

RECEIVED JAN 19 2016
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DEPARTMENT OF THE NAVY
COMMANDER
NAVY REGION HAWAII
850 TICONDEROGA ST STE 110
JBPHH, HAWAII 96860-5101

5090
Ser N45/0412
January 13, 2016

CERTIFIED NO: 7015 0640 0002 4677 5925

Ms. Joanna Seto, Chief
Hawaii State Department of Health
Environmental Management Division
Safe Drinking Water Branch
919 Ala Moana Boulevard, Room 308
Honolulu, HI 96814

Dear Ms. Seto,

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

Enclosed are results for drinking water samples taken at the Red Hill Shaft as required by the Transition Plan for Tank 5 Red Hill Release. Also included are results of an additional drinking water sample taken at the Red Hill Shaft pumphead. The table below summarizes the laboratory results that are enclosed.

Lab Report Number	Sample Location(s)	Sample Date	Laboratory Methods
354971CN	360-011, TAP OUTSIDE CL2 BLDG	12/15/15	524.2, 525.2
354976CN	360-011, TAP OUTSIDE CL2 BLDG	12/15/15	8015
355302	360-011, TAP OUTSIDE CL2 BLDG	12/21/15	200.8
370-91-1	360-001, SHAFT PUMPHEAD	12/16/15	524.2, 525.2, 8015B (TPH-o)

There were no contaminants detected in these samples. Should you have any questions regarding this matter, please contact Ms. Arleen Mizuno at 471-1171, extension 203.

Sincerely

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

5090
Ser N45/0412
January 13, 2016

- Enclosures:
1. NAVFAC Hawaii Laboratory Lab Numbers 16-01514, 16-01515 (28 pages)
 2. NAVFAC Hawaii Laboratory Lab Number 16-01598 (14 pages)
 3. NAVFAC Hawaii Laboratory Lab Number 16-01539, 16-01540 (27 pages)

Copy to: Department of Health, Solid and Hazardous Waste Branch,
Underground Storage Tank Section (Hard copy and CD
enclosures)
LCDR Andrew Lovgren, NAVSUP Fleet Logistics Center Pearl
Harbor Director, Fuel and Facility Management (CD
enclosures)
Mr. Rockne Krill, DLA Energy Pacific (CD enclosures)

MEMORANDUM

12 Jan 16

Packet No: 16-015140112

From: NAVFAC HAWAII, Environmental Services Laboratory, PRP411

To: Randy Kawamura NAVFACHI OPHP61

Copy To: Arleen Mizuno NAVFAC HI

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

Encl: Lab Number(s) 16-01514 , 16-01515

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.~~ 1/12/16
92



Duane Morita, Acting Laboratory Manager

TOTAL NO. OF PAGES: 28

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:

ENCLOSURE(1)

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	Montana	CERT0026
Alaska	IN00035	Nebraska	E87775
Arizona	AZ0432	Nevada	IN000352015-1
Arkansas	IN035	New Hampshire*	2124
California	2920	New Mexico	IN00035
Colorado	IN035	New Jersey*	IN598
Colorado Radiochemistry	IN035	New York*	11398
Connecticut	PH-0132	North Carolina	18700
Delaware	IN035	North Dakota	R-035
Florida (Primary ABI)*	E87775	Ohio	87775
Georgia	929	Oklahoma	D9508
Hawaii	IN035	Oregon*	IN200001
Idaho	IN00035/E87775	Pennsylvania*	68-00466
Illinois*	200001	Puerto Rico	IN00035
Illinois Microbiology	200001	Rhode Island	LA000241
Indiana Chemistry	C-71-01	South Carolina	95005
Indiana Microbiology	M-76-07	South Dakota	IN00035
Iowa	098	Tennessee	TN02973
Kansas*	E-10233	Texas*	T104704187-14-7
Kentucky	90056	Texas/TCEQ	TX207
Louisiana*	LA150003	Utah*	IN00035
Maine	IN00035	Vermont	VT-8775
Maryland	209	Virginia*	00127
Massachusetts	M-IN035	Washington	C837
Michigan	9926	West Virginia	9927 C
Minnesota*	018-999-338	Wisconsin	999766900
Mississippi	IN035	Wyoming	IN035
Missouri	880		

*NELAP/TNI Recognized Accreditation Bodies



Eaton Analytical

LABORATORY CASE NARRATIVE

Client: NAVFAC Hawaii

Report #: 354976CN

All method QC was within acceptance limits.

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

<i>[Handwritten Signature]</i>	<i>[Handwritten Title]</i>	12/22/2015
Authorized Signature	Title	Date

Sample Analysis Report

Client: NAVFAC Hawaii
Contact: Duane Morita
 Environmental Lab Code PRJ411
 Building 1423
 Central Ave.
 JBPHH, Hawaii 96860
 Voice: (808)-474-0768

Order No.: 287061
Receipt Batch No.: 354976

Analytical Method Summary:

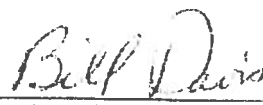
Headspace analysis GC/FID – The sample was analyzed as received. 15 mL sample was pipetted into a 20 mL headspace vial containing 4 grams of sodium chloride. 10 µL of 5.5% isopropyl alcohol was added to the sample. Isopropyl alcohol was used as an internal standard. The sample was capped and heated to 75 °C for 30 minutes. The headspace was then sampled and analyzed using a modified EPA Method 8015B, a headspace GC/FID technique. The calibration concentration range was 0.05-10 mg/L. A quadratic calibration was used with a correlation coefficient (r^2) of 0.98. The minimum reporting level (MRL) was 0.1 mg/L.

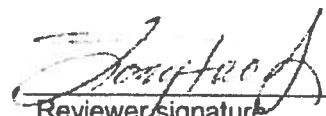
For quantitation of JP-8 Fuel, the analysis included a set of initial calibration standards, an initial continuing calibration check (CCC) at 0.1 mg/L, a laboratory method blank (LMB), a matrix spike (MS) at 1.0 mg/L, and a closing CCC at 1.0 mg/L at the end of the run.

LAB SAMPLE ID: 3376075

SAMPLE SITE: 16-01514 JBPHH Red Hill

Analyte	MRL (mg/L)	Sample Result (mg/L)	LMB Result (mg/L)	MS Recovery (%)	Initial CCC Recovery (%)	Closing CCC Recovery (%)
JP-8 Fuel	0.1	< 0.1	< 0.1	90	92	110

 12/22/2015
 Analyst signature Date

 12/22/2015
 Reviewer/signature Date



Water Analytics

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

Order # 287061
Batch # 254176

www.eurofins.com

CHAIN OF CUSTODY RECORD

REPORT TO: **Shaded area for EEA use only**

Page 2 of 2

NAVFAC Hawaii		SAMPLER (Signature)		FMS ID #		STAFF (sample origin)		PROJECT NAME		PC#		MATRIX CODE	
COMPLIANCE MONITORING		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		HI0000360		HI						# OF CONTAINERS	
NAVFAC Hawaii		SAMPLING SITE		TEST NAME		POPULATION SERVED		SAMPLE REMARKS		CHLORINATED		TURNAROUND TIME	
LAB Number		COLLECTION		TPH as Diesel (IP-8) (8015)		C:W				YES NO		3 DW RV	
1 3376015		DATE TIME AM PM		16 01 51.4 JRPFH Red Hill 356-011						X			
2		DATE TIME AM PM		TP001									
3		DATE TIME AM PM											
4		DATE TIME AM PM											
5		DATE TIME AM PM											
6		DATE TIME AM PM											
7		DATE TIME AM PM											
8		DATE TIME AM PM											
9		DATE TIME AM PM											
10		DATE TIME AM PM											
11		DATE TIME AM PM											
12		DATE TIME AM PM											
13		DATE TIME AM PM											
14		DATE TIME AM PM											

RELINQUISHED BY (Signature)	DATE TIME AM PM	RECEIVED BY (Signature)	DATE TIME AM PM	LAB COMMENTS
<i>[Signature]</i>	12/15/15	Fedex 8564 1152 6886		
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:	DATE TIME AM PM	CONDITIONS UPON RECEIPT (check one)
		<i>[Signature]</i>	08:30	<input checked="" type="checkbox"/> Icest Variables Ambient <u>1.4</u> °C Upon Receipt N/A

MATRIX CODES:
 CW DRINKING WATER
 RW REAGENT WATER
 GW GROUND WATER
 EW EXPOSURE WATER
 SW SURFACE WATER
 PW POOL WATER
 WW WASTE WATER

TURN-AROUND TIME (TAT) - SURCHARGES
 SW - Standard Within (15 working days) 0%
 RW - Rush Verbal (5 working days) 50%
 EW - Rush Verbal (5 working days) 75%
 SW - Rush Verbal (5 working days) 75%

* Please call, expedited service not available for all testing

LAB COMMENTS:
 LAB RESERVES THE RIGHT TO RE-TEST SAMPLES IN TERMS OF NON-AGREED VARIABLES TO CLIENT

LAB COMMENTS:
 Samples received unannounced with less than 48 hour holding time remaining may be subject to additional charges.

05-10-F0435 Issue 4-C Effective Date 2014-05-01

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	Montana	CERT0026
Alaska	IN00035	Nebraska	E87775
Arizona	AZ0432	Nevada	IN000352015-1
Arkansas	IN035	New Hampshire*	2124
California	2920	New Mexico	IN00035
Colorado	IN035	New Jersey*	IN598
Colorado Radiochemistry	IN035	New York*	11398
Connecticut	PH-0132	North Carolina	18700
Delaware	IN035	North Dakota	R-035
Florida (Primary AB)*	E87775	Ohio	87775
Georgia	929	Oklahoma	D9508
Hawaii	IN035	Oregon*	IN200001
Idaho	IN00035/E87775	Pennsylvania*	68-00466
Illinois*	200001	Puerto Rico	IN00035
Illinois Microbiology	200001	Rhode Island	LAO00241
Indiana Chemistry	C-71-01	South Carolina	95005
Indiana Microbiology	M-76-07	South Dakota	IN00035
Iowa	098	Tennessee	TN02973
Kansas*	E-10233	Texas*	T104704187-14-7
Kentucky	90056	Texas/TCEQ	TX207
Louisiana*	LA150003	Utah*	IN00035
Maine	IN00035	Vermont	VT-8775
Maryland	209	Virginia*	00127
Massachusetts	M-IN035	Washington	C837
Michigan	9926	West Virginia	9927 C
Minnesota*	018-999-338	Wisconsin	999766900
Mississippi	IN035	Wyoming	IN035
Missouri	880		

*NELAP/TNI Recognized Accreditation Bodies

LABORATORY CASE NARRATIVE

Client: NAVFAC Hawaii

Report #: 354971CN

All method QC was within acceptance limits.

Note: In the Method 525.2 analysis, the Anthracene recovery in the matrix spike at 5 ug/L (50%) was outside the acceptance limits of 70-130%. Any result is potentially low biased.

Note: In the Method 525.2 analysis, one of three SS recoveries in the sample submitted for analysis was Low biased (63%) outside the acceptance limits of 70-130% recovery. No analytes of interest were detected in the sample submitted for analysis.

Note: In the Method 525.2 analysis, the Di(2-ethylhexyl)adipate recovery in the matrix spike at 5 ug/L (134%) was outside the acceptance limits of 70-130%. Any detected result is potentially high biased.

Note: In the Method 525.2 analysis, the Di(2-ethylhexyl)phthalate recovery in the matrix spike at 5 ug/L (131%) was outside the acceptance limits of 70-130%. Any detected result is potentially high biased.

Note: In the Method 525.2 analysis, the Acenaphthene recovery in the matrix spike at 5 ug/L (123%) was outside the acceptance limits of 58-116%. Any detected result is potentially high biased.

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[Handwritten Signature] *[Handwritten Title]* 12/24/2015
Authorized Signature Title Date
Page 1 of 1



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
JBPHH, HI 96860

Report: 354971
Priority: Rush Verbal
Status: Final
PWS ID: HI0000360

Copies to: None

Sample Information					
EEA ID #	Client ID	Method	Collected Date / Time	Collected By:	Received Date / Time
3376068	16-01514, JBPHH Red Hill	524.2	12/15/15 10:10	Client	12/17/15 09:30
3376069	16-01514, JBPHH Red Hill	525.2	12/15/15 10:10	Client	12/17/15 09:30

Note: See attached page for additional comments.

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 Trott at (574) 233-4777.

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

[Handwritten Signature]

Authorized Signature

Title

12/24/2015

Date

Client Name: NAVFAC Hawaii
Report #: 354971

Semi-volatile Organic Chemicals									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed	EEA ID #
83-32-9	Acenaphthene	525.2	—	0.1	< 0.1	ug/L	12/18/15 08:51	12/19/15 02:21	3376069
208-96-8	Acenaphthylene	525.2	—	0.1	< 0.1	ug/L	12/18/15 08:51	12/19/15 02:21	3376069
120-12-7	Anthracene	525.2	—	0.1	< 0.1	ug/L	12/18/15 08:51	12/19/15 02:21	3376069
50-32-8	Benzo(a)pyrene	525.2	0.2 *	0.02	< 0.02	ug/L	12/18/15 08:51	12/19/15 02:21	3376089
103-23-1	Di(2-ethylhexyl)adipate	525.2	400 *	0.6	< 0.6	ug/L	12/18/15 08:51	12/19/15 02:21	3376069
117-81-7	Di(2-ethylhexyl)phthalate	525.2	6 *	0.6	< 0.6	ug/L	12/18/15 08:51	12/19/15 02:21	3376089
206-44-0	Fluoranthene	525.2	—	0.1	< 0.1	ug/L	12/18/15 08:51	12/19/15 02:21	3376089
85-01-8	Phenanthrene	525.2	—	0.1	< 0.1	ug/L	12/18/15 08:51	12/19/15 02:21	3376069
129-00-0	Pyrene	525.2	—	0.1	< 0.1	ug/L	12/18/15 08:51	12/19/15 02:21	3376069

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	—	12/22/15 13:34	3376068
56-23-5	Carbon tetrachloride	524.2	5 *	0.5	< 0.5	ug/L	—	12/22/15 13:34	3376088
108-90-7	Chlorobenzene	524.2	100 *	0.5	< 0.5	ug/L	—	12/22/15 13:34	3376068
95-50-1	1,2-Dichlorobenzene	524.2	600 *	0.5	< 0.5	ug/L	—	12/22/15 13:34	3376068
106-46-7	1,4-Dichlorobenzene	524.2	75 *	0.5	< 0.5	ug/L	—	12/22/15 13:34	3376068
107-06-2	1,2-Dichloroethane	524.2	5 *	0.5	< 0.5	ug/L	—	12/22/15 13:34	3376088
75-35-4	1,1-Dichloroethylene	524.2	7 *	0.5	< 0.5	ug/L	—	12/22/15 13:34	3376068
156-59-2	cis-1,2-Dichloroethylene	524.2	70 *	0.5	< 0.5	ug/L	—	12/22/15 13:34	3376068
156-60-5	trans-1,2-Dichloroethylene	524.2	100 *	0.5	< 0.5	ug/L	—	12/22/15 13:34	3376068
75-09-2	Dichloromethane	524.2	5 *	0.5	< 0.5	ug/L	—	12/22/15 13:34	3376068
78-87-5	1,2-Dichloropropane	524.2	5 *	0.5	< 0.5	ug/L	—	12/22/15 13:34	3376068
100-41-4	Ethylbenzene	524.2	700 *	0.5	< 0.5	ug/L	—	12/22/15 13:34	3376068
91-20-3	Naphthalene	524.2	—	0.5	< 0.5	ug/L	—	12/22/15 13:34	3376068
100-42-5	Styrene	524.2	100 *	0.5	< 0.5	ug/L	—	12/22/15 13:34	3376068
127-18-4	Tetrachloroethylene	524.2	5 *	0.5	< 0.5	ug/L	—	12/22/15 13:34	3376068
108-88-3	Toluene	524.2	1000 *	0.5	< 0.5	ug/L	—	12/22/15 13:34	3376068
120-82-1	1,2,4-Trichlorobenzene	524.2	70 *	0.5	< 0.5	ug/L	—	12/22/15 13:34	3376068
71-55-6	1,1,1-Trichloroethane	524.2	200 *	0.5	< 0.5	ug/L	—	12/22/15 13:34	3376068
79-00-5	1,1,2-Trichloroethane	524.2	5 *	0.5	< 0.5	ug/L	—	12/22/15 13:34	3376068
79-01-6	Trichloroethylene	524.2	5 *	0.5	< 0.5	ug/L	—	12/22/15 13:34	3376068
75-01-4	Vinyl chloride	524.2	2 *	0.2	< 0.2	ug/L	—	12/22/15 13:34	3376068
95-47-6	1,2-Xylene	524.2	—	0.5	< 0.5	ug/L	—	12/22/15 13:34	3376068
179601-23-1	1,3 + 1,4-Xylene	524.2	—	0.5	< 0.5	ug/L	—	12/22/15 13:34	3376068
1330-20-7	Xylenes, Total	524.2	10000 *	0.5	< 0.5	ug/L	—	12/22/15 13:34	3376068

† 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.



110 S. Hill Street
 South Bond, IN 48617
 T: 1.800.332.4345
 F: 1.574.233.8207

Order # 287061
 Batch # 214971

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CHAIN OF CUSTODY RECORD

Page 1 of 2

REPORT TO:	SAMPLER (Signature)	STATE (transfer origin)		PROJECT NAME	PC#	# OF CONTAINERS	MATRIX CODE	TURNAROUND TIME
		NAVFAAC Hawaii	HI					
BILL TO:	COMPLIANCE MONITORING	Yes	No	SAMPLING SITE	TEST NAME	SAMPLE REMARKS	QML ORIMATED	
NAVFAAC Hawaii	X			16-001514, JBPHH Red Hill	Volatiles (524.2) See attached list		YES NO	
LAB Number	COLLECTION	DATE	TIME	AM	PM			
3376068		12/15/15	1010	X			X	
3376064						TP001	X	
						356-011	X	
						Lead (200.8) - lead not present	X	
						Volatiles (524.2)	X	
3376070		11/23/15				16-01515, Trip Blank	X	

RUSHVERBA

RELINQUISHED BY (Signature)	DATE	TIME	RECEIVED BY (Signature)	DATE	TIME	LAB COMMENTS
[Signature]	12/15/15	1:00 PM	Fedex 8564 1152 6886			Contracted client regarding missing pb sample. Ltr 12/17/15
						CONDITIONS UPON RECEIPT (check one)
						<input checked="" type="checkbox"/> Total Weight/Amount 1.6 <input type="checkbox"/> To Upon Receipt N/A

RELINQUISHED BY (Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY	DATE	TIME	TURN-AROUND TIME (TAT) - SURCHARGES
[Signature]			[Signature]	12-17-15	08:30	
						SW = Standard W/rtm (15 working days) 0% RW = Rush W/rtm (5 working days) 80% RW* = Rush W/rtm (3 working days) 75% * Please call, expedited service not available for all testing

Matrix Codes:
 CW-UNKNOWN WATER
 RW-REAGENT WATER
 LW-COOLING WATER
 EW-EMULSION WATER
 SW-SURFACE WATER
 PW-POOL WATER
 WW-WASTE WATER

LAB COMMENTS:
 100% Immediate Verbal (3 working days)
 125% Next Business Week (5 working days)
 CALL
 150% Weekend Holiday
 CALL
 200% Less than 48 hours
 CALL

08.LO.F0435 Issue 2.0 Effective Date 2014-05-01

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 agreed to in writing by EEA.



NAVFAC HAWAII ENVIRONMENTAL SERVICES LABORATORY CHAIN-OF-CUSTODY
 Navy Facilities Engineering Command, Hawaii, PRP411, Pearl Harbor, Hawaii Phone: (808) 474-3704, FAX: (808) 471-4534

JCN: 114847902016 FISM: FOC: Randy Kawamura PIR: 473-3160 PAN#: 473-1545
 Report To: Randy Kawamura Copy To: Arleen Mizuno
 NAVFAC HI OPBP6 NAVFAC HI EVI
 randy.kawamura@navy.mil arleen.mizuno@navy.mil

Sample ID	Sample Description	Matrix Code	Sampling		Container		Analysis Required	Preservative	FOR LAB USE ONLY			Cand.	
			Date	Time	Vol	Type			Res. Cl (ppm)	pH	Lab Number		Ext
Joint Base Pearl Harbor-Hickam (360-011)	Red Hill, PP001, Tap outside the C12 Bldg	DW	12/15/2015		3x40mL	Glass	Volatiles (S24.2)	Ascorbic, HCl			1-1	C	✓
Trip Blank					2x1L	Glass	Semi-Volatiles (S25.2)	Sulfite, HCl	0.3		4-5	C	✓
					3x40mL	Glass	TPH as Diesel (JP-8) (8015)				6-8	C	✓
					125mL	Plastic	Lead (303.8)	MINO, pH=2			9	C	✓
					2x40mL	Glass	Volatiles	Ascorbic, HCl			1-2	C	✓

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

Transportation Information
 Transported/Stored in: Cooler with ice Cooler Temp: °C
 Air bill/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

Relinquished By: (Print clearly & Sign)
 K. Miyaki *[Signature]* Date: 12/15/15 Time: 1350

Received By: (Print clearly & Sign)
[Signature] Date: 12/15/15 Time: 1350

VOCs tested (EPA Method 524.2)

Benzene
Carbon tetrachloride
Chlorobenzene
1,2-Dichlorobenzene
1,4-Dichlorobenzene
1,2-Dichloroethane
1,1-Dichloroethylene
cis-1,2-Dichloroethylene
trans-1,2-Dichloroethylene
Dichloromethane
1,2-Dichloropropane
Ethylbenzene
Naphthalene (unregulated)
Styrene
Tetrachloroethylene
Toluene
1,2,4-Trichlorobenzene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethylene
Vinyl chloride
Xylenes, Total

SVOCs tested (EPA Method 525.2)

Benzo(a)pyrene
Di(2-ethylhexyl)adipate
Di(2-ethylhexyl)phthalate
Acenaphthene (unregulated)
Acenaphthylene (unregulated)
Anthracene (unregulated)
Phenanthrene (unregulated)
Fluoranthene (unregulated)
Pyrene (unregulated)

TPH as Diesel (JP-8) (SW846 8015 GCMS)



Eaton Analytical

Eurofins Eaton Analytical

Run Log

Run ID: 211172 Method: 524.2

<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	3377450		RW	B	12/22/2015 07:55	524 2-122115b.mth
CCL	3377454		RW	B	12/22/2015 09:23	524 2-122115b.mth
LMB	3377453		RW	B	12/22/2015 10:05	524 2-122115b.mth
LTB	3376070	LTB 11-23-15	RW	B	12/22/2015 13:01	524 2-122115b.mth
FS	3376068	16-01514, JBPHH Red Hill	DW	B	12/22/2015 13:34	524 2-122115b.mth
CCC	3377451		RW	B	12/22/2015 17:58	524 2-122115b.mth

QC Summary Report

Sample Type	Analyte	Method	MRL	Client ID	Result Flag	Amount	Target	Units	% Recovery	Recovery Limit	RPO Limit	DH Factor	Extracted	Analyzed	EEA ID #
CCC	IS-1,4-Difluorobenzene	524.2	N/A			306481	306481	ug/L	100	70 - 130		1.0		12/22/2015 07:55	3377450
CCC	SS-Bromofluorobenzene	524.2	N/A			4.8510	5.0	ug/L	87	70 - 130		1.0		12/22/2015 07:55	3377450
CCC	SS-1,2-Dichlorobenzene-d4	524.2	N/A			8.6600	10.0	ug/L	89	70 - 130		1.0		12/22/2015 07:55	3377450
CCC	SS-1,2-Dichloroethane-d4	524.2	N/A			10.0020	10.0	ug/L	100	70 - 130		1.0		12/22/2015 07:55	3377450
CCC	SS-Toluene-d8	524.2	N/A			10.2880	10.0	ug/L	103	70 - 130		1.0		12/22/2015 07:55	3377450
CCC	Benzene	524.2	0.5			4.9530	5.0	ug/L	99	70 - 130		1.0		12/22/2015 07:55	3377450
CCC	Carbon tetrachloride	524.2	0.5			5.1190	5.0	ug/L	102	70 - 130		1.0		12/22/2015 07:55	3377450
CCC	Chlorobenzene	524.2	0.5			5.0580	5.0	ug/L	101	70 - 130		1.0		12/22/2015 07:55	3377450
CCC	1,2-Dichlorobenzene	524.2	0.5			4.9270	5.0	ug/L	99	70 - 130		1.0		12/22/2015 07:55	3377450
CCC	1,4-Dichlorobenzene	524.2	0.5			5.2130	5.0	ug/L	104	70 - 130		1.0		12/22/2015 07:55	3377450
CCC	1,2-Dichloroethane	524.2	0.5			5.1430	5.0	ug/L	103	70 - 130		1.0		12/22/2015 07:55	3377450
CCC	1,1-Dichloroethylene	524.2	0.5			5.2600	5.0	ug/L	105	70 - 130		1.0		12/22/2015 07:55	3377450
CCC	cis-1,2-Dichloroethylene	524.2	0.5			5.0160	5.0	ug/L	100	70 - 130		1.0		12/22/2015 07:55	3377450
CCC	trans-1,2-Dichloroethylene	524.2	0.5			5.1540	5.0	ug/L	103	70 - 130		1.0		12/22/2015 07:55	3377450
CCC	Dichloromethane	524.2	0.5			4.2700	5.0	ug/L	85	70 - 130		1.0		12/22/2015 07:55	3377450
CCC	1,2-Dichloropropane	524.2	0.5			5.1080	5.0	ug/L	102	70 - 130		1.0		12/22/2015 07:55	3377450
CCC	Ethylbenzene	524.2	0.5			5.0790	5.0	ug/L	102	70 - 130		1.0		12/22/2015 07:55	3377450
CCC	Naphthalene	524.2	0.5			4.1590	5.0	ug/L	83	70 - 130		1.0		12/22/2015 07:55	3377450
CCC	Styrene	524.2	0.5			4.5320	5.0	ug/L	81	70 - 130		1.0		12/22/2015 07:55	3377450
CCC	Tetrachloroethylene	524.2	0.5			5.1860	5.0	ug/L	104	70 - 130		1.0		12/22/2015 07:55	3377450
CCC	Toluene	524.2	0.5			4.9870	5.0	ug/L	100	70 - 130		1.0		12/22/2015 07:55	3377450
CCC	1,2,4-Trichlorobenzene	524.2	0.5			4.6010	5.0	ug/L	92	70 - 130		1.0		12/22/2015 07:55	3377450
CCC	1,1,1-Trichloroethane	524.2	0.5			5.1690	5.0	ug/L	103	70 - 130		1.0		12/22/2015 07:55	3377450
CCC	1,1,2-Trichloroethane	524.2	0.5			4.8750	5.0	ug/L	98	70 - 130		1.0		12/22/2016 07:55	3377450
CCC	Trichloroethylene	524.2	0.5			5.0240	5.0	ug/L	100	70 - 130		1.0		12/22/2015 07:55	3377450
CCC	Vinyl chloride	524.2	0.2			4.3580	5.0	ug/L	87	70 - 130		1.0		12/22/2015 07:55	3377450
CCC	1,2-Xylene	524.2	0.5			4.8070	5.0	ug/L	98	70 - 130		1.0		12/22/2015 07:55	3377450
CCC	1,3 + 1,4-Xylene	524.2	0.5			9.8720	10.0	ug/L	99	70 - 130		1.0		12/22/2015 07:55	3377450
CCl	IS-1,4-Difluorobenzene	524.2	N/A			315946	315946	ug/L	100	70 - 130		1.0		12/22/2015 06:23	3377454
CCl	SS-Bromofluorobenzene	524.2	N/A			4.6570	5.0	ug/L	99	70 - 130		1.0		12/22/2016 06:23	3377454
CCl	SS-1,2-Dichlorobenzene-d4	524.2	N/A			8.3200	10.0	ug/L	83	70 - 130		1.0		12/22/2016 06:23	3377454
CCl	SS-1,2-Dichloroethane-d4	524.2	N/A			9.6980	10.0	ug/L	98	70 - 130		1.0		12/22/2016 06:23	3377454
CCl	SS-Toluene-d8	524.2	N/A			10.1380	10.0	ug/L	101	70 - 130		1.0		12/22/2016 06:23	3377454
CCl	Benzene	524.2	0.5			9.4770	0.5	ug/L	95	68 - 118		1.0		12/22/2016 06:23	3377454
CCl	Carbon tetrachloride	524.2	0.5			0.4280	0.5	ug/L	99	61 - 118		1.0		12/22/2016 06:23	3377454
CCl	Chlorobenzene	524.2	0.5			0.3000	0.5	ug/L	100	66 - 122		1.0		12/22/2016 06:23	3377454
CCl	1,2-Dichlorobenzene	524.2	0.5			0.4690	0.5	ug/L	98	67 - 126		1.0		12/22/2016 06:23	3377454
CCl	1,4-Dichlorobenzene	524.2	0.5			0.5370	0.5	ug/L	107	61 - 128		1.0		12/22/2016 06:23	3377454
CCl	1,2-Dichloroethane	524.2	0.5			0.5070	0.5	ug/L	101	69 - 119		1.0		12/22/2016 06:23	3377454
CCl	1,1-Dichloroethylene	524.2	0.5			0.4510	0.5	ug/L	90	62 - 121		1.0		12/22/2016 06:23	3377454

EEA Run ID 211172 / EEA Report # 354971

QC Summary Report (cont.)

Sample Type	Analyte	Method	MRL	Client ID	Result Flag	Amount	Target	Units	% Recovery	Recovery Limits	RPD	RPD Limit	OH Factor	Extracted	Analyzed	EEA ID #
CCL	cis-1,2-Dichloroethylene	524.2	0.5			0.6480	0.5	ug/L	109	87 - 117			1.0		12/22/2015 09:23	3377454
CCL	trans-1,2-Dichloroethylene	524.2	0.5			0.5800	0.5	ug/L	118	83 - 119			1.0		12/22/2015 09:23	3377454
CCL	Dichloromethane	524.2	0.5			0.5240	0.5	ug/L	105	38 - 154			1.0		12/22/2015 09:23	3377454
CCL	1,2-Dichloropropane	524.2	0.5			0.4860	0.5	ug/L	91	65 - 121			1.0		12/22/2015 09:23	3377454
CCL	Ethylbenzene	524.2	0.5			0.4680	0.5	ug/L	94	63 - 118			1.0		12/22/2015 09:23	3377454
CCL	Styrene	524.2	0.5			0.6160	0.5	ug/L	103	54 - 133			1.0		12/22/2015 09:23	3377454
CCL	Tetrachloroethylene	524.2	0.5			0.4970	0.5	ug/L	93	59 - 124			1.0		12/22/2015 09:23	3377454
CCL	Toluene	524.2	0.5			0.4780	0.5	ug/L	98	66 - 119			1.0		12/22/2015 09:23	3377454
CCL	1,2,4-Trichlorobenzene	524.2	0.5			0.5410	0.5	ug/L	108	57 - 150			1.0		12/22/2015 09:23	3377454
CCL	1,1,1-Trichloroethane	524.2	0.5			0.4380	0.5	ug/L	87	81 - 118			1.0		12/22/2015 09:23	3377454
CCL	1,1,2-Trichloroethane	524.2	0.5			0.4300	0.5	ug/L	84	80 - 118			1.0		12/22/2015 09:23	3377454
CCL	Trichloroethylene	524.2	0.5			0.5360	0.5	ug/L	107	84 - 119			1.0		12/22/2015 09:23	3377454
CCL	Vinyl chloride	524.2	0.5			0.3690	0.5	ug/L	74	52 - 130			1.0		12/22/2015 09:23	3377454
CCL	1,3 + 1,4-Xylene	524.2	0.5			0.4810	0.5	ug/L	92	87 - 119			1.0		12/22/2015 09:23	3377454
CCL	1,3 + 1,4-Xylene	524.2	0.5			0.6260	1.0	ug/L	62	66 - 119			1.0		12/22/2015 10:05	3377453
LMB	IS-1,4-Difluorobenzene	524.2	N/A			295991	315846	ug/L	94	70 - 130			1.0		12/22/2015 10:05	3377453
LMB	SS-Bromofluorobenzene	524.2	N/A			4.7020	5.0	ug/L	84	70 - 130			1.0		12/22/2015 10:05	3377453
LMB	SS-1,2-Dichlorobenzene-d4	524.2	N/A			8.3550	10.0	ug/L	84	70 - 130			1.0		12/22/2015 10:05	3377453
LMB	SS-1,2-Dichloroethane-d4	524.2	N/A			9.9240	10.0	ug/L	86	70 - 130			1.0		12/22/2015 10:05	3377453
LMB	SS-Toluene-d8	524.2	N/A			10.0770	10.0	ug/L	101	70 - 130			1.0		12/22/2015 10:05	3377453
LMB	Benzene	524.2	0.5			0.5		ug/L					1.0		12/22/2015 10:05	3377453
LMB	Carbon tetrachloride	524.2	0.5			0.5		ug/L					1.0		12/22/2015 10:05	3377453
LMB	Chlorobenzene	524.2	0.5			0.5		ug/L					1.0		12/22/2015 10:05	3377453
LMB	1,2-Dichlorobenzene	524.2	0.5			0.5		ug/L					1.0		12/22/2015 10:05	3377453
LMB	1,4-Dichlorobenzene	524.2	0.5			0.5		ug/L					1.0		12/22/2015 10:05	3377453
LMB	1,1-Dichloroethane	524.2	0.5			0.5		ug/L					1.0		12/22/2015 10:05	3377453
LMB	1,1-Dichloroethylene	524.2	0.5			0.5		ug/L					1.0		12/22/2015 10:05	3377453
LMB	cis-1,2-Dichloroethylene	524.2	0.5			0.5		ug/L					1.0		12/22/2015 10:05	3377453
LMB	trans-1,2-Dichloroethylene	524.2	0.5			0.5		ug/L					1.0		12/22/2015 10:05	3377453
LMB	Dichloromethane	524.2	0.5			0.5		ug/L					1.0		12/22/2015 10:05	3377453
LMB	1,2-Dichloropropane	524.2	0.5			0.5		ug/L					1.0		12/22/2015 10:05	3377453
LMB	Ethylbenzene	524.2	0.5			0.5		ug/L					1.0		12/22/2015 10:05	3377453
LMB	Naphthalene	524.2	0.5			0.5		ug/L					1.0		12/22/2015 10:05	3377453
LMB	Styrene	524.2	0.5			0.5		ug/L					1.0		12/22/2015 10:05	3377453
LMB	Tetrachloroethylene	524.2	0.5			0.5		ug/L					1.0		12/22/2015 10:05	3377453
LMB	Toluene	524.2	0.5			0.5		ug/L					1.0		12/22/2015 10:05	3377453
LMB	1,2,4-Trichlorobenzene	524.2	0.5			0.5		ug/L					1.0		12/22/2015 10:05	3377453
LMB	1,1,1-Trichloroethane	524.2	0.5			0.5		ug/L					1.0		12/22/2015 10:05	3377453
LMB	1,1,2-Trichloroethane	524.2	0.5			0.5		ug/L					1.0		12/22/2015 10:05	3377453
LMB	Trichloroethylene	524.2	0.5			0.5		ug/L					1.0		12/22/2015 10:05	3377453
LMB	Vinyl chloride	524.2	0.2			0.2		ug/L					1.0		12/22/2015 10:05	3377453

QC Summary Report (cont.)

Sample Type	Analyte	Method	MRL	Client ID	Result Flag	Amount	Target	Units	% Recovery	Recovery Limits	RPD	RPD Limit	DH Factor	Extracted	Analyzed	EEA ID #
LMB	1,2-Xylene	524.2	0.5		<	0.5		ug/L					1.0		12/22/2015 10:05	3377453
LMB	1,3 + 1,4-Xylene	524.2	0.5		<	0.5		ug/L					1.0		12/22/2015 10:05	3377453
LTB	IS-1,4-Difluorobenzene	524.2	N/A	LTB 11-23-15		283717	315848	ug/L	93	70 - 130			1.0		12/22/2015 13:01	3378070
LTB	SS-Bromofluorobenzene	524.2	N/A	LTB 11-23-15		4.7250	5.0	ug/L	94	70 - 130			1.0		12/22/2015 13:01	3378070
LTB	SS-1,2-Dichlorobenzene-d4	524.2	N/A	LTB 11-23-15		8.4050	10.0	ug/L	84	70 - 130			1.0		12/22/2015 13:01	3378070
LTB	SS-1,2-Dichloroethane-d4	524.2	N/A	LTB 11-23-15		8.6260	10.0	ug/L	98	70 - 130			1.0		12/22/2015 13:01	3378070
LTB	SS-Toluene-d8	524.2	N/A	LTB 11-23-15		10.0400	10.0	ug/L	100	70 - 130			1.0		12/22/2015 13:01	3378070
LTB	Benzene	524.2	0.5	LTB 11-23-15	<	0.5		ug/L					1.0		12/22/2015 13:01	3378070
LTB	Carbon tetrachloride	524.2	0.5	LTB 11-23-15	<	0.5		ug/L					1.0		12/22/2015 13:01	3378070
LTB	Chlorobenzene	524.2	0.5	LTB 11-23-15	<	0.5		ug/L					1.0		12/22/2015 13:01	3378070
LTB	1,2-Dichlorobenzene	524.2	0.5	LTB 11-23-15	<	0.5		ug/L					1.0		12/22/2015 13:01	3378070
LTB	1,4-Dichlorobenzene	524.2	0.5	LTB 11-23-15	<	0.5		ug/L					1.0		12/22/2015 13:01	3378070
LTB	1,2-Dichloroethane	524.2	0.5	LTB 11-23-15	<	0.5		ug/L					1.0		12/22/2015 13:01	3378070
LTB	1,1-Dichloroethylene	524.2	0.5	LTB 11-23-15	<	0.5		ug/L					1.0		12/22/2015 13:01	3378070
LTB	cis-1,3-Dichloroethylene	524.2	0.5	LTB 11-23-15	<	0.5		ug/L					1.0		12/22/2015 13:01	3378070
LTB	trans-1,2-Dichloroethylene	524.2	0.5	LTB 11-23-15	<	0.5		ug/L					1.0		12/22/2015 13:01	3378070
LTB	Dichloromethane	524.2	0.5	LTB 11-23-15	<	0.5		ug/L					1.0		12/22/2015 13:01	3378070
LTB	1,2-Dichloropropane	524.2	0.5	LTB 11-23-15	<	0.5		ug/L					1.0		12/22/2015 13:01	3378070
LTB	Ethylbenzene	524.2	0.5	LTB 11-23-15	<	0.5		ug/L					1.0		12/22/2015 13:01	3378070
LTB	Naphthalene	524.2	0.5	LTB 11-23-15	<	0.5		ug/L					1.0		12/22/2015 13:01	3378070
LTB	Benzene	524.2	0.5	LTB 11-23-15	<	0.5		ug/L					1.0		12/22/2015 13:01	3378070
LTB	Tetrachloroethylene	524.2	0.5	LTB 11-23-15	<	0.5		ug/L					1.0		12/22/2015 13:01	3378070
LTB	Toluene	524.2	0.5	LTB 11-23-15	<	0.5		ug/L					1.0		12/22/2015 13:01	3378070
LTB	1,2,4-Trichlorobenzene	524.2	0.5	LTB 11-23-15	<	0.5		ug/L					1.0		12/22/2015 13:01	3378070
LTB	1,1,1-Trichloroethane	524.2	0.5	LTB 11-23-15	<	0.5		ug/L					1.0		12/22/2015 13:01	3378070
LTB	1,1,2-Trichloroethane	524.2	0.5	LTB 11-23-15	<	0.5		ug/L					1.0		12/22/2015 13:01	3378070
LTB	Vinyl chloride	524.2	0.2	LTB 11-23-15	<	0.5		ug/L					1.0		12/22/2015 13:01	3378070
LTB	1,2-Xylene	524.2	0.5	LTB 11-23-15	<	0.5		ug/L					1.0		12/22/2015 13:01	3378070
LTB	Xylenes, Total	524.2	0.5	LTB 11-23-15	<	0.5		ug/L					1.0		12/22/2015 13:01	3378070
FS	IS-1,4-Difluorobenzene	524.2	N/A	16-001514_JBPHH Rad HI		305657	315848	ug/L	97	70 - 130			1.0		12/22/2015 13:34	3378068
FS	SS-Bromofluorobenzene	524.2	N/A	16-001514_JBPHH Rad HI		4.7420	5.0	ug/L	95	70 - 130			1.0		12/22/2015 13:34	3378068
FS	SS-1,2-Dichlorobenzene-d4	524.2	N/A	16-001514_JBPHH Rad HI		8.2710	10.0	ug/L	83	70 - 130			1.0		12/22/2015 13:34	3378068
FS	SS-1,2-Dichloroethane-d4	524.2	N/A	16-001514_JBPHH Rad HI		9.4450	10.0	ug/L	94	70 - 130			1.0		12/22/2015 13:34	3378068
FS	SS-Toluene-d8	524.2	N/A	16-001514_JBPHH Rad HI		9.8360	10.0	ug/L	98	70 - 130			1.0		12/22/2015 13:34	3378068
FS	Benzene	524.2	0.5	16-001514_JBPHH Rad HI	<	0.5		ug/L					1.0		12/22/2015 13:34	3378068
FS	Carbon tetrachloride	524.2	0.5	16-001514_JBPHH Rad HI	<	0.5		ug/L					1.0		12/22/2015 13:34	3378068
FS	Chlorobenzene	524.2	0.5	16-001514_JBPHH Rad HI	<	0.5		ug/L					1.0		12/22/2015 13:34	3378068
FS	1,2-Dichlorobenzene	524.2	0.5	16-001514_JBPHH Rad HI	<	0.5		ug/L					1.0		12/22/2015 13:34	3378068
FS	1,4-Dichlorobenzene	524.2	0.5	16-001514_JBPHH Rad HI	<	0.5		ug/L					1.0		12/22/2015 13:34	3378068
FS	1,2-Dichloroethane	524.2	0.5	16-001514_JBPHH Rad HI	<	0.5		ug/L					1.0		12/22/2015 13:34	3378068
FS	1,1-Dichloroethylene	524.2	0.5	16-001514_JBPHH Rad HI	<	0.5		ug/L					1.0		12/22/2015 13:34	3378068
FS	cis-1,3-Dichloroethylene	524.2	0.5	16-001514_JBPHH Rad HI	<	0.5		ug/L					1.0		12/22/2015 13:34	3378068
FS	trans-1,2-Dichloroethylene	524.2	0.5	16-001514_JBPHH Rad HI	<	0.5		ug/L					1.0		12/22/2015 13:34	3378068

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	1,1-Dichloroethylene	524.2	0.5	16-001514_JBPHH Resd Hll	<	0.5		ug/L				1.0		12/22/2015 13:34	3376068
FS	cis-1,2-Dichloroethylene	524.2	0.5	16-001514_JBPHH Resd Hll	<	0.5		ug/L				1.0		12/22/2015 13:34	3376068
FS	trans-1,2-Dichloroethylene	524.2	0.5	16-001514_JBPHH Resd Hll	<	0.5		ug/L				1.0		12/22/2015 13:34	3376068
FS	Dichloromethane	524.2	0.5	16-001514_JBPHH Resd Hll	<	0.5		ug/L				1.0		12/22/2015 13:34	3376068
FS	1,2-Dichloropropane	524.2	0.5	16-001514_JBPHH Resd Hll	<	0.5		ug/L				1.0		12/22/2015 13:34	3376068
FS	Ethylbenzene	524.2	0.5	16-001514_JBPHH Resd Hll	<	0.5		ug/L				1.0		12/22/2015 13:34	3376068
FS	Naphthalene	524.2	0.5	16-001514_JBPHH Resd Hll	<	0.5		ug/L				1.0		12/22/2015 13:34	3376068
FS	Styrene	524.2	0.5	16-001514_JBPHH Resd Hll	<	0.5		ug/L				1.0		12/22/2015 13:34	3376068
FS	Tetrachloroethylene	524.2	0.5	16-001514_JBPHH Resd Hll	<	0.5		ug/L				1.0		12/22/2015 13:34	3376068
FS	Toluene	524.2	0.5	16-001514_JBPHH Resd Hll	<	0.5		ug/L				1.0		12/22/2015 13:34	3376068
FS	1,2,4-Trichlorobenzene	524.2	0.5	16-001514_JBPHH Resd Hll	<	0.5		ug/L				1.0		12/22/2015 13:34	3376068
FS	1,1,1-Trichloroethane	524.2	0.5	16-001514_JBPHH Resd Hll	<	0.5		ug/L				1.0		12/22/2015 13:34	3376068
FS	1,1,2-Trichloroethane	524.2	0.5	16-001514_JBPHH Resd Hll	<	0.5		ug/L				1.0		12/22/2015 13:34	3376068
FS	Trichloroethylene	524.2	0.5	16-001514_JBPHH Resd Hll	<	0.5		ug/L				1.0		12/22/2015 13:34	3376068
FS	Vinyl chloride	524.2	0.2	16-001514_JBPHH Resd Hll	<	0.2		ug/L				1.0		12/22/2015 13:34	3376068
FS	1,2-Xylene	524.2	0.5	16-001514_JBPHH Resd Hll	<	0.5		ug/L				1.0		12/22/2015 13:34	3376068
FS	1,3 + 1,4-Xylene	524.2	0.5	16-001514_JBPHH Resd Hll	<	0.5		ug/L				1.0		12/22/2015 13:34	3376068
FS	Xylenes, Total	524.2	0.5	16-001514_JBPHH Resd Hll	<	0.5		ug/L				1.0		12/22/2015 13:34	3376068
CCC	IS-1,4-Difluorobenzene	524.2	N/A			204245	294245	ug/L	100	70 - 130		1.0		12/22/2016 17:58	3377451
CCC	BS-Bromocyclohexane	524.2	N/A			5.1090	5.0	ug/L	102	70 - 130		1.0		12/22/2015 17:58	3377451
CCC	98-1,3-Dichlorobenzene-04	524.2	N/A			10.0780	10.0	ug/L	101	70 - 130		1.0		12/22/2015 17:58	3377451
CCC	68-1,2-Dichloroethane-04	524.2	N/A			10.3680	10.0	ug/L	103	70 - 130		1.0		12/22/2015 17:58	3377451
CCC	SS-Toluene-08	524.2	N/A			9.9110	10.0	ug/L	98	70 - 130		1.0		12/22/2015 17:58	3377451
CCC	Benzene	524.2	0.5			10.2780	10.0	ug/L	103	70 - 130		1.0		12/22/2015 17:58	3377451
CCC	Carbon tetrachloride	524.2	0.5			10.4860	10.0	ug/L	105	70 - 130		1.0		12/22/2015 17:58	3377451
CCC	Chlorobenzene	524.2	0.5			10.4870	10.0	ug/L	105	70 - 130		1.0		12/22/2015 17:58	3377451
CCC	1,2-Dichlorobenzene	524.2	0.5			10.7170	10.0	ug/L	107	70 - 130		1.0		12/22/2015 17:58	3377451
CCC	1,4-Dichlorobenzene	524.2	0.5			10.8790	10.0	ug/L	106	70 - 130		1.0		12/22/2015 17:58	3377451
CCC	1,2-Dichloroethane	524.2	0.5			10.0470	10.0	ug/L	100	70 - 130		1.0		12/22/2015 17:58	3377451
CCC	1,1-Dichloroethylene	524.2	0.5			10.9880	10.0	ug/L	110	70 - 130		1.0		12/22/2015 17:58	3377451
CCC	cis-1,2-Dichloroethylene	524.2	0.5			10.6210	10.0	ug/L	108	70 - 130		1.0		12/22/2015 17:58	3377451
CCC	trans-1,2-Dichloroethylene	524.2	0.5			10.8970	10.0	ug/L	107	70 - 130		1.0		12/22/2015 17:58	3377451
CCC	Dichloromethane	524.2	0.5			9.9380	10.0	ug/L	98	70 - 130		1.0		12/22/2015 17:58	3377451
CCC	1,2-Dichloropropane	524.2	0.5			10.4040	10.0	ug/L	104	70 - 130		1.0		12/22/2015 17:58	3377451
CCC	Ethylbenzene	524.2	0.5			10.2540	10.0	ug/L	103	70 - 130		1.0		12/22/2015 17:58	3377451
CCC	Naphthalene	524.2	0.5			10.1580	10.0	ug/L	105	70 - 130		1.0		12/22/2015 17:58	3377451
CCC	Styrene	524.2	0.5			10.2370	10.0	ug/L	102	70 - 130		1.0		12/22/2015 17:58	3377451
CCC	Tetrachloroethylene	524.2	0.5			10.8860	10.0	ug/L	105	70 - 130		1.0		12/22/2015 17:58	3377451
CCC	Toluene	524.2	0.5			10.3490	10.0	ug/L	103	70 - 130		1.0		12/22/2015 17:58	3377451
CCC	1,2,4-Trichlorobenzene	524.2	0.5			10.3110	10.0	ug/L	103	70 - 130		1.0		12/22/2015 17:58	3377451
CCC	1,1,1-Trichloroethane	524.2	0.5			10.7890	10.0	ug/L	108	70 - 130		1.0		12/22/2015 17:58	3377451

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 #
CCC	1,1,2-Trichloroethane	524.2	0.5	--		10.3360	10.0	ug/L	103	70 - 130	--	1.0	--	12/22/2015 17:58	3377451
CCC	Trichloroethylene	524.2	0.5	--		10.3290	10.0	ug/L	103	70 - 130	--	1.0	--	12/22/2015 17:58	3377451
CCC	Vinyl chloride	524.2	0.2	--		12.8620	10.0	ug/L	128	70 - 130	--	1.0	--	12/22/2015 17:58	3377451
CCC	1,2-Xylene	524.2	0.5	--		9.8010	10.0	ug/L	98	70 - 130	--	1.0	--	12/22/2015 17:58	3377451
CCC	1,3 + 1,4-Xylene	524.2	0.5	--		20.2360	20.0	ug/L	101	70 - 130	--	1.0	--	12/22/2015 17:58	3377451



Eaton Analytical

Eurofins Eaton Analytical

Run Log

Run ID: 211062 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	3376708		OS	DO	12/18/2015 18:39	525 2-DO-110615a.mth
CCC	3376709		OS	DO	12/18/2015 19:21	525 2-DO-110615a.mth
CCC	3376710		OS	DO	12/18/2015 20:03	525 2-DO-110615a.mth
LFB	3376705		RW	DO	12/18/2015 20:45	525 2-DO-110615a.mth
LFB	3376706		RW	DO	12/18/2015 21:27	525 2-DO-110615a.mth
LFB	3376707		RW	DO	12/18/2015 22:09	525 2-DO-110615a.mth
LMB	3376704		RW	DO	12/18/2015 23:33	525 2-DO-110615a.mth
FS	3376069	16-01514, JBPHH Red Hill	DW	DO	12/19/2015 02:21	525 2-DO-110615a.mth
MS	3376701	16-01514, JBPHH Red Hill	DW	DO	12/19/2015 03:03	525 2-DO-110615a.mth

QC Summary Report

Sample Type	Analyte	Method	MIRL	Client ID	Result Flag	Amount	Target	Units	% Recovery	Recovery Limbs	RPD Limit	DH Factor	Extracted	Analyzed	EEA ID #
CCC	IS-Chrysene-d12	625.2	N/A			1132000	1132000	ug/L	100	70 - 130	--	1.0	12/18/2015 08:51	12/18/2015 18:39	3378708
CCC	IS-Phenanthrene-d10	525.2	N/A			1578000	1578000	ug/L	100	70 - 130	--	1.0	12/18/2015 08:51	12/18/2015 18:39	3378708
CCC	IS-Pyrene-d10	525.2	N/A			1180000	1180000	ug/L	100	70 - 130	--	1.0	12/18/2015 08:51	12/18/2015 18:39	3378708
CCC	SS-4,4'-Dichlorobiphenyl	625.2	N/A			4.2540	5.0	ug/L	85	70 - 130	--	1.0	12/18/2015 08:51	12/18/2015 18:39	3378708
CCC	SS-2,4,5,8-Tetrachloro-m-xylene	625.2	N/A			4.5110	5.0	ug/L	80	70 - 130	--	1.0	12/18/2015 08:51	12/18/2015 18:39	3378708
CCC	SS-Triphenylphosphate	628.2	N/A			5.2780	5.0	ug/L	106	70 - 130	--	1.0	12/18/2015 08:51	12/18/2015 18:39	3378708
CCC	Fluoranthene	525.2	0.1			6.1860	5.0	ug/L	103	73 - 122	--	1.0	12/18/2015 08:51	12/18/2015 18:21	3378709
CCC	IS-Chrysene-d12	525.2	N/A			1348000	1348000	ug/L	100	70 - 130	--	1.0	12/18/2015 08:51	12/18/2015 18:21	3378709
CCC	IS-Phenanthrene-d10	525.2	N/A			1815000	1815000	ug/L	100	70 - 130	--	1.0	12/18/2015 08:51	12/18/2015 18:21	3378709
CCC	IS-Pyrene-d10	525.2	N/A			1352000	1352000	ug/L	100	70 - 130	--	1.0	12/18/2015 08:51	12/18/2015 18:21	3378709
CCC	SS-4,4'-Dichlorobiphenyl	525.2	N/A			4.9000	5.0	ug/L	98	70 - 130	--	1.0	12/18/2015 08:51	12/18/2015 18:21	3378709
CCC	SS-2,4,5,8-Tetrachloro-m-xylene	525.2	N/A			4.8640	5.0	ug/L	98	70 - 130	--	1.0	12/18/2015 08:51	12/18/2015 18:21	3378709
CCC	SS-Triphenylphosphate	625.2	N/A			5.0450	5.0	ug/L	101	70 - 130	--	1.0	12/18/2015 08:51	12/18/2015 18:21	3378709
CCC	Benzo(a)pyrene	525.2	0.02			6.1960	5.0	ug/L	124	70 - 130	--	1.0	12/18/2015 08:51	12/18/2015 18:21	3378708
CCC	Di(2-ethylhexyl)sebacate	525.2	0.8			6.4470	5.0	ug/L	129	70 - 130	--	1.0	12/18/2015 08:51	12/18/2015 18:21	3378709
CCC	Di(2-ethylhexyl)phthalate	525.2	0.6			6.1310	5.0	ug/L	123	70 - 130	--	1.0	12/18/2015 08:51	12/18/2015 18:21	3378708
CCC	IS-Chrysene-d12	525.2	N/A			1302000	1302000	ug/L	100	70 - 130	--	1.0	12/18/2015 08:51	12/18/2015 20:03	3378710
CCC	IS-Phenanthrene-d10	525.2	N/A			1718000	1718000	ug/L	100	70 - 130	--	1.0	12/18/2015 08:51	12/18/2015 20:03	3378710
CCC	IS-Pyrene-d10	525.2	N/A			1271000	1271000	ug/L	100	70 - 130	--	1.0	12/18/2015 08:51	12/18/2015 20:03	3378710
CCC	SS-4,4'-Dichlorobiphenyl	625.2	N/A			3.9890	5.0	ug/L	80	70 - 130	--	1.0	12/18/2015 08:51	12/18/2015 20:03	3378710
CCC	SS-2,4,5,8-Tetrachloro-m-xylene	625.2	N/A			4.7620	5.0	ug/L	95	70 - 130	--	1.0	12/18/2015 08:51	12/18/2015 20:03	3378710
CCC	SS-Triphenylphosphate	625.2	N/A			5.0870	5.0	ug/L	101	70 - 130	--	1.0	12/18/2015 08:51	12/18/2015 20:03	3378710
CCC	Acenaphthene	625.2	0.1			6.4970	5.0	ug/L	110	72 - 122	--	1.0	12/18/2015 08:51	12/18/2015 20:03	3378710
CCC	Acenaphthylene	625.2	0.1			6.7630	5.0	ug/L	115	70 - 130	--	1.0	12/18/2015 08:51	12/18/2015 20:03	3378710
CCC	Anthracene	625.2	0.1			6.7980	5.0	ug/L	118	70 - 130	--	1.0	12/18/2015 08:51	12/18/2015 20:03	3378710
CCC	Phenanthrene	625.2	0.1			5.3220	5.0	ug/L	108	70 - 130	--	1.0	12/18/2015 08:51	12/18/2015 20:03	3378710
CCC	Pyrene	625.2	0.1			5.4030	5.0	ug/L	108	70 - 130	--	1.0	12/18/2015 08:51	12/18/2015 20:03	3378710
LFB	IS-Chrysene-d12	525.2	N/A			1022000	1302000	ug/L	76	70 - 130	--	1.0	12/18/2015 08:51	12/18/2015 20:46	3378705
LFB	IS-Phenanthrene-d10	525.2	N/A			1438000	1718000	ug/L	84	70 - 130	--	1.0	12/18/2015 08:51	12/18/2015 20:46	3378705
LFB	IS-Pyrene-d10	525.2	N/A			1175000	1271000	ug/L	92	70 - 130	--	1.0	12/18/2015 08:51	12/18/2015 20:46	3378705
LFB	SS-4,4'-Dichlorobiphenyl	525.2	N/A			4.3810	5.0	ug/L	68	70 - 130	--	1.0	12/18/2015 08:51	12/18/2015 20:46	3378705
LFB	SS-2,4,5,8-Tetrachloro-m-xylene	525.2	N/A			4.0330	5.0	ug/L	81	70 - 130	--	1.0	12/18/2015 08:51	12/18/2015 20:46	3378705
LFB	SS-Triphenylphosphate	525.2	N/A			5.8200	5.0	ug/L	112	70 - 130	--	1.0	12/18/2015 08:51	12/18/2015 20:46	3378705
LFB	Fluoranthene	525.2	0.1			5.2130	5.0	ug/L	104	74 - 125	--	1.0	12/18/2015 08:51	12/18/2015 20:46	3378705
LFB	IS-Chrysene-d12	625.2	N/A			1277000	1302000	ug/L	98	70 - 130	--	1.0	12/18/2015 08:51	12/18/2015 21:27	3378706
LFB	IS-Phenanthrene-d10	525.2	N/A			1787000	1718000	ug/L	103	70 - 130	--	1.0	12/18/2015 08:51	12/18/2015 21:27	3378706
LFB	IS-Pyrene-d10	525.2	N/A			1423000	1271000	ug/L	112	70 - 130	--	1.0	12/18/2015 08:51	12/18/2015 21:27	3378706
LFB	SS-4,4'-Dichlorobiphenyl	525.2	N/A			4.7880	5.0	ug/L	96	70 - 130	--	1.0	12/18/2015 08:51	12/18/2015 21:27	3378706
LFB	SS-2,4,5,8-Tetrachloro-m-xylene	525.2	N/A			4.6940	6.0	ug/L	92	70 - 130	--	1.0	12/18/2015 08:51	12/18/2015 21:27	3378706
LFB	SS-Triphenylphosphate	525.2	N/A			5.2830	5.0	ug/L	105	70 - 130	--	1.0	12/18/2015 08:51	12/18/2015 21:27	3378706

QC Summary Report (cont.)

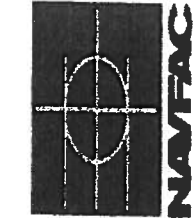
Sample Type	Analyte	Method	MRL	Client ID	Result Flag	Amount	Target	Units	% Recovery	Recovery Limits	RPD Link	DH Factor	Extracted	Analyzed	EEA ID #
LFB	Benz(a)pyrene	525.2	0.02	--		5.0470	5.0	ug/L	119	70 - 130	--	1.0	12/18/2015 08:51	12/18/2016 21:27	3376700
LFB	D(2-ethylhexyl)adipate	525.2	0.8	--		6.1600	5.0	ug/L	123	70 - 130	--	1.0	12/18/2015 08:51	12/18/2016 21:27	3376700
LFB	D(2-ethylhexyl)phthalate	525.2	0.8	--		5.7040	5.0	ug/L	114	70 - 130	--	1.0	12/18/2015 08:51	12/18/2016 21:27	3376700
LFB	IS-Chrysene-d12	525.2	N/A	--		1098000	1302000	ug/L	84	70 - 130	--	1.0	12/18/2015 08:51	12/18/2016 22:09	3376707
LFB	IS-Phenanthrene-d10	525.2	N/A	--		1420000	1716000	ug/L	83	70 - 130	--	1.0	12/18/2015 08:51	12/18/2016 22:08	3376707
LFB	IS-Pyrene-d10	525.2	N/A	--		1165000	1271000	ug/L	94	70 - 130	--	1.0	12/18/2015 08:51	12/18/2016 22:09	3376707
LFB	SS-4,4'-Dichlorobiphenyl	525.2	N/A	--		3.9290	5.0	ug/L	79	70 - 130	--	1.0	12/18/2015 08:51	12/18/2016 22:09	3376707
LFB	SS-2,4,5,6-Tetrachloro-m-xylene	525.2	N/A	--		4.4390	5.0	ug/L	89	70 - 130	--	1.0	12/18/2015 08:51	12/18/2016 22:09	3376707
LFB	SS-Triphenylphosphate	525.2	N/A	--		5.3620	5.0	ug/L	107	70 - 130	--	1.0	12/18/2015 08:51	12/18/2016 22:09	3376707
LFB	Acenaphthene	525.2	0.1	--		6.5050	5.0	ug/L	110	58 - 116	--	1.0	12/18/2015 08:51	12/18/2016 22:06	3376707
LFB	Acenaphthylene	525.2	0.1	--		5.8000	5.0	ug/L	112	70 - 130	--	1.0	12/18/2015 08:51	12/18/2016 22:09	3376707
LFB	Anthracene	525.2	0.1	--		5.5590	5.0	ug/L	111	70 - 130	--	1.0	12/18/2015 08:51	12/18/2016 22:09	3376707
LFB	Phenanthrene	525.2	0.1	--		5.5400	5.0	ug/L	111	70 - 130	--	1.0	12/18/2015 08:51	12/18/2016 22:06	3376707
LFB	Pyrene	525.2	0.1	--		6.8100	5.0	ug/L	112	70 - 130	--	1.0	12/18/2015 08:51	12/18/2016 22:06	3376707
LMB	IS-Chrysene-d12	525.2	N/A	--		1032000	1302000	ug/L	79	70 - 130	--	0.97	12/18/2015 08:51	12/18/2016 23:33	3376704
LMB	IS-Phenanthrene-d10	525.2	N/A	--		1506000	1716000	ug/L	88	70 - 130	--	0.97	12/18/2015 08:51	12/18/2016 23:33	3376704
LMB	IS-Pyrene-d10	525.2	N/A	--		1247000	1271000	ug/L	88	70 - 130	--	0.97	12/18/2015 08:51	12/18/2016 23:33	3376704
LMB	SS-4,4'-Dichlorobiphenyl	525.2	N/A	--		4.6460	5.0	ug/L	88	70 - 130	--	0.97	12/18/2015 08:51	12/18/2016 23:33	3376704
LMB	SS-2,4,5,6-Tetrachloro-m-xylene	525.2	N/A	--		4.4680	5.0	ug/L	83	70 - 130	--	0.97	12/18/2015 08:51	12/18/2016 23:33	3376704
LMB	SS-Triphenylphosphate	525.2	N/A	--		5.4680	5.0	ug/L	113	70 - 130	--	0.97	12/18/2015 08:51	12/18/2016 23:33	3376704
LMB	Acenaphthene	525.2	0.1	--	<	0.1		ug/L	--	--	--	0.97	12/18/2015 08:51	12/18/2016 23:33	3376704
LMB	Acenaphthylene	525.2	0.1	--	<	0.1		ug/L	--	--	--	0.97	12/18/2015 08:51	12/18/2016 23:33	3376704
LMB	Anthracene	525.2	0.1	--	<	0.1		ug/L	--	--	--	0.97	12/18/2015 08:51	12/18/2016 23:33	3376704
LMB	Benzo(a)pyrene	525.2	0.02	--	<	0.02		ug/L	--	--	--	0.97	12/18/2015 08:51	12/18/2016 23:33	3376704
LMB	D(2-ethylhexyl)adipate	525.2	0.8	--	<	0.6		ug/L	--	--	--	0.97	12/18/2015 08:51	12/18/2016 23:30	3376704
LMB	D(2-ethylhexyl)phthalate	525.2	0.8	--	<	0.6		ug/L	--	--	--	0.97	12/18/2015 08:51	12/18/2016 23:33	3376704
LMB	Fluoranthene	525.2	0.1	--	<	0.1		ug/L	--	--	--	0.97	12/18/2015 08:51	12/18/2016 23:33	3376704
LMB	Phenanthrene	525.2	0.1	--	<	0.1		ug/L	--	--	--	0.97	12/18/2015 08:51	12/18/2016 23:33	3376704
LMB	Pyrene	525.2	0.1	--	<	0.1		ug/L	--	--	--	0.97	12/18/2015 08:51	12/18/2016 23:33	3376704
FS	IS-Chrysene-d12	525.2	N/A	16-001514_JBPHH Rad HI		1205000	1302000	ug/L	83	70 - 130	--	0.97	12/18/2015 08:51	12/18/2016 02:21	3376089
FS	IS-Phenanthrene-d10	525.2	N/A	16-001514_JBPHH Rad HI		1638000	1716000	ug/L	95	70 - 130	--	0.97	12/18/2015 08:51	12/18/2016 02:21	3376089
FS	IS-Pyrene-d10	525.2	N/A	16-001514_JBPHH Rad HI		1331000	1271000	ug/L	105	70 - 130	--	0.97	12/18/2015 08:51	12/18/2016 02:21	3376089
FS	SS-4,4'-Dichlorobiphenyl	525.2	N/A	16-001514_JBPHH Rad HI		4.6440	5.0	ug/L	96	70 - 130	--	0.97	12/18/2015 08:51	12/18/2016 02:21	3376089
FS	SS-2,4,5,6-Tetrachloro-m-xylene	525.2	N/A	16-001514_JBPHH Rad HI		4.6800	5.0	ug/L	96	70 - 130	--	0.97	12/18/2015 08:51	12/18/2016 02:21	3376089
FS	SS-Triphenylphosphate	525.2	N/A	16-001514_JBPHH Rad HI		5.0290	5.0	ug/L	104	70 - 130	--	0.97	12/18/2015 08:51	12/18/2016 02:21	3376089
FS	Acenaphthene	525.2	0.1	16-001514_JBPHH Rad HI	<	0.1		ug/L	--	--	--	0.97	12/18/2015 08:51	12/18/2016 02:21	3376089
FS	Acenaphthylene	525.2	0.1	16-001514_JBPHH Rad HI	<	0.1		ug/L	--	--	--	0.97	12/18/2015 08:51	12/18/2016 02:21	3376089
FS	Anthracene	525.2	0.1	16-001514_JBPHH Rad HI	<	0.1		ug/L	--	--	--	0.97	12/18/2015 08:51	12/18/2016 02:21	3376089
FS	Benzo(a)pyrene	525.2	0.02	16-001514_JBPHH Rad HI	<	0.02		ug/L	--	--	--	0.97	12/18/2015 08:51	12/18/2016 02:21	3376089
FS	D(2-ethylhexyl)adipate	525.2	0.8	16-001514_JBPHH Rad HI	<	0.6		ug/L	--	--	--	0.97	12/18/2015 08:51	12/18/2016 02:21	3376089
FS	D(2-ethylhexyl)phthalate	525.2	0.8	16-001514_JBPHH Rad HI	<	0.6		ug/L	--	--	--	0.97	12/18/2015 08:51	12/18/2016 02:21	3376089

QC Summary Report (cont.)																
Sample Type	Analyte	Method	MRL	Client ID	Result Flag	Amount	Target	Units	% Recovery	Recovery Limits	RPD	RPD Limit	DH Factor	Extracted	Analyzed	EEA ID #
FS	Fluorethene	525.2	0.1	18-001514_JBP-HH Rad HH	<	0.1		ug/L					0.97	12/18/2015 08:51	12/19/2015 02:21	3376089
FS	Phenanthrene	525.2	0.1	18-001514_JBP-HH Rad HH	<	0.1		ug/L					0.97	12/18/2015 08:51	12/19/2015 02:21	3376089
FS	Pyrene	525.2	0.1	18-001514_JBP-HH Rad HH	<	0.1		ug/L					0.97	12/18/2015 08:51	12/19/2015 02:21	3376089
M5	IS-Chrysenes-d12	525.2	N/A	18-001514_JBP-HH Rad HH		1260000	1302000	ug/L	100	70 - 130			0.97	12/18/2015 08:51	12/19/2015 03:03	3376701
M5	IS-Phenanthrene-d10	525.2	N/A	18-001514_JBP-HH Rad HH		1725000	1716000	ug/L	101	70 - 130			0.97	12/18/2015 08:51	12/19/2015 03:03	3376701
M5	IS-Pyrene-d10	525.2	N/A	18-001514_JBP-HH Rad HH		1365000	1274000	ug/L	107	70 - 130			0.97	12/18/2015 08:51	12/19/2015 03:03	3376701
M5	SS-4,4'-Dibenzobiphenyl	525.2	N/A	18-001514_JBP-HH Rad HH		3.0710	5.0	ug/L	63	70 - 130			0.97	12/18/2015 08:51	12/19/2015 03:03	3376701
M5	SS-2,4,6-Trichloro-m-xylene	525.2	N/A	18-001514_JBP-HH Rad HH		3.6230	5.0	ug/L	78	70 - 130			0.97	12/18/2015 08:51	12/19/2015 03:03	3376701
M5	SS-Triphenylphosphate	525.2	N/A	18-001514_JBP-HH Rad HH		4.6800	5.0	ug/L	101	70 - 130			0.97	12/18/2015 08:51	12/19/2015 03:03	3376701
M5	Acenaphthene	525.2	0.1	18-001514_JBP-HH Rad HH		5.9690	5.0	ug/L	123	56 - 116			0.97	12/18/2015 08:51	12/19/2015 03:03	3376701
M5	Acenaphthylene	525.2	0.1	18-001514_JBP-HH Rad HH		5.9190	5.0	ug/L	122	70 - 130			0.97	12/18/2015 08:51	12/19/2015 03:03	3376701
M5	Anthracene	525.2	0.1	18-001514_JBP-HH Rad HH		2.4430	5.0	ug/L	59	70 - 130			0.97	12/18/2015 08:51	12/19/2015 03:03	3376701
M5	Benzofluorene	525.2	0.02	18-001514_JBP-HH Rad HH		5.3810	5.0	ug/L	111	70 - 130			0.97	12/18/2015 08:51	12/19/2015 03:03	3376701
M5	DIC-ethylheptylphosphate	525.2	0.6	18-001514_JBP-HH Rad HH		0.4770	5.0	ug/L	134	70 - 130			0.97	12/18/2015 08:51	12/19/2015 03:03	3376701
M5	DIC-nonylheptylphosphate	525.2	0.6	18-001514_JBP-HH Rad HH		6.3490	5.0	ug/L	131	70 - 130			0.97	12/18/2015 08:51	12/19/2015 03:03	3376701
M5	Fluoranthene	525.2	0.1	18-001514_JBP-HH Rad HH		5.2500	5.0	ug/L	106	74 - 125			0.97	12/18/2015 08:51	12/19/2015 03:03	3376701
M5	Phenanthrene	525.2	0.1	18-001514_JBP-HH Rad HH		4.9600	5.0	ug/L	102	70 - 130			0.97	12/18/2015 08:51	12/19/2015 03:03	3376701
M5	Pyrene	525.2	0.1	18-001514_JBP-HH Rad HH		5.4070	5.0	ug/L	111	70 - 130			0.97	12/18/2015 08:51	12/19/2015 03:03	3376701

Sample Type Key

<u>Type (Abbr.)</u>	<u>Sample Type</u>	<u>Type (Abbr.)</u>	<u>Sample Type</u>
CCC	Continuing Calibration Check		
CCL	Continuing Calibration Low		
FS	Field Sample		
LFB	Laboratory Fortified Blank		
LMB	Laboratory Method Blank		
LTB	Laboratory Trip Blank		
MS	Matrix Spike		

END OF REPORT



NAVFAC HAWAII ENVIRONMENTAL SERVICES LABORATORY CHAIN-OF-CUSTODY

Navy Facilities Engineering Command, Hawaii, PRP411, Pearl Harbor, Hawaii Phone: (808) 474-3704, FAX: (808) 471-4534

JON: 114847902016	ESM: Randy Kawamura	POC: Randy Kawamura	PH#: 473-3160	FAX#: 473-1545
Report To: Randy Kawamura	Copy To: Arleen Mizuno	Copy To: NAVFAC HI EVI		
NAVFAC HI OPBP6	randy.kawamura@navy.mil	arleen.mizuno@navy.mil		

Sample ID	Sample Description	Matrix Code	Sampling		Container		Analysis Required	Preservative / Res. Cl (ppm)	pH	FOR LAB USE ONLY			Cond. A U
			Date	Time	Vol	Type				Lab Number	Ext.	Lcfn.	
Joint Base Pearl Harbor-Hickam (360-011)	Red Hill, TP001, Tap outside the C12 Bldg	DW	12/15/2015	1010	3x40mL	Glass	Volatiles (524.2)	Ascorbic, HCl			1-3	C	✓
					2x1L	Glass	Semi-Volatiles (525.2)	Sulfite, HCl			4-5	C	✓
					3x40mL	Glass	TPH as Diesel (JP-8) (8015)				6-8	C	✓
					125mL	Plastic	Lead (200 R)	HNO ₃ , pH<2			9	C	✓
Trip Blank					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: °C Air bill/Carrier ID#:	Unused Sample Disposition <input type="checkbox"/> Return to customer <input checked="" type="checkbox"/> Dispose at 60 Days <input type="checkbox"/> Archive for ___ Days <input type="checkbox"/> Contact before disposal	Sample Condition <input checked="" type="checkbox"/> Received with CoC <input type="checkbox"/> Received with Custody Seals <input type="checkbox"/> Seals Required Seals Intact <input checked="" type="checkbox"/> 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) K. Miyaki	Date 12/15/15	Time 1350	Received By: (Print clearly & Sign) <i>[Signature]</i>	Date 12/15/15	Time 1350
--	------------------	--------------	---	------------------	--------------

MEMORANDUM

11 Jan 16

Packet No: 16-015980111

From: NAVFAC HAWAII, Environmental Services Laboratory, PRP411

To: Randy Kawamura NAVFACHI OPHP61

Copy To: Arleen Mizuno NAVFAC HI

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

Encl: Lab Number(s) 16-01598

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.~~ *9/11/16*



Duane Morita, Acting Laboratory Manager

TOTAL NO. OF PAGES: 14

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:

ENCLOSURE(2)

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	Montana	CERT0026
Alaska	IN00035	Nebraska	E87775
Arizona	AZ0432	Nevada	IN000352015-1
Arkansas	IN035	New Hampshire*	2124
California	2920	New Mexico	IN00035
Colorado	IN035	New Jersey*	IN598
Colorado Radiochemistry	IN035	New York*	11398
Connecticut	PH-0132	North Carolina	18700
Delaware	IN035	North Dakota	R-035
Florida (Primary AB)*	E87775	Ohio	87775
Georgia	929	Oklahoma	D9508
Hawaii	IN035	Oregon*	IN200001
Idaho	IN00035/E87775	Pennsylvania*	68-00436
Illinois*	200001	Puerto Rico	IN00035
Illinois Microbiology	200001	Rhode Island	LAO00241
Indiana Chemistry	C-71-01	South Carolina	95005
Indiana Microbiology	M-76-07	South Dakota	IN00035
Iowa	098	Tennessee	TN02973
Kansas*	E-10233	Texas*	T104704187-14-7
Kentucky	90056	Texas/TCEQ	TX207
Louisiana*	LA150003	Utah*	IN00035
Maine	IN00035	Vermont	VT-8775
Maryland	209	Virginia*	00127
Massachusetts	M-IN035	Washington	C837
Michigan	9926	West Virginia	9927 C
Minnesota*	018 999-338	Wisconsin	999766900
Mississippi	IN035	Wyoming	IN035
Missouri	880		

*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
Copies to: None

Report: 355302
Priority: Rush Verbal
Status: Final
PWS ID: HI0000360

Sample Information					
EEA ID #	Client ID	Method	Collected Date / Time	Collected By:	Received Date / Time
3379090	16-01598,JBP HHRedHITP001	200.8	12/21/15 08:31	Client	12/24/15 09:30

Report Summary

Note: Sample container was provided by the client.

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 Trott at (574) 233-4777.

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

[Signature]

Authorized Signature Title

12/29/2015

Date

Client Name: NAVFAC Hawaii
Report #: 355302

Client Name: NAVFAC Hawaii

Report #: 355302

Sampling Point: 16-01598,JBPHHRedHillITP001

PWS ID: HI0000360

Metals									
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID #
7439-92-1	Lead	200.8	15 !	1.0	< 1.0	ug/L	---	12/28/15 14:22	3379090

† 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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South Bend, IN 46617
T: 1.800.332.4345
F: 1.574.233.8207

Order # 287061
Batch # 255202

www.eurofinsanalytical.com

Shaded area for EEA use only

CHAIN OF CUSTODY RECORD

Page 1 of 2

REPORT TO		SAMPLER (Signature)		STATE (sample origin)		PROJECT NAME		POF	
NAVFAC Hawaii				HI					
BILL TO		COMPLIANCE MONITORING		Yes No		POPULATION SERVED		# OF CONTAINERS	
NAVFAC Hawaii		X		No		GW			
LAB Number		COLLECTION		SAMPLING SITE		TEST NAME		CHLORINATED	
		DATE TIME AM PM		per State Requirements				YES NO	
1 332910		12/21/15 0831 X		16-001598 JBPHH Red Hill		Lead (200.8)		PH2.55 X	
2				TP001 360-011		resample for 16-01514			
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
RELINQUISHED BY: (Signature)		DATE TIME AM PM		RECEIVED BY: (Signature)		DATE TIME AM PM		LAB COMMENTS	
<i>[Signature]</i>		12/21/15 1030 AM		Fedcx 8613 5092 3930				Client Provided Sample Container	
RELINQUISHED BY: (Signature)		DATE TIME AM PM		RECEIVED BY: (Signature)		DATE TIME AM PM		CONDITIONS UPON RECEIPT (check only)	
								<input type="checkbox"/> Ice <input checked="" type="checkbox"/> Ambient <input type="checkbox"/> Upon Receipt <input checked="" type="checkbox"/> N/A	
RELINQUISHED BY: (Signature)		DATE TIME AM PM		RECEIVED FOR LABORATORY BY:		DATE TIME AM PM			
				<i>[Signature]</i>		12/21/15 1730 AM			
MATRIX CODES:		TURN-AROUND TIME (TAT) SURCHARGES							
DW-DRINKING WATER RW-REAGENT WATER GW-GROUND WATER SW-SURFACE WATER PW-POOL WATER WW-WASTE WATER		SW = Standard Within. (15 working days) 6% RW = Rush Within. (5 working days) 50% GW = Rush Within. (5 working days) 75%		NP = Immediate Verbal. (3 working days) 100% RW = Immediate Verbal. (3 working days) 125% SW = Weekend / Holiday STAT = Less than 48 hours		100% 125% CALL CALL		Samples received unannounced with less than 48 hours holding time remaining may be subject to additional charge.	

Gross Off on COG by Client
Bottle Shows 16-01548-1
used for leg-in 5512.2445
RUSH VERBAL



NAVFAC HAWAII ENVIRONMENTAL SERVICES LABORATORY CHAIN-OF-CUSTODY
 Navy Facilities Engineering Command, Hawaii, PRP411, Pearl Harbor, Hawaii Phone: (808) 474-3704, FAX: (808) 471-4534

JON: 114847902016 ESM: POC: Randy Kawamura PH#: 473-3160 FAX#: 473-1545
 Report To: Randy Kawamura Copy To: Arleen Mizuno
 NAVFAC HI OPBP6 NAVFAC HI EV1
 randy.kawamura@navy.mil arleen.mizuno@navy.mil

Sample ID	Sample Description	Matrix Code	Sampling		Container		Analysis Required	Preservative / Res. Cl (ppm)	FOR LAB USE ONLY			Cond. A U
			Date	Time	Vol	Type			pH	Lab Number	Ext	
Joint Base Pearl Harbor-Hickam (360-011)	Red Hill, TP001, Tap outside the C12 Bldg	DW	12/21/15	0831	125ml.	Plastic	Lead (200.8)	HNO ₃ , pH<2	16-01598	1	C	✓

AGENT PROVIDED SAMPLE CONTAINER

Sampling Information
 Location Sampled: Red Hill
 Sampler(s): (Print names clearly) K. Miyaki
 Remarks: Any EPA approved drinking water method for organic chemicals, 40 CFR 141.24, may be used.
 Laboratory must be certified by the Hawaii State DOH Drinking Water Program.
 Resample for 16-01514

Transportation Information
 Transported/Stored in: hand carry cooler with ice
 Cooler Temp: 4°C
 Air Bill/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

Relinquished By: (Print clearly & Sign)
 K. Miyaki
 Date: 12/21/15 13:40
 Received By: (Print clearly & Sign)
 Leigh N. Hokama
 Date: 12/24/15 0930
 Time: 13:40



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Eurofins Eaton Analytical

Run Log

Run ID: 211219 Method: 200.8

Type	Sample Id	Sample Site	Matrix	Instrument ID	Analysis Date	Calibration File
QCS	3377696		RW	DS	12/28/2015 13:14	
ICV	3377697		RW	DS	12/28/2015 13:17	
ICB	3377698		RW	DS	12/28/2015 13:20	
LRB	3377700		RW	DS	12/28/2015 13:23	
LFB	3377702		RW	DS	12/28/2015 13:29	
CCV	3377705		RW	DS	12/28/2015 14:10	
CCB	3377706		RW	DS	12/28/2015 14:13	
FS	3379090	16-01598,JBPHHRedHIIITP001	DW	DS	12/28/2015 14:2	
MS	3379351	16-01598,JBPHHRedHIIITP001	DW	DS	12/28/2015 14:2	
MSD	3379352	16-01598,JBPHHRedHIIITP001	DW	DS	12/28/2015 14:2	
QCS	3377709		RW	DS	12/28/2015 14:32	
CCV	3377712		RW	DS	12/28/2015 14:35	
CCB	3377713		RW	DS	12/28/2015 14:38	



QC Summary Report

Sample Type	Analyte	Method	MRL	Client ID	Result Flag	Amount	Target	Units	% Recovery	Recovery Limits	RPD Limit	DII Factor	Extracted	Analyzed	EEA ID #
QCS	IS-Bismuth	200.8	N/A			1.0137	1.0	N/A	101	60 - 125	--	1.0	--	12/28/2015 13:14	3377696
QCS	Lead	200.8	1.0			49.6390	50.0	ug/L	99	90 - 110	--	1.0	--	12/28/2015 13:14	3377696
QCS	IS-Scandium	200.8	N/A			0.9752	1.0	N/A	98	60 - 125	--	1.0	--	12/28/2015 13:14	3377696
QCS	IS-Yttrium	200.8	N/A			0.9807	1.0	N/A	98	60 - 125	--	1.0	--	12/28/2015 13:14	3377696
ICV	IS-Bismuth	200.8	N/A			0.9828	1.0	N/A	98	60 - 125	--	1.0	--	12/28/2015 13:17	3377697
ICV	Lead	200.8	1.0			48.7710	50.0	ug/L	100	90 - 110	--	1.0	--	12/28/2015 13:17	3377697
ICV	IS-Scandium	200.8	N/A			0.9588	1.0	N/A	98	60 - 125	--	1.0	--	12/28/2015 13:17	3377697
ICV	IS-Yttrium	200.8	N/A			0.9631	1.0	N/A	98	60 - 125	--	1.0	--	12/28/2015 13:17	3377697
ICB	IS-Bismuth	200.8	N/A			1.0010	1.0	N/A	100	60 - 125	--	1.0	--	12/28/2015 13:20	3377698
ICB	Lead	200.8	1.0		<	1.0		ug/L	--	--	--	1.0	--	12/28/2015 13:20	3377698
ICB	IS-Scandium	200.8	N/A			0.9701	1.0	N/A	97	60 - 125	--	1.0	--	12/28/2015 13:20	3377698
ICB	IS-Yttrium	200.8	N/A			0.9730	1.0	N/A	97	60 - 125	--	1.0	--	12/28/2015 13:20	3377698
LRB	IS-Bismuth	200.8	N/A			0.9894	1.0	N/A	98	60 - 125	--	1.0	--	12/28/2015 13:23	3377700
LRB	Lead	200.8	1.0		<	1.0		ug/L	--	--	--	1.0	--	12/28/2015 13:23	3377700
LRB	IS-Scandium	200.8	N/A			0.9882	1.0	N/A	97	60 - 125	--	1.0	--	12/28/2015 13:23	3377700
LRB	IS-Yttrium	200.8	N/A			0.9676	1.0	N/A	97	60 - 125	--	1.0	--	12/28/2015 13:23	3377700
LFB	IS-Bismuth	200.8	N/A			0.9907	1.0	N/A	99	60 - 125	--	1.0	--	12/28/2015 13:28	3377702
LFB	Lead	200.8	1.0			100.3880	100	ug/L	100	85 - 115	--	1.0	--	12/28/2015 13:29	3377702
LFB	IS-Scandium	200.8	N/A			0.9824	1.0	N/A	98	60 - 125	--	1.0	--	12/28/2015 13:29	3377702
LFB	IS-Yttrium	200.8	N/A			0.9517	1.0	N/A	98	60 - 125	--	1.0	--	12/28/2015 13:29	3377702
CCV	IS-Bismuth	200.8	N/A			1.0108	1.0	N/A	101	60 - 125	--	1.0	--	12/28/2015 14:10	3377705
CCV	Lead	200.8	1.0			48.3180	50.0	ug/L	98	65 - 115	--	1.0	--	12/28/2015 14:10	3377705
CCV	IS-Scandium	200.8	N/A			0.9819	1.0	N/A	98	60 - 125	--	1.0	--	12/28/2015 14:10	3377705
CCV	IS-Yttrium	200.8	N/A			0.9802	1.0	N/A	98	60 - 125	--	1.0	--	12/28/2015 14:10	3377705
CCB	IS-Bismuth	200.8	N/A			0.9842	1.0	N/A	99	60 - 125	--	1.0	--	12/28/2015 14:13	3377706
CCB	Lead	200.8	1.0		<	1.0		ug/L	--	--	--	1.0	--	12/28/2015 14:13	3377706
CCB	IS-Scandium	200.8	N/A			0.9367	1.0	N/A	94	60 - 125	--	1.0	--	12/28/2015 14:13	3377706
CCB	IS-Yttrium	200.8	N/A			0.9436	1.0	N/A	94	60 - 125	--	1.0	--	12/28/2015 14:13	3377706
FS	IS-Bismuth	200.8	N/A			0.9858	1.0	N/A	97	60 - 125	--	1.0	--	12/28/2015 14:22	3378080
FS	Lead	200.8	1.0	16-001568_JSPHHRochelITP001	<	1.0		ug/L	--	--	--	1.0	--	12/28/2015 14:22	3378080
FS	IS-Scandium	200.8	N/A			0.9483	1.0	N/A	95	60 - 125	--	1.0	--	12/28/2015 14:22	3378080
FS	IS-Yttrium	200.8	N/A			0.9487	1.0	N/A	98	60 - 125	--	1.0	--	12/28/2015 14:22	3378080
MS	IS-Bismuth	200.8	N/A			0.9844	1.0	N/A	98	60 - 125	--	1.0	--	12/28/2015 14:26	3379351
MS	Lead	200.8	1.0	16-001568_JSPHHRochelITP001		49.3730	50.345988	ug/L	98	70 - 130	--	1.0	--	12/28/2015 14:26	3379351
MS	IS-Scandium	200.8	N/A			0.9815	1.0	N/A	98	60 - 125	--	1.0	--	12/28/2015 14:26	3379351
MS	IS-Yttrium	200.8	N/A			0.9747	1.0	N/A	97	60 - 125	--	1.0	--	12/28/2015 14:26	3379351
TMASD	IS-Bismuth	200.8	N/A			0.9783	1.0	N/A	98	60 - 125	--	1.0	--	12/28/2015 14:28	3379362
CMASD	Lead	200.8	1.0	16-001568_JSPHHRochelITP001		48.2240	50.345988	ug/L	98	70 - 130	0.3	16	1.0	12/28/2015 14:28	3379362
COMSD	IS-Scandium	200.8	N/A			0.9784	1.0	N/A	98	60 - 125	--	1.0	--	12/28/2015 14:28	3379362
TMASD	IS-Yttrium	200.8	N/A			0.9780	1.0	N/A	98	60 - 125	--	1.0	--	12/28/2015 14:28	3379362

EEA Run ID 211219 / EEA Report # 355302

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 #
QCS	IS-Bismuth	200.8	N/A	---		1.0073	1.0	N/A	101	60 - 125	---	1.0	---	12/28/2015 14:32	3377709
QCS	Lead	200.8	1.0	---		49.0840	50.0	ug/L	98	90 - 110	---	1.0	---	12/28/2015 14:32	3377709
QCS	IS-Scandium	200.8	N/A	---		0.9844	1.0	N/A	98	60 - 125	---	1.0	---	12/28/2015 14:32	3377709
QCS	IS-Yttrium	200.8	N/A	---		0.9837	1.0	N/A	98	60 - 125	---	1.0	---	12/28/2015 14:32	3377709
CCV	IS-Bismuth	200.8	N/A	---		1.0077	1.0	N/A	101	60 - 125	---	1.0	---	12/28/2015 14:35	3377712
CCV	Lead	200.8	1.0	---		50.4300	50.0	ug/L	101	85 - 115	---	1.0	---	12/28/2015 14:35	3377712
CCV	IS-Scandium	200.8	N/A	---		0.9872	1.0	N/A	97	60 - 125	---	1.0	---	12/28/2015 14:35	3377712
CCV	IS-Yttrium	200.8	N/A	---		0.9712	1.0	N/A	97	60 - 125	---	1.0	---	12/28/2015 14:35	3377712
CCB	IS-Bismuth	200.8	N/A	---		1.0024	1.0	N/A	100	60 - 125	---	1.0	---	12/28/2015 14:38	3377713
CCB	Lead	200.8	1.0	---	<	1.0		ug/L	---	---	---	1.0	---	12/28/2015 14:38	3377713
CCB	IS-Scandium	200.8	N/A	---		0.9647	1.0	N/A	98	60 - 125	---	1.0	---	12/28/2015 14:38	3377713
CCB	IS-Yttrium	200.8	N/A	---		0.9580	1.0	N/A	96	60 - 125	---	1.0	---	12/28/2015 14:38	3377713

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		
FS	Field Sample		
ICV	Initial Cali. Verification		
ICB	Initial Calibration Blank		
LFB	Laboratory Fortified Blank		
LRB	Laboratory Reagent Blank		
MS	Matrix Spike		
MSD	Matrix Spike Duplicate		
QCS	Quality Control Sample		

END OF REPORT

MEMORANDUM

06 Jan 16

Packet No: 16-015390106

From: NAVFAC HAWAII, Environmental Services Laboratory, PRP411

To: Randy Kawamura NAVFACHI OPHP61

Copy To: Arleen Mizuno NAVFAC HI

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

Encl: Lab Number(s) 16-01539 , 16-01540

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.~~ ² ✓ 1/6/16


Duane Morita, Acting Laboratory Manager

TOTAL NO. OF PAGES: 27

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:

ENCLOSURE(3) ¹

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Honolulu
4429 Malaai St. #104
Honolulu, HI 96818
Tel: (808)486-5227

TestAmerica Job ID: 370-91-1
Client Project/Site: Red Hill

For:
NAVFAC Hawaii
Bldg 1423, Central Avenue
Pearl Harbor, Hawaii 96860

Attn: Duane Morita



Authorized for release by:
1/5/2016 4:39:03 PM

Craig Pili'alo'ha, Project Manager I
(808)486-5227
craig.pili'alo'ha@testamericainc.com

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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.



Table of Contents

Cover Page	1
Table of Contents	2
Sample Summary	3
Case Narrative	4
Client Sample Results	5
Method Summary	7
Chronicle	8
QC Sample Results	9
QC Association	15
Definitions	16
Certification Summary	17
Chain of Custody	19
Receipt Checklists	23

Sample Summary

Client: NAVFAC Hawaii
Project/Site: Red Hill

TestAmerica Job ID: 370-91-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
370-91-1	16-01539-1,2,3	Water	12/16/15 09:15	12/16/15 11:24
370-91-2	16-01539-4,5	Water	12/16/15 09:15	12/16/15 11:24
370-91-3	16-01539-6,7	Water	12/16/15 09:15	12/16/15 11:24
370-91-4	16-01540 (Trip Blank)	Water	12/16/15 09:15	12/16/15 11:24

TestAmerica Honolulu

Case Narrative

Client: NAVFAC Hawaii
Project/Site: Red Hill

TestAmerica Job ID: 370-91-1

Job ID: 370-91-1

Laboratory: TestAmerica Honolulu



Narrative

Job Narrative 370-91-1

Comments

No additional comments.

Receipt

The samples were received on 12/16/2015 11:24 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.4° C.

GC/MS VOA

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

GC/MS Semi VOA

Method(s) 525.2: The reference method requires samples to be preserved to a pH of <2. The following sample was received with insufficient preservation at a pH of 3.16-01539-4,5 (370-91-2). The sample(s) was preserved to the appropriate pH in the laboratory.

Method(s) 525.2: Sample was spiked with twice the amount of spike: (490-94275-C-1-B MS)

Method(s) 525.2: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for preparation batch 680-415438 and analytical batch 680-416297 was outside control limits due to discrepancy in spiking volumes.

Method(s) 525.2: The initial calibration verification (ICV) result for batch 680-416297 was above the upper control limit for Hexachlorocyclopentadiene. Sample results were non-detects for this analyte and have been reported.

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

GC Semi VOA

Method(s) 8015B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with batch preparation batch 440-301228 and analytical batch 440-301287. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.(LCS 440-301228/2-A)

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

Organic Prep

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

Client Sample Results

Client: NAVFAC Hawaii
Project/Site: Red Hill

TestAmerica Job ID: 370-91-1

Client Sample ID: 16-01539-1,2,3
Date Collected: 12/16/15 09:15
Date Received: 12/16/15 11:24

Lab Sample ID: 370-91-1
Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			12/21/15 15:20	1
1,1,2-Trichloroethane	ND		0.50	0.20	ug/L			12/21/15 15:20	1
1,1-Dichloroethylene	ND		0.50	0.20	ug/L			12/21/15 15:20	1
1,2,4-Trichlorobenzene	ND		0.50	0.20	ug/L			12/21/15 15:20	1
1,2-Dichlorobenzene	ND		0.50	0.20	ug/L			12/21/15 15:20	1
1,2-Dichloroethane	ND		0.50	0.20	ug/L			12/21/15 15:20	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			12/21/15 15:20	1
1,4-Dichlorobenzene	ND		0.50	0.20	ug/L			12/21/15 15:20	1
Benzene	ND		0.50	0.20	ug/L			12/21/15 15:20	1
Carbon tetrachloride	ND		0.50	0.20	ug/L			12/21/15 15:20	1
Chlorobenzene	ND		0.50	0.20	ug/L			12/21/15 15:20	1
cis-1,2-Dichloroethylene	ND		0.50	0.20	ug/L			12/21/15 15:20	1
Dichloromethane	ND		0.50	0.40	ug/L			12/21/15 15:20	1
Ethylbenzene	ND		0.50	0.20	ug/L			12/21/15 15:20	1
m,p-Xylene	ND		0.50	0.20	ug/L			12/21/15 15:20	1
Naphthalene	ND		0.50	0.20	ug/L			12/21/15 15:20	1
o-Xylene	ND		0.50	0.20	ug/L			12/21/15 15:20	1
Styrene	ND		0.50	0.20	ug/L			12/21/15 15:20	1
Tetrachloroethylene	ND		0.50	0.20	ug/L			12/21/15 15:20	1
Toluene	ND		0.50	0.20	ug/L			12/21/15 15:20	1
trans-1,2-Dichloroethylene	ND		0.50	0.20	ug/L			12/21/15 15:20	1
Trichloroethylene	ND		0.50	0.20	ug/L			12/21/15 15:20	1
Vinyl chloride	ND		0.50	0.20	ug/L			12/21/15 15:20	1
Xylenes, Total	ND		0.50	0.20	ug/L			12/21/15 15:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene-d4	92		70 - 130		12/21/15 15:20	1
4-Bromofluorobenzene (Surr)	83		70 - 130		12/21/15 15:20	1

5

Client Sample ID: 16-01539-4,5
Date Collected: 12/16/15 09:15
Date Received: 12/16/15 11:24

Lab Sample ID: 370-91-2
Matrix: Water

Method: 525.2 - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.039	ug/L		12/21/15 08:45	12/30/15 22:34	1
Acenaphthylene	ND		0.19	0.019	ug/L		12/21/15 08:45	12/30/15 22:34	1
Anthracene	ND		0.19	0.022	ug/L		12/21/15 08:45	12/30/15 22:34	1
Benzo[a]pyrene	ND		0.19	0.028	ug/L		12/21/15 08:45	12/30/15 22:34	1
Di (2-ethylhexyl)phthalate	ND		1.9	0.58	ug/L		12/21/15 08:45	12/30/15 22:34	1
Di(2-ethylhexyl)adipate	ND		1.4	0.58	ug/L		12/21/15 08:45	12/30/15 22:34	1
Fluoranthene	ND		0.19	0.019	ug/L		12/21/15 08:45	12/30/15 22:34	1
Phenanthrene	ND		0.19	0.019	ug/L		12/21/15 08:45	12/30/15 22:34	1
Pyrene	ND		0.19	0.019	ug/L		12/21/15 08:45	12/30/15 22:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	98		70 - 130	12/21/15 08:45	12/30/15 22:34	1
Acenaphthene-d10 (Surr)	98		70 - 130	12/21/15 08:45	12/30/15 22:34	1
Chrysene-d12 (Surr)	108		70 - 130	12/21/15 08:45	12/30/15 22:34	1
Perylene-d12	79		70 - 130	12/21/15 08:45	12/30/15 22:34	1

TestAmerica Honolulu

Client Sample Results

Client: NAVFAC Hawaii
Project/Site: Red Hill

TestAmerica Job ID: 370-91-1

Client Sample ID: 16-01539-4,5

Lab Sample ID: 370-91-2

Date Collected: 12/16/15 09:15

Matrix: Water

Date Received: 12/16/15 11:24

Method: 525.2 - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Phenanthrene-d10 (Surr)	101		70 - 130	12/21/15 08:45	12/30/15 22:34	1
Triphenylphosphate	90		70 - 130	12/21/15 08:45	12/30/15 22:34	1

5

Client Sample ID: 16-01539-6,7

Lab Sample ID: 370-91-3

Date Collected: 12/16/15 09:15

Matrix: Water

Date Received: 12/16/15 11:24

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
RRO (C25-C36)	ND		0.049	0.024	mg/L		12/18/15 07:17	12/18/15 18:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane	75		45 - 120	12/18/15 07:17	12/18/15 18:58	1

Client Sample ID: 16-01540 (Trip Blank)

Lab Sample ID: 370-91-4

Date Collected: 12/16/15 09:15

Matrix: Water

Date Received: 12/16/15 11:24

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			12/21/15 15:51	1
1,1,2-Trichloroethane	ND		0.50	0.20	ug/L			12/21/15 15:51	1
1,1-Dichloroethylene	ND		0.50	0.20	ug/L			12/21/15 15:51	1
1,2,4-Trichlorobenzene	ND		0.50	0.20	ug/L			12/21/15 15:51	1
1,2-Dichlorobenzene	ND		0.50	0.20	ug/L			12/21/15 15:51	1
1,2-Dichloroethane	ND		0.50	0.20	ug/L			12/21/15 15:51	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			12/21/15 15:51	1
1,4-Dichlorobenzene	ND		0.50	0.20	ug/L			12/21/15 15:51	1
Benzene	ND		0.50	0.20	ug/L			12/21/15 15:51	1
Carbon tetrachloride	ND		0.50	0.20	ug/L			12/21/15 15:51	1
Chlorobenzene	ND		0.50	0.20	ug/L			12/21/15 15:51	1
cis-1,2-Dichloroethylene	ND		0.50	0.20	ug/L			12/21/15 15:51	1
Dichloromethane	ND		0.50	0.40	ug/L			12/21/15 15:51	1
Ethylbenzene	ND		0.50	0.20	ug/L			12/21/15 15:51	1
m,p-Xylene	ND		0.50	0.20	ug/L			12/21/15 15:51	1
Naphthalene	ND		0.50	0.20	ug/L			12/21/15 15:51	1
o-Xylene	ND		0.50	0.20	ug/L			12/21/15 15:51	1
Styrene	ND		0.50	0.20	ug/L			12/21/15 15:51	1
Tetrachloroethylene	ND		0.50	0.20	ug/L			12/21/15 15:51	1
Toluene	ND		0.50	0.20	ug/L			12/21/15 15:51	1
trans-1,2-Dichloroethylene	ND		0.50	0.20	ug/L			12/21/15 15:51	1
Trichloroethylene	ND		0.50	0.20	ug/L			12/21/15 15:51	1
Vinyl chloride	ND		0.50	0.20	ug/L			12/21/15 15:51	1
Xylenes, Total	ND		0.50	0.20	ug/L			12/21/15 15:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene-d4	93		70 - 130		12/21/15 15:51	1
4-Bromofluorobenzene (Surr)	83		70 - 130		12/21/15 15:51	1

TestAmerica Honolulu

Method Summary

Client: NAVFAC Hawaii
Project/Site: Red Hill

TestAmerica Job ID: 370-91-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL IRV
525.2	Semivolatile Organic Compounds (GC/MS)	EPA	TAL SAV
8015B	Diesel Range Organics (DRO) (GC) Low Level	SW846	TAL IRV

Protocol References:

EPA = US Environmental Protection Agency

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

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



Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

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

TestAmerica Honolulu

Lab Chronicle

Client: NAVFAC Hawaii
Project/Site: Red Hill

TestAmerica Job ID: 370-91-1

Client Sample ID: 16-01539-1,2,3

Date Collected: 12/16/15 09:15

Date Received: 12/16/15 11:24

Lab Sample ID: 370-91-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	301670	12/21/15 15:20	GK	TAL IRV

Client Sample ID: 16-01539-4,5

Date Collected: 12/16/15 09:15

Date Received: 12/16/15 11:24

Lab Sample ID: 370-91-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	525.2			415438	12/21/15 08:45	CMV	TAL SAV
Total/NA	Analysis	525.2		1	416590	12/30/15 22:34	NED	TAL SAV

Client Sample ID: 16-01539-6,7

Date Collected: 12/16/15 09:15

Date Received: 12/16/15 11:24

Lab Sample ID: 370-91-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			301228	12/18/15 07:17	FTD	TAL IRV
Total/NA	Analysis	8015B		1	301287	12/18/15 18:58	KW	TAL IRV

Client Sample ID: 16-01540 (Trip Blank)

Date Collected: 12/16/15 09:15

Date Received: 12/16/15 11:24

Lab Sample ID: 370-91-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	301670	12/21/15 15:51	GK	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

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

TestAmerica Honolulu

QC Sample Results

Client: NAVFAC Hawaii
Project/Site: Red Hill

TestAmerica Job ID: 370-91-1

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-301670/5
Matrix: Water
Analysis Batch: 301670

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	DII Fac
	Result	Qualifier							
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			12/21/15 12:12	1
1,1,2-Trichloroethane	ND		0.50	0.20	ug/L			12/21/15 12:12	1
1,1-Dichloroethylene	ND		0.50	0.20	ug/L			12/21/15 12:12	1
1,2,4-Trichlorobenzene	ND		0.50	0.20	ug/L			12/21/15 12:12	1
1,2-Dichlorobenzene	ND		0.50	0.20	ug/L			12/21/15 12:12	1
1,2-Dichloroethane	ND		0.50	0.20	ug/L			12/21/15 12:12	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			12/21/15 12:12	1
1,4-Dichlorobenzene	ND		0.50	0.20	ug/L			12/21/15 12:12	1
Benzene	ND		0.50	0.20	ug/L			12/21/15 12:12	1
Carbon tetrachloride	ND		0.50	0.20	ug/L			12/21/15 12:12	1
Chlorobenzene	ND		0.50	0.20	ug/L			12/21/15 12:12	1
cis-1,2-Dichloroethylene	ND		0.50	0.20	ug/L			12/21/15 12:12	1
Dichloromethane	ND		0.50	0.40	ug/L			12/21/15 12:12	1
Ethylbenzene	ND		0.50	0.20	ug/L			12/21/15 12:12	1
m,p-Xylene	ND		0.50	0.20	ug/L			12/21/15 12:12	1
Naphthalene	ND		0.50	0.20	ug/L			12/21/15 12:12	1
o-Xylene	ND		0.50	0.20	ug/L			12/21/15 12:12	1
Styrene	ND		0.50	0.20	ug/L			12/21/15 12:12	1
Tetrachloroethylene	ND		0.50	0.20	ug/L			12/21/15 12:12	1
Toluene	ND		0.50	0.20	ug/L			12/21/15 12:12	1
trans-1,2-Dichloroethylene	ND		0.50	0.20	ug/L			12/21/15 12:12	1
Trichloroethylene	ND		0.50	0.20	ug/L			12/21/15 12:12	1
Vinyl chloride	ND		0.50	0.20	ug/L			12/21/15 12:12	1
Xylenes, Total	ND		0.50	0.20	ug/L			12/21/15 12:12	1

8

Surrogate	MB	MB	Limits	Prepared	Analyzed	DII Fac
	%Recovery	Qualifier				
1,2-Dichlorobenzene-d4	90		70 - 130		12/21/15 12:12	1
4-Bromofluorobenzene (Surr)	81		70 - 130		12/21/15 12:12	1

Lab Sample ID: LCS 440-301670/1002
Matrix: Water
Analysis Batch: 301670

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
							Limits
1,1,1-Trichloroethane	10.0	9.40		ug/L		94	70 - 130
1,1,2-Trichloroethane	10.0	9.20		ug/L		92	70 - 130
1,1-Dichloroethylene	10.0	9.98		ug/L		100	70 - 130
1,2,4-Trichlorobenzene	10.0	10.8		ug/L		108	70 - 130
1,2-Dichlorobenzene	10.0	9.31		ug/L		93	70 - 130
1,2-Dichloroethane	10.0	9.47		ug/L		95	70 - 130
1,2-Dichloropropane	10.0	9.52		ug/L		95	70 - 130
1,4-Dichlorobenzene	10.0	10.0		ug/L		100	70 - 130
Benzene	10.0	10.5		ug/L		105	70 - 130
Carbon tetrachloride	10.0	9.26		ug/L		93	70 - 130
Chlorobenzene	10.0	10.4		ug/L		104	70 - 130
cis-1,2-Dichloroethylene	10.0	9.44		ug/L		94	70 - 130
Dichloromethane	10.0	9.69		ug/L		97	70 - 130
Ethylbenzene	10.0	11.0		ug/L		110	70 - 130

TestAmerica Honolulu

QC Sample Results

Client: NAVFAC Hawaii
Project/Site: Red Hill

TestAmerica Job ID: 370-91-1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 440-301670/1002
Matrix: Water
Analysis Batch: 301670

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
m,p-Xylene	20.0	21.5		ug/L		107	70 - 130
Naphthalene	10.0	10.7		ug/L		107	70 - 130
o-Xylene	10.0	10.3		ug/L		103	70 - 130
Styrene	10.0	9.79		ug/L		98	70 - 130
Tetrachloroethylene	10.0	9.45		ug/L		95	70 - 130
Toluene	10.0	10.6		ug/L		106	70 - 130
trans-1,2-Dichloroethylene	10.0	10.1		ug/L		101	70 - 130
Trichloroethylene	10.0	10.0		ug/L		100	70 - 130
Vinyl chloride	10.0	10.8		ug/L		108	70 - 130

8

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichlorobenzene-d4	97		70 - 130
4-Bromofluorobenzene (Surr)	99		70 - 130

Lab Sample ID: 280-77986-C-1 MS
Matrix: Water
Analysis Batch: 301670

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND		10.0	10.0		ug/L		100	70 - 130
1,1,2-Trichloroethane	ND		10.0	9.46		ug/L		95	70 - 130
1,1-Dichloroethylene	ND		10.0	9.67		ug/L		97	70 - 130
1,2,4-Trichlorobenzene	ND		10.0	10.9		ug/L		109	70 - 130
1,2-Dichlorobenzene	ND		10.0	10.4		ug/L		104	70 - 130
1,2-Dichloroethane	ND		10.0	9.83		ug/L		98	70 - 130
1,2-Dichloropropane	ND		10.0	9.54		ug/L		95	70 - 130
1,4-Dichlorobenzene	ND		10.0	11.1		ug/L		111	70 - 130
Benzene	ND		10.0	10.7		ug/L		107	70 - 130
Carbon tetrachloride	ND		10.0	9.93		ug/L		99	70 - 130
Chlorobenzene	ND		10.0	11.0		ug/L		110	70 - 130
cis-1,2-Dichloroethylene	ND		10.0	9.53		ug/L		95	70 - 130
Dichloromethane	ND		10.0	9.87		ug/L		99	70 - 130
Ethylbenzene	ND		10.0	11.7		ug/L		117	70 - 130
m,p-Xylene	ND		20.0	23.0		ug/L		115	70 - 130
Naphthalene	ND		10.0	10.6		ug/L		106	70 - 130
o-Xylene	ND		10.0	11.2		ug/L		112	70 - 130
Styrene	ND		10.0	10.3		ug/L		103	70 - 130
Tetrachloroethylene	ND		10.0	9.95		ug/L		99	70 - 130
Toluene	ND		10.0	11.1		ug/L		111	70 - 130
trans-1,2-Dichloroethylene	ND		10.0	10.1		ug/L		101	70 - 130
Trichloroethylene	ND		10.0	10.5		ug/L		105	70 - 130
Vinyl chloride	ND		10.0	9.97		ug/L		100	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichlorobenzene-d4	103		70 - 130
4-Bromofluorobenzene (Surr)	107		70 - 130

TestAmerica Honolulu

QC Sample Results

Client: NAVFAC Hawaii
Project/Site: Red Hill

TestAmerica Job ID: 370-91-1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 280-77986-D-1 MSD
Matrix: Water
Analysis Batch: 301670

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier		Result	Qualifier				Limits		Limit
1,1,1-Trichloroethane	ND		10.0	9.77		ug/L		98	70 - 130	2	20
1,1,2-Trichloroethane	ND		10.0	9.15		ug/L		92	70 - 130	3	20
1,1-Dichloroethylene	ND		10.0	10.1		ug/L		101	70 - 130	4	20
1,2,4-Trichlorobenzene	ND		10.0	11.0		ug/L		110	70 - 130	1	20
1,2-Dichlorobenzene	ND		10.0	10.0		ug/L		100	70 - 130	3	20
1,2-Dichloroethane	ND		10.0	9.78		ug/L		98	70 - 130	1	20
1,2-Dichloropropane	ND		10.0	9.77		ug/L		98	70 - 130	2	20
1,4-Dichlorobenzene	ND		10.0	10.8		ug/L		108	70 - 130	2	20
Benzene	ND		10.0	10.6		ug/L		106	70 - 130	1	20
Carbon tetrachloride	ND		10.0	9.61		ug/L		96	70 - 130	3	20
Chlorobenzene	ND		10.0	10.9		ug/L		109	70 - 130	1	20
cis-1,2-Dichloroethylene	ND		10.0	9.35		ug/L		93	70 - 130	2	20
Dichloromethane	ND		10.0	9.95		ug/L		100	70 - 130	1	20
Ethylbenzene	ND		10.0	11.6		ug/L		116	70 - 130	1	20
m,p-Xylene	ND		20.0	22.8		ug/L		114	70 - 130	1	20
Naphthalene	ND		10.0	10.6		ug/L		106	70 - 130	0	20
o-Xylene	ND		10.0	10.9		ug/L		109	70 - 130	3	20
Styrene	ND		10.0	10.0		ug/L		100	70 - 130	3	20
Tetrachloroethylene	ND		10.0	9.83		ug/L		98	70 - 130	1	20
Toluene	ND		10.0	11.0		ug/L		110	70 - 130	1	20
trans-1,2-Dichloroethylene	ND		10.0	9.92		ug/L		99	70 - 130	2	20
Trichloroethylene	ND		10.0	10.3		ug/L		103	70 - 130	2	20
Vinyl chloride	ND		10.0	10.8		ug/L		108	70 - 130	8	20

8

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
1,2-Dichlorobenzene-d4	103		70 - 130
4-Bromofluorobenzene (Surr)	104		70 - 130

Method: 525.2 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 680-415438/20-B
Matrix: Water
Analysis Batch: 416297

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 415438

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acenaphthene	ND		0.20	0.040	ug/L		12/21/15 08:45	12/29/15 16:21	1
Acenaphthylene	ND		0.20	0.020	ug/L		12/21/15 08:45	12/29/15 16:21	1
Anthracene	ND		0.20	0.023	ug/L		12/21/15 08:45	12/29/15 16:21	1
Benzo[a]pyrene	ND		0.20	0.029	ug/L		12/21/15 08:45	12/29/15 16:21	1
Di (2-ethylhexyl)phthalate	ND		2.0	0.60	ug/L		12/21/15 08:45	12/29/15 16:21	1
Di(2-ethylhexyl)adipate	ND		1.5	0.60	ug/L		12/21/15 08:45	12/29/15 16:21	1
Fluoranthene	ND		0.20	0.020	ug/L		12/21/15 08:45	12/29/15 16:21	1
Phenanthrene	ND		0.20	0.020	ug/L		12/21/15 08:45	12/29/15 16:21	1
Pyrene	ND		0.20	0.020	ug/L		12/21/15 08:45	12/29/15 16:21	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2-Nitro-m-xylene	102		70 - 130	12/21/15 08:45	12/29/15 16:21	1

TestAmerica Honolulu

QC Sample Results

Client: NAVFAC Hawaii
Project/Site: Red Hill

TestAmerica Job ID: 370-91-1

Method: 525.2 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 680-415438/20-B
Matrix: Water
Analysis Batch: 416297

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 415438

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Acenaphthene-d10 (Surr)	99		70 - 130	12/21/15 08:45	12/29/15 16:21	1
Chrysene-d12 (Surr)	109		70 - 130	12/21/15 08:45	12/29/15 16:21	1
Perylene-d12	88		70 - 130	12/21/15 08:45	12/29/15 16:21	1
Phenanthrene-d10 (Surr)	99		70 - 130	12/21/15 08:45	12/29/15 16:21	1
Triphenylphosphate	94		70 - 130	12/21/15 08:45	12/29/15 16:21	1

Lab Sample ID: LCS 680-415438/21-B
Matrix: Water
Analysis Batch: 416297

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 415438

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Acenaphthene	5.00	4.61		ug/L		92	70 - 130
Acenaphthylene	5.00	4.75		ug/L		95	70 - 130
Anthracene	5.00	4.61		ug/L		92	70 - 130
Benzo[a]pyrene	5.00	4.69		ug/L		94	70 - 130
Di (2-ethylhexyl)phthalate	5.00	5.00		ug/L		100	70 - 130
Di(2-ethylhexyl)adipate	5.00	4.78		ug/L		96	70 - 130
Fluoranthene	5.00	4.80		ug/L		96	70 - 130
Phenanthrene	5.00	4.54		ug/L		91	70 - 130
Pyrene	5.00	4.60		ug/L		92	70 - 130

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	100		70 - 130
Acenaphthene-d10 (Surr)	97		70 - 130
Chrysene-d12 (Surr)	101		70 - 130
Perylene-d12	99		70 - 130
Phenanthrene-d10 (Surr)	102		70 - 130
Triphenylphosphate	106		70 - 130

Lab Sample ID: 490-94275-C-1-B MS
Matrix: Water
Analysis Batch: 416297

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 415438

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	Limits
				Result	Qualifier				
Acenaphthene	ND	F2	10.0	9.70		ug/L		97	70 - 130
Acenaphthylene	ND	F2	10.0	9.67		ug/L		97	70 - 130
Anthracene	ND	F2	10.0	8.59		ug/L		86	70 - 130
Benzo[a]pyrene	ND	F2	10.0	8.97		ug/L		90	70 - 130
Di (2-ethylhexyl)phthalate	ND	F2	10.0	10.0		ug/L		100	70 - 130
Di(2-ethylhexyl)adipate	ND	F2	10.0	9.97		ug/L		100	70 - 130
Fluoranthene	ND	F2	10.0	10.8		ug/L		108	70 - 130
Phenanthrene	ND	F2	10.0	9.37		ug/L		94	70 - 130
Pyrene	ND	F2	10.0	9.94		ug/L		99	70 - 130

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	98		70 - 130
Acenaphthene-d10 (Surr)	40	X	70 - 130

TestAmerica Honolulu

QC Sample Results

Client: NAVFAC Hawaii
Project/Site: Red Hill

TestAmerica Job ID: 370-91-1

Method: 525.2 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-94275-C-1-B MS
Matrix: Water
Analysis Batch: 416297

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 415438

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
Chrysene-d12 (Surr)	46	X	70 - 130
Perylene-d12	96		70 - 130
Phenanthrene-d10 (Surr)	44	X	70 - 130
Triphenylphosphate	104		70 - 130

Lab Sample ID: 490-94275-C-1-C MSD
Matrix: Water
Analysis Batch: 416297

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 415438

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD MSD		Unit	D	%Rec	Limits	RPD	Limit
				Result	Qualifier						
Acenaphthene	ND	F2	5.00	4.87	F2	ug/L		97	70 - 130	66	30
Acenaphthylene	ND	F2	5.00	4.73	F2	ug/L		95	70 - 130	69	30
Anthracene	ND	F2	5.00	3.79	F2	ug/L		76	70 - 130	78	30
Benzo[a]pyrene	ND	F2	5.00	4.46	F2	ug/L		89	70 - 130	67	30
Di (2-ethylhexyl)phthalate	ND	F2	5.00	4.97	F2	ug/L		99	70 - 130	68	30
Di(2-ethylhexyl)adipate	ND	F2	5.00	4.69	F2	ug/L		94	70 - 130	72	30
Fluoranthene	ND	F2	5.00	5.50	F2	ug/L		110	70 - 130	65	30
Phenanthrene	ND	F2	5.00	4.62	F2	ug/L		92	70 - 130	68	30
Pyrene	ND	F2	5.00	4.89	F2	ug/L		98	70 - 130	68	30

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	99		70 - 130
Acenaphthene-d10 (Surr)	76		70 - 130
Chrysene-d12 (Surr)	96		70 - 130
Perylene-d12	93		70 - 130
Phenanthrene-d10 (Surr)	85		70 - 130
Triphenylphosphate	103		70 - 130

Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level

Lab Sample ID: MB 440-301228/1-A
Matrix: Water
Analysis Batch: 301287

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 301228

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
RRO (C25-C36)	ND		0.050	0.025	mg/L		12/18/15 07:17	12/18/15 17:58	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
n-Octacosane	76		45 - 120	12/18/15 07:17	12/18/15 17:58	1

Lab Sample ID: LCS 440-301228/2-A
Matrix: Water
Analysis Batch: 301287

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 301228

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
C10-C28	1.00	0.679		mg/L		68	40 - 115

TestAmerica Honolulu

QC Sample Results

Client: NAVFAC Hawaii
Project/Site: Red Hill

TestAmerica Job ID: 370-91-1

Method: S015B - Diesel Range Organics (DRO) (GC) Low Level (Continued)

Lab Sample ID: LCS 440-301228/2-A
Matrix: Water
Analysis Batch: 301287

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 301228

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
n-Octacosane	70		45 - 120

Lab Sample ID: LCSD 440-301228/3-A
Matrix: Water
Analysis Batch: 301287

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 301228

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	RPD		
							Limit	RPD	Limit
C10-C28	1.00	0.770		mg/L		77	40 - 115	12	25

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
n-Octacosane	73		45 - 120

8

QC Association Summary

Client: NAVFAC Hawaii
Project/Site: Red Hill

TestAmerica Job ID: 370-91-1

GC/MS VOA

Analysis Batch: 301670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-77986-C-1 MS	Matrix Spike	Total/NA	Water	524.2	
280-77986-D-1 MSD	Matrix Spike Duplicate	Total/NA	Water	524.2	
370-91-1	16-01539-1,2,3	Total/NA	Water	524.2	
370-91-4	16-01540 (Trip Blank)	Total/NA	Water	524.2	
LCS 440-301670/1002	Lab Control Sample	Total/NA	Water	524.2	
MB 440-301670/5	Method Blank	Total/NA	Water	524.2	

GC/MS Semi VOA

Prep Batch: 415438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
370-91-2	16-01539-4,5	Total/NA	Water	525.2	
490-94275-C-1-B MS	Matrix Spike	Total/NA	Water	525.2	
490-94275-C-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	525.2	
LCS 680-415438/21-B	Lab Control Sample	Total/NA	Water	525.2	
MB 680-415438/20-B	Method Blank	Total/NA	Water	525.2	

Analysis Batch: 416297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-94275-C-1-B MS	Matrix Spike	Total/NA	Water	525.2	415438
490-94275-C-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	525.2	415438
LCS 680-415438/21-B	Lab Control Sample	Total/NA	Water	525.2	415438
MB 680-415438/20-B	Method Blank	Total/NA	Water	525.2	415438

Analysis Batch: 416590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
370-91-2	16-01539-4,5	Total/NA	Water	525.2	415438

GC Semi VOA

Prep Batch: 301228

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
370-91-3	16-01539-6,7	Total/NA	Water	3510C	
LCS 440-301228/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 440-301228/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 440-301228/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 301287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
370-91-3	16-01539-6,7	Total/NA	Water	8015B	301228
LCS 440-301228/2-A	Lab Control Sample	Total/NA	Water	8015B	301228
LCSD 440-301228/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	301228
MB 440-301228/1-A	Method Blank	Total/NA	Water	8015B	301228

TestAmerica Honolulu

Definitions/Glossary

Client: NAVFAC Hawaii
Project/Site: Red Hill

TestAmerica Job ID: 370-91-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
F2	MS/MSD RPD exceeds control limits

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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

TestAmerica Honolulu

Certification Summary

Client: NAVFAC Hawaii
Project/Site: Red Hill

TestAmerica Job ID: 370-91-1

Laboratory: TestAmerica Honolulu

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Hawaii	State Program	9	N/A	06-28-10 *
USDA	Federal		HON-S-206	11-04-16

Laboratory: TestAmerica Irvine

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-16
Arizona	State Program	9	AZ0671	10-13-16
California	LA Cty Sanitation Districts	9	10256	01-31-16 *
California	State Program	9	2706	06-30-16
Guam	State Program	9	Cert. No. 12.002r	01-23-16
Hawaii	State Program	9	N/A	01-29-16
Kansas	NELAP Secondary AB	7	E-10420	07-31-16
Nevada	State Program	9	CA015312007A	07-31-16 *
New Mexico	State Program	6	N/A	01-29-16
Northern Mariana Islands	State Program	9	MP0002	01-29-16
Oregon	NELAP	10	4005	01-29-16
USDA	Federal		P330-09-00080	07-08-18

Laboratory: TestAmerica Savannah

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

Authority	Program	EPA Region	Certification ID	Expiration Date
	AFCEE		SAVLAB	
A2LA	DoD ELAP		399.01	02-28-17
A2LA	ISO/IEC 17025		399.01	02-28-17
Alabama	State Program	4	41450	06-30-16
Alaska (UST)	State Program	10	UST-104	11-05-16
Arkansas DEQ	State Program	6	88-0692	01-31-16 *
California	State Program	9	2939	07-31-16
Colorado	State Program	8	N/A	12-31-16
Connecticut	State Program	1	PH-0161	03-31-17
Florida	NELAP	4	E87052	06-30-16
GA Dept. of Agriculture	State Program	4	N/A	06-12-17
Georgia	State Program	4	803	06-30-16
Guam	State Program	9	14-004r	04-16-16
Hawaii	State Program	9	N/A	06-30-16
Illinois	NELAP	5	200022	11-30-16
Indiana	State Program	5	N/A	06-30-16
Iowa	State Program	7	353	06-30-17
Kentucky (DW)	State Program	4	90084	12-31-16
Kentucky (UST)	State Program	4	18	06-30-16
Kentucky (WW)	State Program	4	90084	12-31-15 *
Louisiana	NELAP	6	30690	06-30-16
Louisiana (DW)	NELAP	6	LA160019	12-31-16
Maine	State Program	1	GA00006	09-24-16
Maryland	State Program	3	250	12-31-16
Massachusetts	State Program	1	M-GA006	06-30-16
Michigan	State Program	5	9925	03-05-16
Mississippi	State Program	4	N/A	06-30-16

* Certification renewal pending - certification considered valid.

TestAmerica Honolulu

Certification Summary

Client: NAVFAC Hawaii
Project/Site: Red Hill

TestAmerica Job ID: 370-91-1

Laboratory: TestAmerica Savannah (Continued)

All certification data by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Montana	State Program	8	CERT0081	12-31-15
Nebraska	State Program	7	TestAmerica-Savannah	06-30-16
New Jersey	NELAP	2	GA769	06-30-16
New Mexico	State Program	6	N/A	06-30-16
New York	NELAP	2	10842	03-31-16
North Carolina (DW)	State Program	4	13701	07-31-16
North Carolina (WW/SW)	State Program	4	269	12-31-16
Oklahoma	State Program	6	9984	08-31-16
Pennsylvania	NELAP	3	68-00474	06-30-16
Puerto Rico	State Program	2	GA00006	12-31-16
South Carolina	State Program	4	98001	06-30-16
Tennessee	State Program	4	TN02961	06-30-16
Texas	NELAP	6	T104704185-14-7	11-30-16
USDA	Federal		SAV 3-04	06-11-17
Virginia	NELAP	3	460161	06-14-16
Washington	State Program	10	C805	06-10-16
West Virginia (DW)	State Program	3	9950C	12-31-15 *
West Virginia DEP	State Program	3	094	06-30-16
Wisconsin	State Program	5	999819810	08-31-16
Wyoming	State Program	8	8TMS-L	06-30-16

* Certification renewal pending - certification considered valid.

TestAmerica Honolulu

Chain of Custody / Analysis Request Form

Client: Police - Houston
 Project/Identification: Case # 117
 Sample ID: 400 Maxwell Road
 Date: 11/11/15
 Quantity: 800
 Analyte: THCN
 Method: GC/MS
 Reference: SW-117

Step	Date	Time	Signature	Agency	Remarks
1	12/15/15	11:17	[Signature]	HOUSTON	Sample received
2	12/15/15	11:17	[Signature]	HOUSTON	Sample analyzed
3	12/15/15	11:17	[Signature]	HOUSTON	Sample stored
4	12/15/15	11:17	[Signature]	HOUSTON	Sample returned

479-91 Chain of Custody

Sample ID: 12/15/15 11:17
 Analyte: THCN
 Method: GC/MS
 Reference: SW-117

See attached for list of analyzed laboratory results. Laboratory results may be subject to change. Please refer to the attached laboratory report for details.

Police - Houston
 4229 Alton 50665-7104 • Houston, TX 77041
 281-485-1488 (5277) • Fax 281-485-1489

VOCs tested (EPA Method 824.2)

Benzene
Carbon tetrachloride
Chlorobenzene
1,2-Dichlorobenzene
1,4-Dichlorobenzene
1,2-Dichloroethane
1,1-Dichloroethylene
cis-1,2-Dichloroethylene
trans-1,2-Dichloroethylene
Dichloromethane
1,2-Dichloropropane
Ethylbenzene
Naphthalene (unregulated)
Styrene
Tetrachloroethylene
Toluene
1,2,4-Trichlorobenzene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethylene
Vinyl chloride
Xylenes, Total

SVOCs tested (EPA Method 825.2)

Benzo(a)pyrene
Di(2-ethylhexyl)adipate
Di(2-ethylhexyl)phthalate
Acenaphthene (unregulated)
Acenaphthylene (unregulated)
Anthracene (unregulated)
Phenanthrene (unregulated)
Fluoranthene (unregulated)
Pyrene (unregulated)

TPH as Oil (SW846 8015 GCM5)

TestAmerica Honolulu
 4429 Meleal St. #104
 Honolulu, HI 96818
 Phone (808) 486-5227 Fax (808) 486-2458

Chain of Custody Record

TestAmerica
 THE LEADER IN ENVIRONMENTAL TESTING

Company: TestAmerica Laboratories, Inc
 Address: 17461 Deivan Ave, Suite 100,
 City: Irvine
 State, Zip: CA, 92614-5817
 Phone: 949-281-1022(Tel) 949-280-3287(Fax)
 Email:
 Project Name: Rad HRI
 Rad HRI Site:
 Project #: 44012499
 SBO#:
 Lab PI#: Piliakoha, Craig O
 E-Mail: craig.piliakoha@testamerica.com

Client Information (Sub Contract Lab)
 Client Contact: Shipping/Receiving
 Sample:
 Date Requested: 12/22/2015
 TAT Requested (days):
 PO #:
 WO #:
 Project #: 44012499
 SBO#:
 Carrier Tracking No(s):
 Job #: 370-91-1
 COC No: 370-82.1
 Page 1 of 1

Sample ID	Sample Date	Sample Time	Sample Type (C-Contam, G-grab)	Metric (V-volatiles, B-biomass, O-oils, P-pH)	Preservation Code	Analysis Requested	Level 8018	Level 8019	Level 8020	Level 8021	Level 8022	Level 8023	Level 8024	Level 8025	Level 8026	Level 8027	Level 8028	Level 8029	Level 8030	Level 8031	Level 8032	Level 8033	Level 8034	Level 8035	Level 8036	Level 8037	Level 8038	Level 8039	Level 8040	Level 8041	Level 8042	Level 8043	Level 8044	Level 8045	Level 8046	Level 8047	Level 8048	Level 8049	Level 8050	Level 8051	Level 8052	Level 8053	Level 8054	Level 8055	Level 8056	Level 8057	Level 8058	Level 8059	Level 8060	Level 8061	Level 8062	Level 8063	Level 8064	Level 8065	Level 8066	Level 8067	Level 8068	Level 8069	Level 8070	Level 8071	Level 8072	Level 8073	Level 8074	Level 8075	Level 8076	Level 8077	Level 8078	Level 8079	Level 8080	Level 8081	Level 8082	Level 8083	Level 8084	Level 8085	Level 8086	Level 8087	Level 8088	Level 8089	Level 8090	Level 8091	Level 8092	Level 8093	Level 8094	Level 8095	Level 8096	Level 8097	Level 8098	Level 8099	Level 8100	Level 8101	Level 8102	Level 8103	Level 8104	Level 8105	Level 8106	Level 8107	Level 8108	Level 8109	Level 8110	Level 8111	Level 8112	Level 8113	Level 8114	Level 8115	Level 8116	Level 8117	Level 8118	Level 8119	Level 8120	Level 8121	Level 8122	Level 8123	Level 8124	Level 8125	Level 8126	Level 8127	Level 8128	Level 8129	Level 8130	Level 8131	Level 8132	Level 8133	Level 8134	Level 8135	Level 8136	Level 8137	Level 8138	Level 8139	Level 8140	Level 8141	Level 8142	Level 8143	Level 8144	Level 8145	Level 8146	Level 8147	Level 8148	Level 8149	Level 8150	Level 8151	Level 8152	Level 8153	Level 8154	Level 8155	Level 8156	Level 8157	Level 8158	Level 8159	Level 8160	Level 8161	Level 8162	Level 8163	Level 8164	Level 8165	Level 8166	Level 8167	Level 8168	Level 8169	Level 8170	Level 8171	Level 8172	Level 8173	Level 8174	Level 8175	Level 8176	Level 8177	Level 8178	Level 8179	Level 8180	Level 8181	Level 8182	Level 8183	Level 8184	Level 8185	Level 8186	Level 8187	Level 8188	Level 8189	Level 8190	Level 8191	Level 8192	Level 8193	Level 8194	Level 8195	Level 8196	Level 8197	Level 8198	Level 8199	Level 8200	Level 8201	Level 8202	Level 8203	Level 8204	Level 8205	Level 8206	Level 8207	Level 8208	Level 8209	Level 8210	Level 8211	Level 8212	Level 8213	Level 8214	Level 8215	Level 8216	Level 8217	Level 8218	Level 8219	Level 8220	Level 8221	Level 8222	Level 8223	Level 8224	Level 8225	Level 8226	Level 8227	Level 8228	Level 8229	Level 8230	Level 8231	Level 8232	Level 8233	Level 8234	Level 8235	Level 8236	Level 8237	Level 8238	Level 8239	Level 8240	Level 8241	Level 8242	Level 8243	Level 8244	Level 8245	Level 8246	Level 8247	Level 8248	Level 8249	Level 8250	Level 8251	Level 8252	Level 8253	Level 8254	Level 8255	Level 8256	Level 8257	Level 8258	Level 8259	Level 8260	Level 8261	Level 8262	Level 8263	Level 8264	Level 8265	Level 8266	Level 8267	Level 8268	Level 8269	Level 8270	Level 8271	Level 8272	Level 8273	Level 8274	Level 8275	Level 8276	Level 8277	Level 8278	Level 8279	Level 8280	Level 8281	Level 8282	Level 8283	Level 8284	Level 8285	Level 8286	Level 8287	Level 8288	Level 8289	Level 8290	Level 8291	Level 8292	Level 8293	Level 8294	Level 8295	Level 8296	Level 8297	Level 8298	Level 8299	Level 8300	Level 8301	Level 8302	Level 8303	Level 8304	Level 8305	Level 8306	Level 8307	Level 8308	Level 8309	Level 8310	Level 8311	Level 8312	Level 8313	Level 8314	Level 8315	Level 8316	Level 8317	Level 8318	Level 8319	Level 8320	Level 8321	Level 8322	Level 8323	Level 8324	Level 8325	Level 8326	Level 8327	Level 8328	Level 8329	Level 8330	Level 8331	Level 8332	Level 8333	Level 8334	Level 8335	Level 8336	Level 8337	Level 8338	Level 8339	Level 8340	Level 8341	Level 8342	Level 8343	Level 8344	Level 8345	Level 8346	Level 8347	Level 8348	Level 8349	Level 8350	Level 8351	Level 8352	Level 8353	Level 8354	Level 8355	Level 8356	Level 8357	Level 8358	Level 8359	Level 8360	Level 8361	Level 8362	Level 8363	Level 8364	Level 8365	Level 8366	Level 8367	Level 8368	Level 8369	Level 8370	Level 8371	Level 8372	Level 8373	Level 8374	Level 8375	Level 8376	Level 8377	Level 8378	Level 8379	Level 8380	Level 8381	Level 8382	Level 8383	Level 8384	Level 8385	Level 8386	Level 8387	Level 8388	Level 8389	Level 8390	Level 8391	Level 8392	Level 8393	Level 8394	Level 8395	Level 8396	Level 8397	Level 8398	Level 8399	Level 8400	Level 8401	Level 8402	Level 8403	Level 8404	Level 8405	Level 8406	Level 8407	Level 8408	Level 8409	Level 8410	Level 8411	Level 8412	Level 8413	Level 8414	Level 8415	Level 8416	Level 8417	Level 8418	Level 8419	Level 8420	Level 8421	Level 8422	Level 8423	Level 8424	Level 8425	Level 8426	Level 8427	Level 8428	Level 8429	Level 8430	Level 8431	Level 8432	Level 8433	Level 8434	Level 8435	Level 8436	Level 8437	Level 8438	Level 8439	Level 8440	Level 8441	Level 8442	Level 8443	Level 8444	Level 8445	Level 8446	Level 8447	Level 8448	Level 8449	Level 8450	Level 8451	Level 8452	Level 8453	Level 8454	Level 8455	Level 8456	Level 8457	Level 8458	Level 8459	Level 8460	Level 8461	Level 8462	Level 8463	Level 8464	Level 8465	Level 8466	Level 8467	Level 8468	Level 8469	Level 8470	Level 8471	Level 8472	Level 8473	Level 8474	Level 8475	Level 8476	Level 8477	Level 8478	Level 8479	Level 8480	Level 8481	Level 8482	Level 8483	Level 8484	Level 8485	Level 8486	Level 8487	Level 8488	Level 8489	Level 8490	Level 8491	Level 8492	Level 8493	Level 8494	Level 8495	Level 8496	Level 8497	Level 8498	Level 8499	Level 8500	Level 8501	Level 8502	Level 8503	Level 8504	Level 8505	Level 8506	Level 8507	Level 8508	Level 8509	Level 8510	Level 8511	Level 8512	Level 8513	Level 8514	Level 8515	Level 8516	Level 8517	Level 8518	Level 8519	Level 8520	Level 8521	Level 8522	Level 8523	Level 8524	Level 8525	Level 8526	Level 8527	Level 8528	Level 8529	Level 8530	Level 8531	Level 8532	Level 8533	Level 8534	Level 8535	Level 8536	Level 8537	Level 8538	Level 8539	Level 8540	Level 8541	Level 8542	Level 8543	Level 8544	Level 8545	Level 8546	Level 8547	Level 8548	Level 8549	Level 8550	Level 8551	Level 8552	Level 8553	Level 8554	Level 8555	Level 8556	Level 8557	Level 8558	Level 8559	Level 8560	Level 8561	Level 8562	Level 8563	Level 8564	Level 8565	Level 8566	Level 8567	Level 8568	Level 8569	Level 8570	Level 8571	Level 8572	Level 8573	Level 8574	Level 8575	Level 8576	Level 8577	Level 8578	Level 8579	Level 8580	Level 8581	Level 8582	Level 8583	Level 8584	Level 8585	Level 8586	Level 8587	Level 8588	Level 8589	Level 8590	Level 8591	Level 8592	Level 8593	Level 8594	Level 8595	Level 8596	Level 8597	Level 8598	Level 8599	Level 8600	Level 8601	Level 8602	Level 8603	Level 8604	Level 8605	Level 8606	Level 8607	Level 8608	Level 8609	Level 8610	Level 8611	Level 8612	Level 8613	Level 8614	Level 8615	Level 8616	Level 8617	Level 8618	Level 8619	Level 8620	Level 8621	Level 8622	Level 8623	Level 8624	Level 8625	Level 8626	Level 8627	Level 8628	Level 8629	Level 8630	Level 8631	Level 8632	Level 8633	Level 8634	Level 8635	Level 8636	Level 8637	Level 8638	Level 8639	Level 8640	Level 8641	Level 8642	Level 8643	Level 8644	Level 8645	Level 8646	Level 8647	Level 8648	Level 8649	Level 8650	Level 8651	Level 8652	Level 8653	Level 8654	Level 8655	Level 8656	Level 8657	Level 8658	Level 8659	Level 8660	Level 8661	Level 8662	Level 8663	Level 8664	Level 8665	Level 8666	Level 8667	Level 8668	Level 8669	Level 8670	Level 8671	Level 8672	Level 8673	Level 8674	Level 8675	Level 8676	Level 8677	Level 8678	Level 8679	Level 8680	Level 8681	Level 8682	Level 8683	Level 8684	Level 8685	Level 8686	Level 8687	Level 8688	Level 8689	Level 8690	Level 8691	Level 8692	Level 8693	Level 8694	Level 8695	Level 8696	Level 8697	Level 8698	Level 8699	Level 8700	Level 8701	Level 8702	Level 8703	Level 8704	Level 8705	Level 8706	Level 8707	Level 8708	Level 8709	Level 8710	Level 8711	Level 8712	Level 8713	Level 8714	Level 8715	Level 8716	Level 8717	Level 8718	Level 8719	Level 8720	Level 8721	Level 8722	Level 8723	Level 8724	Level 8725	Level 8726	Level 8727	Level 8728	Level 8729	Level 8730	Level 8731	Level 8732	Level 8733	Level 8734	Level 8735	Level 8736	Level 8737	Level 8738	Level 8739	Level 8740	Level 8741	Level 8742	Level 8743	Level 8744	Level 8745	Level 8746	Level 8747	Level 8748	Level 8749	Level 8750	Level 8751	Level 8752	Level 8753	Level 8754	Level 8755	Level 8756	Level 8757	Level 8758	Level 8759	Level 8760	Level 8761	Level 8762	Level 8763	Level 8764	Level 8765	Level 8766	Level 8767	Level 8768	Level 8769	Level 8770	Level 8771	Level 8772	Level 8773	Level 8774	Level 8775	Level 8776	Level 8777	Level 8778	Level 8779	Level 8780	Level 8781	Level 8782	Level 8783	Level 8784	Level 8785	Level 8786	Level 8787	Level 8788	Level 8789	Level 8790	Level 8791	Level 8792	Level
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TestAmerica Honolulu
 4428 Melani St. #104
 Honolulu, HI 96818
 Phone (808) 488-5227 Fax (808) 488-2456

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab) Shipping/Receiving Company: TestAmerica Laboratories, Inc. Address: 5102 LaRoche Avenue, Savannah, GA, 31404 Phone: 912-354-7858 (Tel) 912-352-0165 (Fax) Email: craig.pilafiche@testamericainc.com		Lab PI: Philoche, Craig O Email: craig.pilafiche@testamericainc.com	
Client Contact Name: Philoche, Craig O Title: Analyst		COC No: 370-91.1 Page: Page 1 of 1 Job #: 370-91-1	
Analysis Requested Preservative Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - NaOH G - Amfloc H - Acetic Acid I - IS J - DI Water K - EDTA L - EDTA Other:		Special Instructions/Notes: 82.1722.2, Prep (MCO) Custom Subst	
Sample Information Date Requested: 12/22/15 TAT Requested (days): PO #: 18-01539-4.5 (370-91-2) WQ #: Project # 44012469 SSSON#		Field Plotted Sample (Yes or No) [X] Total Number of Containers: 2	
Sample Identification - Client ID (Lab ID) Sample Date: 12/18/15 Sample Time: 08:15 Sample Location: Hawaiian Sample Type (C-Company, G-Grab, P-Preparation Code): Water Metric (Invert, Invert, Invert, Invert):		Possible Hazard Identification Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify)	
Chain of Custody Date/Time: 12/18/15 10:25 Date/Time: 12/18/15 08:08 Date/Time: 12/18/15 Date/Time: 12/18/15		Method of Shipment:	
Requisitioned by: KAREN HEARD Requisitioned by:		Received by: KYLE KUKES Received by:	
Requisitioned by:		Received by:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 19/1.6	

Login Sample Receipt Checklist

Client: NAVFAC Hawaii

Job Number: 370-91-1

Login Number: 91
List Number: 1
Creator: Asato, Katelyn

List Source: TestAmerica Honolulu

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	
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.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

13

Login Sample Receipt Checklist

Client: NAVFAC Hawaii

Job Number: 370-91-1

Login Number: 91
List Number: 2
Creator: Ornelas, Olga

List Source: TestAmerica Irvine
List Creation: 12/17/15 01:30 PM

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	
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?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

13

Login Sample Receipt Checklist

Client: NAVFAC Hawaii

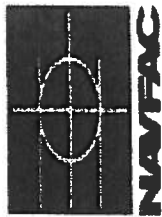
Job Number: 370-91-1

Login Number: 91
List Number: 4
Creator: Kirkland, Keyon A

List Source: TestAmerica Savannah
List Creation: 12/18/15 11:23 AM

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

13



NAVFAC HAWAII ENVIRONMENTAL SERVICES LABORATORY CHAIN-OF-CUSTODY

Navy Facilities Engineering Command, Hawaii, PRP411, Pearl Harbor, Hawaii Phone: (808) 474-3704, FAX: (808) 471-4534

JON: 114847902016	ESM: Randy Kawamura	FOC: Randy Kawamura	PFX#: 473-3160
Report To: Randy Kawamura	Copy To: Arleen Mizuno	Copy To: NAVFAC HI EVI	Copy To:
randy.kawamura@navy.mil	randy.kawamura@navy.mil	arleen.mizuno@navy.mil	

Sample ID	Sample Description	Matrix Code	Sampling Date	Time	Container		Analysis Required	Preservative / Res. Cl (ppm)	FOR LAB USE ONLY			Cond.	
					Vol	Type			pH	Lab Number	Ext		Letn.
Joint Base Pearl Harbor-Hickam (360-001)	Red Hill, WL01, Shaft pumphead	DW	12/16/15	0915	3x40mL	Glass	Volatiles (524.2)*	Ascorbic, HCl			1-3	C	
					2x1L	Glass	Semi-Volatiles (525.2)*	Sulfite, HCl			4-5	C	
					2x1L	Glass	TPH as Residual Range Organics C25-C36 (8015 GCMS)	Cool			6-7	C	
					2x40mL	Glass	Volatiles	Ascorbic, HCl			1-2	C	
Trip Blank			12/16/15	0735									

Sampling Information Location Sampled: Red Hill Sampler(s): (Print names clearly) K. Miyaki	Transportation Information Transported/Stored in: Cooler with ice Cooler Temp: 4.1 °C Air Blwr/Carrier ID#: _____	Used Sample Disposition <input type="checkbox"/> Return to customer <input checked="" type="checkbox"/> Dispose at 60 Days <input type="checkbox"/> Archive for _____ Days <input type="checkbox"/> Contact before disposal
Sample Condition <input checked="" type="checkbox"/> Received with CoC <input type="checkbox"/> Received with Custody Seals <input type="checkbox"/> Seals Required <input type="checkbox"/> Seals Intact <input checked="" type="checkbox"/> 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.
 *See attached for list of analytes.

Requisitioned By: (Print clearly & Sign)	Date	Time	Received By: (Print clearly & Sign)	Date	Time
K. Miyaki	12/16/15	1015	Duane Morita	12/16/15	1015

