

SAF-RC-150
300 Area D4 Waste Sites – Other
FINAL DATA PACKAGE

COMPLETE COPY OF DATA PACKAGE TO:

Kathy Wendt H4-21

KW 9/8/15
INITIAL/DATE

COMMENTS:

SDG JP0990

SAF-RC-150

Rad only

Chem only

Rad & Chem

Complete

Partial

Sample Location/Waste Site: 300 Area Waste Pad Oil (non-RMA)

ANALYTICAL REPORT

Job Number: 280-73548-1

SDG Number: JP0990

Job Description: SAF# RC-150

For:

Washington Closure Hanford
2620 Fermi Avenue
Richland, WA 99354

Attention: Joan H Kessner



Approved for release.
Kae E Yoder
Senior Project Manager
9/8/2015 2:16 PM

Kae E Yoder, Senior Project Manager
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09/08/2015

The test results in this report relate only to the samples in this report and meet all requirements of NELAP, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Denver Project Manager.

The Lab Certification ID# is 4025.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

TestAmerica Laboratories, Inc.

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CASE NARRATIVE

Client: Washington Closure Hanford

Project: WASHINGTON CLOSURE HANFORD

Job Number: 280-73548-1

SDG #: JP0990

SAF#: RC-150

Date SDG Closed: August 28, 2015

Data Deliverable: 7 Day / Summary

<u>CLIENT ID</u>	<u>LAB ID</u>	<u>ANALYSES REQUESTED</u>	<u>ANALYSES PERFORMED</u>
J1V831	280-73548-1	9020/8082	9056A/8082

The TOX method substitution noted above, as agreed to by all parties, has no technical impact on the data.

I certify that this data package is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed in this Case Narrative. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or a designee, as verified by the signature on the Report Cover.

With exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. All laboratory quality control samples analyzed in conjunction with the samples in this project were within established control limits, with any exceptions noted. Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The sample was received on 8/28/2015 9:20 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.7° C.

TestAmerica Denver subcontracted the Total Halogens 9056A (TOX 9020) analyses to TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, 314-298-8566.

Receipt Exceptions

The Chain of Custody (COC) lists the Price Code as 8B; however, as the matrix of this sample is "Other", the Price Code was logged as 9B. The client was notified on 8/31/2015.

GC SEMIVOLATILES - SW846 8082 - PCBs

The routine extraction procedure could not be performed for sample J1V831, due to the nature of the sample matrix. The sample had to be analyzed using the waste dilution procedure. The units and detection limits have been adjusted accordingly.

The laboratory noted that a Sulfuric Acid clean-up was performed on sample J1V831 to reduce matrix interferences.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to the nature of the sample matrix, sample J1V831 had to be analyzed at a dilution, and the associated results have been flagged with a "D". The reporting limits have been adjusted relative to the dilution required. The laboratory noted that the extract was dark brown in color after the acid clean-up, and analysis at a less diluted concentration would jeopardize the integrity of the instrument.

Surrogate Tetrachloro-m-xylene was recovered outside the control limits in sample J1V830; however, the surrogate recovery is not considered reliable, because the extract was diluted beyond the ability to reliably quantitate recoveries.

The MS/MSD performed on sample J1V831 exhibited spike compound recoveries, RPD data and surrogate recoveries outside the control limits; however, recoveries are not considered reliable, because the sample was diluted beyond the ability to reliably quantitate recoveries. The acceptable LCS analyte recoveries provide evidence that the laboratory is performing the method within acceptable guidelines.

No other anomalies were encountered.

GENERAL CHEMISTRY - SW846 9056A - TOTAL HALOGENS

The Total Halogens analyses presented in this report were performed at the TestAmerica St. Louis facility.

Due to the nature of the sample matrix, the samples presented in this report had to be treated as waste samples. The units and detection limits have been adjusted accordingly.

For Total Halogens batch 160-209390, the Fluoride, Bromide, and Iodide Method Blank and LCS results were obtained by direct injection, with no prep involved (batches 160-209348 and 160-209350). The Chloride Method Blank and LCS results were obtained by Parr Bomb prep (batch 160-209352).

Low levels of Chloride are present in the method blank associated with batch 190-209352. Because the concentration in the method blank is not present at a level greater than the reporting limit, corrective action is deemed unnecessary.

The Iodide and Fluoride components of the Total Halogens Matrix Spike performed on sample J1V831 exhibited the percent recoveries outside the control limits. It can be noted that the Fluoride matrix spike concentration was present above the instrument calibration range. There is no indication that the analytical system was operating out of control, and method accuracy has been verified by the acceptable LCS analysis data; therefore, corrective action is deemed unnecessary.

No other anomalies were encountered.

DATA REPORTING QUALIFIERS

Client: Washington Closure Hanford

Job Number: 280-73548-1

Sdg Number: JP0990

Lab Section	Qualifier	Description
GC Semi VOA		
	U	Analyzed for but not detected.
	N	MS, MSD: Spike recovery is outside acceptance limits.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	*	Surrogate is outside acceptance limits.
	D	The reported value is from a dilution.
HPLC/IC		
	U	Analyzed for but not detected.
	N	MS, MSD: Spike recovery is outside acceptance limits.
	E	Result exceeded calibration range.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

SAMPLE SUMMARY

Client: Washington Closure Hanford

Job Number: 280-73548-1
Sdg Number: JP0990

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-73548-1	J1V831	Waste	08/26/2015 1105	08/28/2015 0920

METHOD SUMMARY

Client: Washington Closure Hanford

Job Number: 280-73548-1
Sdg Number: JP0990

Description	Lab Location	Method	Preparation Method
Matrix: Waste			
Polychlorinated Biphenyls (PCBs) by Gas Chromatography	TAL DEN	SW846 8082	
Waste Dilution	TAL DEN		SW846 3580A
Anions, Ion Chromatography	TAL SL	SW846 9056A	
Bomb Preparation Method for Solid Waste	TAL SL		SW846 5050
Total Halogens (IC)	TAL SL	SW846 9056A	

Lab References:

TAL DEN = TestAmerica Denver

TAL SL = TestAmerica St. Louis

Method References:

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

METHOD / ANALYST SUMMARY

Client: Washington Closure Hanford

Job Number: 280-73548-1

Sdg Number: JP0990

Method	Analyst	Analyst ID
SW846 8082	Pavlakovich, Adam M	AMP
SW846 9056A	Boyd, Jacob C	JCB

SAMPLE RESULTS

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-73548-1

Sdg Number: JP0990

Client Sample ID: J1V831

Lab Sample ID: 280-73548-1

Date Sampled: 08/26/2015 1105

Client Matrix: Waste

Date Received: 08/28/2015 0920

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method: 8082	Analysis Batch: 280-293322	Instrument ID: SGC_P3
Prep Method: 3580A	Prep Batch: 280-292976	Initial Weight/Volume: 1.0277 g
Dilution: 10		Final Weight/Volume: 10 mL
Analysis Date: 09/03/2015 0410		Injection Volume: 1 uL
Prep Date: 08/31/2015 1506		Result Type: PRIMARY

Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		1500	U N D	1500	9600
Aroclor 1221		4600	U D	4600	14000
Aroclor 1232		1500	U D	1500	9600
Aroclor 1242		2700	U D	2700	9600
Aroclor 1248		1600	U D	1600	9600
Aroclor 1254		1600	U D	1600	9600
Aroclor 1260		770	U N D	770	9600

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	107	D	59 - 130
Tetrachloro-m-xylene	286	* D	53 - 128

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-73548-1

Sdg Number: JP0990

Client Sample ID: J1V831

Lab Sample ID: 280-73548-1

Date Sampled: 08/26/2015 1105

Client Matrix: Waste

Date Received: 08/28/2015 0920

9056A Total Halogens (IC)

Analysis Method:	9056A	Analysis Batch:	160-209390	Instrument ID:	NOEQUIP
	N/A	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	
Analysis Date:	09/03/2015 1724			Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Total Halogens		230	J	39	390

QUALITY CONTROL RESULTS

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-73548-1

Sdg Number: JP0990

Surrogate Recovery Report

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Matrix: Waste

Lab Sample ID	Client Sample ID	DCB2 %Rec	TCX2 %Rec
280-73548-1	J1V831	107D	286* D
MB 280-292976/1-A		92	91
LCS 280-292976/2-A		99	98
280-73548-1 MS	J1V831 MS	215* D	1052* D
280-73548-1 MSD	J1V831 MSD	141* D	1148* D

Surrogate	Acceptance Limits
DCB = Decachlorobiphenyl	59-130
TCX = Tetrachloro-m-xylene	53-128

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-73548-1
Sdg Number: JP0990

Method Blank - Batch: 280-292976

Method: 8082
Preparation: 3580A

Lab Sample ID: MB 280-292976/1-A	Analysis Batch: 280-293322	Instrument ID: SGC_P3
Client Matrix: Waste	Prep Batch: 280-292976	Lab File ID: 09020027.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 1 g
Analysis Date: 09/03/2015 0055	Units: ug/Kg	Final Weight/Volume: 10 mL
Prep Date: 08/31/2015 1506		Injection Volume: 1 uL
Leach Date: N/A		Column ID: PRIMARY

Analyte	Result	Qual	MDL	RL
Aroclor 1016	150	U	150	990
Aroclor 1221	470	U	470	1400
Aroclor 1232	150	U	150	990
Aroclor 1242	270	U	270	990
Aroclor 1248	170	U	170	990
Aroclor 1254	170	U	170	990
Aroclor 1260	80	U	80	990

Surrogate	% Rec	Acceptance Limits
Decachlorobiphenyl	92	59 - 130
Tetrachloro-m-xylene	91	53 - 128

Lab Control Sample - Batch: 280-292976

Method: 8082
Preparation: 3580A

Lab Sample ID: LCS 280-292976/2-A	Analysis Batch: 280-293322	Instrument ID: SGC_P3
Client Matrix: Waste	Prep Batch: 280-292976	Lab File ID: 09020028.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 1 g
Analysis Date: 09/03/2015 0117	Units: ug/Kg	Final Weight/Volume: 10 mL
Prep Date: 08/31/2015 1506		Injection Volume: 1 uL
Leach Date: N/A		Column ID: PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aroclor 1016	2000	2280	114	54 - 132	
Aroclor 1260	2000	2260	113	62 - 129	

Surrogate	% Rec	Acceptance Limits
Decachlorobiphenyl	99	59 - 130
Tetrachloro-m-xylene	98	53 - 128

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-73548-1
Sdg Number: JP0990

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-292976**

**Method: 8082
Preparation: 3580A**

MS Lab Sample ID: 280-73548-1
Client Matrix: Waste
Dilution: 10
Analysis Date: 09/03/2015 0453
Prep Date: 08/31/2015 1506
Leach Date: N/A

Analysis Batch: 280-293322
Prep Batch: 280-292976
Leach Batch: N/A

Instrument ID: SGC_P3
Lab File ID: 09020034.D
Initial Weight/Volume: 1.0386 g
Final Weight/Volume: 10 mL
Injection Volume: 1 uL
Column ID: PRIMARY

MSD Lab Sample ID: 280-73548-1
Client Matrix: Waste
Dilution: 10
Analysis Date: 09/03/2015 0537
Prep Date: 08/31/2015 1506
Leach Date: N/A

Analysis Batch: 280-293322
Prep Batch: 280-292976
Leach Batch: N/A

Instrument ID: SGC_P3
Lab File ID: 09020035.D
Initial Weight/Volume: 1.0014 g
Final Weight/Volume: 10 mL
Injection Volume: 1 uL
Column ID: PRIMARY

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Aroclor 1016	0	187	54 - 132	NC	36	U N D	J D N
Aroclor 1260	55	39	62 - 129	9	44	J D N	J D N
Surrogate	MS % Rec		MSD % Rec	Acceptance Limits			
Decachlorobiphenyl	215		* D 141	* D	59 - 130		
Tetrachloro-m-xylene	1052		* D 1148	* D	53 - 128		

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-292976**

**Method: 8082
Preparation: 3580A**

MS Lab Sample ID: 280-73548-1
Client Matrix: Waste
Dilution: 10
Analysis Date: 09/03/2015 0453
Prep Date: 08/31/2015 1506
Leach Date: N/A

Units: ug/Kg

MSD Lab Sample ID: 280-73548-1
Client Matrix: Waste
Dilution: 10
Analysis Date: 09/03/2015 0537
Prep Date: 08/31/2015 1506
Leach Date: N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Aroclor 1016	1500	U	1930	2000	1500 U N D	3730 J D N
Aroclor 1260	2300	J	1930	2000	3350 J D N	3060 J D N

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-73548-1
Sdg Number: JP0990

Method Blank - Batch: 160-209348

Method: 9056A
Preparation: N/A

Lab Sample ID: MB 160-209348/10
Client Matrix: Waste
Dilution: 1.0
Analysis Date: 09/03/2015 1339
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 160-209348
Prep Batch: N/A
Leach Batch: N/A
Units: mg/Kg

Instrument ID: CIC1500
Lab File ID: IOD 090315- 10.d
Initial Weight/Volume: 5 mL
Final Weight/Volume:
Injection Volume: 100 uL

Analyte	Result	Qual	MDL	RL
Iodide	0.010	U	0.010	1.0

Lab Control Sample - Batch: 160-209348

Method: 9056A
Preparation: N/A

Lab Sample ID: LCS 160-209348/11
Client Matrix: Waste
Dilution: 1.0
Analysis Date: 09/03/2015 1353
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 160-209348
Prep Batch: N/A
Leach Batch: N/A
Units: mg/Kg

Instrument ID: CIC1500
Lab File ID: IOD 090315- 11.d
Initial Weight/Volume: 5 mL
Final Weight/Volume:
Injection Volume: 100 uL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Iodide	4.00	3.75	94	80 - 120	

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-73548-1
Sdg Number: JP0990

Method Blank - Batch: 160-209350

Method: 9056A
Preparation: N/A

Lab Sample ID:	MB 160-209350/3	Analysis Batch:	160-209350	Instrument ID:	CIC2500
Client Matrix:	Waste	Prep Batch:	N/A	Lab File ID:	090315- 3.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	09/03/2015 1344	Units:	mg/Kg	Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	50 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Bromide	0.025	U	0.025	0.25
Fluoride	0.010	U	0.010	0.10

Lab Control Sample - Batch: 160-209350

Method: 9056A
Preparation: N/A

Lab Sample ID:	LCS 160-209350/4	Analysis Batch:	160-209350	Instrument ID:	CIC2500
Client Matrix:	Waste	Prep Batch:	N/A	Lab File ID:	090315- 4.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	09/03/2015 1400	Units:	mg/Kg	Final Weight/Volume:	
Prep Date:	N/A			Injection Volume:	50 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Bromide	2.00	1.92	96	80 - 120	
Fluoride	1.00	0.987	99	80 - 120	

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-73548-1

Sdg Number: JP0990

Method Blank - Batch: 160-209352

Method: 9056A
Preparation: 5050

Lab Sample ID: MB 160-209352/1-A
Client Matrix: Waste
Dilution: 1.0
Analysis Date: 09/03/2015 1439
Prep Date: 09/03/2015 1100
Leach Date: N/A

Analysis Batch: 160-209350
Prep Batch: 160-209352
Leach Batch: N/A
Units: mg/Kg

Instrument ID: CIC2500
Lab File ID: 090315- 5.d
Initial Weight/Volume: 0.4 g
Final Weight/Volume: 100 mL
Injection Volume: 50 uL

Analyte	Result	Qual	MDL	RL
Chloride	37.9	J	5.0	50

Lab Control Sample - Batch: 160-209352

Method: 9056A
Preparation: 5050

Lab Sample ID: LCS 160-209352/2-A
Client Matrix: Waste
Dilution: 1.0
Analysis Date: 09/03/2015 1455
Prep Date: 09/03/2015 1133
Leach Date: N/A

Analysis Batch: 160-209350
Prep Batch: 160-209352
Leach Batch: N/A
Units: mg/Kg

Instrument ID: CIC2500
Lab File ID: 090315- 6.d
Initial Weight/Volume: 0.4 g
Final Weight/Volume: 100 mL
Injection Volume: 50 uL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chloride	500	535	107	80 - 120	

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-73548-1
Sdg Number: JP0990

Matrix Spike - Batch: 160-209352

Method: 9056A
Preparation: 5050

Lab Sample ID: 280-73548-1
Client Matrix: Waste
Dilution: 1.0
Analysis Date: 09/03/2015 1542
Prep Date: 09/03/2015 1312
Leach Date: N/A

Analysis Batch: 160-209348
Prep Batch: 160-209352
Leach Batch: N/A
Units: mg/Kg

Instrument ID: CIC1500
Lab File ID: IOD 090315- 14.d
Initial Weight/Volume: 0.3964 g
Final Weight/Volume: 100 mL
Injection Volume: 100 uL

Analyte	Sample	Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Iodide	2.5	U	1010	1250	124	80 - 118	N

Matrix Spike - Batch: 160-209352

Method: 9056A
Preparation: 5050

Lab Sample ID: 280-73548-1
Client Matrix: Waste
Dilution: 1.0
Analysis Date: 09/03/2015 1544
Prep Date: 09/03/2015 1312
Leach Date: N/A

Analysis Batch: 160-209350
Prep Batch: 160-209352
Leach Batch: N/A
Units: mg/Kg

Instrument ID: CIC2500
Lab File ID: 090315- 9.d
Initial Weight/Volume: 0.3964 g
Final Weight/Volume: 100 mL
Injection Volume: 50 uL

Analyte	Sample	Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Chloride	210		505	694	96	70 - 128	
Bromide	6.3	U	505	480	95	79 - 117	
Fluoride	19	J	505	673	130	80 - 123	E N

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-73548-1
Sdg Number: JP0990

Duplicate - Batch: 160-209352

Method: 9056A
Preparation: 5050

Lab Sample ID: 280-73548-1
Client Matrix: Waste
Dilution: 1.0
Analysis Date: 09/03/2015 1527
Prep Date: 09/03/2015 1239
Leach Date: N/A

Analysis Batch: 160-209348
Prep Batch: 160-209352
Leach Batch: N/A
Units: mg/Kg

Instrument ID: CIC1500
Lab File ID: IOD 090315- 13.d
Initial Weight/Volume: 0.4028 g
Final Weight/Volume: 100 mL
Injection Volume: 100 uL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Iodide	2.5 U	2.5	NC	30	U

Duplicate - Batch: 160-209352

Method: 9056A
Preparation: 5050

Lab Sample ID: 280-73548-1
Client Matrix: Waste
Dilution: 1.0
Analysis Date: 09/03/2015 1528
Prep Date: 09/03/2015 1239
Leach Date: N/A

Analysis Batch: 160-209350
Prep Batch: 160-209352
Leach Batch: N/A
Units: mg/Kg

Instrument ID: CIC2500
Lab File ID: 090315- 8.d
Initial Weight/Volume: 0.4028 g
Final Weight/Volume: 100 mL
Injection Volume: 50 uL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Chloride	210	191	8	30	
Bromide	6.3 U	6.2	NC	30	U
Fluoride	19 J	17.9	6	30	J

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-73548-1
Sdg Number: JP0990

Method Blank - Batch: 160-209390

Method: 9056A
Preparation: N/A

Lab Sample ID: MB 160-209390/1
Client Matrix: Waste
Dilution: 1.0
Analysis Date: 09/03/2015 1724
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 160-209390
Prep Batch: N/A
Leach Batch: N/A
Units: mg/Kg

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume:
Injection Volume:

Analyte	Result	Qual	MDL	RL
Total Halogens	39	U	39	390

Duplicate - Batch: 160-209390

Method: 9056A
Preparation: N/A

Lab Sample ID: 280-73548-1
Client Matrix: Waste
Dilution: 1.0
Analysis Date: 09/03/2015 1724
Prep Date: N/A
Leach Date: N/A

Analysis Batch: 160-209390
Prep Batch: N/A
Leach Batch: N/A
Units: mg/Kg

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume:
Injection Volume:

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Total Halogens	230 J	209	9	30	J

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-73548-1

Sdg Number: JP0990

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 280-292976					
LCS 280-292976/2-A	Lab Control Sample	T	Waste	3580A	
MB 280-292976/1-A	Method Blank	T	Waste	3580A	
280-73548-1	J1V831	T	Waste	3580A	
280-73548-1MS	Matrix Spike	T	Waste	3580A	
280-73548-1MSD	Matrix Spike Duplicate	T	Waste	3580A	
Analysis Batch:280-293322					
LCS 280-292976/2-A	Lab Control Sample	T	Waste	8082	280-292976
MB 280-292976/1-A	Method Blank	T	Waste	8082	280-292976
280-73548-1	J1V831	T	Waste	8082	280-292976
280-73548-1MS	Matrix Spike	T	Waste	8082	280-292976
280-73548-1MSD	Matrix Spike Duplicate	T	Waste	8082	280-292976

Report Basis

T = Total

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-73548-1

Sdg Number: JP0990

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
HPLC/IC					
Analysis Batch:160-209348					
LCS 160-209348/11	Lab Control Sample	T	Waste	9056A	
MB 160-209348/10	Method Blank	T	Waste	9056A	
280-73548-1	J1V831	T	Waste	9056A	160-209352
280-73548-1DU	Duplicate	T	Waste	9056A	160-209352
280-73548-1MS	Matrix Spike	T	Waste	9056A	160-209352
Analysis Batch:160-209350					
LCS 160-209350/4	Lab Control Sample	T	Waste	9056A	
MB 160-209350/3	Method Blank	T	Waste	9056A	
LCS 160-209352/2-A	Lab Control Sample	T	Waste	9056A	160-209352
MB 160-209352/1-A	Method Blank	T	Waste	9056A	160-209352
280-73548-1	J1V831	T	Waste	9056A	160-209352
280-73548-1DU	Duplicate	T	Waste	9056A	160-209352
280-73548-1MS	Matrix Spike	T	Waste	9056A	160-209352
Prep Batch: 160-209352					
LCS 160-209352/2-A	Lab Control Sample	T	Waste	5050	
MB 160-209352/1-A	Method Blank	T	Waste	5050	
280-73548-1	J1V831	T	Waste	5050	
280-73548-1DU	Duplicate	T	Waste	5050	
280-73548-1MS	Matrix Spike	T	Waste	5050	
Analysis Batch:160-209390					
MB 160-209390/1	Method Blank	T	Waste	9056A	
280-73548-1	J1V831	T	Waste	9056A	
280-73548-1DU	Duplicate	T	Waste	9056A	

Report Basis

T = Total

Chain of Custody Record



Client Information (Sub Contract Lab) Client Contact: Yoder, Kae E Shipping/Receiving: kae.yoder@testamericainc.com Company: TestAmerica Laboratories, Inc. Address: 13715 Rider Trail North, City: Earth City State, Zip: MO, 63045 Phone: 314-298-8566(Tel) 314-298-8757(Fax) Email:		Lab P/M: Yoder, Kae E E-Mail: kae.yoder@testamericainc.com Carrier Tracking No(s): COC No: 280-317459.1 Page: Page 1 of 1 Job #: 280-73548-1	
Due Date Requested: 9/3/2015 TAT Requested (days): PO #: WO #: Project #: 28002142 SSOW#:		Analysis Requested Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 Z - other (specify)	
Sample Identification - Client ID (Lab ID) J17831 (280-73548-1)		Total Number of Containers: 1 Special Instructions/Note: Dont batch or share QC w/ other Jobs; QC Required=MS and Dup: TOTAL	
Possible Hazard Identification Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements:	
Empty Kit Relinquished by:		Method of Shipment:	
Relinquished by: <i>[Signature]</i> Relinquished by:		Date/Time: 8/28/15 15:31 Date/Time:	
Relinquished by:		Date/Time:	
Relinquished by:		Date/Time:	
Custody Seals Intact: Δ Yes Δ No		Cooler Temperature(s) °C and Other Remarks:	

Temp 2.6 IR# 5
CF +0.1 Initials M7
Date: 08/28/15

90w Permission

Project 28002142
Report Due: 9/4/2015 ^{D.B.}
TALs TAT: Rushy TAT ₈₋₂₋₁₅

Sample Check-in List

Date/Time Received: 8/28/15 9:20 GM Screen Result 12 microR/hr

Client: Washington Closure Hanford SDG #: JP0790 NA [] SAF #: RC-150 NA []

Job Number: 73548 Chain of Custody # RC-150-083

Shipping Container ID: GWS-056 Air Bill # 7743 8422 3980

- 1. Custody Seals on shipping container intact? NA [] Yes No []
- 2. Custody Seals dated and signed? NA [] Yes No []
- 3. Chain of Custody record present? NA [] Yes No []
- 4. Cooler Temperature °C: 2.6 ^{IDS+0.1} 8/28/15 NA [] 5. Vermiculite/packing materials is NA [] Wet [] Dry
- 6. Number of samples in shipping container: 1
- 7. Sample holding times exceeded? NA [] Yes [] No []
- 8. Samples have:
 - Tape Hazard Labels
 - Custody Seals Appropriate Sample Labels
- 9. Samples are:
 - In Good Condition Leaking
 - Broken Have Air Bubbles

(Only for samples requiring no head space.)
- 10. Sample pH taken? NA pH<2 [] pH>2 [] pH>9 [] Amount HNO₃ Added _____
- 11. Sample Location, Sample Collector Listed? *
*For documentation only. No corrective action needed.
- 12. Were any anomalies identified in sample receipt? Yes [] No
- 13. Description of anomalies (include sample numbers): _____

Sample Custodian: [Signature] Date: 8/28/15

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[] No action necessary; process as is.

Project Manager Darlene Bandy Date 8/31/15

ORIGIN ID:PPSCA (509) 376-7492
1167 SHIPPING
US POSTAL NETWORK
2399 STEVENS DR
RICHLAND, WA 99354
UNITED STATES US

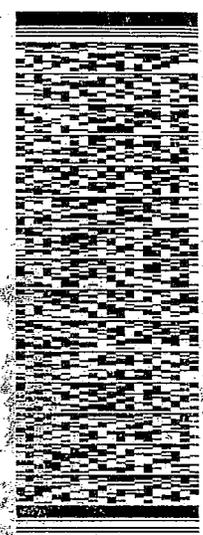
SHIP DATE: 27AUG15
ACTWGST: 22.00 LB
CAD: 10326592/NET3670
BILL THIRD PARTY

TO KAE YODER

TESTAMERICA
4955 YARROW ST.
A120882

ARVADA CO 80002

(303) 736-0190 REF: R32FXS.000
INV: DEPT:



115201406250115

TRK# 7743 8422 3980
0201

FRI - 28 AUG 10:30A
PRIORITY OVERNIGHT

XHWHHA

80002
CO-US DEN



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