



DEPARTMENT OF THE NAVY
 COMMANDER
 NAVY REGION HAWAII
 850 TICONDEROGA ST STE 110
 JBPBH, HAWAII 96860-5101

JAN 31 2020

RK

5090
 N45
 January 29, 2020

Ms. Joanna Seto, Chief
 Hawaii State Department of Health
 Environmental Management Division
 Safe Drinking Water Branch
 2385 Waimano Home Road
 Uluakupu Building 4
 Pearl City, HI 96782

Dear Ms. Seto:

SUBJECT: FOURTH QUARTER 2019 DRINKING WATER MONITORING RESULTS FOR RED HILL, JOINT BASE PEARL HARBOR-HICKAM WATER SYSTEM (PWS NO. 360)

As required by the Transition Plan for Tank 5 Red Hill Release drinking water samples were collected at the Red Hill Shaft on December 18, 2019. A summary of the laboratory report is provided in the table below. A complete laboratory report is attached as enclosure 1.

Lab Report Number	Sample Location(s)	Sample Date	Laboratory Methods
474323	360-011, TAP OUTSIDE CL2 BLDG	12/18/19	200.8, 524.2, 525.2
474328	360-011, TAP OUTSIDE CL2 BLDG	12/18/19	8015D

No contaminants were detected. Please note, due to Christmas holiday, the sample for JP8 did not meet the required 7 days holding time for the analysis using laboratory method 8015D and is marked as out of holding time on the lab report.

Should you have any questions regarding this matter, please contact Mr. Dean Setiono at (808) 471-4811.

Sincerely,

AARON Y. POENTIS
 Director
 Regional Environmental Department
 By direction of the
 Commander

Enclosure: 1. Eurofins Lab Reports for Samples Collected on 12/18/19 (42 pages)

5090
N45
January 29, 2020

Copy to:

Department of Health, Solid and Hazardous Waste Branch, Underground Storage Tank Section (Hard copy w/ enclosure)

Electronic copy to:

Mr. John Floyd, NAVSUP Fleet Logistics Center Pearl Harbor Deputy Director, Fuel and Facility Management

Mr. Ralph Wells, DLA Energy Pacific

MEMORANDUM

22 Jan 20

Packet No: 20-015820122

From: NAVFAC HAWAII, Environmental Services Laboratory, PRP411

To: Kyle Teraoka NAVFACHI OPBP6

Copy To: See COC

Subj: LABORATORY REPORTS
 MISCELLANEOUS CHARGES AND/OR CHAIN(S) OF CUSTODY SHEETS

Encl: Lab Number(s) 20-01582 , 20-01583

1. Thank you for using our laboratory to provide you with quality test results and/or services.
2. Please take a few minutes and check over the enclosures. If you believe anything is missing or in need of correction, let us know immediately and we will send you a correction as soon as possible.
3. Our goal is to better serve all our customers and we are concerned that you are receiving our services in the most efficient and timely manner possible. Please acknowledge receipt by signing below and returning this memo so we will know that you have received the enclosures. Also feel free to include any comments you have concerning our services. You may return this memo to us through the guardmail (NAVFAC HI PRP411) or fax it to 471-4534.
4. After the laboratory reports are archived, additional copies are available with an archival fee of \$72.00/hr. If you have any questions, please contact us at 474-3704 or at the above fax number.
5. ~~Laboratory certifies that the results meet all A2LA requirements unless noted in the "remarks" section of the report.~~ ⁹ 1/22/20



Duane Morita, Acting Laboratory Manager

TOTAL NO. OF PAGES: 42

To: NAVFAC HI PRP4

- Receipt acknowledged. Enclosures appear complete and acceptable.
- Comments/discrepancies noted.

Please fax corrections/amendments to Fax#: _____
or guardmail to: _____

Customer's Signature/Date: _____

LABORATORY REPORT

If you have any questions concerning this report, please do not hesitate to call us at (800) 332-4345 or (574) 233-4777.

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STATE CERTIFICATION LIST

State	Certification	State	Certification
Alabama	40700	Missouri	880
Alaska	IN00035	Montana	CERT0026
Arizona	AZ0432	Nebraska	NE-OS-05-04
Arkansas	IN00035	Nevada	IN00035
California	2920	New Hampshire*	2124
Colorado	IN00035	New Jersey*	IN598
Colorado Radiochemistry	IN00035	New Mexico	IN00035
Connecticut	PH-0132	New York*	11398
Delaware	IN035	North Carolina	18700
Florida*	E87775	North Dakota	R-035
Georgia	929	Ohio	87775
Hawaii	IN035	Oklahoma	D9508
Idaho	IN00035	Oregon (Primary AB)*	4074
Illinois*	200001	Pennsylvania*	68-00466
Illinois Microbiology	17767	Puerto Rico	IN00035
Illinois Radiochemistry	IN00035	Rhode Island	LAO00343
Indiana Chemistry	C-71-01	South Carolina	95005
Indiana Microbiology	M-76-07	South Dakota	IN00035
Iowa	098	Tennessee	TN02973
Kansas*	E-10233	Texas*	T104704187-18-12
Kentucky	90056	Texas/TCEQ	TX207
Louisiana*	LA014	Utah*	IN00035
Maine	IN00035	Vermont	VT-8775
Maryland	209	Virginia*	460275
Massachusetts	M-IN035	Washington	C837
Michigan	9926	West Virginia	9927 C
Minnesota*	018-999-338	Wisconsin	999766900
Mississippi	IN035	Wyoming	IN035
EPA	IN00035		

*NELAP/TNI Recognized Accreditation Bodies



Environment Testing
TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-175563-1
Client Project/Site: 20-01582
JBPHH Red Hill TP001 360-011

For:
Eurofins Eaton Analytical
110 S Hill Street
South Bend, Indiana 46617

Authorized for release by:
12/30/2019 7:40:27 AM

Eric Lang, Manager of Project Management
(708)534-5200
eric.lang@testamericainc.com

LINKS

Review your project
results through
Total Access

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The
Expert**

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Case Narrative

Client: Eurofins Eaton Analytical
Project/Site: 20-01582 JBPHH
Red Hill TP001 360-011

Job ID: 500-175563-1

Job ID: 500-175563-1

Laboratory: Eurofins TestAmerica, Chicago

Narrative

Job Narrative
500-175563-1

Comments

No additional comments.

Receipt

The sample was received on 12/24/2019 11:55 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.3° C.

GC Semi VOA

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

Organic Prep

Method 3510C: 3510 8015

The following sample(s) was received with less than 2 days remaining on the holding time or less than one shift (8 hours) remaining on a test with a holding time of 48 hours or less. As such, the laboratory had insufficient time remaining to perform the analysis within holding time: 500-175563-1.

The sample was received on 12/24/19. The hold time expired on 12/25/19. It was extracted on 12/26/19.

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

Detection Summary

Client: Eurofins Eaton Analytical Project/Site:
20-01582 JBPHH Red Hill TP001 360-011

Job ID: 500-175563-1

Client Sample ID: 4521859 (2)

Lab Sample ID: 500-175563-1

No Detections.



This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Chicago

Method Summary

Client: Eurofins Eaton Analytical
Project/Site: 20-01582 JBPHH
Red Hill TP001 360-011

Job ID: 500-175563-1

Method	Method Description	Protocol	Laboratory
8015D	Diesel Range Organics (DRO) (GC)	SW846	TAL CHI
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL CHI

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



Sample Summary

Client: Eurofins Eaton Analytical
Project/Site: 20-01582 JBPHH
Red Hill TP001 360-011

Job ID: 500-175563-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
500-175563-1	4521859 (2)	Water	12/18/19 09:05	12/24/19 11:55	

6

Client Sample Results

Client: Eurofins Eaton Analytical Project/Site:
20-01582 JBPHH Red Hill TP001 360-011

Job ID: 500-175563-1

Client Sample ID: 4521859 (2)

Lab Sample ID: 500-175563-1

Date Collected: 12/18/19 09:05

Matrix: Water

Date Received: 12/24/19 11:55

Method: 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C8-C18 TPH – Jet Fuel (JP8)	<0.48	H	0.48	0.24	mg/L		12/26/19 12:00	12/26/19 17:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl (Surr)	79		50 - 148				12/26/19 12:00	12/26/19 17:18	1
2-Fluorobiphenyl	78		50 - 140				12/26/19 12:00	12/26/19 17:18	1



Definitions/Glossary

Client: Eurofins Eaton Analytical Project/Site:
20-01582 JBPHH Red Hill TP001 360-011

Job ID: 500-175563-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time

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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

QC Association Summary

Client: Eurofins Eaton Analytical Project/Site:
20-01582 JBPHH Red Hill TP001 360-011

Job ID: 500-175563-1

GC Semi VOA

Analysis Batch: 522442

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175563-1	4521859 (2)	Total/NA	Water	8015D	522528
MB 500-522528/1-A	Method Blank	Total/NA	Water	8015D	522528
LCS 500-522528/2-A	Lab Control Sample	Total/NA	Water	8015D	522528
LCSD 500-522528/3-A	Lab Control Sample Dup	Total/NA	Water	8015D	522528

Prep Batch: 522528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-175563-1	4521859 (2)	Total/NA	Water	3510C	522528
MB 500-522528/1-A	Method Blank	Total/NA	Water	3510C	522528
LCS 500-522528/2-A	Lab Control Sample	Total/NA	Water	3510C	522528
LCSD 500-522528/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	522528



Surrogate Summary

Client: Eurofins Eaton Analytical Project/Site:
20-01582 JBPHH Red Hill TP001 360-011

Job ID: 500-175563-1

Method: 8015D - Diesel Range Organics (DRO) (GC)

Prep Type: Total/NA

Matrix: Water

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		OTPH (50-148)	FBP (50-140)
500-175563-1	4521859 (2)	79	78
LCS 500-522528/2-A	Lab Control Sample	83	87
LCSD 500-522528/3-A	Lab Control Sample Dup	84	87
MB 500-522528/1-A	Method Blank	78	78

Surrogate Legend

OTPH = o-Terphenyl (Surr)

FBP = 2-Fluorobiphenyl



QC Sample Results

Client: Eurofins Eaton Analytical Project/Site:
20-01582 JBPHH Red Hill TP001 360-011

Job ID: 500-175563-1

Method: 8015D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 500-522528/1-A
Matrix: Water
Analysis Batch: 522442

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 522528

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C8-C18 TPH - Jet Fuel (JP8)	<0.50		0.50	0.25	mg/L		12/26/19 12:00	12/26/19 15:31	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl (Surr)	78		50 - 148				12/26/19 12:00	12/26/19 15:31	1
2-Fluorobiphenyl	78		50 - 140				12/26/19 12:00	12/26/19 15:31	1

Lab Sample ID: LCS 500-522528/2-A
Matrix: Water
Analysis Batch: 522442

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 522528

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
C8-C18 TPH - Jet Fuel (JP8)	2.00	1.55		mg/L		78	50 - 141
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
<i>o</i> -Terphenyl (Surr)	83		50 - 148				
2-Fluorobiphenyl	87		50 - 140				

Lab Sample ID: LCSD 500-522528/3-A
Matrix: Water
Analysis Batch: 522442

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 522528

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
C8-C18 TPH - Jet Fuel (JP8)	2.00	1.61		mg/L		81	50 - 141	4	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
<i>o</i> -Terphenyl (Surr)	84		50 - 148						
2-Fluorobiphenyl	87		50 - 140						

Lab Chronicle

Client: Eurofins Eaton Analytical Project/Site:
20-01582 JBPHH Red Hill TP001 360-011

Job ID: 500-175563-1

Client Sample ID: 4521859 (2)

Lab Sample ID: 500-175563-1

Date Collected: 12/18/19 09:05

Matrix: Water

Date Received: 12/24/19 11:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			522528	12/26/19 12:00	BSO	TAL CHI
Total/NA	Analysis	8015D		1	522442	12/26/19 17:18	JBj	TAL CHI

Laboratory References:

TAL CHI = Eurofins TestAmerica, Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



Accreditation/Certification Summary

Client: Eurofins Eaton Analytical Project/Site:
20-01582 JBPHH Red Hill TP001 360-011

Job ID: 500-175563-1

Laboratory: Eurofins TestAmerica, Chicago

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2903	04-30-20
Georgia	State	N/A	04-30-20
Georgia (DW)	State	939	04-30-20
Hawaii	State	NA	04-30-20
Illinois	NELAP	IL00035	04-30-20
Indiana	State	C-IL-02	04-30-20
Iowa	State	082	05-01-20
Kansas	NELAP	E-10161	11-01-20
Kentucky (UST)	State	AI # 108083	04-30-20
Kentucky (WW)	State	KY90023	12-31-19
Louisiana	NELAP	02046	06-30-20
Mississippi	State	NA	04-30-20
New York	NELAP	12019	04-01-20
North Carolina (WW/SW)	State	291	12-31-19
North Dakota	State	R-194	04-30-20
Oklahoma	State	8908	08-31-20
South Carolina	State	77001003	04-30-20
USDA	US Federal Programs	P330-18-00018	02-11-21
Wisconsin	State	999580010	08-31-20
Wyoming	State	8TMS-Q	04-30-20





110 South Hill Street
 South Bend, IN 46617
 800-332-4345
 574-233-8207 fax

Eaton Analytical

REC - Subcontractor Laboratory Request Form

Reference Lab Name: Test America

Address: 3417 Bond Street

City, State, Zip: University Park, IL 60484

Telephone Number: 708-534-1530

Total Sent: 1

Shipping Method: UPS Next Day

EEA Contact Name: Kelly Blackbird

500-175563 COC

Reference Lab: This form must be returned via email to US25_RefLab@eurofinsUS.com or by fax to 574-233-8207 upon receipt of samples. Note any discrepancies in the number of samples received, analyses requested, sample condition upon receipt, ID discrepancies, or price in the Reference Lab Notes section at the bottom of this form. Result sheets and invoice must be emailed to US25_RefLab@eurofinsUS.com upon completion of analysis.

500-48 175563

EEA Sample ID#	TAT Requested	Sample Type	Matrix	Collection Date	Collection Time	State of Origin	QC Criteria (circle one)	Analysis Requested	Price	EEA-PM
4521859 (2)	5days	FS	DW	12-18-19	0705	HI	NELAC / State compliance / non-compliance	JP-8		
							NELAC / State compliance / non-compliance			
							NELAC / State compliance / non-compliance			
							NELAC / State compliance / non-compliance			
							NELAC / State compliance / non-compliance			
							NELAC / State compliance / non-compliance			
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							NELAC / State compliance / non-compliance			
							NELAC / State compliance / non-compliance			
							NELAC / State compliance / non-compliance			

Reference Lab Notes:

Relinquished from EEA By: S. J. S. S. S. Date/Time: 12-23-19 1600
 Received by Reference Lab By: Quana Dudley, TA Date/Time: 12/19 1155

Matrix: DW, RW, GW, SW, BW, EW, PW, WW
 TAT Codes: SW (Standard Written), RW (Rush Written, 5 Day), IW (Immediate Written, 3 Day)
 Sample Types: FS, FD, FTB, FEB, MS, MSD, Other

5.3

16gt

Effective Date: 2018-10-09

Page 14 of 15

Page 1 of 1

WVS NDA

12/30/2019

Login Sample Receipt Checklist

Client: Eurofins Eaton Analytical

Job Number: 500-175563-1

Login Number: 175563

List Source: Eurofins TestAmerica, Chicago

List Number: 1

Creator: Buckley, Paula M

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
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	5.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $< 6\text{mm}$ (1/4")	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Eaton Analytical

110 S. Hill Street
South Bend, IN 46617
T: 1.800.332.4345
F: 1.574.233.8207

Order # 367934
Batch # 4743288

www.eatonanalytical.com

Shaded area for EEA use only

CHAIN OF CUSTODY RECORD

Page 2 of 2

REPORT TO: NAVFAC Hawaii		SAMPLER (Signature)		STATE (sample origin) HI		PROJECT NAME		PO#		# OF CONTAINERS		MATRIX CODE	
BILL TO: NAVFAC Hawaii		COMPLIANCE MONITORING		Yes No		POPULATION SERVED		SOURCE WATER GW		SAMPLE REMARKS		CHLORINATED YES NO	
LAB Number		COLLECTION		SAMPLING SITE		TEST NAME		SAMPLE REMARKS		CHLORINATED YES NO		TURNAROUND TIME	
1 4531859		DATE TIME AM PM 12/18/19 0905 X		20-01582 JBPHH Red Hill TP001 360-011		TPH as Diesel (P-8) (8015)		X		2		DW RV	
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													

RELINQUISHED BY: (Signature) Duane Morita		DATE 18 Dec 2019		TIME 1300		RECEIVED BY: (Signature) Fedex		DATE		TIME AM PM		LAB COMMENTS	
RELINQUISHED BY: (Signature)		DATE		TIME AM PM		RECEIVED BY: (Signature)		DATE		TIME AM PM		LAB COMMENTS	
RELINQUISHED BY: (Signature)		DATE		TIME AM PM		RECEIVED FOR LABORATORY BY: Beverly		DATE 12/29/19		TIME 0930		CONDITIONS UPON RECEIPT (check one): Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Ambient: _____ °C Upon Receipt: <u>02</u> N/A	
MATRIX CODES: DW-DRINKING WATER RW-REAGENT WATER GW-GROUND WATER SW-EXPOSURE WATER SU-SURFACE WATER PW-POOL WATER WW-WASTE WATER		TURN-AROUND TIME (TAT) - SURCHARGES SW = Standard Water, (15 working days) 0% RW = Rush Water, (5 working days) 50% RW* = Rush Water, (5 working days) 75%		* Please call, expedited service not available for all testing		* Sample received unannounced with less than 48 hours holding time remaining may be subject to additional charges.		06-LO-FH35 Issue 4.0 Effective Date: 2014-05-01		EEA		Sample analysis will be provided according to the standard EEA/Water Services Terms, which are available upon request. Any other terms proposed by Customer are deemed material alterations and are rejected unless expressly agree to in writing by EEA.	

LABORATORY REPORT

If you have any questions concerning this report, please do not hesitate to call us at (800) 332-4345 or (574) 233-4777.

This report may not be reproduced, except in full, without written approval from EEA.

STATE CERTIFICATION LIST

State	Certification	State	Certification
Alabama	40700	Missouri	880
Alaska	IN00035	Montana	CERT0026
Arizona	AZ0432	Nebraska	NE-OS-05-04
Arkansas	IN00035	Nevada	IN00035
California	2920	New Hampshire*	2124
Colorado	IN00035	New Jersey*	IN598
Colorado Radiochemistry	IN00035	New Mexico	IN00035
Connecticut	PH-0132	New York*	11398
Delaware	IN035	North Carolina	18700
Florida*	E87775	North Dakota	R-035
Georgia	929	Ohio	87775
Hawaii	IN035	Oklahoma	D9508
Idaho	IN00035	Oregon (Primary AB)*	4074
Illinois*	200001	Pennsylvania*	68-00466
Illinois Microbiology	17767	Puerto Rico	IN00035
Illinois Radiochemistry	IN00035	Rhode Island	LAO00343
Indiana Chemistry	C-71-01	South Carolina	95005
Indiana Microbiology	M-76-07	South Dakota	IN00035
Iowa	098	Tennessee	TN02973
Kansas*	E-10233	Texas*	T104704187-18-12
Kentucky	90056	Texas/TCEQ	TX207
Louisiana*	LA014	Utah*	IN00035
Maine	IN00035	Vermont	VT-8775
Maryland	209	Virginia*	460275
Massachusetts	M-IN035	Washington	C837
Michigan	9926	West Virginia	9927 C
Minnesota*	018-999-338	Wisconsin	999766900
Mississippi	IN035	Wyoming	IN035
EPA	IN00035		

*NELAP/TNI Recognized Accreditation Bodies



Eaton Analytical

110 South Hill Street
South Bend, IN 46617
Tel: (574) 233-4777
Fax: (574) 233-8207
1 800 332 4345

Laboratory Report

Client: NAVFAC Hawaii
Attn: Duane Morita
Environmental Lab, Code PRJ411
Building 1423, Central Avenue
JBP HH, HI 96860

Report: 474323
Priority: Rush Verbal
Status: Final
PWS ID: HI10000360

Sample Information					
EEA ID #	Client ID	Method	Collected Date / Time	Collected By:	Received Date / Time
4521767	20-01582,JBP HH Red Hill	524.2	12/18/19 09:05	Client	12/20/19 09:30
4521768	20-01582,JBP HH Red Hill	525.2	12/18/19 09:05	Client	12/20/19 09:30
4521769	20-01582,JBP HH Red Hill	200.8	12/18/19 09:05	Client	12/20/19 09:30

Detailed quantitative results are presented on the following pages. The results presented relate only to the samples provided for analysis.

We appreciate the opportunity to provide you with this analysis. If you have any questions concerning this report, please do not hesitate to call Kelly Blackburn at (574) 233-4777.

Note: This report may not be reproduced, except in full, without written approval from EEA.

Kelly Blackburn ASM

Authorized Signature _____ Title _____
Client Name: NAVFAC Hawaii
Report #: 474323

01/06/2020
Date _____

Sampling Point: 20-01582,JBPHH Red Hill

PWS ID: HI10000360

Metals									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID #
7439-92-1	Lead	200.8	15 l	1.0	< 1.0	ug/L	--	12/26/19 14:44	4521769

Semi-volatile Organic Chemicals									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed	EEA ID #
83-32-9	Acenaphthene S	525.2	--	0.1	< 0.1	ug/L	12/23/19 08:12	12/24/19 04:06	4521768
208-96-8	Acenaphthylene S	525.2	--	0.1	< 0.1	ug/L	12/23/19 08:12	12/24/19 04:06	4521768
120-12-7	Anthracene S	525.2	--	0.1	< 0.1	ug/L	12/23/19 08:12	12/24/19 04:06	4521768
50-32-8	Benzo(a)pyrene	525.2	0.2 *	0.02	< 0.02	ug/L	12/23/19 08:12	12/24/19 04:06	4521768
103-23-1	Di(2-ethylhexyl)adipate	525.2	400 *	0.6	< 0.6	ug/L	12/23/19 08:12	12/24/19 04:06	4521768
117-81-7	Di(2-ethylhexyl)phthalate	525.2	6 *	0.6	< 0.6	ug/L	12/23/19 08:12	12/24/19 04:06	4521768
206-44-0	Fluoranthene S	525.2	--	0.1	< 0.1	ug/L	12/23/19 08:12	12/24/19 04:06	4521768
85-01-8	Phenanthrene S	525.2	--	0.1	< 0.1	ug/L	12/23/19 08:12	12/24/19 04:06	4521768
129-00-0	Pyrene S	525.2	--	0.1	< 0.1	ug/L	12/23/19 08:12	12/24/19 04:06	4521768

Volatile Organic Chemicals									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID #
71-43-2	Benzene	524.2	5 *	0.5	< 0.5	ug/L	--	12/27/19 02:06	4521767
56-23-5	Carbon tetrachloride	524.2	5 *	0.5	< 0.5	ug/L	--	12/27/19 02:06	4521767
108-90-7	Chlorobenzene	524.2	100 *	0.5	< 0.5	ug/L	--	12/27/19 02:06	4521767
95-50-1	1,2-Dichlorobenzene	524.2	600 *	0.5	< 0.5	ug/L	--	12/27/19 02:06	4521767
106-46-7	1,4-Dichlorobenzene	524.2	75 *	0.5	< 0.5	ug/L	--	12/27/19 02:06	4521767
107-06-2	1,2-Dichloroethane	524.2	5 *	0.5	< 0.5	ug/L	--	12/27/19 02:06	4521767
75-35-4	1,1-Dichloroethylene	524.2	7 *	0.5	< 0.5	ug/L	--	12/27/19 02:06	4521767
156-59-2	cis-1,2-Dichloroethylene	524.2	70 *	0.5	< 0.5	ug/L	--	12/27/19 02:06	4521767
156-60-5	trans-1,2-Dichloroethylene	524.2	100 *	0.5	< 0.5	ug/L	--	12/27/19 02:06	4521767
75-09-2	Dichloromethane	524.2	5 *	0.5	< 0.5	ug/L	--	12/27/19 02:06	4521767
78-87-5	1,2-Dichloropropane	524.2	5 *	0.5	< 0.5	ug/L	--	12/27/19 02:06	4521767
100-41-4	Ethylbenzene	524.2	700 *	0.5	< 0.5	ug/L	--	12/27/19 02:06	4521767
91-20-3	Naphthalene	524.2	--	0.5	< 0.5	ug/L	--	12/27/19 02:06	4521767
100-42-5	Styrene	524.2	100 *	0.5	< 0.5	ug/L	--	12/27/19 02:06	4521767
127-18-4	Tetrachloroethylene	524.2	5 *	0.5	< 0.5	ug/L	--	12/27/19 02:06	4521767
108-88-3	Toluene	524.2	1000 *	0.5	< 0.5	ug/L	--	12/27/19 02:06	4521767
120-82-1	1,2,4-Trichlorobenzene	524.2	70 *	0.5	< 0.5	ug/L	--	12/27/19 02:06	4521767
71-55-6	1,1,1-Trichloroethane	524.2	200 *	0.5	< 0.5	ug/L	--	12/27/19 02:06	4521767
79-00-5	1,1,2-Trichloroethane	524.2	5 *	0.5	< 0.5	ug/L	--	12/27/19 02:06	4521767
79-01-6	Trichloroethylene	524.2	5 *	0.5	< 0.5	ug/L	--	12/27/19 02:06	4521767
75-01-4	Vinyl chloride	524.2	2 *	0.2	< 0.2	ug/L	--	12/27/19 02:06	4521767
95-47-6	1,2-Xylene	524.2	--	0.5	< 0.5	ug/L	--	12/27/19 02:06	4521767
179601-23-1	1,3 + 1,4-Xylene	524.2	--	0.5	< 0.5	ug/L	--	12/27/19 02:06	4521767
1330-20-7	Xylenes, Total	524.2	10000 *	0.5	< 0.5	ug/L	--	12/27/19 02:06	4521767

Client Name: NAVFAC Hawaii

Report #: 474323

\$ The state of origin does not offer certification for this parameter.

† EEA has demonstrated it can achieve these report limits in reagent water, but can not document them in all sample matrices.

Reg Limit Type:	MCL	SMCL	AL
Symbol:	*	^	!

Lab Definitions

Continuing Calibration Check Standard (CCC) / Continuing Calibration Verification (CCV) / Initial Calibration Verification Standard (ICV) / Initial Performance Check (IPC) - is a standard containing one or more of the target analytes that is prepared from the same standards used to calibrate the instrument. This standard is used to verify the calibration curve at the beginning of each analytical sequence, and may also be analyzed throughout and at the end of the sequence. The concentration of continuing standards may be varied, when prescribed by the reference method, so that the range of the calibration curve is verified on a regular basis. CCL, CCM, and CCH are the CCC standards at low, mid, and high concentration levels, respectively.

Internal Standards (IS) - are pure compounds with properties similar to the analytes of interest, which are added to field samples or extracts, calibration standards, and quality control standards at a known concentration. They are used to measure the relative responses of the analytes of interest and surrogates in the sample, calibration standard or quality control standard.

Laboratory Duplicate (LD) - is a field sample aliquot taken from the same sample container in the laboratory and analyzed separately using identical procedures. Analysis of laboratory duplicates provides a measure of the precision of the laboratory procedures.

Laboratory Fortified Blank (LFB) / Laboratory Control Sample (LCS) - is an aliquot of reagent water to which known concentrations of the analytes of interest are added. The LFB is analyzed exactly the same as the field samples. LFBs are used to determine whether the method is in control. FBL, FBM, and FBH are the LFB samples at low, mid, and high concentration levels, respectively.

Laboratory Method Blank (LMB) / Laboratory Reagent Blank (LRB) - is a sample of reagent water included in the sample batch analyzed in the same way as the associated field samples. The LMB is used to determine if method analytes or other background contamination have been introduced during the preparation or analytical procedure. The LMB is analyzed exactly the same as the field samples.

Laboratory Trip Blank (LTB) / Field Reagent Blank (FRB) - is a sample of laboratory reagent water placed in a sample container in the laboratory and treated as a field sample, including storage, preservation, and all analytical procedures. The FRB/LTB container follows the collection bottles to and from the collection site, but the FRB/LTB is not opened at any time during the trip. The FRB/LTB is primarily a travel blank used to verify that the samples were not contaminated during shipment.

Matrix Spike Duplicate Sample (MSD) / Laboratory Fortified Sample Matrix Duplicate (LFSMD) - is a sample aliquot taken from the same field sample source as the Matrix Spike Sample to which known quantities of the analytes of interest are added in the laboratory. The MSD is analyzed exactly the same as the field samples. Analysis of the MSD provides a measure of the precision of the laboratory procedures in a specific matrix. SDL, SDM, and SDH / LFSMDL, LFSMDM, and LFSMDH are the MSD or LFSMD at low, mid, and high concentration levels, respectively.

Matrix Spike Sample (MS) / Laboratory Fortified Sample Matrix (LFSM) - is a sample aliquot taken from field sample source to which known quantities of the analytes of interest are added in the laboratory. The MS is analyzed exactly the same as the field samples. The purpose is to demonstrate recovery of the analytes from a sample matrix to determine if the specific matrix contributes bias to the analytical results. MSL, MSM, and MSH / LFSML, LFSMM, and LFSMH are the MS or LFSM at low, mid, and high concentration levels, respectively.

Quality Control Standard (QCS) / Second Source Calibration Verification (SSCV) - is a solution containing known concentrations of the analytes of interest prepared from a source different from the source of the calibration standards. The solution is obtained from a second manufacturer or lot if the lot can be demonstrated by the manufacturer as prepared independently from other lots. The QCS sample is analyzed using the same procedures as field samples. The QCS is used as a check on the calibration standards used in the method on a routine basis.

Reporting Limit Check (RLC) / Initial Calibration Check Standard (ICCS) - is a procedural standard that is analyzed each day to evaluate instrument performance at or below the minimum reporting limit (MRL).

Surrogate Standard (SS) / Surrogate Analyte (SUR) - is a pure compound with properties similar to the analytes of interest, which is highly unlikely to be found in any field sample, that is added to the field samples, calibration standards, blanks and quality control standards before sample preparation. The SS is used to evaluate the efficiency of the sample preparation process.



Eaton Analytical

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Order # 367934

Batch # 474323

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CHAIN OF CUSTODY RECORD

Page 1 of 2

REPORT TO:		Shaded area for EEA use only		SAMPLER (Signature)		STATE (sample origin)		PROJECT NAME		POP		MATRIX CODE		TURNAROUND TIME	
NAVFAC Hawaii						HI									
BILL TO:		NAVFAC Hawaii		COMPLIANCE MONITORING		Yes No		POPULATION SERVED		SOURCE WATER					
				X				GW							
LAB Number		COLLECTION		SAMPLING SITE		TEST NAME		SAMPLE REMARKS		CHLORINATED		OF CONTAINERS			
		DATE TIME AM PM								YES NO					
1 4521767		12/18/19 0905 X		20-01582, JRPFH Red Hill		Volatiles (524.2) See attached list				X		3		DW RV	
2 4521768				TP001.360-011		Semivolatiles (525.2) See attached list				X		2		DW RV	
3 4521769						Lead (200.8)				X		1		DW RV	
4 4521770		11/25/19		20-01583		Volatiles (524.2)				X		2		DW RV	
5				Trip Blank											
6															
7															
8															
9															
10															
11															
12															
13															
14															

RELINQUISHED BY: (Signature) <i>Daniel Martin</i>	DATE 12/18/19	TIME 1330	RECEIVED BY: (Signature) Fedex	DATE	TIME AM PM	LAB COMMENTS
RELINQUISHED BY: (Signature)	DATE	TIME AM PM	RECEIVED BY: (Signature)	DATE	TIME AM PM	LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-HOMOGENEOUS SAMPLES TO CLIENT
RELINQUISHED BY: (Signature)	DATE	TIME AM PM	RECEIVED FOR LABORATORY BY: <i>Ubert</i>	DATE 12/20/19	TIME 0900	CONDITIONS UPON RECEIPT (check one): Iced/Wet/Blue _____ Ambient _____ °C Upon Receipt <i>02</i> N/A
MATRIX CODES: DW-DRINKING WATER 100% RW-REAGENT WATER 125% GW-GROUND WATER CALL SW-EXPOSURE WATER CALL PW-SURFACE WATER WW-WASTE WATER						
TURN-AROUND TIME (TAT) - SURCHARGES SW = Standard Written, (15 working days) 0% RW = Rush Verbal, (5 working days) 50% RW = Rush Written, (5 working days) 75%						
• Please call, expedited service not available for all testing • Sample received announced with less than 48 hours holding time remaining may be subject to additional charges. 06-LO-F0435 Issue 4.0 Effective Date: 2014-05-01						



Eaton Analytical

Eurofins Eaton Analytical

Run Log

Run ID: 269372 Method: 200.8

<u>Type</u>	<u>Sample Id</u>	<u>Sample Site</u>	<u>Matrix</u>	<u>Instrument ID</u>	<u>Analysis Date</u>	<u>Calibration File</u>
QCS	4520004		RW	FQ	12/26/2019 13:10	
ICV	4520005		RW	FQ	12/26/2019 13:13	
ICB	4520006		RW	FQ	12/26/2019 13:15	
LRB	4519919		RW	FQ	12/26/2019 13:19	
CCV	4519990		RW	FQ	12/26/2019 13:57	
CCB	4519991		RW	FQ	12/26/2019 13:59	
CCV	4520010		RW	FQ	12/26/2019 14:28	
CCB	4520011		RW	FQ	12/26/2019 14:30	
LRB	4519930		RW	FQ	12/26/2019 14:32	
LFB	4519931		RW	FQ	12/26/2019 14:35	
FS	4521769	20-01582,JBPHH Red Hill	DW	FQ	12/26/2019 14:44	
CCV	4520012		RW	FQ	12/26/2019 15:04	
CCB	4520013		RW	FQ	12/26/2019 15:06	
CCV	4520016		RW	FQ	12/26/2019 15:35	
CCB	4520017		RW	FQ	12/26/2019 15:37	
CCV	4520018		RW	FQ	12/26/2019 15:41	
CCB	4520019		RW	FQ	12/26/2019 15:43	

QC Summary Report

Sample Type	Analyte	Method	MRL	Client ID	Result Flag	Amount	Target	Units	% Recovery	Recovery Limits	RPD Limit	Dil Factor	Extracted	Analyzed	EEA ID #
QCS	IS-Bismuth	200.8	N/A	---		0.9914	1.0	N/A	98	60 - 125	---	1.0	---	12/28/2019 13:10	4520004
QCS	Lead	200.8	1.0	---		53.7288	50.0	ug/L	107	90 - 110	---	1.0	---	12/28/2019 13:10	4520004
QCS	IS-Scandium	200.8	N/A	---		0.9773	1.0	N/A	98	60 - 125	---	1.0	---	12/28/2019 13:10	4520004
QCS	IS-Yttrium	200.8	N/A	---		0.9881	1.0	N/A	98	60 - 125	---	1.0	---	12/28/2019 13:10	4520004
ICV	IS-Bismuth	200.8	N/A	---		0.9889	1.0	N/A	100	60 - 125	---	1.0	---	12/28/2019 13:13	4520005
ICV	Lead	200.8	1.0	---		54.3729	50.0	ug/L	109	90 - 110	---	1.0	---	12/28/2019 13:13	4520005
ICV	IS-Scandium	200.8	N/A	---		0.9850	1.0	N/A	98	60 - 125	---	1.0	---	12/28/2019 13:13	4520005
ICV	IS-Yttrium	200.8	N/A	---		0.9882	1.0	N/A	100	60 - 125	---	1.0	---	12/28/2019 13:13	4520005
ICB	IS-Bismuth	200.8	N/A	---		1.0071	1.0	N/A	101	60 - 125	---	1.0	---	12/28/2019 13:15	4520006
ICB	Lead	200.8	1.0	---	<	1.0		ug/L	---	---	---	1.0	---	12/28/2019 13:15	4520006
ICB	IS-Scandium	200.8	N/A	---		0.9915	1.0	N/A	99	60 - 125	---	1.0	---	12/28/2019 13:15	4520006
ICB	IS-Yttrium	200.8	N/A	---		1.0004	1.0	N/A	100	60 - 125	---	1.0	---	12/28/2019 13:15	4520006
LRB	IS-Bismuth	200.8	N/A	---		0.9808	1.0	N/A	98	60 - 125	---	1.0	---	12/28/2019 13:19	4518919
LRB	Lead	200.8	1.0	---	<	1.0		ug/L	---	---	---	1.0	---	12/28/2019 13:19	4518919
LRB	IS-Scandium	200.8	N/A	---		0.9704	1.0	N/A	97	60 - 125	---	1.0	---	12/28/2019 13:19	4518919
LRB	IS-Yttrium	200.8	N/A	---		0.9783	1.0	N/A	98	60 - 125	---	1.0	---	12/28/2019 13:19	4518919
CCV	IS-Bismuth	200.8	N/A	---		0.9846	1.0	N/A	98	60 - 125	---	1.0	---	12/28/2019 13:57	4518990
CCV	Lead	200.8	1.0	---		53.1471	50.0	ug/L	108	85 - 115	---	1.0	---	12/28/2019 13:57	4518990
CCV	IS-Scandium	200.8	N/A	---		0.9836	1.0	N/A	98	60 - 125	---	1.0	---	12/28/2019 13:57	4518990
CCV	IS-Yttrium	200.8	N/A	---		0.9912	1.0	N/A	99	60 - 125	---	1.0	---	12/28/2019 13:57	4518990
CCB	IS-Bismuth	200.8	N/A	---		1.0243	1.0	N/A	102	60 - 125	---	1.0	---	12/28/2019 13:59	4518991
CCB	Lead	200.8	1.0	---	<	1.0		ug/L	---	---	---	1.0	---	12/28/2019 13:59	4518991
CCB	IS-Scandium	200.8	N/A	---		1.0161	1.0	N/A	102	60 - 125	---	1.0	---	12/28/2019 13:59	4518991
CCB	IS-Yttrium	200.8	N/A	---		1.0184	1.0	N/A	102	60 - 125	---	1.0	---	12/28/2019 13:59	4518991
CCV	IS-Bismuth	200.8	N/A	---		0.9812	1.0	N/A	98	60 - 125	---	1.0	---	12/28/2019 14:28	4520010
CCV	Lead	200.8	1.0	---		53.2287	50.0	ug/L	106	85 - 115	---	1.0	---	12/28/2019 14:28	4520010
CCV	IS-Scandium	200.8	N/A	---		0.9839	1.0	N/A	98	60 - 125	---	1.0	---	12/28/2019 14:28	4520010
CCV	IS-Yttrium	200.8	N/A	---		0.9927	1.0	N/A	99	60 - 125	---	1.0	---	12/28/2019 14:28	4520010
CCB	IS-Bismuth	200.8	N/A	---		0.9830	1.0	N/A	98	60 - 125	---	1.0	---	12/28/2019 14:30	4520011
CCB	Lead	200.8	1.0	---	<	1.0		ug/L	---	---	---	1.0	---	12/28/2019 14:30	4520011
CCB	IS-Scandium	200.8	N/A	---		0.9883	1.0	N/A	99	60 - 125	---	1.0	---	12/28/2019 14:30	4520011
CCB	IS-Yttrium	200.8	N/A	---		0.9900	1.0	N/A	99	60 - 125	---	1.0	---	12/28/2019 14:30	4520011
LRB	IS-Bismuth	200.8	N/A	---		0.9777	1.0	N/A	98	60 - 125	---	1.0	---	12/28/2019 14:32	4518930
LRB	Lead	200.8	1.0	---	<	1.0		ug/L	---	---	---	1.0	---	12/28/2019 14:32	4518930
LRB	IS-Scandium	200.8	N/A	---		0.9706	1.0	N/A	97	60 - 125	---	1.0	---	12/28/2019 14:32	4518930
LRB	IS-Yttrium	200.8	N/A	---		0.9765	1.0	N/A	98	60 - 125	---	1.0	---	12/28/2019 14:32	4518930
OLFB	IS-Bismuth	200.8	N/A	---		0.9718	1.0	N/A	97	60 - 125	---	1.0	---	12/28/2019 14:35	4518931
OLFB	Lead	200.8	1.0	---		56.1868	50.0	ug/L	112	85 - 115	---	1.0	---	12/28/2019 14:35	4518931
OLFB	IS-Scandium	200.8	N/A	---		0.9745	1.0	N/A	97	60 - 125	---	1.0	---	12/28/2019 14:35	4518931
OLFB	IS-Yttrium	200.8	N/A	---		0.9808	1.0	N/A	98	60 - 125	---	1.0	---	12/28/2019 14:35	4518931

EEA Run ID 269372 / EEA Report # 474323

QC Summary Report (cont.)

Sample Type	Analyte	Method	MRL	Client ID	Result Flag	Amount	Target	Units	% Recovery	Recovery Limits	RPD Limit	RPD Factor	Extracted	Analyzed	EEA ID #
FS	IS-Bismuth	200.8	N/A	20-01582_JBPHH Red HI	<	0.9323	1.0	N/A	93	60 - 125	---	1.0	---	12/28/2019 14:44	4521789
FS	Lead	200.8	1.0	20-01582_JBPHH Red HI		1.0		ug/L	---	---	---	1.0	---	12/28/2019 14:44	4521789
FS	IS-Scandium	200.8	N/A	20-01582_JBPHH Red HI		1.0281	1.0	N/A	103	60 - 125	---	1.0	---	12/28/2019 14:44	4521789
FS	IS-Yttrium	200.8	N/A	20-01582_JBPHH Red HI		0.9835	1.0	N/A	98	60 - 125	---	1.0	---	12/28/2019 14:44	4521789
CCV	IS-Bismuth	200.8	N/A	---		0.9794	1.0	N/A	98	60 - 125	---	1.0	---	12/28/2019 15:04	4520012
CCV	Lead	200.8	1.0	---		53.5144	50.0	ug/L	107	85 - 115	---	1.0	---	12/28/2019 15:04	4520012
CCV	IS-Scandium	200.8	N/A	---		0.9921	1.0	N/A	99	60 - 125	---	1.0	---	12/28/2019 15:04	4520012
CCV	IS-Yttrium	200.8	N/A	---		0.9847	1.0	N/A	99	60 - 125	---	1.0	---	12/28/2019 15:06	4520013
CCB	IS-Bismuth	200.8	N/A	---		0.9946	1.0	N/A	99	60 - 125	---	1.0	---	12/28/2019 15:06	4520013
CCB	Lead	200.8	1.0	---	<	1.0		ug/L	---	---	---	1.0	---	12/28/2019 15:06	4520013
CCB	IS-Scandium	200.8	N/A	---		0.9914	1.0	N/A	99	60 - 125	---	1.0	---	12/28/2019 15:06	4520013
CCB	IS-Yttrium	200.8	N/A	---		0.9983	1.0	N/A	100	60 - 125	---	1.0	---	12/28/2019 15:08	4520013
CCV	IS-Bismuth	200.8	N/A	---		1.0432	1.0	N/A	104	60 - 125	---	1.0	---	12/28/2019 15:35	4520016
CCV	Lead	200.8	1.0	---		50.9251	50.0	ug/L	102	85 - 115	---	1.0	---	12/28/2019 15:35	4520016
CCV	IS-Scandium	200.8	N/A	---		1.0633	1.0	N/A	106	60 - 125	---	1.0	---	12/28/2019 15:35	4520016
CCV	IS-Yttrium	200.8	N/A	---		1.0664	1.0	N/A	107	60 - 125	---	1.0	---	12/28/2019 15:35	4520016
CCB	IS-Bismuth	200.8	N/A	---		1.0330	1.0	N/A	103	60 - 125	---	1.0	---	12/28/2019 15:37	4520017
CCB	Lead	200.8	1.0	---	<	1.0		ug/L	---	---	---	1.0	---	12/28/2019 15:37	4520017
CCB	IS-Scandium	200.8	N/A	---		1.0366	1.0	N/A	104	60 - 125	---	1.0	---	12/28/2019 15:37	4520017
CCB	IS-Yttrium	200.8	N/A	---		1.0381	1.0	N/A	104	60 - 125	---	1.0	---	12/28/2019 15:37	4520017
CCV	IS-Bismuth	200.8	N/A	---		1.0187	1.0	N/A	102	60 - 125	---	1.0	---	12/28/2019 15:41	4520018
CCV	Lead	200.8	1.0	---		52.8809	50.0	ug/L	105	85 - 115	---	1.0	---	12/28/2019 15:41	4520018
CCV	IS-Scandium	200.8	N/A	---		1.0394	1.0	N/A	104	60 - 125	---	1.0	---	12/28/2019 15:41	4520018
CCV	IS-Yttrium	200.8	N/A	---		1.0403	1.0	N/A	104	60 - 125	---	1.0	---	12/28/2019 15:41	4520018
CCB	IS-Bismuth	200.8	N/A	---		1.0251	1.0	N/A	103	60 - 125	---	1.0	---	12/28/2019 15:43	4520019
CCB	Lead	200.8	1.0	---	<	1.0		ug/L	---	---	---	1.0	---	12/28/2019 15:43	4520019
CCB	IS-Scandium	200.8	N/A	---		1.0415	1.0	N/A	104	60 - 125	---	1.0	---	12/28/2019 15:43	4520019
CCB	IS-Yttrium	200.8	N/A	---		1.0455	1.0	N/A	105	60 - 125	---	1.0	---	12/28/2019 15:43	4520019



Eaton Analytical

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Run Log

Run ID: 269415 Method: 524.2

Type	Sample Id	Sample Site	Matrix	Instrument ID	Analysis Date	Calibration File
CCL	4523536		RW	PW2	12/26/2019 10:50	524 2-120219-PW2.mth
LMB	4523537		RW	PW2	12/26/2019 11:38	524 2-120219-PW2.mth
CCC	4523533		RW	PW2	12/26/2019 18:53	524 2-120219-PW2.mth
LMB	4523538		RW	PW2	12/26/2019 20:33	524 2-120219-PW2.mth
LTB	4521770	20-01583_LTB-11/25/19	RW	PW2	12/27/2019 01:33	524 2-120219-PW2.mth
FS	4521767	20-01582_JBPHH Red Hill	DW	PW2	12/27/2019 02:06	524 2-120219-PW2.mth
CCC	4523535		RW	PW2	12/27/2019 02:40	524 2-120219-PW2.mth

QC Summary Report

Sample Type	Analyte	Method	MRL	Client ID	Result Flag	Amount	Target	Units	% Recovery	Recovery Limits	RPD Limit	Dil Factor	Extracted	Analyzed	EEA ID #
CCL	IS-1,4-Difluorobenzene	524.2	N/A	---		345231	345231	ug/L	100	50 - 150	---	1.0	---	12/28/2019 10:50	4523536
CCL	SS-Bromofluorobenzene	524.2	N/A	---		5.0160	5.0	ug/L	100	70 - 130	---	1.0	---	12/28/2019 10:50	4523536
CCL	SS-1,2-Dichlorobenzene-d4	524.2	N/A	---		9.6340	10.0	ug/L	98	70 - 130	---	1.0	---	12/28/2019 10:50	4523536
CCL	SS-1,2-Dichloroethane-d4	524.2	N/A	---		9.2290	10.0	ug/L	92	70 - 130	---	1.0	---	12/28/2019 10:50	4523536
CCL	SS-Toluene-d8	524.2	N/A	---		10.0700	10.0	ug/L	101	70 - 130	---	1.0	---	12/28/2019 10:50	4523536
CCL	Benzene	524.2	0.5	---		0.5260	0.5	ug/L	105	50 - 150	---	1.0	---	12/28/2019 10:50	4523536
CCL	Carbon tetrachloride	524.2	0.5	---		0.3130	0.5	ug/L	63	50 - 150	---	1.0	---	12/28/2019 10:50	4523536
CCL	Chlorobenzene	524.2	0.5	---		0.5780	0.5	ug/L	116	50 - 150	---	1.0	---	12/28/2019 10:50	4523536
CCL	1,2-Dichlorobenzene	524.2	0.5	---		0.5910	0.5	ug/L	118	50 - 150	---	1.0	---	12/28/2019 10:50	4523536
CCL	1,4-Dichlorobenzene	524.2	0.5	---		0.5710	0.5	ug/L	114	50 - 150	---	1.0	---	12/28/2019 10:50	4523536
CCL	1,2-Dichloroethane	524.2	0.5	---		0.4470	0.5	ug/L	89	50 - 150	---	1.0	---	12/28/2019 10:50	4523536
CCL	1,1-Dichloroethane	524.2	0.5	---		0.4710	0.5	ug/L	94	50 - 150	---	1.0	---	12/28/2019 10:50	4523536
CCL	cis-1,2-Dichloroethylene	524.2	0.5	---		0.5170	0.5	ug/L	103	50 - 150	---	1.0	---	12/28/2019 10:50	4523536
CCL	trans-1,2-Dichloroethylene	524.2	0.5	---		0.4460	0.5	ug/L	90	50 - 150	---	1.0	---	12/28/2019 10:50	4523536
CCL	Dichloromethane	524.2	0.5	---		0.2820	0.5	ug/L	58	50 - 150	---	1.0	---	12/28/2019 10:50	4523536
CCL	1,2-Dichloropropane	524.2	0.5	---		0.4530	0.5	ug/L	91	50 - 150	---	1.0	---	12/28/2019 10:50	4523536
CCL	Ethylbenzene	524.2	0.5	---		0.4930	0.5	ug/L	89	50 - 150	---	1.0	---	12/28/2019 10:50	4523536
CCL	Styrene	524.2	0.5	---		0.4830	0.5	ug/L	97	50 - 150	---	1.0	---	12/28/2019 10:50	4523536
CCL	Tetrachloroethylene	524.2	0.5	---		0.4560	0.5	ug/L	91	50 - 150	---	1.0	---	12/28/2019 10:50	4523536
CCL	Toluene	524.2	0.5	---		0.4990	0.5	ug/L	100	50 - 150	---	1.0	---	12/28/2019 10:50	4523536
CCL	1,2,4-Trichlorobenzene	524.2	0.5	---		0.5970	0.5	ug/L	119	50 - 150	---	1.0	---	12/28/2019 10:50	4523536
CCL	1,1,1-Trichloroethane	524.2	0.5	---		0.4420	0.5	ug/L	88	50 - 150	---	1.0	---	12/28/2019 10:50	4523536
CCL	1,1,2-Trichloroethane	524.2	0.5	---		0.4510	0.5	ug/L	90	50 - 150	---	1.0	---	12/28/2019 10:50	4523536
CCL	Trichloroethylene	524.2	0.5	---		0.4710	0.5	ug/L	94	50 - 150	---	1.0	---	12/28/2019 10:50	4523536
CCL	Vinyl chloride	524.2	0.2	---		0.3720	0.5	ug/L	74	50 - 150	---	1.0	---	12/28/2019 10:50	4523536
CCL	1,2-Xylene	524.2	0.5	---		0.5080	0.5	ug/L	102	50 - 150	---	1.0	---	12/28/2019 10:50	4523536
CCL	1,3 + 1,4-Xylene	524.2	0.5	---		1.0120	1.0	ug/L	101	50 - 150	---	1.0	---	12/28/2019 10:50	4523536
LMB	IS-1,4-Difluorobenzene	524.2	N/A	---		362920	345231	ug/L	105	70 - 130	---	1.0	---	12/28/2019 11:38	4523537
LMB	SS-Bromofluorobenzene	524.2	N/A	---		5.0390	5.0	ug/L	101	70 - 130	---	1.0	---	12/28/2019 11:38	4523537
LMB	SS-1,2-Dichlorobenzene-d4	524.2	N/A	---		9.3990	10.0	ug/L	94	70 - 130	---	1.0	---	12/28/2019 11:38	4523537
LMB	SS-1,2-Dichloroethane-d4	524.2	N/A	---		9.5510	10.0	ug/L	96	70 - 130	---	1.0	---	12/28/2019 11:38	4523537
LMB	SS-Toluene-d8	524.2	N/A	---		10.1460	10.0	ug/L	101	70 - 130	---	1.0	---	12/28/2019 11:38	4523537
LMB	Benzene	524.2	0.5	---	<	0.5		ug/L	---	---	---	1.0	---	12/28/2019 11:38	4523537
LMB	Carbon tetrachloride	524.2	0.5	---	<	0.5		ug/L	---	---	---	1.0	---	12/28/2019 11:38	4523537
LMB	Chlorobenzene	524.2	0.5	---	<	0.5		ug/L	---	---	---	1.0	---	12/28/2019 11:38	4523537
LMB	1,2-Dichlorobenzene	524.2	0.5	---	<	0.5		ug/L	---	---	---	1.0	---	12/28/2019 11:38	4523537
LMB	1,4-Dichlorobenzene	524.2	0.5	---	<	0.5		ug/L	---	---	---	1.0	---	12/28/2019 11:38	4523537
LMB	1,2-Dichloroethane	524.2	0.5	---	<	0.5		ug/L	---	---	---	1.0	---	12/28/2019 11:38	4523537
LMB	1,1-Dichloroethane	524.2	0.5	---	<	0.5		ug/L	---	---	---	1.0	---	12/28/2019 11:38	4523537
LMB	cis-1,2-Dichloroethylene	524.2	0.5	---	<	0.5		ug/L	---	---	---	1.0	---	12/28/2019 11:38	4523537
LMB	trans-1,2-Dichloroethylene	524.2	0.5	---	<	0.5		ug/L	---	---	---	1.0	---	12/28/2019 11:38	4523537



QC Summary Report (cont.)

Sample Type	Analyte	Method	MRL	Client ID	Result Flag	Amount	Target	Units	% Recovery	Recovery Limits	RPD Limit	Dil Factor	Extracted	Analyzed	EEA ID #
LMB	trans-1,2-Dichloroethylene	524.2	0.5	---	<	0.5		ug/L	---	---	---	1.0	---	12/26/2018 11:38	4523537
LMB	Dichloromethane	524.2	0.5	---	<	0.5		ug/L	---	---	---	1.0	---	12/26/2018 11:38	4523537
LMB	1,2-Dichloropropane	524.2	0.5	---	<	0.5		ug/L	---	---	---	1.0	---	12/26/2018 11:38	4523537
LMB	Ethylbenzene	524.2	0.5	---	<	0.5		ug/L	---	---	---	1.0	---	12/26/2018 11:38	4523537
LMB	Naphthalene	524.2	0.5	---	<	0.5		ug/L	---	---	---	1.0	---	12/26/2018 11:38	4523537
LMB	Styrene	524.2	0.5	---	<	0.5		ug/L	---	---	---	1.0	---	12/26/2018 11:38	4523537
LMB	Tetrachloroethylene	524.2	0.5	---	<	0.5		ug/L	---	---	---	1.0	---	12/26/2018 11:38	4523537
LMB	Toluene	524.2	0.5	---	<	0.5		ug/L	---	---	---	1.0	---	12/26/2018 11:38	4523537
LMB	1,2,4-Trichlorobenzene	524.2	0.5	---	<	0.5		ug/L	---	---	---	1.0	---	12/26/2018 11:38	4523537
LMB	1,1,1-Trichloroethane	524.2	0.5	---	<	0.5		ug/L	---	---	---	1.0	---	12/26/2018 11:38	4523537
LMB	1,1,2-Trichloroethane	524.2	0.5	---	<	0.5		ug/L	---	---	---	1.0	---	12/26/2018 11:38	4523537
LMB	Trichloroethylene	524.2	0.5	---	<	0.5		ug/L	---	---	---	1.0	---	12/26/2018 11:38	4523537
LMB	Vinyl chloride	524.2	0.2	---	<	0.2		ug/L	---	---	---	1.0	---	12/26/2018 11:38	4523537
LMB	1,2-Xylene	524.2	0.5	---	<	0.5		ug/L	---	---	---	1.0	---	12/26/2018 11:38	4523537
LMB	1,3 + 1,4-Xylene	524.2	0.5	---	<	0.5		ug/L	---	---	---	1.0	---	12/26/2018 11:38	4523537
CCC	IS-1,4-Difluorobenzene	524.2	N/A	---	<	355282	355282	ug/L	100	50 - 150	---	1.0	---	12/26/2018 18:53	4523533
CCC	SS-Bromofluorobenzene	524.2	N/A	---		5.2030	5.0	ug/L	104	70 - 130	---	1.0	---	12/26/2018 18:53	4523533
CCC	SS-1,2-Dichlorobenzene-d4	524.2	N/A	---		9.6780	10.0	ug/L	97	70 - 130	---	1.0	---	12/26/2018 18:53	4523533
CCC	SS-1,2-Dichloroethane-d4	524.2	N/A	---		9.3510	10.0	ug/L	94	70 - 130	---	1.0	---	12/26/2018 18:53	4523533
CCC	SS-Toluene-d8	524.2	N/A	---		9.9830	10.0	ug/L	100	70 - 130	---	1.0	---	12/26/2018 18:53	4523533
CCC	Benzene	524.2	0.5	---		9.7770	10.0	ug/L	88	70 - 130	---	1.0	---	12/26/2018 18:53	4523533
CCC	Carbon tetrachloride	524.2	0.5	---		9.0870	10.0	ug/L	91	70 - 130	---	1.0	---	12/26/2018 18:53	4523533
CCC	Chlorobenzene	524.2	0.5	---		9.6680	10.0	ug/L	97	70 - 130	---	1.0	---	12/26/2018 18:53	4523533
CCC	1,2-Dichlorobenzene	524.2	0.5	---		9.8440	10.0	ug/L	98	70 - 130	---	1.0	---	12/26/2018 18:53	4523533
CCC	1,4-Dichlorobenzene	524.2	0.5	---		9.8500	10.0	ug/L	98	70 - 130	---	1.0	---	12/26/2018 18:53	4523533
CCC	1,2-Dichloroethane	524.2	0.5	---		9.2690	10.0	ug/L	93	70 - 130	---	1.0	---	12/26/2018 18:53	4523533
CCC	1,1-Dichloroethylene	524.2	0.5	---		9.3280	10.0	ug/L	83	70 - 130	---	1.0	---	12/26/2018 18:53	4523533
CCC	cis-1,2-Dichloroethylene	524.2	0.5	---		9.7100	10.0	ug/L	97	70 - 130	---	1.0	---	12/26/2018 18:53	4523533
CCC	trans-1,2-Dichloroethylene	524.2	0.5	---		9.0070	10.0	ug/L	90	70 - 130	---	1.0	---	12/26/2018 18:53	4523533
CCC	Dichloromethane	524.2	0.5	---		8.7380	10.0	ug/L	87	70 - 130	---	1.0	---	12/26/2018 18:53	4523533
CCC	1,2-Dichloropropane	524.2	0.5	---		9.3400	10.0	ug/L	83	70 - 130	---	1.0	---	12/26/2018 18:53	4523533
CCC	Ethylbenzene	524.2	0.5	---		9.7070	10.0	ug/L	87	70 - 130	---	1.0	---	12/26/2018 18:53	4523533
CCC	Naphthalene	524.2	0.5	---		9.9850	10.0	ug/L	100	70 - 130	---	1.0	---	12/26/2018 18:53	4523533
CCC	Styrene	524.2	0.5	---		9.4240	10.0	ug/L	94	70 - 130	---	1.0	---	12/26/2018 18:53	4523533
CCC	Tetrachloroethylene	524.2	0.5	---		9.5950	10.0	ug/L	86	70 - 130	---	1.0	---	12/26/2018 18:53	4523533
CCC	Toluene	524.2	0.5	---		9.5340	10.0	ug/L	95	70 - 130	---	1.0	---	12/26/2018 18:53	4523533
CCC	1,2,4-Trichlorobenzene	524.2	0.5	---		9.7640	10.0	ug/L	88	70 - 130	---	1.0	---	12/26/2018 18:53	4523533
CCC	1,1,1-Trichloroethane	524.2	0.5	---		9.3750	10.0	ug/L	94	70 - 130	---	1.0	---	12/26/2018 18:53	4523533
CCC	1,1,2-Trichloroethane	524.2	0.5	---		9.6280	10.0	ug/L	86	70 - 130	---	1.0	---	12/26/2018 18:53	4523533
CCC	Trichloroethylene	524.2	0.5	---		9.3300	10.0	ug/L	83	70 - 130	---	1.0	---	12/26/2018 18:53	4523533
CCC	Vinyl chloride	524.2	0.2	---		8.1680	10.0	ug/L	82	70 - 130	---	1.0	---	12/26/2018 18:53	4523533

QC Summary Report (cont.)

Sample Type	Analyte	Method	MRL	Client ID	Result Flag	Amount	Target	Units	% Recovery	Recovery Limits	RPD Limit	Dil Factor	Extracted	Analyzed	EEA ID #
COC	1,2-Xylene	524.2	0.5	--		9.6090	10.0	ug/L	96	70 - 130	--	1.0	--	12/28/2019 18:53	4523533
COC	1,3 + 1,4-Xylene	524.2	0.5	--		18.9330	20.0	ug/L	95	70 - 130	--	1.0	--	12/28/2019 18:53	4523533
LMB	IS-1,4-Difluorobenzene	524.2	N/A	--		350128	355282	ug/L	99	70 - 130	--	1.0	--	12/28/2019 20:33	4523538
LMB	SS-Bromofluorobenzene	524.2	N/A	--		4.8350	5.0	ug/L	98	70 - 130	--	1.0	--	12/28/2019 20:33	4523538
LMB	SS-1,2-Dichlorobenzene-d4	524.2	N/A	--		9.2730	10.0	ug/L	93	70 - 130	--	1.0	--	12/28/2019 20:33	4523538
LMB	SS-1,2-Dichloroethane-d4	524.2	N/A	--		9.4200	10.0	ug/L	94	70 - 130	--	1.0	--	12/28/2019 20:33	4523538
LMB	SS-Toluene-d8	524.2	N/A	--		9.9810	10.0	ug/L	100	70 - 130	--	1.0	--	12/28/2019 20:33	4523538
LMB	Benzene	524.2	0.5	--	<	0.5		ug/L	--	--	--	1.0	--	12/28/2019 20:33	4523538
LMB	Carbon tetrachloride	524.2	0.5	--	<	0.5		ug/L	--	--	--	1.0	--	12/28/2019 20:33	4523538
LMB	Chlorobenzene	524.2	0.5	--	<	0.5		ug/L	--	--	--	1.0	--	12/28/2019 20:33	4523538
LMB	1,2-Dichlorobenzene	524.2	0.5	--	<	0.5		ug/L	--	--	--	1.0	--	12/28/2019 20:33	4523538
LMB	1,4-Dichlorobenzene	524.2	0.5	--	<	0.5		ug/L	--	--	--	1.0	--	12/28/2019 20:33	4523538
LMB	1,2-Dichloroethane	524.2	0.5	--	<	0.5		ug/L	--	--	--	1.0	--	12/28/2019 20:33	4523538
LMB	1,1-Dichloroethylene	524.2	0.5	--	<	0.5		ug/L	--	--	--	1.0	--	12/28/2019 20:33	4523538
LMB	cis-1,2-Dichloroethylene	524.2	0.5	--	<	0.5		ug/L	--	--	--	1.0	--	12/28/2019 20:33	4523538
LMB	trans-1,2-Dichloroethylene	524.2	0.5	--	<	0.5		ug/L	--	--	--	1.0	--	12/28/2019 20:33	4523538
LMB	Dichloromethane	524.2	0.5	--	<	0.5		ug/L	--	--	--	1.0	--	12/28/2019 20:33	4523538
LMB	1,2-Dichloropropane	524.2	0.5	--	<	0.5		ug/L	--	--	--	1.0	--	12/28/2019 20:33	4523538
LMB	Ethylbenzene	524.2	0.5	--	<	0.5		ug/L	--	--	--	1.0	--	12/28/2019 20:33	4523538
LMB	Naphthalene	524.2	0.5	--	<	0.5		ug/L	--	--	--	1.0	--	12/28/2019 20:33	4523538
LMB	Styrene	524.2	0.5	--	<	0.5		ug/L	--	--	--	1.0	--	12/28/2019 20:33	4523538
LMB	Tetrachloroethylene	524.2	0.5	--	<	0.5		ug/L	--	--	--	1.0	--	12/28/2019 20:33	4523538
LMB	Toluene	524.2	0.5	--	<	0.5		ug/L	--	--	--	1.0	--	12/28/2019 20:33	4523538
LMB	1,2,4-Trichlorobenzene	524.2	0.5	--	<	0.5		ug/L	--	--	--	1.0	--	12/28/2019 20:33	4523538
LMB	1,1,1-Trichloroethane	524.2	0.5	--	<	0.5		ug/L	--	--	--	1.0	--	12/28/2019 20:33	4523538
LMB	1,1,2-Trichloroethane	524.2	0.5	--	<	0.5		ug/L	--	--	--	1.0	--	12/28/2019 20:33	4523538
LMB	Trichloroethylene	524.2	0.5	--	<	0.5		ug/L	--	--	--	1.0	--	12/28/2019 20:33	4523538
LMB	Vinyl chloride	524.2	0.2	--	<	0.2		ug/L	--	--	--	1.0	--	12/28/2019 20:33	4523538
LMB	1,2-Xylene	524.2	0.5	--	<	0.5		ug/L	--	--	--	1.0	--	12/28/2019 20:33	4523538
LMB	1,3 + 1,4-Xylene	524.2	0.5	--	<	0.5		ug/L	--	--	--	1.0	--	12/28/2019 20:33	4523538
LTB	IS-1,4-Difluorobenzene	524.2	N/A	20-01583.LTB-11/25/19		345677	355282	ug/L	97	70 - 130	--	1.0	--	12/27/2019 01:33	4521770
LTB	SS-Bromofluorobenzene	524.2	N/A	20-01583.LTB-11/25/19		5.0170	5.0	ug/L	100	70 - 130	--	1.0	--	12/27/2019 01:33	4521770
LTB	SS-1,2-Dichlorobenzene-d4	524.2	N/A	20-01583.LTB-11/25/19		9.2560	10.0	ug/L	93	70 - 130	--	1.0	--	12/27/2019 01:33	4521770
LTB	SS-1,2-Dichloroethane-d4	524.2	N/A	20-01583.LTB-11/25/19		9.4500	10.0	ug/L	94	70 - 130	--	1.0	--	12/27/2019 01:33	4521770
LTB	SS-Toluene-d8	524.2	N/A	20-01583.LTB-11/25/19		9.9160	10.0	ug/L	99	70 - 130	--	1.0	--	12/27/2019 01:33	4521770
LTB	Benzene	524.2	0.5	20-01583.LTB-11/25/19	<	0.5		ug/L	--	--	--	1.0	--	12/27/2019 01:33	4521770
LTB	Carbon tetrachloride	524.2	0.5	20-01583.LTB-11/25/19	<	0.5		ug/L	--	--	--	1.0	--	12/27/2019 01:33	4521770
LTB	Chlorobenzene	524.2	0.5	20-01583.LTB-11/25/19	<	0.5		ug/L	--	--	--	1.0	--	12/27/2019 01:33	4521770
LTB	1,2-Dichlorobenzene	524.2	0.5	20-01583.LTB-11/25/19	<	0.5		ug/L	--	--	--	1.0	--	12/27/2019 01:33	4521770
LTB	1,4-Dichlorobenzene	524.2	0.5	20-01583.LTB-11/25/19	<	0.5		ug/L	--	--	--	1.0	--	12/27/2019 01:33	4521770
LTB	1,2-Dichloroethane	524.2	0.5	20-01583.LTB-11/25/19	<	0.5		ug/L	--	--	--	1.0	--	12/27/2019 01:33	4521770

QC Summary Report (cont.)

Sample Type	Analyte	Method	MRL	Client ID	Result Flag	Amount	Target	Units	% Recovery	Recovery Limits	RPD Limit	DII Factor	Extracted	Analyzed	EEA ID #
LTB	1,1-Dichloroethylene	524.2	0.5	20-01583.LTB-11/25/19	<	0.5		ug/L	---	---	---	1.0	---	12/27/2019 01:33	4521770
LTB	cis-1,2-Dichloroethylene	524.2	0.5	20-01583.LTB-11/25/19	<	0.5		ug/L	---	---	---	1.0	---	12/27/2019 01:33	4521770
LTB	trans-1,2-Dichloroethylene	524.2	0.5	20-01583.LTB-11/25/19	<	0.5		ug/L	---	---	---	1.0	---	12/27/2019 01:33	4521770
LTB	Dichloromethane	524.2	0.5	20-01583.LTB-11/25/19	<	0.5		ug/L	---	---	---	1.0	---	12/27/2019 01:33	4521770
LTB	1,2-Dichloropropane	524.2	0.5	20-01583.LTB-11/25/19	<	0.5		ug/L	---	---	---	1.0	---	12/27/2019 01:33	4521770
LTB	Ethylbenzene	524.2	0.5	20-01583.LTB-11/25/19	<	0.5		ug/L	---	---	---	1.0	---	12/27/2019 01:33	4521770
LTB	Naphthalene	524.2	0.5	20-01583.LTB-11/25/19	<	0.5		ug/L	---	---	---	1.0	---	12/27/2019 01:33	4521770
LTB	Styrene	524.2	0.5	20-01583.LTB-11/25/19	<	0.5		ug/L	---	---	---	1.0	---	12/27/2019 01:33	4521770
LTB	Tetrachloroethylene	524.2	0.5	20-01583.LTB-11/25/19	<	0.5		ug/L	---	---	---	1.0	---	12/27/2019 01:33	4521770
LTB	Toluene	524.2	0.5	20-01583.LTB-11/25/19	<	0.5		ug/L	---	---	---	1.0	---	12/27/2019 01:33	4521770
LTB	1,2,4-Trichlorobenzene	524.2	0.5	20-01583.LTB-11/25/19	<	0.5		ug/L	---	---	---	1.0	---	12/27/2019 01:33	4521770
LTB	1,1,1-Trichloroethane	524.2	0.5	20-01583.LTB-11/25/19	<	0.5		ug/L	---	---	---	1.0	---	12/27/2019 01:33	4521770
LTB	1,1,2-Trichloroethane	524.2	0.5	20-01583.LTB-11/25/19	<	0.5		ug/L	---	---	---	1.0	---	12/27/2019 01:33	4521770
LTB	Vinyl chloride	524.2	0.2	20-01583.LTB-11/25/19	<	0.2		ug/L	---	---	---	1.0	---	12/27/2019 01:33	4521770
LTB	1,2-Xylene	524.2	0.5	20-01583.LTB-11/25/19	<	0.5		ug/L	---	---	---	1.0	---	12/27/2019 01:33	4521770
LTB	1,3 + 1,4-Xylene	524.2	0.5	20-01583.LTB-11/25/19	<	0.5		ug/L	---	---	---	1.0	---	12/27/2019 01:33	4521770
LTB	Xylenes, Total	524.2	0.5	20-01583.LTB-11/25/19	<	0.5		ug/L	---	---	---	1.0	---	12/27/2019 01:33	4521770
FS	IS-1,4-Difluorobenzene	524.2	N/A	20-01582.JBPHH Red HI		348218	355282	ug/L	88	70 - 130	---	1.0	---	12/27/2019 02:06	4521767
FS	SS-Bromofluorobenzene	524.2	N/A	20-01582.JBPHH Red HI		4.8840	5.0	ug/L	88	70 - 130	---	1.0	---	12/27/2019 02:06	4521767
FS	SS-1,2-Dichlorobenzene-d4	524.2	N/A	20-01582.JBPHH Red HI		9.3840	10.0	ug/L	94	70 - 130	---	1.0	---	12/27/2019 02:06	4521767
FS	SS-1,2-Dichloroethane-d4	524.2	N/A	20-01582.JBPHH Red HI		9.3100	10.0	ug/L	93	70 - 130	---	1.0	---	12/27/2019 02:06	4521767
FS	SS-Toluene-d8	524.2	N/A	20-01582.JBPHH Red HI		9.6820	10.0	ug/L	97	70 - 130	---	1.0	---	12/27/2019 02:06	4521767
FS	Benzene	524.2	0.5	20-01582.JBPHH Red HI	<	0.5		ug/L	---	---	---	1.0	---	12/27/2019 02:06	4521767
FS	Carbon tetrachloride	524.2	0.5	20-01582.JBPHH Red HI	<	0.5		ug/L	---	---	---	1.0	---	12/27/2019 02:06	4521767
FS	Chlorobenzene	524.2	0.5	20-01582.JBPHH Red HI	<	0.5		ug/L	---	---	---	1.0	---	12/27/2019 02:06	4521767
FS	1,2-Dichlorobenzene	524.2	0.5	20-01582.JBPHH Red HI	<	0.5		ug/L	---	---	---	1.0	---	12/27/2019 02:06	4521767
FS	1,4-Dichlorobenzene	524.2	0.5	20-01582.JBPHH Red HI	<	0.5		ug/L	---	---	---	1.0	---	12/27/2019 02:06	4521767
FS	1,2-Dichloroethane	524.2	0.5	20-01582.JBPHH Red HI	<	0.5		ug/L	---	---	---	1.0	---	12/27/2019 02:06	4521767
FS	1,1-Dichloroethylene	524.2	0.5	20-01582.JBPHH Red HI	<	0.5		ug/L	---	---	---	1.0	---	12/27/2019 02:06	4521767
FS	cis-1,2-Dichloroethylene	524.2	0.5	20-01582.JBPHH Red HI	<	0.5		ug/L	---	---	---	1.0	---	12/27/2019 02:06	4521767
FS	trans-1,2-Dichloroethylene	524.2	0.5	20-01582.JBPHH Red HI	<	0.5		ug/L	---	---	---	1.0	---	12/27/2019 02:06	4521767
FS	Dichloromethane	524.2	0.5	20-01582.JBPHH Red HI	<	0.5		ug/L	---	---	---	1.0	---	12/27/2019 02:06	4521767
FS	1,2-Dichloropropane	524.2	0.5	20-01582.JBPHH Red HI	<	0.5		ug/L	---	---	---	1.0	---	12/27/2019 02:06	4521767
FS	Ethylbenzene	524.2	0.5	20-01582.JBPHH Red HI	<	0.5		ug/L	---	---	---	1.0	---	12/27/2019 02:06	4521767
FS	Naphthalene	524.2	0.5	20-01582.JBPHH Red HI	<	0.5		ug/L	---	---	---	1.0	---	12/27/2019 02:06	4521767
FS	Styrene	524.2	0.5	20-01582.JBPHH Red HI	<	0.5		ug/L	---	---	---	1.0	---	12/27/2019 02:06	4521767
FS	Tetrachloroethylene	524.2	0.5	20-01582.JBPHH Red HI	<	0.5		ug/L	---	---	---	1.0	---	12/27/2019 02:06	4521767
FS	Toluene	524.2	0.5	20-01582.JBPHH Red HI	<	0.5		ug/L	---	---	---	1.0	---	12/27/2019 02:06	4521767
FS	1,2,4-Trichlorobenzene	524.2	0.5	20-01582.JBPHH Red HI	<	0.5		ug/L	---	---	---	1.0	---	12/27/2019 02:06	4521767
FS	1,1,1-Trichloroethane	524.2	0.5	20-01582.JBPHH Red HI	<	0.5		ug/L	---	---	---	1.0	---	12/27/2019 02:06	4521767
FS	1,1,2-Trichloroethane	524.2	0.5	20-01582.JBPHH Red HI	<	0.5		ug/L	---	---	---	1.0	---	12/27/2019 02:06	4521767

QC Summary Report (cont.)

Sample Type	Analyte	Method	MRL	Client ID	Result Flag	Amount	Target	Units	% Recovery	Recovery Limits	RPD Limit	Dil Factor	Extracted	Analyzed	EEA ID #
FS	Trichloroethylene	524.2	0.5	20-01582_JBP HH Red H8	<	0.5		ug/L				1.0		12/27/2019 02:06	4523535
FS	Vinyl chloride	524.2	0.2	20-01582_JBP HH Red H8	<	0.2		ug/L				1.0		12/27/2019 02:06	4523535
FS	1,2-Xylene	524.2	0.5	20-01582_JBP HH Red H8	<	0.5		ug/L				1.0		12/27/2019 02:06	4523535
FS	1,3 + 1,4-Xylene	524.2	0.5	20-01582_JBP HH Red H8	<	0.5		ug/L				1.0		12/27/2019 02:06	4523535
FS	Xylenes, Total	524.2	0.5	20-01582_JBP HH Red H8	<	0.5		ug/L				1.0		12/27/2019 02:06	4523535
CCC	IS-1,4-Difluorobenzene	524.2	N/A			324208	324208	ug/L	100	50 - 150		1.0		12/27/2019 02:40	4523535
CCC	SS-Bromofluorobenzene	524.2	N/A			5.3620	5.0	ug/L	107	70 - 130		1.0		12/27/2019 02:40	4523535
CCC	SS-1,2-Dichlorobenzene-d4	524.2	N/A			9.8680	10.0	ug/L	89	70 - 130		1.0		12/27/2019 02:40	4523535
CCC	SS-1,2-Dichloroethane-d4	524.2	N/A			9.8220	10.0	ug/L	98	70 - 130		1.0		12/27/2019 02:40	4523535
CCC	SS-Toluene-d8	524.2	N/A			10.4890	10.0	ug/L	105	70 - 130		1.0		12/27/2019 02:40	4523535
CCC	Benzene	524.2	0.5			17.4290	18.0	ug/L	97	70 - 130		1.0		12/27/2019 02:40	4523535
CCC	Carbon tetrachloride	524.2	0.5			16.4570	18.0	ug/L	91	70 - 130		1.0		12/27/2019 02:40	4523535
CCC	Chlorobenzene	524.2	0.5			17.8210	18.0	ug/L	99	70 - 130		1.0		12/27/2019 02:40	4523535
CCC	1,2-Dichlorobenzene	524.2	0.5			18.1630	18.0	ug/L	101	70 - 130		1.0		12/27/2019 02:40	4523535
CCC	1,4-Dichlorobenzene	524.2	0.5			17.9400	18.0	ug/L	100	70 - 130		1.0		12/27/2019 02:40	4523535
CCC	1,2-Dichloroethane	524.2	0.5			18.8420	18.0	ug/L	94	70 - 130		1.0		12/27/2019 02:40	4523535
CCC	1,1-Dichloroethane	524.2	0.5			17.1360	18.0	ug/L	95	70 - 130		1.0		12/27/2019 02:40	4523535
CCC	cis-1,2-Dichloroethylene	524.2	0.5			17.4350	18.0	ug/L	97	70 - 130		1.0		12/27/2019 02:40	4523535
CCC	trans-1,2-Dichloroethylene	524.2	0.5			16.2490	18.0	ug/L	90	70 - 130		1.0		12/27/2019 02:40	4523535
CCC	Dichloromethane	524.2	0.5			15.8310	16.0	ug/L	88	70 - 130		1.0		12/27/2019 02:40	4523535
CCC	1,2-Dichloropropane	524.2	0.5			17.1490	18.0	ug/L	95	70 - 130		1.0		12/27/2019 02:40	4523535
CCC	Ethylbenzene	524.2	0.5			17.3300	18.0	ug/L	96	70 - 130		1.0		12/27/2019 02:40	4523535
CCC	Naphthalene	524.2	0.5			18.3250	18.0	ug/L	102	70 - 130		1.0		12/27/2019 02:40	4523535
CCC	Styrene	524.2	0.5			17.6840	18.0	ug/L	98	70 - 130		1.0		12/27/2019 02:40	4523535
CCC	Tetrachloroethylene	524.2	0.5			17.7070	18.0	ug/L	98	70 - 130		1.0		12/27/2019 02:40	4523535
CCC	Toluene	524.2	0.5			17.2090	18.0	ug/L	96	70 - 130		1.0		12/27/2019 02:40	4523535
CCC	1,2,4-Trichlorobenzene	524.2	0.5			18.2180	18.0	ug/L	101	70 - 130		1.0		12/27/2019 02:40	4523535
CCC	1,1,1-Trichloroethane	524.2	0.5			17.2860	18.0	ug/L	96	70 - 130		1.0		12/27/2019 02:40	4523535
CCC	1,1,2-Trichloroethane	524.2	0.5			17.8260	18.0	ug/L	98	70 - 130		1.0		12/27/2019 02:40	4523535
CCC	Trichloroethylene	524.2	0.5			16.7490	18.0	ug/L	93	70 - 130		1.0		12/27/2019 02:40	4523535
CCC	Vinyl chloride	524.2	0.2			14.5550	18.0	ug/L	81	70 - 130		1.0		12/27/2019 02:40	4523535
CCC	1,2-Xylene	524.2	0.5			17.6840	18.0	ug/L	98	70 - 130		1.0		12/27/2019 02:40	4523535
CCC	1,3 + 1,4-Xylene	524.2	0.5			34.7360	36.0	ug/L	96	70 - 130		1.0		12/27/2019 02:40	4523535



Eurofins Eaton Analytical
Run Log

Eaton Analytical

Run ID: 269539 Method: 525.2

<u>Type</u>	<u>Sample Id</u>	<u>Sample Site</u>	<u>Matrix</u>	<u>Instrument ID</u>	<u>Analysis Date</u>	<u>Calibration File</u>
CCC	4523238		OS	DO	12/23/2019 20:23	525 2-DO-112119a.mth
CCC	4523239		OS	DO	12/23/2019 21:05	525 2-DO-112119a.mth
CCC	4523240		OS	DO	12/23/2019 21:47	525 2-DO-112119a.mth
LFB	4523216		RW	DO	12/23/2019 22:29	525 2-DO-112119a.mth
LFB	4523217		RW	DO	12/23/2019 23:11	525 2-DO-112119a.mth
LFB	4523218		RW	DO	12/23/2019 23:53	525 2-DO-112119a.mth
LMB	4523211		RW	DO	12/24/2019 00:35	525 2-DO-112119a.mth
FS	4521768	20-01582.JBPHH Red Hill	DW	DO	12/24/2019 04:06	525 2-DO-112119a.mth
CCC	4523413		OS	DO	12/24/2019 09:00	525 2-DO-112119a.mth
CCC	4523414		OS	DO	12/24/2019 09:42	525 2-DO-112119a.mth
CCC	4523415		OS	DO	12/24/2019 10:24	525 2-DO-112119a.mth

QC Summary Report

Sample Type	Analyte	Method	MRL	Client ID	Result Flag	Amount	Target	Units	% Recovery	Recovery Limits	RPD	RPD Limit	Dil Factor	Extracted	Analyzed	EEA ID #
CCC	IS-Chrysene-d12	525.2	N/A	--		689680	689680	ug/L	100	50 - 150	--	--	1.0	12/23/2019 08:12	12/23/2019 20:23	45232338
CCC	IS-Phenanthrene-d10	525.2	N/A	--		1066000	1066000	ug/L	100	50 - 150	--	--	1.0	12/23/2019 08:12	12/23/2019 20:23	45232338
CCC	IS-Pyrene-d10	525.2	N/A	--		728932	728932	ug/L	100	50 - 150	--	--	1.0	12/23/2019 08:12	12/23/2019 20:23	45232338
CCC	SS-4,4'-Dichlorobiphenyl	525.2	N/A	--		3.8270	5.0	ug/L	77	70 - 130	--	--	1.0	12/23/2019 08:12	12/23/2019 20:23	45232338
CCC	SS-2,4,5,6-Tetrachloro-m-xylene	525.2	N/A	--		4.8870	5.0	ug/L	97	70 - 130	--	--	1.0	12/23/2019 08:12	12/23/2019 20:23	45232338
CCC	SS-Triphenylphosphate	525.2	N/A	--		5.2200	5.0	ug/L	104	70 - 130	--	--	1.0	12/23/2019 08:12	12/23/2019 20:23	45232338
CCC	Acenaphthene	525.2	0.1	--		4.7840	5.0	ug/L	95	65 - 130	--	--	1.0	12/23/2019 08:12	12/23/2019 20:23	45232338
CCC	Acenaphthylene	525.2	0.1	--		4.8790	5.0	ug/L	98	70 - 130	--	--	1.0	12/23/2019 08:12	12/23/2019 20:23	45232338
CCC	Anthracene	525.2	0.1	--		4.8840	5.0	ug/L	94	70 - 130	--	--	1.0	12/23/2019 08:12	12/23/2019 20:23	45232338
CCC	Phenanthrene	525.2	0.1	--		5.0400	5.0	ug/L	101	70 - 130	--	--	1.0	12/23/2019 08:12	12/23/2019 20:23	45232338
CCC	Pyrene	525.2	0.1	--		4.8830	5.0	ug/L	98	70 - 130	--	--	1.0	12/23/2019 08:12	12/23/2019 20:23	45232338
CCC	IS-Chrysene-d12	525.2	N/A	--		483163	483163	ug/L	100	50 - 150	--	--	1.0	12/23/2019 08:12	12/23/2019 21:05	45232339
CCC	IS-Phenanthrene-d10	525.2	N/A	--		874225	874225	ug/L	100	50 - 150	--	--	1.0	12/23/2019 08:12	12/23/2019 21:05	45232339
CCC	IS-Pyrene-d10	525.2	N/A	--		605324	605324	ug/L	100	50 - 150	--	--	1.0	12/23/2019 08:12	12/23/2019 21:05	45232339
CCC	SS-4,4'-Dichlorobiphenyl	525.2	N/A	--		4.4470	5.0	ug/L	89	70 - 130	--	--	1.0	12/23/2019 08:12	12/23/2019 21:05	45232339
CCC	SS-2,4,5,6-Tetrachloro-m-xylene	525.2	N/A	--		4.3720	5.0	ug/L	87	70 - 130	--	--	1.0	12/23/2019 08:12	12/23/2019 21:05	45232339
CCC	SS-Triphenylphosphate	525.2	N/A	--		6.1930	5.0	ug/L	124	70 - 130	--	--	1.0	12/23/2019 08:12	12/23/2019 21:05	45232339
CCC	Fluoranthene	525.2	0.1	--		5.2110	5.0	ug/L	104	65 - 130	--	--	1.0	12/23/2019 08:12	12/23/2019 21:05	45232339
CCC	IS-Chrysene-d12	525.2	N/A	--		636714	636714	ug/L	100	50 - 150	--	--	1.0	12/23/2019 08:12	12/23/2019 21:47	45232340
CCC	IS-Phenanthrene-d10	525.2	N/A	--		1028000	1028000	ug/L	100	50 - 150	--	--	1.0	12/23/2019 08:12	12/23/2019 21:47	45232340
CCC	IS-Pyrene-d10	525.2	N/A	--		708701	708701	ug/L	100	50 - 150	--	--	1.0	12/23/2019 08:12	12/23/2019 21:47	45232340
CCC	SS-4,4'-Dichlorobiphenyl	525.2	N/A	--		5.0800	5.0	ug/L	102	70 - 130	--	--	1.0	12/23/2019 08:12	12/23/2019 21:47	45232340
CCC	SS-2,4,5,6-Tetrachloro-m-xylene	525.2	N/A	--		4.9440	5.0	ug/L	99	70 - 130	--	--	1.0	12/23/2019 08:12	12/23/2019 21:47	45232340
CCC	SS-Triphenylphosphate	525.2	N/A	--		5.6470	5.0	ug/L	113	70 - 130	--	--	1.0	12/23/2019 08:12	12/23/2019 21:47	45232340
CCC	Benz[a]pyrene	525.2	0.02	--		4.4280	5.0	ug/L	89	70 - 130	--	--	1.0	12/23/2019 08:12	12/23/2019 21:47	45232340
CCC	Di(2-ethylhexyl)adipate	525.2	0.6	--		5.2520	5.0	ug/L	105	70 - 130	--	--	1.0	12/23/2019 08:12	12/23/2019 21:47	45232340
CCC	Di(2-ethylhexyl)phthalate	525.2	0.6	--		5.2440	5.0	ug/L	105	70 - 130	--	--	1.0	12/23/2019 08:12	12/23/2019 21:47	45232340
LFB	IS-Chrysene-d12	525.2	N/A	--		519105	636714	ug/L	82	70 - 130	--	--	1.0	12/23/2019 08:12	12/23/2019 22:29	45232316
LFB	IS-Phenanthrene-d10	525.2	N/A	--		855149	1028000	ug/L	83	70 - 130	--	--	1.0	12/23/2019 08:12	12/23/2019 22:29	45232316
LFB	IS-Pyrene-d10	525.2	N/A	--		607650	708701	ug/L	86	70 - 130	--	--	1.0	12/23/2019 08:12	12/23/2019 22:29	45232316
LFB	SS-4,4'-Dichlorobiphenyl	525.2	N/A	--		4.2380	5.0	ug/L	85	70 - 130	--	--	1.0	12/23/2019 08:12	12/23/2019 22:29	45232316
LFB	SS-2,4,5,6-Tetrachloro-m-xylene	525.2	N/A	--		3.9000	5.0	ug/L	78	70 - 130	--	--	1.0	12/23/2019 08:12	12/23/2019 22:29	45232316
LFB	SS-Triphenylphosphate	525.2	N/A	--		5.8910	5.0	ug/L	118	70 - 130	--	--	1.0	12/23/2019 08:12	12/23/2019 22:29	45232316
LFB	Fluoranthene	525.2	0.1	--		5.3840	5.0	ug/L	108	64 - 139	--	--	1.0	12/23/2019 08:12	12/23/2019 22:29	45232316
LFB	IS-Chrysene-d12	525.2	N/A	--		559718	636714	ug/L	88	70 - 130	--	--	1.0	12/23/2019 08:12	12/23/2019 23:11	45232317
LFB	IS-Phenanthrene-d10	525.2	N/A	--		963768	1028000	ug/L	94	70 - 130	--	--	1.0	12/23/2019 08:12	12/23/2019 23:11	45232317
LFB	IS-Pyrene-d10	525.2	N/A	--		700807	708701	ug/L	99	70 - 130	--	--	1.0	12/23/2019 08:12	12/23/2019 23:11	45232317
LFB	SS-4,4'-Dichlorobiphenyl	525.2	N/A	--		5.1370	5.0	ug/L	103	70 - 130	--	--	1.0	12/23/2019 08:12	12/23/2019 23:11	45232317
LFB	SS-2,4,5,6-Tetrachloro-m-xylene	525.2	N/A	--		4.5870	5.0	ug/L	91	70 - 130	--	--	1.0	12/23/2019 08:12	12/23/2019 23:11	45232317
LFB	SS-Triphenylphosphate	525.2	N/A	--		6.0520	5.0	ug/L	121	70 - 130	--	--	1.0	12/23/2019 08:12	12/23/2019 23:11	45232317

QC Summary Report (cont.)

Sample Type	Analyte	Method	MRL	Client ID	Result Flag	Amount	Target	Units	% Recovery	Recovery Limits	RPD Limit	DH Factor	Extracted	Analyzed	EEA ID #
LFB	Benzo(a)pyrene	525.2	0.02	--		4.2520	5.0	ug/L	85	70 - 130	--	1.0	12/23/2019 08:12	12/23/2019 23:11	4523217
LFB	Di(2-ethylhexyl)adipate	525.2	0.6	--		5.4370	5.0	ug/L	109	70 - 130	--	1.0	12/23/2019 08:12	12/23/2019 23:11	4523217
LFB	Di(2-ethylhexyl)phthalate	525.2	0.6	--		5.4130	5.0	ug/L	108	70 - 130	--	1.0	12/23/2019 08:12	12/23/2019 23:11	4523217
LFB	IS-Chrysene-d12	525.2	N/A	--		696928	636714	ug/L	109	70 - 130	--	1.0	12/23/2019 08:12	12/23/2019 23:53	4523218
LFB	IS-Phenanthrene-d10	525.2	N/A	--		1027000	1028000	ug/L	100	70 - 130	--	1.0	12/23/2019 08:12	12/23/2019 23:53	4523218
LFB	IS-Pyrene-d10	525.2	N/A	--		780561	708701	ug/L	110	70 - 130	--	1.0	12/23/2019 08:12	12/23/2019 23:53	4523218
LFB	SS-4,4'-Dichlorobiphenyl	525.2	N/A	--		4.4940	5.0	ug/L	90	70 - 130	--	1.0	12/23/2019 08:12	12/23/2019 23:53	4523218
LFB	SS-2,4,5,6-Tetrachloro-m-xylene	525.2	N/A	--		4.5550	5.0	ug/L	91	70 - 130	--	1.0	12/23/2019 08:12	12/23/2019 23:53	4523218
LFB	SS-Triphenylphosphate	525.2	N/A	--		5.4450	5.0	ug/L	109	70 - 130	--	1.0	12/23/2019 08:12	12/23/2019 23:53	4523218
LFB	Acenaphthene	525.2	0.1	--		4.7070	5.0	ug/L	94	57 - 130	--	1.0	12/23/2019 08:12	12/23/2019 23:53	4523218
LFB	Acenaphthylene	525.2	0.1	--		4.7950	5.0	ug/L	98	70 - 130	--	1.0	12/23/2019 08:12	12/23/2019 23:53	4523218
LFB	Anthracene	525.2	0.1	--		3.8750	5.0	ug/L	78	70 - 130	--	1.0	12/23/2019 08:12	12/23/2019 23:53	4523218
LFB	Phenanthrene	525.2	0.1	--		5.0580	5.0	ug/L	101	70 - 130	--	1.0	12/23/2019 08:12	12/23/2019 23:53	4523218
LFB	Pyrene	525.2	0.1	--		4.9060	5.0	ug/L	88	70 - 130	--	1.0	12/23/2019 08:12	12/23/2019 23:53	4523218
LMB	IS-Chrysene-d12	525.2	N/A	--		502721	636714	ug/L	79	70 - 130	--	0.98	12/23/2019 08:12	12/24/2019 00:35	4523211
LMB	IS-Phenanthrene-d10	525.2	N/A	--		888830	1028000	ug/L	86	70 - 130	--	0.98	12/23/2019 08:12	12/24/2019 00:35	4523211
LMB	IS-Pyrene-d10	525.2	N/A	--		630130	708701	ug/L	89	70 - 130	--	0.98	12/23/2019 08:12	12/24/2019 00:35	4523211
LMB	SS-4,4'-Dichlorobiphenyl	525.2	N/A	--		4.8470	5.0	ug/L	99	70 - 130	--	0.98	12/23/2019 08:12	12/24/2019 00:35	4523211
LMB	SS-2,4,5,6-Tetrachloro-m-xylene	525.2	N/A	--		4.5120	5.0	ug/L	92	70 - 130	--	0.98	12/23/2019 08:12	12/24/2019 00:35	4523211
LMB	SS-Triphenylphosphate	525.2	N/A	--		5.8750	5.0	ug/L	120	70 - 130	--	0.98	12/23/2019 08:12	12/24/2019 00:35	4523211
LMB	Acenaphthene	525.2	0.1	--	<	0.1		ug/L	--	--	--	0.98	12/23/2019 08:12	12/24/2019 00:35	4523211
LMB	Acenaphthylene	525.2	0.1	--	<	0.1		ug/L	--	--	--	0.98	12/23/2019 08:12	12/24/2019 00:35	4523211
LMB	Anthracene	525.2	0.1	--	<	0.1		ug/L	--	--	--	0.98	12/23/2019 08:12	12/24/2019 00:35	4523211
LMB	Benzo(a)pyrene	525.2	0.02	--	<	0.02		ug/L	--	--	--	0.98	12/23/2019 08:12	12/24/2019 00:35	4523211
LMB	Di(2-ethylhexyl)adipate	525.2	0.6	--	<	0.6		ug/L	--	--	--	0.98	12/23/2019 08:12	12/24/2019 00:35	4523211
LMB	Di(2-ethylhexyl)phthalate	525.2	0.6	--	<	0.6		ug/L	--	--	--	0.98	12/23/2019 08:12	12/24/2019 00:35	4523211
LMB	Fluoranthene	525.2	0.1	--	<	0.1		ug/L	--	--	--	0.98	12/23/2019 08:12	12/24/2019 00:35	4523211
LMB	Phenanthrene	525.2	0.1	--	<	0.1		ug/L	--	--	--	0.98	12/23/2019 08:12	12/24/2019 00:35	4523211
LMB	Pyrene	525.2	0.1	--	<	0.1		ug/L	--	--	--	0.98	12/23/2019 08:12	12/24/2019 00:35	4523211
FS	IS-Chrysene-d12	525.2	N/A	20-01582_JBPHH Red HI	<	547544	636714	ug/L	88	70 - 130	--	0.96	12/23/2019 08:12	12/24/2019 04:06	4521768
FS	IS-Phenanthrene-d10	525.2	N/A	20-01582_JBPHH Red HI	<	894099	1028000	ug/L	87	70 - 130	--	0.96	12/23/2019 08:12	12/24/2019 04:06	4521768
FS	IS-Pyrene-d10	525.2	N/A	20-01582_JBPHH Red HI	<	654304	708701	ug/L	92	70 - 130	--	0.96	12/23/2019 08:12	12/24/2019 04:06	4521768
FS	SS-4,4'-Dichlorobiphenyl	525.2	N/A	20-01582_JBPHH Red HI	<	4.7780	5.0	ug/L	100	70 - 130	--	0.96	12/23/2019 08:12	12/24/2019 04:06	4521768
FS	SS-2,4,5,6-Tetrachloro-m-xylene	525.2	N/A	20-01582_JBPHH Red HI	<	4.5630	5.0	ug/L	95	70 - 130	--	0.96	12/23/2019 08:12	12/24/2019 04:06	4521768
FS	SS-Triphenylphosphate	525.2	N/A	20-01582_JBPHH Red HI	<	5.8330	5.0	ug/L	122	70 - 130	--	0.96	12/23/2019 08:12	12/24/2019 04:06	4521768
FS	Acenaphthene	525.2	0.1	20-01582_JBPHH Red HI	<	0.1		ug/L	--	--	--	0.96	12/23/2019 08:12	12/24/2019 04:06	4521768
FS	Acenaphthylene	525.2	0.1	20-01582_JBPHH Red HI	<	0.1		ug/L	--	--	--	0.96	12/23/2019 08:12	12/24/2019 04:06	4521768
FS	Anthracene	525.2	0.1	20-01582_JBPHH Red HI	<	0.1		ug/L	--	--	--	0.96	12/23/2019 08:12	12/24/2019 04:06	4521768
FS	Benzo(a)pyrene	525.2	0.02	20-01582_JBPHH Red HI	<	0.02		ug/L	--	--	--	0.96	12/23/2019 08:12	12/24/2019 04:06	4521768
FS	Di(2-ethylhexyl)adipate	525.2	0.6	20-01582_JBPHH Red HI	<	0.6		ug/L	--	--	--	0.96	12/23/2019 08:12	12/24/2019 04:06	4521768
FS	Di(2-ethylhexyl)phthalate	525.2	0.6	20-01582_JBPHH Red HI	<	0.6		ug/L	--	--	--	0.96	12/23/2019 08:12	12/24/2019 04:06	4521768



QC Summary Report (cont.)															
Sample Type	Analyte	Method	MRL	Client ID	Result Flag	Amount	Target	Units	% Recovery	Recovery Limits	RPD Limit	DIH Factor	Extracted	Analyzed	EEA ID #
FS	Fluoranthene	525.2	0.1	20-01582_JBP-HH Red HH	<	0.1		ug/L	--	--	--	0.98	12/23/2019 08:12	12/24/2019 04:06	4521788
FS	Phenanthrene	525.2	0.1	20-01582_JBP-HH Red HH	<	0.1		ug/L	--	--	--	0.98	12/23/2019 08:12	12/24/2019 04:06	4521788
FS	Pyrene	525.2	0.1	20-01582_JBP-HH Red HH	<	0.1		ug/L	--	--	--	0.98	12/23/2019 08:12	12/24/2019 04:06	4521788
CCC	IS-Chrysenes-d12	525.2	N/A			699234	699234	ug/L	100	50 - 150	--	1.0	12/23/2019 08:12	12/24/2019 09:00	4523413
CCC	IS-Phenanthrene-d10	525.2	N/A			1115000	1115000	ug/L	100	50 - 150	--	1.0	12/23/2019 08:12	12/24/2019 09:00	4523413
CCC	IS-Pyrene-d10	525.2	N/A			751355	751355	ug/L	100	50 - 150	--	1.0	12/23/2019 08:12	12/24/2019 09:00	4523413
CCC	SS-4,4'-Dichlorobiphenyl	525.2	N/A			4.0380	5.0	ug/L	81	70 - 130	--	1.0	12/23/2019 08:12	12/24/2019 09:00	4523413
CCC	SS-2,4,5,6-Tetrachloro-m-xylene	525.2	N/A			4.3350	5.0	ug/L	87	70 - 130	--	1.0	12/23/2019 08:12	12/24/2019 09:00	4523413
CCC	SS-Triphenylphosphate	525.2	N/A			5.2880	5.0	ug/L	108	70 - 130	--	1.0	12/23/2019 08:12	12/24/2019 09:00	4523413
CCC	Acenaphthene	525.2	0.1			4.6360	5.0	ug/L	93	65 - 130	--	1.0	12/23/2019 08:12	12/24/2019 09:00	4523413
CCC	Acenaphthylene	525.2	0.1			4.9030	5.0	ug/L	98	70 - 130	--	1.0	12/23/2019 08:12	12/24/2019 09:00	4523413
CCC	Anthracene	525.2	0.1			4.5990	5.0	ug/L	92	70 - 130	--	1.0	12/23/2019 08:12	12/24/2019 09:00	4523413
CCC	Phenanthrene	525.2	0.1			4.8500	5.0	ug/L	97	70 - 130	--	1.0	12/23/2019 08:12	12/24/2019 09:00	4523413
CCC	Pyrene	525.2	0.1			4.8990	5.0	ug/L	94	70 - 130	--	1.0	12/23/2019 08:12	12/24/2019 09:00	4523413
CCC	IS-Chrysenes-d12	525.2	N/A			563728	563728	ug/L	100	50 - 150	--	1.0	12/23/2019 08:12	12/24/2019 09:42	4523414
CCC	IS-Phenanthrene-d10	525.2	N/A			1001000	1001000	ug/L	100	50 - 150	--	1.0	12/23/2019 08:12	12/24/2019 09:42	4523414
CCC	IS-Pyrene-d10	525.2	N/A			691860	691860	ug/L	100	50 - 150	--	1.0	12/23/2019 08:12	12/24/2019 09:42	4523414
CCC	SS-4,4'-Dichlorobiphenyl	525.2	N/A			4.4160	5.0	ug/L	88	70 - 130	--	1.0	12/23/2019 08:12	12/24/2019 09:42	4523414
CCC	SS-2,4,5,6-Tetrachloro-m-xylene	525.2	N/A			4.1070	5.0	ug/L	82	70 - 130	--	1.0	12/23/2019 08:12	12/24/2019 09:42	4523414
CCC	SS-Triphenylphosphate	525.2	N/A			5.9340	5.0	ug/L	119	70 - 130	--	1.0	12/23/2019 08:12	12/24/2019 09:42	4523414
CCC	Fluoranthene	525.2	0.1			5.1370	5.0	ug/L	103	65 - 130	--	1.0	12/23/2019 08:12	12/24/2019 09:42	4523414
CCC	IS-Chrysenes-d12	525.2	N/A			551457	551457	ug/L	100	50 - 150	--	1.0	12/23/2019 08:12	12/24/2019 10:24	4523415
CCC	IS-Phenanthrene-d10	525.2	N/A			883478	883478	ug/L	100	50 - 150	--	1.0	12/23/2019 08:12	12/24/2019 10:24	4523415
CCC	IS-Pyrene-d10	525.2	N/A			628316	628316	ug/L	100	50 - 150	--	1.0	12/23/2019 08:12	12/24/2019 10:24	4523415
CCC	SS-4,4'-Dichlorobiphenyl	525.2	N/A			5.0410	5.0	ug/L	101	70 - 130	--	1.0	12/23/2019 08:12	12/24/2019 10:24	4523415
CCC	SS-2,4,5,6-Tetrachloro-m-xylene	525.2	N/A			4.9060	5.0	ug/L	98	70 - 130	--	1.0	12/23/2019 08:12	12/24/2019 10:24	4523415
CCC	SS-Triphenylphosphate	525.2	N/A			5.9870	5.0	ug/L	120	70 - 130	--	1.0	12/23/2019 08:12	12/24/2019 10:24	4523415
CCC	Benzo(a)pyrene	525.2	0.02			4.5290	5.0	ug/L	91	70 - 130	--	1.0	12/23/2019 08:12	12/24/2019 10:24	4523415
CCC	Di(2-ethylhexyl)adipate	525.2	0.6			5.6860	5.0	ug/L	113	70 - 130	--	1.0	12/23/2019 08:12	12/24/2019 10:24	4523415
CCC	Di(2-ethylhexyl)phthalate	525.2	0.6			5.7850	5.0	ug/L	116	70 - 130	--	1.0	12/23/2019 08:12	12/24/2019 10:24	4523415



Sample Type Key

<u>Type (Abbr.)</u>	<u>Sample Type</u>	<u>Type (Abbr.)</u>	<u>Sample Type</u>
CCV	Continuing Cali. Verification		
CCB	Continuing Calibration Blank		
CCC	Continuing Calibration Check		
CCL	Continuing Calibration Low		
FS	Field Sample		
ICV	Initial Cali. Verification		
ICB	Initial Calibration Blank		
LFB	Laboratory Fortified Blank		
LMB	Laboratory Method Blank		
LRB	Laboratory Reagent Blank		
LTB	Laboratory Trip Blank		
QCS	Quality Control Sample		

END OF REPORT



NAVFAC HAWAII ENVIRONMENTAL SERVICES LABORATORY CHAIN-OF-CUSTODY
 Navy Facilities Engineering Command, Hawaii, Pearl Harbor, Hawaii Phone: (808) 474-3704, FAX: (808) 471-4534

JON: 178014602019 ESM: Kyle Teraoka POC: Kyle Teraoka PIH#: 473-3160 FAX#: 473-1545
 Report To: Kyle Teraoka Copy To: Dean Setiono
 NAVFAC HI OPBP6 NAVFAC HIEV11
 kyle.teraoka@navy.mil dean.setiono@navy.mil

Sample ID	Sample Description	Matrix Code	Sampling		Container Vol	Type	Analysis Required	Preservative / Res. Cl (ppm)	FOR LAB USE ONLY			Cond.
			Date	Time					Lab Number	Ext.	Lctn.	
Joint Base Pearl Harbor-Hickam (360-011)	Red Hill, TP001, Tap outside the C12 Bldg	DW	12/18/19	0905	3x40mL	Glass	Volatiles (524.2)	Ascorbic, HCl	20-01582	1-3	C	-
Trip Blank			11/25/2019		2x1L	Glass	Semi-Volatiles (525.2)	Sulfite, HCl	20-01583	4-5	C	-
					2x1L	Glass	TPH as Diesel (JP-8) (8015)			6-7	C	-
					125mL	Plastic	Lead (200.8)			8	C	-
					2x40mL	Glass	Volatiles	Ascorbic, HCl		1-2	C	-

Sampling Information
 Location Sampled: Red Hill
 Sampler(s): (Print names clearly) K. Miyaki

Transportation Information
 Transported/Stored in: Cooler with ice
 Cooler Temp: 11.7 °C
 Air bil/Carrier ID#: _____

Unused Sample Disposition
 Return to customer
 Dispose at 60 Days
 Archive for _____ Days
 Contact before disposal

Sample Condition
 Received with CoC
 Received with Custody Seals
 Seals Required | Seals Intact
 Labels and CoC agree

Remarks: Any EPA approved drinking water method for organic chemicals, 40 CFR 141.24, may be used.
 Laboratory must certified by the Hawaii State DOH Drinking Water Program.

Relinquished By: (Print clearly & Sign)	Date	Time	Received By: (Print clearly & Sign)	Date	Time
K. Miyaki	12/18/19	1010	K. Miyaki	12/18/19	1010