



ANALYTICAL REPORT

PREPARED FOR

Attn: Terri Choy
AECOM

1001 Bishop Street
Honolulu, Hawaii 96813

Generated 2/10/2023 10:54:52 AM Revision 1

JOB DESCRIPTION

Red Hill - AFFF Assessment

JOB NUMBER

580-122151-1

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



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Revision 1

Authorized for release by
Marie Walker, Senior Project Manager
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Case Narrative

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

Job ID: 580-122151-1

Job ID: 580-122151-1

Laboratory: Eurofins Seattle

Narrative

CASE NARRATIVE

Client: AECOM
Project: Red Hill - AFFF Assessment
Report Number: 580-122151-1

REVISION 1: FEBRUARY 10, 2023

Report revised to add the COC and receipt checklist to the report.

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.

Following DoD QSM guidelines, manual integrations were performed only when necessary and are in compliance with the laboratory's standard operating procedure, Acceptable Manual Integration Practices, SOP No.: Q-S-002. The reason(s) for manual integration have been documented on the affected chromatogram(s), which is/are provided in the raw data package. The raw data also includes the original chromatogram(s) prior to any manual integration being performed. Manual integrations are detailed in the manual integration summary forms following this narrative.

It should be noted that samples with elevated Limits of Quantitation (LOQs) resulting from a dilution may not be able to satisfy customer reporting limits in some cases. Such increases in the LOQs 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

The samples were received on 01/12/2023; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.5 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-2301W2 (580-122151-1), AF-RHMW16-WGN01LF-2301W2 (580-122151-2), AF-RHMW10-WGN01LF-2301W2 (580-122151-3), AF-RHMW12A-WGN01LF-2301W2 (580-122151-4), AF-RHMW12A-WGFD01LF-2301W2 (580-122151-5) and AF-HDMW225303-WGN01LF-2301W2 (580-122151-6) were analyzed for glycols in accordance with EPA SW-846 Method 8015B - DAI. The samples were analyzed on 01/16/2023.

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

Job ID: 580-122151-1

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
Project/Site: Red Hill - AFFF Assessment

Job ID: 580-122151-1

Client Sample ID: AF-RHMW225401-WGN01B-2301W2

Lab Sample ID: 580-122151-1

Date Collected: 01/11/23 11:20

Matrix: Water

Date Received: 01/12/23 14:50

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			01/16/23 18:59	1

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

Client Sample Results

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

Job ID: 580-122151-1

Client Sample ID: AF-RHMW16-WGN01LF-2301W2

Lab Sample ID: 580-122151-2

Date Collected: 01/10/23 12:34

Matrix: Water

Date Received: 01/12/23 14:50

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			01/16/23 21:42	1

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

Client Sample Results

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

Job ID: 580-122151-1

Client Sample ID: AF-RHMW10-WGN01LF-2301W2

Lab Sample ID: 580-122151-3

Date Collected: 01/10/23 13:15

Matrix: Water

Date Received: 01/12/23 14:50

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			01/16/23 22:05	1

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

Client Sample Results

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

Job ID: 580-122151-1

Client Sample ID: AF-RHMW12A-WGN01LF-2301W2

Lab Sample ID: 580-122151-4

Date Collected: 01/10/23 10:10

Matrix: Water

Date Received: 01/12/23 14:50

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			01/16/23 22:28	1

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

Client Sample Results

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

Job ID: 580-122151-1

Client Sample ID: AF-RHMW12A-WGFD01LF-2301W2

Lab Sample ID: 580-122151-5

Date Collected: 01/10/23 10:10

Matrix: Water

Date Received: 01/12/23 14:50

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			01/16/23 22:51	1

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

Client Sample Results

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

Job ID: 580-122151-1

Client Sample ID: AF-HDMW225303-WGN01LF-2301W2

Lab Sample ID: 580-122151-6

Date Collected: 01/10/23 10:35

Matrix: Water

Date Received: 01/12/23 14:50

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			01/16/23 23:15	1

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

QC Sample Results

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

Job ID: 580-122151-1

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

Lab Sample ID: MB 680-759183/10
Matrix: Water
Analysis Batch: 759183

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			01/16/23 15:06	1

Lab Sample ID: LCS 680-759183/6
Matrix: Water
Analysis Batch: 759183

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 680-759183/7
Matrix: Water
Analysis Batch: 759183

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	18.8		mg/L		94	50 - 150	1	50

Lab Sample ID: 580-122151-2 MS
Matrix: Water
Analysis Batch: 759183

Client Sample ID: AF-RHMW16-WGN01LF-2301W2
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	14.0		mg/L		70	50 - 150

Lab Sample ID: 580-122151-2 MSD
Matrix: Water
Analysis Batch: 759183

Client Sample ID: AF-RHMW16-WGN01LF-2301W2
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	16.5		mg/L		82	50 - 150	16	50

Lab Chronicle

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

Job ID: 580-122151-1

Client Sample ID: AF-RHMW225401-WGN01B-2301W2

Lab Sample ID: 580-122151-1

Date Collected: 01/11/23 11:20

Matrix: Water

Date Received: 01/12/23 14:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	759183	JCK	EET SAV	01/16/23 18:59

Client Sample ID: AF-RHMW16-WGN01LF-2301W2

Lab Sample ID: 580-122151-2

Date Collected: 01/10/23 12:34

Matrix: Water

Date Received: 01/12/23 14:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	759183	JCK	EET SAV	01/16/23 21:42

Client Sample ID: AF-RHMW10-WGN01LF-2301W2

Lab Sample ID: 580-122151-3

Date Collected: 01/10/23 13:15

Matrix: Water

Date Received: 01/12/23 14:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	759183	JCK	EET SAV	01/16/23 22:05

Client Sample ID: AF-RHMW12A-WGN01LF-2301W2

Lab Sample ID: 580-122151-4

Date Collected: 01/10/23 10:10

Matrix: Water

Date Received: 01/12/23 14:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	759183	JCK	EET SAV	01/16/23 22:28

Client Sample ID: AF-RHMW12A-WGFD01LF-2301W2

Lab Sample ID: 580-122151-5

Date Collected: 01/10/23 10:10

Matrix: Water

Date Received: 01/12/23 14:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	759183	JCK	EET SAV	01/16/23 22:51

Client Sample ID: AF-HDMW225303-WGN01LF-2301W2

Lab Sample ID: 580-122151-6

Date Collected: 01/10/23 10:35

Matrix: Water

Date Received: 01/12/23 14:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015C GLY		1	759183	JCK	EET SAV	01/16/23 23:15

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

Job ID: 580-122151-1

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
Project/Site: Red Hill - AFFF Assessment

Job ID: 580-122151-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-122151-1	AF-RHMW225401-WGN01B-2301W2	Water	01/11/23 11:20	01/12/23 14:50
580-122151-2	AF-RHMW16-WGN01LF-2301W2	Water	01/10/23 12:34	01/12/23 14:50
580-122151-3	AF-RHMW10-WGN01LF-2301W2	Water	01/10/23 13:15	01/12/23 14:50
580-122151-4	AF-RHMW12A-WGN01LF-2301W2	Water	01/10/23 10:10	01/12/23 14:50
580-122151-5	AF-RHMW12A-WGFD01LF-2301W2	Water	01/10/23 10:10	01/12/23 14:50
580-122151-6	AF-HDMW225303-WGN01LF-2301W2	Water	01/10/23 10:35	01/12/23 14:50

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Chain of Custody Record

United

Client Information		Sampler: NOAH TURNER		Lab Pkt: Elaine Walker		Carrier Tracking No(s): 2301W2AFE07	
Client Contact:		Phone: (781) 366-4777		E-Mail: M.Elaine.Walker@EurofinsET.com		State of Origin: Hawaii	
Company: AECOM		PWSID:		Analysis Requested:		Job #: 2301W2AFE07	
Address: 1001 Bishop St. Suite 1600		Due Date Requested: see subcontract		TAT Requested (days): Rush - ASAP		Preservation Codes: M - Hexane N - None O - AsNsO2 P - Na2OAS Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 X - EDTA Z - other (specify) Other:	
City: Honolulu		Compliance Project: Δ Yes Δ No		Field Filtered Sample (Yes or No)		Total Number of Containers	
State, Zip: Hawaii 96813		PO #:		Perform MS/MSD (Yes or No)		Special Instructions/Note:	
Phone: 808-954-4512 / 770-331-0794		WO #:		801SC_DAL_GL_DS/2-(2-butylethoxy)-ethanol		3	
Email: Watson.Tanji (watson.tanji@aecom.com) / Mark.Kromis (mark.kromis@aecom.com)		Project #:		Matrix (Water, Organic, Inorganic, Biological, Tissue, A+B)			
Project Name: CTO N6274223F0104		SSOW#:		Sample Type (C=Comp, G=grab)			
Site: RHSF		Sample Date: 01/11/2023		Sample Time: 1120			
Sample Identification		Sample Date: 01/11/2023		Sample Time: 1120			
AF-RHMV225401-WGND01B-2301W2		Sample Date: 01/11/2023		Sample Time: 1120			
Possible Hazard Identification		Sample Date: 01/11/2023		Sample Time: 1120			
<input checked="" type="checkbox"/> Non-Hazard		Sample Date: 01/11/2023		Sample Time: 1120			
<input type="checkbox"/> Flammable		Sample Date: 01/11/2023		Sample Time: 1120			
<input type="checkbox"/> Skin Irritant		Sample Date: 01/11/2023		Sample Time: 1120			
<input type="checkbox"/> Poison B		Sample Date: 01/11/2023		Sample Time: 1120			
<input type="checkbox"/> Unknown		Sample Date: 01/11/2023		Sample Time: 1120			
<input type="checkbox"/> Radiological		Sample Date: 01/11/2023		Sample Time: 1120			
Deliverable Requested: I, II, III, IV, Other (specify)		Sample Date: 01/11/2023		Sample Time: 1120			
Empty Kit Relinquished by:		Sample Date: 01/11/2023		Sample Time: 1120			
Relinquished by: NOAH TURNER		Sample Date: 01/11/2023		Sample Time: 1120			
Relinquished by: [Signature]		Sample Date: 01/11/2023		Sample Time: 1120			
Relinquished by:		Sample Date: 01/11/2023		Sample Time: 1120			
Custody Seals Intact: Δ Yes Δ No		Sample Date: 01/11/2023		Sample Time: 1120			
Custody Seal No.:		Sample Date: 01/11/2023		Sample Time: 1120			
Cooler Temperature(s) °C and Other Remarks: 0.5 / 0.5		Sample Date: 01/11/2023		Sample Time: 1120			
Special Instructions/QC Requirements: DOD GSM project		Sample Date: 01/11/2023		Sample Time: 1120			
Return To Client <input type="checkbox"/>		Sample Date: 01/11/2023		Sample Time: 1120			
Disposal By Lab <input type="checkbox"/>		Sample Date: 01/11/2023		Sample Time: 1120			
Archive For _____ Months		Sample Date: 01/11/2023		Sample Time: 1120			
Received by: [Signature]		Sample Date: 01/11/2023		Sample Time: 1120			
Received by: [Signature]		Sample Date: 01/11/2023		Sample Time: 1120			
Received by: [Signature]		Sample Date: 01/11/2023		Sample Time: 1120			
Company: AECOM		Sample Date: 01/11/2023		Sample Time: 1120			
Company: AECOM		Sample Date: 01/11/2023		Sample Time: 1120			
Company: AECOM		Sample Date: 01/11/2023		Sample Time: 1120			



Chain of Custody Record

Client Information Client Contact: <u>Jakubyn Vb</u> Phone: <u>408-438-0688</u> PWSID:		Lab PM: <u>Elaine Walker</u> E-Mail: <u>M.Elaine.Walker@EurofinsET.com</u>		Carmer Tracking No(s): <u>ANB 2301W2AFE06</u> State of Origin: <u>Hawaii</u>		COC No: <u>2301W2AFE06</u> Page: <u>Page 1 of 1</u> Job #:	
Due Date Requested: <u>see subcontract</u> TAT Requested (days): <u>Rush - ASAP</u>		Matrix (W=water, S=solid, O=soil, I=infusible, A=air)		Analysis Requested		Preservation Codes: M - Hexane N - None O - AshAO2 P - Na2O4S Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - NCAAA W - pH 4-5 X - EDTA L - EDA Z - other (specify)	
Compliance Project: <u>Yes</u> <input type="checkbox"/> <u>No</u> <input type="checkbox"/>		Sample Type (C=comp, G=grab)		Total Number of Containers		Other:	
PO #:		Sample Time		Perform MS/MSD (Yes or No)		Field Filtered Sample (Yes or No)	
W/O #:		Sample Date		Field Filtered Sample (Yes or No)		Field Filtered Sample (Yes or No)	
Email: <u>Watson.Tanji@aeacom.com</u> / <u>Mark.Kromis@aeacom.com</u>		Preservation Code:		Field Filtered Sample (Yes or No)		Field Filtered Sample (Yes or No)	
Project Name: <u>CTO N6274223F0104</u>		Matrix (W=water, S=solid, O=soil, I=infusible, A=air)		Field Filtered Sample (Yes or No)		Field Filtered Sample (Yes or No)	
Site: <u>RHSF</u>		Sample Date: <u>01/10/23</u>		Field Filtered Sample (Yes or No)		Field Filtered Sample (Yes or No)	
Sample Identification: <u>AF-RHMW16-WGN01LF-2301W2</u>		Sample Time: <u>1234</u>		Field Filtered Sample (Yes or No)		Field Filtered Sample (Yes or No)	
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		Date: <u>01/10/23</u>		Field Filtered Sample (Yes or No)		Field Filtered Sample (Yes or No)	
Deliverable Requested: I, II, III, IV, Other (specify)		Date: <u>01/10/23</u>		Field Filtered Sample (Yes or No)		Field Filtered Sample (Yes or No)	
Empty Kit Relinquished by:		Date: <u>01/10/23</u>		Field Filtered Sample (Yes or No)		Field Filtered Sample (Yes or No)	
Relinquished by: <u>Jakubyn Vb</u>		Date: <u>01/10/23</u>		Field Filtered Sample (Yes or No)		Field Filtered Sample (Yes or No)	
Relinquished by: <u>Miranda Detarms</u>		Date: <u>01/10/23</u>		Field Filtered Sample (Yes or No)		Field Filtered Sample (Yes or No)	
Relinquished by:		Date: <u>01/10/23</u>		Field Filtered Sample (Yes or No)		Field Filtered Sample (Yes or No)	
Custody Seals Intact: <u>Yes</u> <input type="checkbox"/> <u>No</u> <input type="checkbox"/>		Date: <u>01/10/23</u>		Field Filtered Sample (Yes or No)		Field Filtered Sample (Yes or No)	
Custody Seal No.:		Date: <u>01/10/23</u>		Field Filtered Sample (Yes or No)		Field Filtered Sample (Yes or No)	
Cooler Temperature(s) °C and Other Remarks: <u>0.5 / 0.5</u>		Date: <u>01/10/23</u>		Field Filtered Sample (Yes or No)		Field Filtered Sample (Yes or No)	
Ver: 01/16/2019		Date: <u>01/10/23</u>		Field Filtered Sample (Yes or No)		Field Filtered Sample (Yes or No)	



Chain of Custody Record

Client Information		Lab PM: Elaine Walker	Carrier Tracking No(s): ANB 2301W2AFE03	COC No: 2301W2AFE03
Client Contact: Noah Turner		E-Mail: M.Elaine.Walker@EurofinsET.com	State of Origin: Hawaii	Page: Page 1 of 1
Company: AECOM		PWSID:	Job #:	
Address: 1001 Bishop St, Suite 1600		Due Date Requested: see subcontract	Analysis Requested	
City: Honolulu		TAT Requested (days): Rush - ASAP	Preservation Codes: M - Hexane N - None O - AshNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4.5 X - EDTA L - EDA Z - other (specify) Other:	
State, Zip: Hawaii 96813		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No	Total Number of Containers: 3	
Phone: 808-954-4512 / 770-331-0794		PO #:	Special Instructions/Note:	
Email: Watson.Tanji@aeom.com / Mark.Kromis@aeom.com		WO #:	8015C_DAL_GL_DS/2-(2-butoxyethoxy)-ethanol	
Project Name: CTO N6274223F0104		Project #: 60697810	Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/>	
Site: RHSF		SSOW#:	Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/>	
Sample Identification		Sample Date: 01/10/2023	Sample Time: 1315	Sample Type (C=Comp, G=grab) G
AF-RHMW10-WGN01F-2301W2		Matrix (W=water, S=solid, O=water/gel, BT=issue, AW=air)	Preservation Code: W	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	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
Deliverable Requested: I, II, III, IV, Other (specify)		Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		
Empty Kit Relinquished by: Noah Turner		Special Instructions/QC Requirements: DOD QSM project		
Relinquished by: GABRIEL ALLEN		Date: 01/10/2023	Date: 1-10-23	Date: 1450
Relinquished by: GABRIEL ALLEN		Date: 01/11/23	Date: 01/12/23	Date: 14:50
Custody Seal Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks: 05/0.5		



Chain of Custody Record

Client Information		Lab PM: Elaine Walker		Carrier Tracking No(s): ANB 2301W2AFE05		
Client Contact: JAWAN V		E-Mail: Elaine.Walker@EurofinsET.com		Page: Page 1 of 1		
Phone: 408 438 8068		PWSID:		Job #:		
Company: AECOM		Due Date Requested: see subcontract		Analysis Requested		
Address: 1001 Bishop St. Suite 1600		TAT Requested (days): Rush - ASAP		8015C_DAL_GL_DS/2-(2-butoxyethoxy)-ethanol		
City: Honolulu		Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Perform MS/MSD (Yes or No)		
State, Zip: Hawaii 96813		PO #:		Field Filled Sample (Yes or No)		
Phone: 808-954-4512 / 770-331-0794		WO #:		Total Number of Containers		
Email: Watson.Tanji@aecom.com / Mark.Kromis@aecom.com		Project #:		Preservation Codes:		
Project Name: CTO N6274223F0104		60697810		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 - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - NCAAA W - pH 4-5 Z - other (specify)		
Site: RHSF		SSOW#:		Other:		
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=swastrol, I=In tissue, A=air)	Preservation Code	Special Instructions/Note:
AF-RHMMW12A-WGN01LF-2301W2	01/10/23	1010	G	W		3
AF-RHMMW12A-WGFD01LF-2301W2	01/10/23	1010	G	W		3
<p>Possible Hazard Identification</p> <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						

Chain of Custody Record

Client Information		Lab PM: Elaine Walker		COC No: 2301W2AFE04	
Client Contact: NOAH TURNER		E-Mail: M.Elaine.Walker@EurofinsET.com		Carrier Tracking No(s): ANB 2301W2AFE04	
Phone: (781) 366-4777		PWSID:		Page: Page 1 of 1	
Company: AECOM		Due Date Requested: see subcontract		Job #:	
Address: 1001 Bishop St. Suite 1600		TAT Requested (days): Rush - ASAP		Analysis Requested	
City: Honolulu		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		Preservation Codes:	
State, Zip: Hawaii 96813		PO #:		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:	
Phone: 808-954-4512 / 770-331-0794		Project #:		Total Number of containers	
Email: Watson.Tanji@aeacom.com / Mark.Kromis@aeacom.com		SSOW#:		3	
Project Name: CTO N6274223F0104		Sample Date		Special Instructions/Note:	
Site: RHSF		Sample Time			
Sample Identification		Sample Type (C=Comp, G=grab)			
AF-HDMW225303-WGN01LF-2301W2		G			
Sample Date		Sample Time			
01/10/2023		1035			
Matrix (W=water, S=solid, O=swastool, B=bi-tissue, A=air)		Preservation Code:			
		W			
Possible Hazard Identification		Sample Date			
<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		01/10/2023			
Deliverable Requested: I, II, III, IV, Other (specify)		Sample Time			
4 report standard IAT, AECOM, EQUIS, EDD.		1035			
Empty Kit Relinquished by:		Sample Date			
NOAH TURNER		01/10/2023			
Relinquished by: NOAH TURNER		Sample Time			
Miranda Defarimo		1230			
Relinquished by: Miranda Defarimo		Sample Date			
Date/Time: 01/10/2023 1415		Date/Time: 01/11/2023 1230			
Date/Time: 01/12/23 14:50		Date/Time: 01/12/23 14:50			
Company: AECOM		Company: AECOM			
Company: AECOM		Company: AECOM			
Company: AECOM		Company: AECOM			
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:			
Cooler Temperature(s) °C and Other Remarks:		0-5/0-5			



Login Sample Receipt Checklist

Client: AECOM

Job Number: 580-122151-1

Login Number: 122151

List Number: 2

Creator: Johnson, Corey M

List Source: Eurofins Savannah

Question	Answer	Comment
Radioactivity is at or below background levels?	N/A	
The cooler's custody seal is present and intact?	True	
The cooler or samples do not appear to have been compromised or tampered with?	True	
Samples were received on Ice?	True	
Containers are not broken or leaking?	True	
There are no samples present with short holding-time parameters?	True	
Quick TAT was not requested?	True	
COC is present?	True	
COC is filled out in ink and legible?	True	
COC is filled out completely?	True	
COC includes all required signatures?	True	
Is the Field Sampler's name present on COC?	N/A	
Sample containers have legible labels?	True	
COC matches up to all samples in the cooler?	True	
Sample ID's on containers match exactly the sample ID's on COC?	True	
Appropriate sample containers are used?	True	
Sample collection date/times are provided?	True	
Samples are received within Holding Time?	True	
Cooler Temperature is acceptable: <6 degC, with no frozen samples?	True	
Cooler Temperature is recorded?	True	
Sample bottles are completely filled?	True	
There is sufficient volume for all the requested analyses?	True	
Appropriate sample preservatives were used?	True	
Aqueous inorganic sample pHs are acceptable?	True	
Aqueous semi-volatile organics sample pHs are acceptable?	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter?	N/A	
MS/MSD was not requested and not extra volume was sent?	True	
Samples do not require splitting or compositing?	N/A	
Multiphase samples are not present?	True	
Trip Blank was not provided/required?	True	
A sample discrepancy report is not needed?	N/A	