID: AF-HDMW225303-WGN01LF-2302W2

Lab Sample ID: 580-123622-5

Date Collected: 02/14/23 10:30

Matrix: Water

Date Received: 02/16/23 11:00

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 Q	5.0	1.1	mg/L			02/21/23 06:48	1

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

QC Sample Results

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

Job ID: 580-123622-1

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

Lab Sample ID: MB 680-764187/14
Matrix: Water
Analysis Batch: 764187

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 M	5.0	1.1	mg/L	-		02/20/23 23:25	1

Lab Sample ID: LCS 680-764187/10
Matrix: Water
Analysis Batch: 764187

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	23.6		mg/L	-	118	50 - 150

Lab Sample ID: LCSD 680-764187/11
Matrix: Water
Analysis Batch: 764187

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	24.5		mg/L	-	122	50 - 150	4	50

Lab Sample ID: 580-123622-1 MS
Matrix: Water
Analysis Batch: 764187

Client Sample ID: AF-RHMW10-WGN01LF-2302W2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2-(2-Butoxyethoxy)ethanol	3.0	U M	20.0	23.4		mg/L	-	117	50 - 150

Lab Sample ID: 580-123622-1 MSD
Matrix: Water
Analysis Batch: 764187

Client Sample ID: AF-RHMW10-WGN01LF-2302W2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-(2-Butoxyethoxy)ethanol	3.0	U M	20.0	25.0		mg/L	-	125	50 - 150	7	50

Lab Chronicle

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

Job ID: 580-123622-1

Client Sample ID: AF-RHMW10-WGN01LF-2302W2

Lab Sample ID: 580-123622-1

Date Collected: 02/14/23 12:40

Matrix: Water

Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	764187	JCK	EET SAV	02/21/23 02:55

Client Sample ID: AF-RHMW16-WGN01LF-2302W2

Lab Sample ID: 580-123622-2

Date Collected: 02/14/23 11:55

Matrix: Water

Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	764187	JCK	EET SAV	02/21/23 04:05

Client Sample ID: AF-RHMW12A-WGN01LF-2302W2

Lab Sample ID: 580-123622-3

Date Collected: 02/14/23 09:45

Matrix: Water

Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	764187	JCK	EET SAV	02/21/23 04:29

Client Sample ID: AF-RHMW12A-WGFD01LF-2302W2

Lab Sample ID: 580-123622-4

Date Collected: 02/14/23 09:45

Matrix: Water

Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	764187	JCK	EET SAV	02/21/23 04:52

Client Sample ID: AF-HDMW225303-WGN01LF-2302W2

Lab Sample ID: 580-123622-5

Date Collected: 02/14/23 10:30

Matrix: Water

Date Received: 02/16/23 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	764187	JCK	EET SAV	02/21/23 06:48

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: 580-123622-1

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



Sample Summary

Client: AECOM

Job ID: 580-123622-1

Project/Site: Red Hill - AFFF Assessment Sampling

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-123622-1	AF-RHMW10-WGN01LF-2302W2	Water	02/14/23 12:40	02/16/23 11:00
580-123622-2	AF-RHMW16-WGN01LF-2302W2	Water	02/14/23 11:55	02/16/23 11:00
580-123622-3	AF-RHMW12A-WGN01LF-2302W2	Water	02/14/23 09:45	02/16/23 11:00
580-123622-4	AF-RHMW12A-WGFD01LF-2302W2	Water	02/14/23 09:45	02/16/23 11:00
580-123622-5	AF-HDMW225303-WGN01LF-2302W2	Water	02/14/23 10:30	02/16/23 11:00

1

2

3

4

5

6

7

8

9

10

Chain of Custody Record

Client Information Client Contact: Olivia Shively Phone: 850-938-770 PWSID:		Lab P/N: Elaine Walker E-Mail: M.Elaine.Walker@EurofinsET.com Carrier Tracking No(s): AW182534 FedEx: 016-2082534 State of Origin: Hawaii Page 1 of 1 Job #:	
Due Date Requested: see subcontract TAT Requested (days): Rush - ASAP Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No PO #:		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - NaOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
Address: 1001 Bishop St. Suite 1600 City: Honolulu State, Zip: Hawaii 96813 Phone: 808-954-4512 / 770-331-0794 Email: Watson.Tanji@aeocom.com / Mark.Kromis@aeocom.com Project Name: CTO N6274223F0104 Site: RHSF		Analysis Requested Total Number of Containers: 3 Special Instructions/Note:	
Sample Identification AF-RHMMW10-WGND01LF-2302W2		Matrix (Number, Sample, Overweight, A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z) Preservation Code: G Sample Type (C=Comp, G=grab) Sample Time: 1240 Sample Date: 2/14/23 Date/Time: 2/14/23 1350 Date/Time: 2/15/23 1400 Date/Time:	
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 type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Deliverable Requested: I, II, III, IV, Other (specify) Empty Kit Relinquished by:		Prelim data (Level 1 or 2) = see TAT above DoD Stage 4 report standard TAT - AECOM EQUIS EDD Method of Shipment:	
Relinquished by: Olivia Shively Relinquished by: James Mason Relinquished by:		Received by: James Mason Received by: James Mason Received by:	
Custody Seals Intact: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Custody Seal No.: 5.0/5.0		Cooler Temperature(s) °C and Other Remarks:	



Client Information Client Contact: None Hoagster Phone: 804-875-0325 Lab PM: Elaine Walker E-Mail: M.Elaine.Walker@EurofinsET.com		Carrier Tracking No(s): AW3 Feed 016-2482536 State of Origin: Hawaii COC No: 2302W2AFEAO6 Page: Page 1 of 1 Job #:	
Due Date Requested: see subcontract TAT Requested (days): Rush - ASAP Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No PO #: 806-954-4512 / 770-331-0794 WO #: 60697810 Project #: CTO N6274223F0104 Site: RHSF		Analysis Requested Total Number of Containers: 3 Special Instructions/Note: 8015C_DAI_GL_DS/2-(2-butoxyethoxy)-ethanol Field Filtered Sample (Yes or No) X Perform MS/MSD (Yes or No) X 8015C_DAI_GL_DS/2-(2-butoxyethoxy)-ethanol 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 Date: 2/14/23 Sample Time: 1155 Sample Type (C=Comp, G=grab): G Matrix (viewwater, soil, sediment, etc.): W Preservation Code: A	Sample Date: 2/14/23 Sample Time: 1155 Sample Type (C=Comp, G=grab): G Matrix (viewwater, soil, sediment, etc.): W Preservation Code: A	Date/Time: 2/14/23 1310 Date/Time: 2/16/23 1100 Date/Time: 2/14/23 1310 Date/Time: 2/16/23 1100	Date/Time: 2/14/23 1310 Date/Time: 2/16/23 1100 Date/Time: 2/14/23 1310 Date/Time: 2/16/23 1100
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 Deliverable Requested: I, II, III, IV, Other (specify) 4 report standard TAT - AECOM EQMS EDD		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	
Empty Kit Relinquished by: WTR Relinquished by: WTR Relinquished by: Miranda DeGarmo Relinquished by:		Relinquished by: WTR Relinquished by: Miranda DeGarmo Relinquished by:	
Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 5.0 / 5.0	



Chain of Custody Record

Client Information	Sampler: <i>Mark Kromis</i> Phone: <i>804-903-0523</i> PWSID:	Lab P.M.: Elaine Walker E-Mail: M.Elaine.Walker@EurofinsET.com	Carier Tracking No(s): <i>AWB FeedEx 016-24825334</i> State of Origin: Hawaii Page 1 of 1 Job #:
Due Date Requested: see subcontract TAT Requested (days): Rush - ASAP Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No PO #: _____ WO #: _____ Project #: 60697810 SSOV#: _____		Analysis Requested <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> 8015C_DAL_GL_DS/2-(2-butylethoxy)-ethanol </div>	
Sample Identification AF-RHMW12A-WGN01LF-2302W2 AF-RHMW12A-WGFD01LF-2302W2 <i>2/14/23</i>	Sample Date <i>2/14/23</i> <i>2/14/23</i>	Sample Time <i>0945</i> <i>0945</i>	Sample Type (C=Comp, G=grab) G G
Matrix (Liquid, Solid, Other) W W	Preservation Code: W W	Field Filtered Sample (Yes or No) N N	Perform MS/MSD (Yes or No) N N
Total Number of Containers 3 3		Special Instructions/Note:	
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"/> Unknown <input type="checkbox"/> Radiological			
Deliverable Requested: I, II, III, IV, Other (specify) _____ 4 report standard TAT. AECOM EQUIS EDD.			
Empty Kit Relinquished by: <i>W</i> Relinquished by: <i>Miranda DeBarma</i> Relinquished by:		Date: <i>2/14/23 1310</i> Date/Time: <i>2/15/23 1400</i> Date/Time:	
Custody Seals Intact: <input checked="" type="checkbox"/> Custody Seal No.: _____		Date: <i>2/14/23 1310</i> Date/Time: <i>2/16/23 1100</i> Date/Time:	

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months
 Special Instructions/QC Requirements: DOD QSM project.

Method of Shipment: _____
 Received by: *Miranda DeBarma*
 Received by: *Miranda DeBarma*
 Received by: _____
 Cooler Temperature(s) °C and Other Remarks: *5.0/5.0*
 Ver: 01/16/2019



Client Information Client Contact: <u>Olivia Shirley</u> Phone: <u>850-138-7710</u> PWSID:		Lab PM: <u>Elaine Walker</u> E-Mail: <u>M.Elaine.Walker@EurofinsET.com</u> State of Origin: <u>Hawaii</u>		Carrier Tracking No(s): <u>AWB FedEx 016-2482534</u> COC No: <u>2302W2AFE04</u> Page: <u>Page 1 of 1</u> Job #:	
Due Date Requested: <u>see subcontract</u> TAT Requested (days): <u>Rush - ASAP</u> Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No PO #:		Analysis Requested		Preservation Codes: 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 Other:	
Project #: <u>60697810</u> SSO#:		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>		Special Instructions/Note:	
Sample Identification AF-HDMW225303-WGN01LF-2302W2		Sample Date: <u>2/14/23</u> Sample Time: <u>1030</u> Sample Type (C=Comp, G=grab): <u>G</u> Matrix (W=water, S=solid, O=other, BT=Basin, AW=Air)	Preservation Code: <u>W</u>	Special Instructions/Note: <u>Sample 2/14/23</u>	
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 type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		Special Instructions/OC Requirements: <u>DOD QSM project.</u>	
Deliverable Requested: I, II, III, IV, Other (specify)		Prelim data (Level 1 or 2) - see TAT above. DoD Stage 4 report standard IAT. AECOM-EQUUS EDD.		Method of Shipment:	
Empty Kit Relinquished by:		Date:		Date/Time:	
Relinquished by: <u>Olivia Shirley</u>		Date/Time: <u>2/14/23</u>		Date/Time: <u>2/14/23 1350</u> Company: <u>AECOM</u>	
Relinquished by: <u>James Mason</u>		Date/Time: <u>2/15/23</u>		Date/Time: <u>2/16/23 1100</u> Company: <u>AECOM</u>	
Relinquished by:		Date/Time:		Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) / C and Other Remarks: <u>5.0 / 5.0</u>	



Chain of Custody Record

Client Information Client Contact: Quinn Shively Phone: 850-938-770		Lab Pkt: Elaine Walker E-Mail: M.Elaine.Walker@EurofinsET.com		Carrier Tracking No: 4145-2482534 State of Origin: Hawaii		COC No: 2302W2AFEAO3 Page: Page 1 of 1 Job #:	
Company: AECOM Address: 1001 Bishop St. Suite 1600 City: Honolulu State, Zip: Hawaii 96813 Phone: 808-954-4512 / 770-331-0794 Email: Watson.Tanji@aecom.com / Mark.Kromis@aecom.com Project Name: CTO N6274223F0104 Site: RHSF		Due Date Requested: see subcontract TAT Requested (days): Rush - ASAP Compliance Project: Yes No PO #:		Analysis Requested Total Number of Containers: 3 Preservation Codes: 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 Other:		Preservation Codes: M - Hexane N - None O - AsKAO2 P - Na2SO4 Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
Sample ID: AF-RHMW10-WGN01LF-2302W2 Sample Date: 2/14/23 Sample Time: 12:40 Sample Type: G Matrix: Water Matrix (W=water, S=solid, O=swab/stool, B=biological, A=air)		Field Filtered Sample (Yes or No): N Perform MS/MSD (Yes or No): N 8015C_DAL_GL_DS/2-(2-butoxyethoxy)-ethanol: A		Total Number of Containers: 3 Spec:		Barcode: 580-123622 Chain of Custody	
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"/> Radiobiological		Deliverable Requested: I II III IV Other (specify)		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 Archive For: Months		Special Instructions/QC Requirements: DOD QSM project	
Relinquished by: Quinn Shively Relinquished by: James Mason Relinquished by:		Date: 2/14/23 Date: 2/15/23 Date:		Date/Time: 2/14/23 1350 Date/Time: 2/16/23 1100 Date/Time:		Company: AECOM Company: AECOM Company:	
Custody Seals Intact: Yes No Custody Seal No		Cooler Temperature(s) °C and Other Remarks: 5.0/5.0		Ver: 01/16/2019			



Chain of Custody Record

Client Information Client Contact: Mark Kromis Phone: 809-873-0525 E-Mail: M.Elaine.Walker@EurofinsET.com		Lab PIV: Elaine Walker State of Origin: Hawaii Carrier Tracking No(s): A443 FeedX C16-4432556		COC No: 2302W2AFE06 Page: Page 1 of 1 Job #:	
Due Date Requested: See subcontract		Analysis Requested			
TAT Requested (days): Rush - ASAP		Total Number of Containers: 3			
Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - NaHSO4 R - Na2SO3 S - H2SO4 T - TSP Dodecalhydrate U - Acetone V - MCAA W - PH 4-5 X - EDTA L - EDA Z - other (specify)			
PO #:		8015C_DAI_GL_D5/2-(2-butoxyethoxy)-ethanol			
WO #:		Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> A			
Project #: 60697810 SOW#:		Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/> X			
Email: Tanjil (watson.tanjil@aeacom.com) Mark Kromis (mark.kromis@aeacom.com) Project Name: CTO N6274223F0104		Matrix (Hexane, Spill, On-water/oil, Air-Tissue, Air-Air)			
Site: RHSF		Sample Type (C=Comp, G=grab) G		Preservation Code: W	
Sample Identification AF-RHMW16-WGND1LF-2302W2		Sample Date: 2/14/23		Sample Time: 155	
Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B		Special Instructions/Note: 2/14/23 2/17/23			
Deliverable Requested I, II, III, IV, Other (specify)		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			
Empty Kit Relinquished by		Prelim data (Level 1 or 2)=see TAT above DoD Stage: 4 report standard TAT - AECOM EQUIS EDD			
Relinquished by: MAE		Date/Time: 2/14/23 1310		Method of Shipment:	
Relinquished by: Miranda Delarimo		Date/Time: 2/15/23 1400		Received by: Miranda Delarimo	
Relinquished by:		Date/Time:		Received by:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Date/Time:		Received by:	
Custody Seal No 50/50		Date/Time:		Received by:	
Cooler Temperature (s) °C and Other Remarks:		Company: AECOM			
Ver: 01/16/2019		Company: AECOM			

Chain of Custody Record

Client Information		Sampler: <i>Ng Fe Ag State</i>		Lab PM: Elaine Walker		Carrier Tracking No(s): <i>AM3</i>		COC No: 2302W2AFEAO5	
Client Contact: AECOM		Phone: <i>812-873-0523</i>		E-Mail: <i>M Elaine Walker@EurofinsET.com</i>		State of Origin: Hawaii		Page: 1 of 1	
Company: AECOM		PWSID		Analysis Requested		Total Number of Containers		Preservation Codes:	
Address: 1001 Bishop St. Suite 1600		Due Date Requested: see subcontract		TAT Requested (days): <i>Rush - ASAP</i>		8015C_DAL_GL_DS/2-(2-butoxyethoxy)-ethanol		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHCO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
City: Honolulu		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		M - Hexane N - None O - AsNaO2 P - Na2OAS Q - Na2SO3 R - H2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
State, Zip: Hawaii 96813		FO #:		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
Phone: 808-954-4512 / 770-331-0794		WO #:		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
Email: <i>Watson Tanji (watson.tanji@aecom.com) / Mark Kromis (mark.kromis@aecom.com)</i>		Project #:		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
Project Name: CTO N6274223F0104		SSOW#:		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
Site: RH5F		Matrix (W=water, S=solid, O=soil, D=drainage, A=air)		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
Sample Identification		AF-RHMW12A-WGN01LF-2302W2		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
AF-RHMW12A-WGFD01LF-2302W2		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Special Instructions/Note:	
<i>2/14/23</i>		<i>0915</i>		<i>0945</i>		<i>W</i>		<i>3</i>	
<i>2/14/23</i>		<i>0915</i>		<i>0945</i>		<i>W</i>		<i>3</i>	
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"/> Unknown <input type="checkbox"/> Radiological		Date: <i>2/14/23</i>		Time: <i>1310</i>		Company: <i>AECOM</i>	
Deliverable Requested I II III IV Other (specify)		4 report standard TAT AECOM EquiS EDD		Date: <i>2/15/23</i>		Time: <i>1400</i>		Company: <i>AECOM</i>	
Empty Kit Relinquished by: <i>W</i>		Date: <i>2/14/23</i>		Time: <i>1310</i>		Company: <i>AECOM</i>		Received by: <i>Miranda DeBarma</i>	
Relinquished by: <i>Miranda DeBarma</i>		Date: <i>2/15/23</i>		Time: <i>1400</i>		Company: <i>AECOM</i>		Received by: <i>Miranda DeBarma</i>	
Relinquished by:		Date:		Time:		Company:		Received by:	
Custody Seals Intact: <input checked="" type="checkbox"/> Custody Seal No.		Cooler Temperature(s) °C and Other Remarks: <i>5.0/5.0</i>		Date: <i>2/14/23</i>		Time: <i>1310</i>		Company: <i>AECOM</i>	
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 <i>Months</i>		Date: <i>2/14/23</i>		Time: <i>1310</i>		Company: <i>AECOM</i>	



Chain of Custody Record

Client Information		Lab PIV: Elaine Walker		Carrier Tracking No(s): <u>ALV38</u>		COC No: <u>2302W2AFE04</u>	
Company: AECOM		E-Mail: <u>M.Elaine.Walker@EurofinsET.com</u>		FedEx: <u>016-243-2534</u>		Page: Page 1 of 1	
Address: 1001 Bishop St. Suite 1600		State of Origin: Hawaii		Job #:			
City: Honolulu		PWSID:		Analysis Requested:		Preservation Codes:	
State, Zip: Hawaii 96813		TAT Requested (days): <u>Rush - ASAP</u>		8015C_DAI_GL_DS/2-2-butylhexoxy-ethanol		M - Hexane N - None O - AsNO2 P - Na2OAS Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecalhydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
Phone: 808-954-4512 / 770-331-0794		Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Field Filtered Sample (Yes or No)		Total Number of Containers	
Email: <u>watson.tanji@aecom.com</u> / <u>Mark.Kromis@aecom.com</u>		PO #:		Perform MS/MSD (Yes or No)		3	
Project Name: <u>CTO N6274223F0104</u>		WO #:		8015C_DAI_GL_DS/2-2-butylhexoxy-ethanol		Special Instructions/Note:	
Site: <u>RHSF</u>		Project #: <u>60697810</u>		Matrix (W=Water, S=Soil, O=Water/Oil, B=In-Stream, A=Air)			
Site: <u>RHSF</u>		SSOW#:		Sample Type (C=Comp, G=grab)			
Sample Identification		Sample Date		Sample Time		Preservation Code:	
AF-HDMW/225303-WGN01LF-2302W2		2/14/23		1030		G W	
Possible Hazard Identification		Sample Date		Sample Time		Preservation Code:	
<input 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		Date		Time		Date/Time	
Deliverable Requested I, II, III, IV Other (specify)		Date		Time		Date/Time	
Empty Kit Relinquished by		Date		Time		Date/Time	
Relinquished by: <u>Olivia Shively</u>		Date: <u>2/14/23</u>		Time: <u>1350</u>		Company: <u>AECOM</u>	
Relinquished by: <u>James Mason</u>		Date: <u>2/15/23</u>		Time: <u>1400</u>		Company: <u>AECOM</u>	
Relinquished by:		Date:		Time:		Date/Time	
Custody Seals Intact: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Custody Seal No		Cooler Temperature (°C and Other Remarks):		5.0 / 5.0	

