0098310

SAF-RC-183
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SDG J01113 SAF-RC-183

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☑ Complete Partial

Sample Location: 100-F-47 Transformers

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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 280-17253-1

SDG Number: J01113

Job Description: SAF# RC-183

RECEIVED JUL 2011

For:
Washington Closure Hanford
2620 Fermi Avenue
Richland, WA 99354

Attention: Joan H Kessner

Approved for release.
Kae E Yoder
Project Manager II
7/13/2011 12:28 PM

Kae E Yoder
Project Manager II
kae.yoder@testamericainc.com

07/13/2011

The test results in this report relate only to the samples in this report and meet all requirements of NELAC, 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 E87667.

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

TestAmerica Laboratories, Inc.
TestAmerica Denver 4955 Yarrow Street, Arvada, CO 80002
Tel (303) 736-0100 Fax (303) 431-7171 www.testamericainc.com

ACCREDITED IN ACCORDANCE WITH nelac

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CASE NARRATIVE

Client: Washington Closure Hanford

Project: WASHINGTON CLOSURE HANFORD

Report Number: 280-17253-1

SDG #: J01113
SAF#: RC-183

Date SDG Closed: June 22, 2011
Data Deliverable: 15 Day / Summary

CLIENT ID	LAB ID	ANALYSES REQUESTED	ANALYSES PERFORMED
J1JW27	280-17253-1	6010/7471/8270A/8310/8082	6010B/7471A/8270C/8082

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.

This report includes reporting limits (RLs) less than TestAmerica Denver's practical quantitation limits. These reporting limits are being used specifically at the client's request to meet the needs of this project. Please note that data are not normally reported to these levels without qualification, since they are inherently less reliable and potentially less defensible than required by the current NELAC standards.

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 6/22/2011; the sample arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 4.5 C.

Sample J1JW27 is a tar like material, logged as a waste matrix, and is not soluble in Acetonitrile; therefore, the requested PAH 8310 analysis could not be performed. It can be noted that the PAH compounds are included in the Semi-VOA 8270C list. The client was notified on 6/23/2011.

GC/MS SEMIVOLATILES - SW846 8270C
The routine extraction procedure could not be performed for sample J1JW27, due to the nature of the sample matrix. The sample had to be analyzed using the waste dilution procedure. The reporting limits have been elevated accordingly.

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 J1JW27 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 sample was viscous.

Surrogate recoveries have been "D" flagged in sample J1JW27, as the recoveries obtained are calculated from a diluted sample and are not considered reliable.

Low levels of Bis(2-ethylhexyl) phthalate, a common laboratory contaminant, are present in the method blank associated with batch 280-73442. Because the concentration in the method blank is not present at a level greater than the reporting limit, corrective action is deemed unnecessary. Associated sample results present above the MDL and/or RL have been flagged with a "B".

Spike compound recoveries, RPD data and surrogate recoveries have been "D" flagged in the MS/MSD performed on sample J1JW27, as the recoveries obtained are calculated from diluted samples and are not considered reliable. The acceptable LCS analysis data indicated that the analytical system was operating within control.

No other anomalies were encountered.

GC SEMIVOLATILES - SW846 8082 - PCBs

The routine extraction procedure could not be performed for sample J1JW27, due to the nature of the sample matrix. The sample had to be analyzed using the waste dilution procedure. The reporting limits have been elevated accordingly.

The laboratory noted that a Sulfuric Acid clean-up and a Mercury clean-up were performed on sample J1JW27 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 J1JW27 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.

Surrogate recoveries have been "D" flagged in sample J1JW27, as the recoveries obtained are calculated from a diluted sample and are not considered reliable.

Spike compound recoveries, RPD data and surrogate recoveries have been "D" flagged in the MS and MSD performed on sample J1JW27, as the recoveries obtained are calculated from diluted samples and are not considered reliable. The acceptable LCS analysis data indicated that the analytical system was operating within control.

A Continuing Calibration Verification (CCV) standard exhibited the %Difference (%D) value >15%, biased low, for surrogate Decachlorobiphenyl (-19.9%). For the samples associated with this CCV, surrogate Decachlorobiphenyl was either in control or considered not reliable due to dilution; therefore, data are reported as is.

No other anomalies were encountered.

TOTAL METALS - SW846 6010B/7471A

Due to the oily matrix of sample J1F1N1, the routine ICP Metals digestion procedure could not be performed. The sample was digested with 0.25 g of sample and taken to a final volume of 25 mL, instead of the routine 1 g of sample taken to a final volume of 100 mL.

Low levels of Molybdenum, Silicon and Sodium are present in the method blank associated with batch 280-73419. Because the concentrations in the method blank are not present at levels greater than the reporting limits, corrective action is deemed unnecessary.

Silicon was recovered outside the control limits, biased low, in the LCS associated with batch 280-73419, and the associated sample result has been flagged "N". Silicon is a poor performer and has a history of reacting inconsistently. Data are reported as is.

It can be noted that the sample amount was greater than four times the spike amount for Aluminum and Iron in the Matrix Spike performed on sample J1JW27; therefore, control limits are not applicable.

The Matrix Spike performed on sample J1JW27 exhibited percent recoveries outside the control limits for several elements, and the associated sample results have been flagged "N". 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.

The duplicate analysis of sample J1JW27 exhibited RPD data outside the control limits for several elements, and the associated sample results have been flagged "M". 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.

Antimony is present at a level greater than the reporting limit in the instrument blank associated with batch 280-73419. As Antimony is not present at a level greater than the reporting limit in the associated sample, corrective action is deemed unnecessary.

No other anomalies were encountered.

DATA REPORTING QUALIFIERS

Client: Washington Closure Hanford

Job Number: 280-17253-1
Sdg Number: J01113

Lab Section	Qualifier	Description
GC/MS Semi VOA		
	U	Analyzed for but not detected.
	J	Indicates an Estimated Value for TICs
	N	Presumptive evidence of material.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
GC Semi VOA		
	U	Analyzed for but not detected.
	D	The reported value is from a dilution.
Metals		
	U	Analyzed for but not detected.
	B	Estimated result. Result is less than the RL, but greater than MDL
	4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
	N	Recovery exceeds upper or lower control limits
	M	Sample duplicate precision not met.
	C	The analyte was detected in both the sample and the assoicated QC blank, and the sample concentration was </= 5X the blank concentration.

METHOD SUMMARY

Client: Washington Closure Hanford

Job Number: 280-17253-1
Sdg Number: J01113

Description	Lab Location	Method	Preparation Method
Matrix: Waste			
Semivolatile Organic Compounds (GC/MS)	TAL DEN	SW846 8270C	
Waste Dilution	TAL DEN		SW846 3580A
Polychlorinated Biphenyls (PCBs) by Gas Chromatography	TAL DEN	SW846 8082	
Waste Dilution	TAL DEN		SW846 3580A
Metals (ICP)	TAL DEN	SW846 6010B	
Preparation, Metals, Microwave Assisted	TAL DEN		SW846 3052
Mercury (CVAA)	TAL DEN	SW846 7471A	
Preparation, Mercury	TAL DEN		SW846 7471A

Lab References:

TAL DEN = TestAmerica Denver

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: 280-17253-1
Sdg Number: J01113

Method	Analyst	Analyst ID
SW846 8270C	Kiekel, Daniel C	DCK
SW846 8082	Jackson, Todd D	TDJ
SW846 6010B	Trudell, Lynn-Anne	LT
SW846 7471A	Niman, Katie M	KMN

SAMPLE SUMMARY

Client: Washington Closure Hanford

Job Number: 280-17253-1
Sdg Number: J01113

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-17253-1	J1JW27	Waste	06/20/2011 1300	06/22/2011 0930

SAMPLE RESULTS

Client: Washington Closure Hanford

Job Number: 280-17253-1
Sdg Number: J01113

Client Sample ID: **J1JW27**

Lab Sample ID: 280-17253-1
Client Matrix: Waste

Date Sampled: 06/20/2011 1300
Date Received: 06/22/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-73997	Instrument ID:	MSS_G6
Prep Method:	3580A	Prep Batch:	280-73442	Lab File ID:	G6_2465.D
Dilution:	20			Initial Weight/Volume:	1.1780 g
Analysis Date:	06/25/2011 0123			Final Weight/Volume:	10000 uL
Prep Date:	06/22/2011 2307			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	MDL	RL
Phenol		92000	U D	92000	1700000
2-Chlorophenol		110000	U D	110000	1700000
1,3-Dichlorobenzene		61000	U D	61000	1700000
1,4-Dichlorobenzene		70000	U D	70000	1700000
1,2-Dichlorobenzene		110000	U D	110000	1700000
2-Methylphenol		66000	U D	66000	1700000
3 & 4 Methylphenol		170000	U D	170000	1700000
N-Nitrosodi-n-propylamine		160000	U D	160000	1700000
Hexachloroethane		110000	U D	110000	1700000
Nitrobenzene		110000	U D	110000	1700000
Isophorone		87000	U D	87000	1700000
2,4-Dimethylphenol		340000	U D	340000	1700000
2-Nitrophenol		51000	U D	51000	1700000
Bis(2-chloroethoxy)methane		120000	U D	120000	1700000
2,4-Dichlorophenol		51000	U D	51000	1700000
1,2,4-Trichlorobenzene		140000	U D	140000	1700000
Naphthalene		160000	U D	160000	1700000
4-Chloroaniline		420000	U D	420000	1700000
Hexachlorobutadiene		51000	U D	51000	1700000
4-Chloro-3-methylphenol		340000	U D	340000	1700000
2-Methylnaphthalene		97000	U D	97000	1700000
Hexachlorocyclopentadiene		250000	U D	250000	8100000
2,4,6-Trichlorophenol		51000	U D	51000	1700000
2,4,5-Trichlorophenol		51000	U D	51000	1700000
2-Chloronaphthalene		51000	U D	51000	1700000
2-Nitroaniline		250000	U D	250000	8100000
Dimethyl phthalate		120000	U D	120000	1700000
2,6-Dinitrotoluene		140000	U D	140000	1700000
Acenaphthylene		87000	U D	87000	1700000
3-Nitroaniline		370000	U D	370000	8100000
Acenaphthene		51000	U D	51000	1700000
2,4-Dinitrophenol		1700000	U D	1700000	8100000
4-Nitrophenol		490000	U D	490000	8100000
Dibenzofuran		100000	U D	100000	1700000
2,4-Dinitrotoluene		340000	U D	340000	1700000
Diethyl phthalate		130000	U D	130000	3400000
4-Chlorophenyl phenyl ether		110000	U D	110000	1700000
Fluorene		92000	U D	92000	1700000
4-Nitroaniline		370000	U D	370000	8100000
4,6-Dinitro-2-methylphenol		1700000	U D	1700000	8100000
N-Nitrosodiphenylamine		110000	U D	110000	1700000
4-Bromophenyl phenyl ether		97000	U D	97000	1700000
Hexachlorobenzene		150000	U D	150000	1700000
Pentachlorophenol		1700000	U D	1700000	8100000
Phenanthrene		87000	U D	87000	1700000
Anthracene		87000	U D	87000	1700000

Client: Washington Closure Hanford

Job Number: 280-17253-1
Sdg Number: J01113

Client Sample ID: **J1JW27**

Lab Sample ID: 280-17253-1
Client Matrix: Waste

Date Sampled: 06/20/2011 1300
Date Received: 06/22/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-73997	Instrument ID:	MSS_G6
Prep Method:	3580A	Prep Batch:	280-73442	Lab File ID:	G6_2465.D
Dilution:	20			Initial Weight/Volume:	1.1780 g
Analysis Date:	06/25/2011 0123			Final Weight/Volume:	10000 uL
Prep Date:	06/22/2011 2307			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	MDL	RL
Carbazole		190000	U D	190000	1700000
Di-n-butyl phthalate		150000	U D	150000	1700000
Fluoranthene		190000	U D	190000	1700000
Pyrene		61000	U D	61000	1700000
Butyl benzyl phthalate		220000	U D	220000	1700000
Bis(2-ethylhexyl) phthalate		240000	U D	240000	1700000
3,3'-Dichlorobenzidine		460000	U D	460000	3400000
Benzo[a]anthracene		100000	U D	100000	1700000
Chrysene		140000	U D	140000	1700000
Di-n-octyl phthalate		73000	U D	73000	1700000
Benzo[b]fluoranthene		130000	U D	130000	1700000
Benzo[k]fluoranthene		200000	U D	200000	1700000
Benzo[a]pyrene		100000	U D	100000	1700000
Dibenz(a,h)anthracene		97000	U D	97000	1700000
Indeno[1,2,3-cd]pyrene		110000	U D	110000	1700000
Benzo[ghi]perylene		81000	U D	81000	1700000
Bis(2-chloroethyl)ether		85000	U D	85000	1700000
bis (2-chloroisopropyl) ether		120000	U D	120000	1700000

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol	91	D	53 - 120
Phenol-d5	92	D	52 - 120
Nitrobenzene-d5	93	D	50 - 120
2-Fluorobiphenyl	88	D	50 - 120
2,4,6-Tribromophenol	78	D	51 - 120
Terphenyl-d14	89	D	55 - 120

Client: Washington Closure Hanford

Job Number: 280-17253-1
Sdg Number: J01113

Client Sample ID: **J1JW27**

Lab Sample ID: 280-17253-1
Client Matrix: Waste

Date Sampled: 06/20/2011 1300
Date Received: 06/22/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-73997	Instrument ID:	MSS_G6
Prep Method:	3580A	Prep Batch:	280-73442	Lab File ID:	G6_2465.D
Dilution:	20			Initial Weight/Volume:	1.1780 g
Analysis Date:	06/25/2011 0123			Final Weight/Volume:	10000 uL
Prep Date:	06/22/2011 2307			Injection Volume:	0.5 uL

Tentatively Identified Compounds **Number TIC's Found:** 3

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	10.42	1400000	N J
	Unknown	11.64	1200000	N J
192-65-4	Naphtho[1,2,3,4-def]chrysene	11.72	2100000	N J

Client: Washington Closure Hanford

Job Number: 280-17253-1
Sdg Number: J01113

Client Sample ID: **J1JW27**

Lab Sample ID: 280-17253-1
Client Matrix: Waste

Date Sampled: 06/20/2011 1300
Date Received: 06/22/2011 0930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-74870	Instrument ID:	GCS_P3
Prep Method:	3580A	Prep Batch:	280-73438	Initial Weight/Volume:	1.0171 g
Dilution:	10			Final Weight/Volume:	10000 uL
Analysis Date:	06/30/2011 2332			Injection Volume:	
Prep Date:	06/22/2011 2223			Result Type:	PRIMARY

Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		50	U D	50	320
Aroclor 1221		150	U D	150	460
Aroclor 1232		50	U D	50	320
Aroclor 1242		90	U D	90	320
Aroclor 1248		55	U D	55	320
Aroclor 1254		54	U D	54	320
Aroclor 1260		26	U D	26	320

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	20	D	59 - 130
Tetrachloro-m-xylene	103	D	53 - 128

Client: Washington Closure Hanford

Job Number: 280-17253-1
Sdg Number: J01113

Client Sample ID: **J1JW27**

Lab Sample ID: 280-17253-1
Client Matrix: Waste

Date Sampled: 06/20/2011 1300
Date Received: 06/22/2011 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-75225	Instrument ID:	MT_026
Prep Method:	3052	Prep Batch:	280-73419	Lab File ID:	26a070511.asc
Dilution:	1.0			Initial Weight/Volume:	0.23 g
Analysis Date:	07/05/2011 1906			Final Weight/Volume:	25 mL
Prep Date:	07/05/2011 0900				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		2450	M	5.9	21.7
Antimony		0.70	B	0.65	1.6
Arsenic		0.65	U N	0.65	2.2
Barium		16.2		0.54	1.1
Beryllium		0.076	U N	0.076	0.54
Boron		0.86	B M N	0.43	10.9
Cadmium		0.72	M	0.11	0.54
Calcium		1740	M N	9.9	54.3
Chromium		4.6	N	0.16	1.6
Cobalt		2.8	M N	0.22	1.1
Copper		10.7	M	0.54	2.2
Iron		6900		5.4	16.3
Lead		21.3	N	0.29	0.87
Magnesium		1190	M N	4.7	21.7
Manganese		56.0	M	0.088	1.1
Molybdenum		0.91	B N C	0.54	2.2
Nickel		10.4		1.1	4.3
Potassium		224	B N	54.3	326
Selenium		1.1	B N	0.72	1.4
Silicon		312	N M	12.2	54.3
Silver		0.12	U N	0.12	1.1
Sodium		285	B N M C	36.3	543
Vanadium		18.0		0.14	2.2
Zinc		20.6	N	1.1	3.3

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-75231	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-74659	Lab File ID:	110705AB.txt
Dilution:	1.0			Initial Weight/Volume:	0.67 g
Analysis Date:	07/05/2011 2212			Final Weight/Volume:	50 mL
Prep Date:	07/05/2011 1545				

Analyte	DryWt Corrected: N	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0083	U	0.0083	0.025

QUALITY CONTROL RESULTS

Client: Washington Closure Hanford

Job Number: 280-17253-1
Sdg Number: J01113

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 280-73442					
LCS 280-73442/2-A	Lab Control Sample	T	Waste	3580A	
MB 280-73442/1-A	Method Blank	T	Waste	3580A	
280-17253-1	J1JW27	T	Waste	3580A	
280-17253-1MS	Matrix Spike	T	Waste	3580A	
280-17253-1MSD	Matrix Spike Duplicate	T	Waste	3580A	
Analysis Batch:280-73997					
LCS 280-73442/2-A	Lab Control Sample	T	Waste	8270C	280-73442
MB 280-73442/1-A	Method Blank	T	Waste	8270C	280-73442
280-17253-1	J1JW27	T	Waste	8270C	280-73442
280-17253-1MS	Matrix Spike	T	Waste	8270C	280-73442
280-17253-1MSD	Matrix Spike Duplicate	T	Waste	8270C	280-73442

Report Basis
T = Total

GC Semi VOA					
Prep Batch: 280-73438					
LCS 280-73438/2-A	Lab Control Sample	T	Waste	3580A	
MB 280-73438/1-A	Method Blank	T	Waste	3580A	
280-17253-1	J1JW27	T	Waste	3580A	
280-17253-1MS	Matrix Spike	T	Waste	3580A	
280-17253-1MSD	Matrix Spike Duplicate	T	Waste	3580A	
Analysis Batch:280-74870					
LCS 280-73438/2-A	Lab Control Sample	T	Waste	8082	280-73438
MB 280-73438/1-A	Method Blank	T	Waste	8082	280-73438
280-17253-1	J1JW27	T	Waste	8082	280-73438
280-17253-1MS	Matrix Spike	T	Waste	8082	280-73438
280-17253-1MSD	Matrix Spike Duplicate	T	Waste	8082	280-73438

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-17253-1
Sdg Number: J01113

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-73419					
LCS 280-73419/2-A	Lab Control Sample	T	Waste	3052	
MB 280-73419/1-A	Method Blank	T	Waste	3052	
280-17253-1	J1JW27	T	Waste	3052	
280-17253-1DU	Duplicate	T	Waste	3052	
280-17253-1MS	Matrix Spike	T	Waste	3052	
Prep Batch: 280-74659					
LCSSRM 280-74659/6-A ^200	LCS-Certified Reference Material	T	Waste	7471A	
MB 280-74659/1-A	Method Blank	T	Waste	7471A	
280-17253-1	J1JW27	T	Waste	7471A	
280-17253-1DU	Duplicate	T	Waste	7471A	
280-17253-1MS	Matrix Spike	T	Waste	7471A	
Analysis Batch:280-75225					
LCS 280-73419/2-A	Lab Control Sample	T	Waste	6010B	280-73419
MB 280-73419/1-A	Method Blank	T	Waste	6010B	280-73419
280-17253-1	J1JW27	T	Waste	6010B	280-73419
280-17253-1DU	Duplicate	T	Waste	6010B	280-73419
280-17253-1MS	Matrix Spike	T	Waste	6010B	280-73419
Analysis Batch:280-75231					
LCSSRM 280-74659/6-A ^200	LCS-Certified Reference Material	T	Waste	7471A	280-74659
MB 280-74659/1-A	Method Blank	T	Waste	7471A	280-74659
280-17253-1	J1JW27	T	Waste	7471A	280-74659
280-17253-1DU	Duplicate	T	Waste	7471A	280-74659
280-17253-1MS	Matrix Spike	T	Waste	7471A	280-74659

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-17253-1
Sdg Number: J01113

Method Blank - Batch: 280-73442

Method: 8270C
Preparation: 3580A

Lab Sample ID:	MB 280-73442/1-A	Analysis Batch:	280-73997	Instrument ID:	MSS_G6
Client Matrix:	Waste	Prep Batch:	280-73442	Lab File ID:	G6_2444.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	06/24/2011 1839	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	06/22/2011 2307			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Phenol	5400	U	5400	99000
2-Chlorophenol	6300	U	6300	99000
1,3-Dichlorobenzene	3600	U	3600	99000
1,4-Dichlorobenzene	4100	U	4100	99000
1,2-Dichlorobenzene	6600	U	6600	99000
2-Methylphenol	3900	U	3900	99000
3 & 4 Methylphenol	9900	U	9900	99000
N-Nitrosodi-n-propylamine	9300	U	9300	99000
Hexachloroethane	6400	U	6400	99000
Nitrobenzene	6600	U	6600	99000
Isophorone	5100	U	5100	99000
2,4-Dimethylphenol	20000	U	20000	99000
2-Nitrophenol	3000	U	3000	99000
Bis(2-chloroethoxy)methane	6900	U	6900	99000
2,4-Dichlorophenol	3000	U	3000	99000
1,2,4-Trichlorobenzene	8400	U	8400	99000
Naphthalene	9300	U	9300	99000
4-Chloroaniline	25000	U	25000	99000
Hexachlorobutadiene	3000	U	3000	99000
4-Chloro-3-methylphenol	20000	U	20000	99000
2-Methylnaphthalene	5700	U	5700	99000
Hexachlorocyclopentadiene	15000	U	15000	480000
2,4,6-Trichlorophenol	3000	U	3000	99000
2,4,5-Trichlorophenol	3000	U	3000	99000
2-Chloronaphthalene	3000	U	3000	99000
2-Nitroaniline	15000	U	15000	480000
Dimethyl phthalate	6900	U	6900	99000
2,6-Dinitrotoluene	8400	U	8400	99000
Acenaphthylene	5100	U	5100	99000
3-Nitroaniline	22000	U	22000	480000
Acenaphthene	3000	U	3000	99000
2,4-Dinitrophenol	99000	U	99000	480000
4-Nitrophenol	29000	U	29000	480000
Dibenzofuran	6000	U	6000	99000
2,4-Dinitrotoluene	20000	U	20000	99000
Diethyl phthalate	7800	U	7800	200000
4-Chlorophenyl phenyl ether	6300	U	6300	99000
Fluorene	5400	U	5400	99000
4-Nitroaniline	22000	U	22000	480000
4,6-Dinitro-2-methylphenol	99000	U	99000	480000
N-Nitrosodiphenylamine	6300	U	6300	99000
4-Bromophenyl phenyl ether	5700	U	5700	99000
Hexachlorobenzene	8700	U	8700	99000
Pentachlorophenol	99000	U	99000	480000
Phenanthrene	5100	U	5100	99000

Client: Washington Closure Hanford

Job Number: 280-17253-1
Sdg Number: J01113

Method Blank - Batch: 280-73442

Method: 8270C
Preparation: 3580A

Lab Sample ID:	MB 280-73442/1-A	Analysis Batch:	280-73997	Instrument ID:	MSS_G6
Client Matrix:	Waste	Prep Batch:	280-73442	Lab File ID:	G6_2444.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	06/24/2011 1839	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	06/22/2011 2307			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Anthracene	5100	U	5100	99000
Carbazole	11000	U	11000	99000
Di-n-butyl phthalate	8700	U	8700	99000
Fluoranthene	11000	U	11000	99000
Pyrene	3600	U	3600	99000
Butyl benzyl phthalate	13000	U	13000	99000
Bis(2-ethylhexyl) phthalate	28000	J	14000	99000
3,3'-Dichlorobenzidine	27000	U	27000	200000
Benzo[a]anthracene	6000	U	6000	99000
Chrysene	8100	U	8100	99000
Di-n-octyl phthalate	4300	U	4300	99000
Benzo[b]fluoranthene	7900	U	7900	99000
Benzo[k]fluoranthene	12000	U	12000	99000
Benzo[a]pyrene	6000	U	6000	99000
Dibenz(a,h)anthracene	5700	U	5700	99000
Indeno[1,2,3-cd]pyrene	6600	U	6600	99000
Benzo[ghi]perylene	4800	U	4800	99000
Bis(2-chloroethyl)ether	5000	U	5000	99000
bis (2-chloroisopropyl) ether	6900	U	6900	99000

Surrogate	% Rec	Acceptance Limits
2-Fluorophenol	88	53 - 120
Phenol-d5	91	52 - 120
Nitrobenzene-d5	90	50 - 120
2-Fluorobiphenyl	86	50 - 120
2,4,6-Tribromophenol	103	51 - 120
Terphenyl-d14	84	55 - 120

Method Blank TICs- Batch: 280-73442

Cas Number	Analyte	RT	Est. Result	Qual
	Tentatively Identified Compound		None	N J

Client: Washington Closure Hanford

Job Number: 280-17253-1
Sdg Number: J01113

Lab Control Sample - Batch: 280-73442

Method: 8270C
Preparation: 3580A

Lab Sample ID:	LCS 280-73442/2-A	Analysis Batch:	280-73997	Instrument ID:	MSS_G6
Client Matrix:	Waste	Prep Batch:	280-73442	Lab File ID:	G6_2445.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	06/24/2011 1858	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	06/22/2011 2307			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Phenol	1500000	1310000	87	54 - 120	
2-Chlorophenol	1500000	1370000	92	53 - 120	
1,4-Dichlorobenzene	1000000	860000	86	46 - 120	
N-Nitrosodi-n-propylamine	1000000	939000	94	51 - 120	
1,2,4-Trichlorobenzene	1000000	861000	86	50 - 120	
4-Chloro-3-methylphenol	1500000	1360000	91	57 - 120	
Acenaphthene	1000000	852000	85	52 - 120	
4-Nitrophenol	1500000	1370000	91	41 - 120	
2,4-Dinitrotoluene	1000000	924000	92	53 - 120	
Pentachlorophenol	1500000	1500000	100	30 - 120	
Pyrene	1000000	835000	83	50 - 120	

Surrogate	% Rec	Acceptance Limits
2-Fluorophenol	89	53 - 120
Phenol-d5	91	52 - 120
Nitrobenzene-d5	90	50 - 120
2-Fluorobiphenyl	86	50 - 120
2,4,6-Tribromophenol	105	51 - 120
Terphenyl-d14	83	55 - 120

Client: Washington Closure Hanford

Job Number: 280-17253-1
Sdg Number: J01113

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-73442

Method: 8270C
Preparation: 3580A

MS Lab Sample ID:	280-17253-1	Analysis Batch:	280-73997	Instrument ID:	MSS_G6
Client Matrix:	Waste	Prep Batch:	280-73442	Lab File ID:	G6_2466.D
Dilution:	20	Leach Batch:	N/A	Initial Weight/Volume:	1.0499 g
Analysis Date:	06/25/2011 0142			Final Weight/Volume:	10000 uL
Prep Date:	06/22/2011 2307			Injection Volume:	0.5 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-17253-1	Analysis Batch:	280-73997	Instrument ID:	MSS_G6
Client Matrix:	Waste	Prep Batch:	280-73442	Lab File ID:	G6_2467.D
Dilution:	20	Leach Batch:	N/A	Initial Weight/Volume:	1.0154 g
Analysis Date:	06/25/2011 0201			Final Weight/Volume:	10000 uL
Prep Date:	06/22/2011 2307			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Phenol	89	95	54 - 120	9	30	D	D
2-Chlorophenol	90	97	53 - 120	10	30	D	D
1,4-Dichlorobenzene	90	95	46 - 120	9	30	D	D
N-Nitrosodi-n-propylamine	94	101	51 - 120	11	30	D	D
1,2,4-Trichlorobenzene	89	92	50 - 120	6	30	D	D
4-Chloro-3-methylphenol	87	88	57 - 120	5	30	D	D
Acenaphthene	88	95	52 - 120	11	30	D	D
4-Nitrophenol	62	59	41 - 120	2	30	D	D
2,4-Dinitrotoluene	69	77	53 - 120	14	30	D	D
Pentachlorophenol	NC	NC	30 - 120	NC	30	D	D
Pyrene	95	98	50 - 120	7	38	D	D

Surrogate	MS % Rec		MSD % Rec		Acceptance Limits
2-Fluorophenol	87	D	91	D	53 - 120
Phenol-d5	92	D	99	D	52 - 120
Nitrobenzene-d5	90	D	96	D	50 - 120
2-Fluorobiphenyl	91	D	94	D	50 - 120
2,4,6-Tribromophenol	78	D	85	D	51 - 120
Terphenyl-d14	90	D	96	D	55 - 120

Client: Washington Closure Hanford

Job Number: 280-17253-1
Sdg Number: J01113

Method Blank - Batch: 280-73438

Method: 8082
Preparation: 3580A

Lab Sample ID:	MB 280-73438/1-A	Analysis Batch:	280-74870	Instrument ID:	GCS_P3
Client Matrix:	Waste	Prep Batch:	280-73438	Lab File ID:	033B3301.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	06/30/2011 2249	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	06/22/2011 2223			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Aroclor 1016	5.1	U	5.1	33
Aroclor 1221	16	U	16	47
Aroclor 1232	5.1	U	5.1	33
Aroclor 1242	9.1	U	9.1	33
Aroclor 1248	5.6	U	5.6	33
Aroclor 1254	5.5	U	5.5	33
Aroclor 1260	2.7	U	2.7	33

Surrogate	% Rec	Acceptance Limits
Decachlorobiphenyl	85	59 - 130
Tetrachloro-m-xylene	107	53 - 128

Lab Control Sample - Batch: 280-73438

Method: 8082
Preparation: 3580A

Lab Sample ID:	LCS 280-73438/2-A	Analysis Batch:	280-74870	Instrument ID:	GCS_P3
Client Matrix:	Waste	Prep Batch:	280-73438	Lab File ID:	034B3401.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	06/30/2011 2310	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	06/22/2011 2223			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aroclor 1016	2000	2320	116	54 - 132	
Aroclor 1260	2000	2120	106	62 - 129	

Surrogate	% Rec	Acceptance Limits
Decachlorobiphenyl	96	59 - 130
Tetrachloro-m-xylene	107	53 - 128

Client: Washington Closure Hanford

Job Number: 280-17253-1
Sdg Number: J01113

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-73438

Method: 8082
Preparation: 3580A

MS Lab Sample ID:	280-17253-1	Analysis Batch:	280-74870	Instrument ID:	GCS_P3
Client Matrix:	Waste	Prep Batch:	280-73438	Lab File ID:	036B3601.D
Dilution:	10	Leach Batch:	N/A	Initial Weight/Volume:	1.1784 g
Analysis Date:	06/30/2011 2353			Final Weight/Volume:	10000 uL
Prep Date:	06/22/2011 2223			Injection Volume:	
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-17253-1	Analysis Batch:	280-74870	Instrument ID:	GCS_P3
Client Matrix:	Waste	Prep Batch:	280-73438	Lab File ID:	037B3701.D
Dilution:	10	Leach Batch:	N/A	Initial Weight/Volume:	1.0427 g
Analysis Date:	07/01/2011 0014			Final Weight/Volume:	10000 uL
Prep Date:	06/22/2011 2223			Injection Volume:	
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Aroclor 1016	22	25	54 - 132	24	36	D	D
Aroclor 1260	28	30	62 - 129	18	44	D	D

Surrogate	MS % Rec		MSD % Rec		Acceptance Limits
Decachlorobiphenyl	10	D	7	D	59 - 130
Tetrachloro-m-xylene	90	D	80	D	53 - 128

Client: Washington Closure Hanford

Job Number: 280-17253-1
Sdg Number: J01113

Method Blank - Batch: 280-73419

Method: 6010B
Preparation: 3052

Lab Sample ID:	MB 280-73419/1-A	Analysis Batch:	280-75225	Instrument ID:	MT_026
Client Matrix:	Waste	Prep Batch:	280-73419	Lab File ID:	26a070511.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.25 g
Analysis Date:	07/05/2011 1901	Units:	mg/Kg	Final Weight/Volume:	25 mL
Prep Date:	07/05/2011 0900				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Aluminum	5.4	U	5.4	20.0
Antimony	0.60	U	0.60	1.5
Arsenic	0.60	U	0.60	2.0
Barium	0.50	U	0.50	1.0
Beryllium	0.070	U	0.070	0.50
Boron	0.40	U	0.40	10.0
Cadmium	0.10	U	0.10	0.50
Calcium	9.1	U	9.1	50.0
Chromium	0.15	U	0.15	1.5
Cobalt	0.20	U	0.20	1.0
Copper	0.50	U	0.50	2.0
Iron	5.0	U	5.0	15.0
Lead	0.26	U	0.26	0.80
Magnesium	4.4	U	4.4	20.0
Manganese	0.081	U	0.081	1.0
Molybdenum	0.702	B	0.50	2.0
Nickel	1.0	U	1.0	4.0
Potassium	50.0	U	50.0	300
Selenium	0.67	U	0.67	1.3
Silicon	49.46	B	11.2	50.0
Silver	0.11	U	0.11	1.0
Sodium	79.93	B	33.4	500
Vanadium	0.13	U	0.13	2.0
Zinc	1.0	U	1.0	3.0

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-17253-1
Sdg Number: J01113

Lab Control Sample - Batch: 280-73419

Method: 6010B
Preparation: 3052

Lab Sample ID:	LCS 280-73419/2-A	Analysis Batch:	280-75225	Instrument ID:	MT_026
Client Matrix:	Waste	Prep Batch:	280-73419	Lab File ID:	26a070511.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.25 g
Analysis Date:	07/05/2011 1904	Units:	mg/Kg	Final Weight/Volume:	25 mL
Prep Date:	07/05/2011 0900				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	100	101.1	101	80 - 120	
Antimony	100	93.79	94	80 - 120	
Arsenic	100	95.05	95	80 - 120	
Barium	100	94.72	95	80 - 120	
Beryllium	100	97.96	98	80 - 120	
Boron	100	80.01	80	80 - 120	
Cadmium	100	96.44	96	80 - 120	
Calcium	1000	999.3	100	80 - 120	
Chromium	100	103.7	104	80 - 120	
Cobalt	100	101.5	102	80 - 120	
Copper	100	107.8	108	80 - 120	
Iron	100	100.9	101	80 - 120	
Lead	100	99.25	99	80 - 120	
Magnesium	1000	903.7	90	80 - 120	
Manganese	100	107.2	107	80 - 120	
Molybdenum	100	105.0	105	80 - 120	
Nickel	100	103.5	103	80 - 120	
Potassium	1000	951.2	95	80 - 120	
Selenium	100	93.53	94	80 - 120	
Silicon	100	65.32	65	80 - 120	N
Silver	100	97.62	98	80 - 120	
Sodium	1000	979.9	98	80 - 120	
Vanadium	100	103.8	104	80 - 120	
Zinc	100	96.24	96	80 - 120	

Client: Washington Closure Hanford

Job Number: 280-17253-1
Sdg Number: J01113

Matrix Spike - Batch: 280-73419

Method: 6010B
Preparation: 3052

Lab Sample ID:	280-17253-1	Analysis Batch:	280-75225	Instrument ID:	MT_026
Client Matrix:	Waste	Prep Batch:	280-73419	Lab File ID:	26a070511.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.24 g
Analysis Date:	07/05/2011 1914	Units:	mg/Kg	Final Weight/Volume:	25 mL
Prep Date:	07/05/2011 0900				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	2450		104	1462	-948	50 - 200	4
Antimony	0.70	B	104	62.29	59	20 - 200	
Arsenic	0.65	U	104	65.59	63	76 - 111	N
Barium	16.2		104	101.6	82	52 - 159	
Beryllium	0.076	U	104	63.63	61	72 - 105	N
Boron	0.86	B	104	54.84	52	75 - 107	N
Cadmium	0.72		104	65.43	62	40 - 130	
Calcium	1740		1040	1423	-30	43 - 165	N
Chromium	4.6		104	73.65	66	70 - 200	N
Cobalt	2.8		104	69.29	64	72 - 106	N
Copper	10.7		104	73.38	60	37 - 187	
Iron	6900		104	2954	-3785	70 - 200	4
Lead	21.3		104	75.08	52	70 - 200	N
Magnesium	1190		1040	1278	9	64 - 145	N
Manganese	56.0		104	101.1	43	40 - 200	
Molybdenum	0.91	B	104	68.85	65	75 - 103	N
Nickel	10.4		104	83.29	70	61 - 126	
Potassium	224	B	1040	749.7	50	56 - 172	N
Selenium	1.1	B	104	68.71	65	76 - 104	N
Silicon	312		104	580.7	258	20 - 200	N
Silver	0.12	U	104	64.41	62	75 - 141	N
Sodium	285	B	1040	693.4	39	78 - 111	N
Vanadium	18.0		104	88.75	68	50 - 169	
Zinc	20.6		104	80.97	58	70 - 200	N

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-17253-1
Sdg Number: J01113

Duplicate - Batch: 280-73419

Method: 6010B
Preparation: 3052

Lab Sample ID:	280-17253-1	Analysis Batch:	280-75225	Instrument ID:	MT_026
Client Matrix:	Waste	Prep Batch:	280-73419	Lab File ID:	26a070511.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.24 g
Analysis Date:	07/05/2011 1911	Units:	mg/Kg	Final Weight/Volume:	25 mL
Prep Date:	07/05/2011 0900				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Aluminum	2450		677.1	113	40	M
Antimony	0.70	B	0.63	NC	40	U
Arsenic	0.65	U	0.63	NC	30	U
Barium	16.2		18.58	14	30	
Beryllium	0.076	U	0.073	NC	30	U
Boron	0.86	B	0.448	63	30	B M
Cadmium	0.72		0.110	147	30	B M
Calcium	1740		544.9	104	30	M
Chromium	4.6		3.43	30	40	
Cobalt	2.8		1.19	79	30	M
Copper	10.7		7.30	37	30	M
Iron	6900		5001	32	40	
Lead	21.3		14.27	40	40	
Magnesium	1190		487.6	84	30	M
Manganese	56.0		35.61	45	40	M
Molybdenum	0.91	B	0.52	NC	30	U
Nickel	10.4		9.69	7	30	
Potassium	224	B	158.0	35	40	B
Selenium	1.1	B	0.69	NC	30	U
Silicon	312		183.6	52	40	M N
Silver	0.12	U	0.12	NC	30	U
Sodium	285	B	78.78	113	30	B M C
Vanadium	18.0		15.44	15	30	
Zinc	20.6		16.77	21	40	

Client: Washington Closure Hanford

Job Number: 280-17253-1
Sdg Number: J01113

Method Blank - Batch: 280-74659

Method: 7471A
Preparation: 7471A

Lab Sample ID:	MB 280-74659/1-A	Analysis Batch:	280-75231	Instrument ID:	MT_033
Client Matrix:	Waste	Prep Batch:	280-74659	Lab File ID:	110705AB.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.6 g
Analysis Date:	07/05/2011 2203	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	07/05/2011 1545				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	0.0092	U	0.0092	0.028

LCS-Certified Reference Material - Batch: 280-74659

Method: 7471A
Preparation: 7471A

Lab Sample ID:	LCSSRM 280-74659/6-A	Analysis Batch:	280-75231	Instrument ID:	MT_033
Client Matrix:	Waste	Prep Batch:	280-74659	Lab File ID:	110705AB.txt
Dilution:	200	Leach Batch:	N/A	Initial Weight/Volume:	0.69 g
Analysis Date:	07/05/2011 2219	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	07/05/2011 1545				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	100	95.97	96	55 - 145	

Matrix Spike - Batch: 280-74659

Method: 7471A
Preparation: 7471A

Lab Sample ID:	280-17253-1	Analysis Batch:	280-75231	Instrument ID:	MT_033
Client Matrix:	Waste	Prep Batch:	280-74659	Lab File ID:	110705AB.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.61 g
Analysis Date:	07/05/2011 2217	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	07/05/2011 1545				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.0083	U	0.410	0.379	93	87 - 111	

Client: Washington Closure Hanford

Job Number: 280-17253-1
Sdg Number: J01113

Duplicate - Batch: 280-74659

Method: 7471A
Preparation: 7471A

Lab Sample ID:	280-17253-1	Analysis Batch:	280-75231	Instrument ID:	MT_033
Client Matrix:	Waste	Prep Batch:	280-74659	Lab File ID:	110705AB.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	07/05/2011 2214	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	07/05/2011 1545				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Mercury	0.0083	U	0.0092	NC	20	U

4.5°

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-183-019	Page 1 of 1

Collector: RICE, DD	Company Contact: Jen Russell	Telephone No.: 509-380-8093	Project Coordinator: KESSNER, JH
Price Code: ~~9L~~ 9K (JR 6/20/11)	Data Turnaround: ~~21 Days~~ 15/45 (JR 6/20/11)		
Project Designation: ARRA 100F Remaining Sites Remediation - Other	Sampling Location: 100-F-47 Transformers		SAF No.: RC-183
Ice Chest No.: WCH-11-020	Field Logbook No.: EL-1651-01	COA: S00F478100	Method of Shipment: FedEx
Shipped To: TestAmerica Incorporated, ~~Richland~~ Denver (A# 6-20-11)	Offsite Property No.: NA		Bill of Lading/Air Bill No.: 7972 2795 0481

POSSIBLE SAMPLE HAZARDS/REMARKS

None

Special Handling and/or Storage

Cool 4 degrees C

Preservation	Cool 4C	Cool 4C	Cool 4C	Cool 4C							
Type of Container	G/P	aG	aG	aG							
No. of Container(s)	1	1	1	1							
Volume	60mL	60mL	60mL	60mL							
SAMPLE ANALYSIS	See item (1) in Special Instructions.	Semi-VOA - 8270A (TCL)	PAHs - 8310	PCBs - 8082							
Sample No. / Matrix * / Sample Date / Sample Time											
J1JW27 / OTHER / 6/20/11 / 1300	X	X	X	X							

CHAIN OF POSSESSION — Sign/Print Names

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
David A. Rice / David A. Rice	6-20-11 1315	Jen Russell / Jen Russell	6/20/11 1315
Jen Russell / Jen Russell	6/20/11 1530	A. Freier / A. Freier (1060, #1)	6-20-11 1530
A. Freier / A. Freier (WCH 1060, #1)	6-21-11 1005	Fed Ex	
		~~Received By/Stored In~~	6/22/11 930

SPECIAL INSTRUCTIONS

(1) ICP Metals - 6010TR (Client List) (Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Molybdenum, Nickel, Potassium, Selenium, Silicon, Silver, Sodium, Vanadium, Zinc); Mercury - 7471 - (CV) (Mercury)

506
J01113

REVIEWED BY — DATE 6-21-11

Matrix *

S=Soil
SE=Sediment
SO=Solid
SL=Sludge
W = Water
O=Oil
A=Air
DS=Drum Solids
DL=Drum Liquids
T=Tissue
WI=Wipe
L=Liquid
V=Vegetation
X=Other

LABORATORY SECTION	Received By	Title	Date/Time
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

WCH-EE-011

Page 30 of 32

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Project 28002142 - 60107R Solid

Analytical Due:

Report Due: 7/7/11 (Rush 10 day TAT)

Sample Check-in List

Date/Time Received: 6/22/11 930 GM Screen Result 12 microR/hr

Client: Washington Closure Hanford SDG #: J01113 NA[ ] SAF #: RC-183 NA [ ]

Job Number: 17253 Chain of Custody # RC-183-019

Shipping Container ID: WCH-11-020 Air Bill # 7972279504 81

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: 4.5 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
   - ✓ Custody Seals
   - ✓ Hazard Lables
   - ✓ Appropriate Sample Lables
9. Samples are:
   - ✓ In Good Condition
   - Broken
   - Leaking
   - Have Air Bubbles (Only for samples requiring no head space.)
10. Sample pH taken? NA [✓] pH<2 [ ] pH>2 [ ] pH>9 [ ] Amount HNO_3 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: Date: 6/22/11

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[ ] No action necessary; process as is.

Project Manager [signature] Date 6/23/11

LS-023, Rev. 7, 1/08

From: (509) 375-4640 Origin ID: PSCA
WCH MAILROOM
WASHINGTON CLOSURE HANFORD
2620 FERMI AVE

RICHLAND, WA 99354

FedEx Express

J1120110429022 5

Ship Date: 21JUN11
ActWgt: 29.0 LB
CAD: 8897843/INET3180

Delivery Address Bar Code

SHIP TO: (303) 736-0100 BILL SENDER

Sample Recieving
Test America Denver
4955 YARROW ST

ARVADA, CO 80002

Ref #
Invoice #
PO #
Dept #

WED - 22 JUN A1
PRIORITY OVERNIGHT

TRK# 7972 2795 0481
0201

XH WHHA

80002
CO-US
DEN

50FG1/0CB0/F5F4

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