0097118

SAF-RC-182
ARRA 100-F Remaining Sites Remediation – Soil In-Process FINAL DATA PACKAGE

COMPLETE COPY OF DATA PACKAGE TO:

Kathy Wendt H4-21 KW 5/26/11
INITIAL/DATE

COMMENTS:

SDG J01089 SAF-RC-182

Rad only ☑ Chem only Rad & Chem

☑ Complete Partial

Sample Location: 100-F-49 Pre-Verification

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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 280-14884-1

SDG Number: J01089

Job Description: SAF# RC-182

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

Attention: Joan H Kessner

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MAY 2011

Approved for release.
Kae E Yoder
Project Manager II
5/24/2011 2:12 PM

Kae E Yoder
Project Manager II
kae.yoder@testamericainc.com
05/24/2011

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.

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CASE NARRATIVE

Client: Washington Closure Hanford

Project: WASHINGTON CLOSURE HANFORD

Report Number: 280-14884-1

SDG #: J01089
SAF#: RC-182

Date SDG Closed: April 21, 2011
Data Deliverable: 15 Day / Summary

CLIENT ID	LAB ID	ANALYSES REQUESTED	ANALYSES PERFORMED
J1HHT6	280-14884-1	6010/7471/1311-6010-7470/WTPH-D+/WTPH-G/ 8270A/8310/8081	6010B/7471A/NWTPH-Dx/NWTPH-Gx/ 8270C/8310/8081A

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.

The results, RLs and MDLs included in this report have been adjusted for dry weight, as appropriate.

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 4/21/2011; the sample arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 3.5 C.

Sample J1HHT6, requesting TCLP Metals 1311/6010B/7470A analysis, was leached and placed on hold, as instructed on the chain-of-custody. On 5/24/2011, the client instructed the laboratory to cancel all requested TCLP analyses.

GC/MS SEMIVOLATILES - SW846 8270C
No anomalies were encountered.

GC VOLATILES - NWTPH-Gx - GRO
The laboratory noted that at the time the sample aliquot was taken to perform the requested TPH-Gasoline analysis, headspace was present in the container. All other sample volume submitted by the client had been consumed.

The method specified initial volume is 10 grams; however, due to the limited sample volume available, only ~4 grams were used for sample J1HHT6. The reporting limit has been elevated accordingly.

Low levels of Gasoline are present in the method blank associated with batch 280-64599. 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".

The method required MS/MSD could not be performed for batch 280-64599, due to insufficient sample volume submitted by the client. A duplicate LCS (LCSD) was analyzed to provide some evidence of batch precision.

No other anomalies were encountered.

GC SEMIVOLATILES - SW846 8081A - PESTICIDEs
No anomalies were encountered.

GC SEMIVOLATILES - NWTPH-Dx - DRO
No anomalies were encountered.

HPLC - SW846 8310 - PAHs
No anomalies were encountered.

TOTAL METALS - SW846 6010B/7471A
Serial dilution of a digestate in batch 280-63507 indicates that physical and chemical interferences are present for Cobalt, Copper, Nickel and Zinc. Results have been flagged with an "X".

Aluminum was recovered outside the control limits, biased high, in the LCS associated with batch 280-63507, and the associated sample result has been flagged "N". This is an indicator that data may be biased high. Due to insufficient sample volume submitted by the client, corrective action could not be initiated, and data are reported as is.

It can be noted that the sample amount was greater than four times the spike amount for Aluminum, Iron and Manganese in the Matrix Spike performed on sample J1HHT6; therefore, control limits are not applicable.

The duplicate analysis of sample J1HHT6 exhibited RPD data outside the control limits for Boron, and the associated sample result has 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.

No other anomalies were encountered.

DATA REPORTING QUALIFIERS

Client: Washington Closure Hanford

Job Number: 280-14884-1
Sdg Number: J01089

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.
GC VOA		
	B	Analyte was found in the associated method blank as well as in the sample.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
GC Semi VOA		
	U	Analyzed for but not detected.
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.
	X	Serial dilution in the analytical batch indicates that physical and chemical interferences are present.

DATA REPORTING QUALIFIERS

Client: Washington Closure Hanford

Job Number: 280-14884-1
Sdg Number: J01089

Lab Section	Qualifier	Description
HPLC/IC		
	U	Analyzed for but not detected.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

METHOD SUMMARY

Client: Washington Closure Hanford

Job Number: 280-14884-1
Sdg Number: J01089

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Semivolatile Organic Compounds (GC/MS)	TAL DEN	SW846 8270C	
Ultrasonic Extraction	TAL DEN		SW846 3550C
Northwest - Volatile Petroleum Products (GC)	TAL DEN	NWTPH NWTPH-Gx	
Purge and Trap	TAL DEN		SW846 5030B
Organochlorine Pesticides (GC)	TAL DEN	SW846 8081A	
Ultrasonic Extraction	TAL DEN		SW846 3550C
Northwest - Semi-Volatile Petroleum Products (GC)	TAL DEN	NWTPH NWTPH-Dx	
Ultrasonic Extraction	TAL DEN		SW846 3550C
PAHs (HPLC)	TAL DEN	SW846 8310	
Ultrasonic Extraction	TAL DEN		SW846 3550C
Metals (ICP)	TAL DEN	SW846 6010B	
Preparation, Metals	TAL DEN		SW846 3050B
Mercury (CVAA)	TAL DEN	SW846 7471A	
Preparation, Mercury	TAL DEN		SW846 7471A
ASTM D-2216	TAL DEN	ASTM D-2216	

Lab References:

TAL DEN = TestAmerica Denver

Method References:

ASTM = ASTM International

NWTPH = Northwest Total Petroleum Hydrocarbon

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: 280-14884-1
Sdg Number: J01089

Method	Analyst	Analyst ID
SW846 8270C	Hoffman, Michael G	MGH
NWTPH NWTPH-Gx	Moore, Tegan E	TEM
SW846 8081A	Ream, Brian E	BER
NWTPH NWTPH-Dx	Birdsell, Matthew R	MRB
SW846 6010B	Bowen, Heidi E	HEB
SW846 7471A	Niman, Katie M	KMN
ASTM D-2216	Gilbert, Bryan M	BMG
SW846 8310	Hall, Koley J	KJH

SAMPLE SUMMARY

Client: Washington Closure Hanford

Job Number: 280-14884-1
Sdg Number: J01089

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-14884-1	J1HHT6	Solid	04/19/2011 0905	04/21/2011 0930

SAMPLE RESULTS

Client: Washington Closure Hanford

Job Number: 280-14884-1
Sdg Number: J01089

Client Sample ID: **J1HHT6**

Lab Sample ID: 280-14884-1
Client Matrix: Solid
% Moisture: 3.2

Date Sampled: 04/19/2011 0905
Date Received: 04/21/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-64085	Instrument ID:	MSS_D
Prep Method:	3550C	Prep Batch:	280-63550	Lab File ID:	D3414.D
Dilution:	1.0			Initial Weight/Volume:	31.0 g
Analysis Date:	04/25/2011 1243			Final Weight/Volume:	1000 uL
Prep Date:	04/21/2011 2225			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	330
Acenaphthylene		17	U	17	330
Anthracene		17	U	17	330
Benzo[a]anthracene		20	U	20	330
Benzo[a]pyrene		20	U	20	330
Benzo[b]fluoranthene		26	U	26	330
Benzo[ghi]perylene		16	U	16	330
Benzo[k]fluoranthene		40	U	40	330
Bis(2-chloroethoxy)methane		23	U	23	330
Bis(2-chloroethyl)ether		17	U	17	330
bis (2-chloroisopropyl) ether		23	U	23	330
Bis(2-ethylhexyl) phthalate		140	J	46	330
4-Bromophenyl phenyl ether		19	U	19	330
Butyl benzyl phthalate		43	U	43	330
Carbazole		36	U	36	330
4-Chloroaniline		82	U	82	330
4-Chloro-3-methylphenol		66	U	66	330
2-Chloronaphthalene		10	U	10	330
2-Chlorophenol		21	U	21	330
4-Chlorophenyl phenyl ether		21	U	21	330
Chrysene		27	U	27	330
Dibenz(a,h)anthracene		19	U	19	330
Dibenzofuran		20	U	20	330
1,2-Dichlorobenzene		22	U	22	330
1,3-Dichlorobenzene		12	U	12	330
1,4-Dichlorobenzene		14	U	14	330
3,3'-Dichlorobenzidine		90	U	90	660
2,4-Dichlorophenol		10	U	10	330
Diethyl phthalate		26	U	26	330
2,4-Dimethylphenol		66	U	66	330
Dimethyl phthalate		23	U	23	330
Di-n-butyl phthalate		29	U	29	330
4,6-Dinitro-2-methylphenol		330	U	330	660
2,4-Dinitrophenol		330	U	330	820
2,4-Dinitrotoluene		66	U	66	330
2,6-Dinitrotoluene		28	U	28	330
Di-n-octyl phthalate		14	U	14	330
Fluoranthene		99	J	36	330
Fluorene		18	U	18	330
Hexachlorobenzene		29	U	29	330
Hexachlorobutadiene		10	U	10	330
Hexachlorocyclopentadiene		50	U	50	330
Hexachloroethane		21	U	21	330
Indeno[1,2,3-cd]pyrene		22	U	22	330
Isophorone		17	U	17	330
2-Methylnaphthalene		19	U	19	330

Client: Washington Closure Hanford

Job Number: 280-14884-1
Sdg Number: J01089

Client Sample ID: **J1HHT6**

Lab Sample ID: 280-14884-1
Client Matrix: Solid
% Moisture: 3.2

Date Sampled: 04/19/2011 0905
Date Received: 04/21/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-64085	Instrument ID:	MSS_D
Prep Method:	3550C	Prep Batch:	280-63550	Lab File ID:	D3414.D
Dilution:	1.0			Initial Weight/Volume:	31.0 g
Analysis Date:	04/25/2011 1243			Final Weight/Volume:	1000 uL
Prep Date:	04/21/2011 2225			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2-Methylphenol		13	U	13	330
3 & 4 Methylphenol		33	U	33	330
Naphthalene		31	U	31	330
2-Nitroaniline		50	U	50	330
3-Nitroaniline		73	U	73	330
4-Nitroaniline		72	U	72	330
Nitrobenzene		22	U	22	330
2-Nitrophenol		10	U	10	330
4-Nitrophenol		97	U	97	660
N-Nitrosodi-n-propylamine		31	U	31	330
N-Nitrosodiphenylamine		21	U	21	330
Pentachlorophenol		330	U	330	660
Phenanthrene		17	U	17	330
Phenol		18	U	18	330
Pyrene		12	U	12	330
1,2,4-Trichlorobenzene		28	U	28	330
2,4,5-Trichlorophenol		10	U	10	330
2,4,6-Trichlorophenol		10	U	10	330

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	64		50 - 120
2-Fluorophenol	68		53 - 120
Nitrobenzene-d5	65		50 - 120
Phenol-d5	67		52 - 120
Terphenyl-d14	83		55 - 120
2,4,6-Tribromophenol	73		51 - 120

Client: Washington Closure Hanford

Job Number: 280-14884-1
Sdg Number: J01089

Client Sample ID: **J1HHT6**

Lab Sample ID: 280-14884-1
Client Matrix: Solid
% Moisture: 3.2

Date Sampled: 04/19/2011 0905
Date Received: 04/21/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-64085	Instrument ID:	MSS_D
Prep Method:	3550C	Prep Batch:	280-63550	Lab File ID:	D3414.D
Dilution:	1.0			Initial Weight/Volume:	31.0 g
Analysis Date:	04/25/2011 1243			Final Weight/Volume:	1000 uL
Prep Date:	04/21/2011 2225			Injection Volume:	0.5 uL

Tentatively Identified Compounds **Number TIC's Found:** 1

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	2.93	1800	N J

Client: Washington Closure Hanford

Job Number: 280-14884-1
Sdg Number: J01089

Client Sample ID: **J1HHT6**

Lab Sample ID: 280-14884-1
Client Matrix: Solid
% Moisture: 3.2

Date Sampled: 04/19/2011 0905
Date Received: 04/21/2011 0930

NWTPH-Gx Northwest - Volatile Petroleum Products (GC)

Analysis Method:	NWTPH-Gx	Analysis Batch:	280-64919	Instrument ID:	GCV_K
Prep Method:	5030B	Prep Batch:	280-64599	Initial Weight/Volume:	4.09 g
Dilution:	1.0			Final Weight/Volume:	250 mL
Analysis Date:	04/28/2011 1656			Injection Volume:	5 mL
Prep Date:	04/28/2011 1314			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Gasoline		440	J B	410	1500

Surrogate	%Rec	Qualifier	Acceptance Limits
a,a,a-Trifluorotoluene	91		77 - 123

Client: Washington Closure Hanford

Job Number: 280-14884-1
Sdg Number: J01089

Client Sample ID: **J1HHT6**

Lab Sample ID: 280-14884-1
Client Matrix: Solid
% Moisture: 3.2

Date Sampled: 04/19/2011 0905
Date Received: 04/21/2011 0930

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-64054	Instrument ID:	GCS_P1
Prep Method:	3550C	Prep Batch:	280-63547	Initial Weight/Volume:	31.6 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	04/25/2011 1737			Injection Volume:	1 uL
Prep Date:	04/21/2011 2215			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.54	U	0.54	1.7
4,4'-DDE		0.23	U	0.23	1.7
4,4'-DDT		0.58	U	0.58	1.7
Aldrin		0.25	U	0.25	1.6
alpha-BHC		0.21	U	0.21	1.6
beta-BHC		0.65	U	0.65	1.6
delta-BHC		0.39	U	0.39	1.6
gamma-BHC (Lindane)		0.45	U	0.45	1.6
Heptachlor		0.21	U	0.21	1.6
Heptachlor epoxide		0.42	U	0.42	1.6
Endosulfan I		0.17	U	0.17	1.6
Endosulfan II		0.28	U	0.28	1.7
Endosulfan sulfate		0.27	U	0.27	1.7
Endrin		0.30	U	0.30	1.7
Endrin aldehyde		0.17	U	0.17	1.7
Endrin ketone		0.48	U	0.48	1.7
gamma-Chlordane		0.26	U	0.26	1.7
Methoxychlor		0.44	U	0.44	3.2
alpha-Chlordane		0.32	U	0.32	1.7
Dieldrin		0.21	U	0.21	1.7
Toxaphene		15	U	15	160

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	86		59 - 115
Decachlorobiphenyl	81		63 - 124

Client: Washington Closure Hanford

Job Number: 280-14884-1
Sdg Number: J01089

Client Sample ID: **J1HHT6**

Lab Sample ID: 280-14884-1
Client Matrix: Solid
% Moisture: 3.2

Date Sampled: 04/19/2011 0905
Date Received: 04/21/2011 0930

NWTPH-Dx Northwest - Semi-Volatile Petroleum Products (GC)

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-64212	Instrument ID:	GCS_U
Prep Method:	3550C	Prep Batch:	280-63552	Lab File ID:	087B8701.D
Dilution:	1.0			Initial Weight/Volume:	31.5 g
Analysis Date:	04/24/2011 0616			Final Weight/Volume:	1000 uL
Prep Date:	04/21/2011 2255			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		11000		980	3900
C10-C28		5300		670	3900

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	66		49 - 115

Client: Washington Closure Hanford

Job Number: 280-14884-1
Sdg Number: J01089

Client Sample ID: **J1HHT6**

Lab Sample ID: 280-14884-1
Client Matrix: Solid
% Moisture: 3.2

Date Sampled: 04/19/2011 0905
Date Received: 04/21/2011 0930

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-63892	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-63551	Initial Weight/Volume:	32.3 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	04/25/2011 1925			Injection Volume:	20 uL
Prep Date:	04/21/2011 2240			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		9.6	U	9.6	96
Acenaphthylene		8.6	U	8.6	96
Anthracene		2.9	U	2.9	19
Benzo[a]anthracene		3.1	U	3.1	14
Benzo[a]pyrene		8.4	J	6.1	14
Benzo[b]fluoranthene		12	J	4.0	14
Benzo[g,h,i]perylene		8.2	J	6.9	29
Benzo[k]fluoranthene		7.4	J	3.8	14
Chrysene		8.3	J	4.6	38
Dibenzo(a,h)anthracene		11	U	11	29
Fluoranthene		12	U	12	38
Fluorene		5.1	U	5.1	29
Indeno[1,2,3-cd]pyrene		12	U	12	29
Naphthalene		12	U	12	96
Phenanthrene		12	U	12	38
Pyrene		12	U	12	38

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	90		72 - 115

Client: Washington Closure Hanford

Job Number: 280-14884-1
Sdg Number: J01089

Client Sample ID: **J1HHT6**

Lab Sample ID: 280-14884-1
Client Matrix: Solid
% Moisture: 3.2

Date Sampled: 04/19/2011 0905
Date Received: 04/21/2011 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-64575	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-63507	Lab File ID:	26a042711.asc
Dilution:	1.0			Initial Weight/Volume:	1.11 g
Analysis Date:	04/27/2011 1733			Final Weight/Volume:	100 mL
Prep Date:	04/26/2011 1530				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		7280	N	1.4	4.7
Antimony		0.35	U	0.35	0.56
Arsenic		1.6		0.61	0.93
Barium		99.1		0.071	0.47
Beryllium		0.031	U	0.031	0.19
Boron		4.3	M	0.91	1.9
Cadmium		0.11	B	0.038	0.19
Calcium		4370		13.1	46.5
Chromium		9.8		0.054	0.19
Cobalt		6.9	X	0.093	0.93
Copper		13.8	X	0.20	0.93
Iron		16600		3.5	4.7
Lead		5.3		0.25	0.47
Magnesium		4110		3.4	18.6
Manganese		268		0.093	0.93
Molybdenum		0.26	B	0.24	1.9
Nickel		11.4	X	0.11	3.7
Potassium		1210		38.2	279
Selenium		0.80	U	0.80	0.93
Silicon		282		5.3	9.3
Silver		0.15	U	0.15	0.19
Sodium		236		54.9	112
Vanadium		43.9		0.087	1.9
Zinc		35.8	X	0.37	0.93

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-64749	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-63744	Lab File ID:	110428AA.txt
Dilution:	1.0			Initial Weight/Volume:	0.62 g
Analysis Date:	04/28/2011 1626			Final Weight/Volume:	50 mL
Prep Date:	04/28/2011 1100				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0055	U	0.0055	0.017

General Chemistry

Client Sample ID: **J1HHT6**

Lab Sample ID: 280-14884-1
Client Matrix: Solid

Date Sampled: 04/19/2011 0905
Date Received: 04/21/2011 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	3.2		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-63630 Analysis Date: 04/22/2011 1032 DryWt Corrected: N

QUALITY CONTROL RESULTS

Client: Washington Closure Hanford

Job Number: 280-14884-1
Sdg Number: J01089

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 280-63550					
LCS 280-63550/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-63550/1-A	Method Blank	T	Solid	3550C	
280-14884-1	J1HHT6	T	Solid	3550C	
280-14884-1MS	Matrix Spike	T	Solid	3550C	
280-14884-1MSD	Matrix Spike Duplicate	T	Solid	3550C	
Analysis Batch:280-64085					
LCS 280-63550/2-A	Lab Control Sample	T	Solid	8270C	280-63550
MB 280-63550/1-A	Method Blank	T	Solid	8270C	280-63550
280-14884-1	J1HHT6	T	Solid	8270C	280-63550
280-14884-1MS	Matrix Spike	T	Solid	8270C	280-63550
280-14884-1MSD	Matrix Spike Duplicate	T	Solid	8270C	280-63550

Report Basis
T = Total

GC VOA					
Prep Batch: 280-64599					
LCS 280-64599/1-A	Lab Control Sample	T	Solid	5030B	
LCSD 280-64599/2-A	Lab Control Sample Duplicate	T	Solid	5030B	
MB 280-64599/3-A	Method Blank	T	Solid	5030B	
280-14884-1	J1HHT6	T	Solid	5030B	
Analysis Batch:280-64919					
LCS 280-64599/1-A	Lab Control Sample	T	Solid	NWTPH-Gx	280-64599
LCSD 280-64599/2-A	Lab Control Sample Duplicate	T	Solid	NWTPH-Gx	280-64599
MB 280-64599/3-A	Method Blank	T	Solid	NWTPH-Gx	280-64599
280-14884-1	J1HHT6	T	Solid	NWTPH-Gx	280-64599

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-14884-1
Sdg Number: J01089

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 280-63547					
LCS 280-63547/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-63547/1-A	Method Blank	T	Solid	3550C	
280-14884-1	J1HHT6	T	Solid	3550C	
280-14884-1MS	Matrix Spike	T	Solid	3550C	
280-14884-1MSD	Matrix Spike Duplicate	T	Solid	3550C	
Prep Batch: 280-63552					
LCS 280-63552/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-63552/1-A	Method Blank	T	Solid	3550C	
280-14884-1	J1HHT6	T	Solid	3550C	
280-14884-1MS	Matrix Spike	T	Solid	3550C	
280-14884-1MSD	Matrix Spike Duplicate	T	Solid	3550C	
Analysis Batch:280-64054					
LCS 280-63547/2-A	Lab Control Sample	T	Solid	8081A	280-63547
MB 280-63547/1-A	Method Blank	T	Solid	8081A	280-63547
280-14884-1	J1HHT6	T	Solid	8081A	280-63547
280-14884-1MS	Matrix Spike	T	Solid	8081A	280-63547
280-14884-1MSD	Matrix Spike Duplicate	T	Solid	8081A	280-63547
Analysis Batch:280-64212					
LCS 280-63552/2-A	Lab Control Sample	T	Solid	NWTPH-Dx	280-63552
MB 280-63552/1-A	Method Blank	T	Solid	NWTPH-Dx	280-63552
280-14884-1	J1HHT6	T	Solid	NWTPH-Dx	280-63552
280-14884-1MS	Matrix Spike	T	Solid	NWTPH-Dx	280-63552
280-14884-1MSD	Matrix Spike Duplicate	T	Solid	NWTPH-Dx	280-63552

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-14884-1
Sdg Number: J01089

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-63507					
LCS 280-63507/2-A	Lab Control Sample	T	Solid	3050B	
MB 280-63507/1-A	Method Blank	T	Solid	3050B	
280-14884-1	J1HHT6	T	Solid	3050B	
280-14884-1DU	Duplicate	T	Solid	3050B	
280-14884-1MS	Matrix Spike	T	Solid	3050B	
Prep Batch: 280-63744					
LCS 280-63744/2-A	Lab Control Sample	T	Solid	7471A	
MB 280-63744/1-A	Method Blank	T	Solid	7471A	
280-14884-1	J1HHT6	T	Solid	7471A	
280-14884-1DU	Duplicate	T	Solid	7471A	
280-14884-1MS	Matrix Spike	T	Solid	7471A	
Analysis Batch:280-64575					
LCS 280-63507/2-A	Lab Control Sample	T	Solid	6010B	280-63507
MB 280-63507/1-A	Method Blank	T	Solid	6010B	280-63507
280-14884-1	J1HHT6	T	Solid	6010B	280-63507
280-14884-1DU	Duplicate	T	Solid	6010B	280-63507
280-14884-1MS	Matrix Spike	T	Solid	6010B	280-63507
Analysis Batch:280-64749					
LCS 280-63744/2-A	Lab Control Sample	T	Solid	7471A	280-63744
MB 280-63744/1-A	Method Blank	T	Solid	7471A	280-63744
280-14884-1	J1HHT6	T	Solid	7471A	280-63744
280-14884-1DU	Duplicate	T	Solid	7471A	280-63744
280-14884-1MS	Matrix Spike	T	Solid	7471A	280-63744

Report Basis
T = Total

General Chemistry

Analysis Batch:280-63630					
280-14884-1	J1HHT6	T	Solid	D-2216	
280-14884-1DU	Duplicate	T	Solid	D-2216	

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-14884-1
Sdg Number: J01089

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
HPLC/IC					
Prep Batch: 280-63551					
LCS 280-63551/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-63551/1-A	Method Blank	T	Solid	3550C	
280-14884-1	J1HHT6	T	Solid	3550C	
280-14884-1MS	Matrix Spike	T	Solid	3550C	
280-14884-1MSD	Matrix Spike Duplicate	T	Solid	3550C	
Analysis Batch:280-63892					
LCS 280-63551/2-A	Lab Control Sample	T	Solid	8310	280-63551
MB 280-63551/1-A	Method Blank	T	Solid	8310	280-63551
280-14884-1	J1HHT6	T	Solid	8310	280-63551
280-14884-1MS	Matrix Spike	T	Solid	8310	280-63551
280-14884-1MSD	Matrix Spike Duplicate	T	Solid	8310	280-63551

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-14884-1
Sdg Number: J01089

Method Blank - Batch: 280-63550

Method: 8270C
Preparation: 3550C

Lab Sample ID:	MB 280-63550/1-A	Analysis Batch:	280-64085	Instrument ID:	MSS_D
Client Matrix:	Solid	Prep Batch:	280-63550	Lab File ID:	D3413.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	32.7 g
Analysis Date:	04/25/2011 1224	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	04/21/2011 2225			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acenaphthene	9.4	U	9.4	300
Acenaphthylene	16	U	16	300
Anthracene	16	U	16	300
Benzo[a]anthracene	18	U	18	300
Benzo[a]pyrene	18	U	18	300
Benzo[b]fluoranthene	24	U	24	300
Benzo[ghi]perylene	15	U	15	300
Benzo[k]fluoranthene	37	U	37	300
Bis(2-chloroethoxy)methane	21	U	21	300
Bis(2-chloroethyl)ether	15	U	15	300
bis (2-chloroisopropyl) ether	21	U	21	300
Bis(2-ethylhexyl) phthalate	42	U	42	300
4-Bromophenyl phenyl ether	17	U	17	300
Butyl benzyl phthalate	39	U	39	300
Carbazole	33	U	33	300
4-Chloroaniline	75	U	75	300
4-Chloro-3-methylphenol	61	U	61	300
2-Chloronaphthalene	9.2	U	9.2	300
2-Chlorophenol	19	U	19	300
4-Chlorophenyl phenyl ether	19	U	19	300
Chrysene	25	U	25	300
Dibenz(a,h)anthracene	17	U	17	300
Dibenzofuran	18	U	18	300
1,2-Dichlorobenzene	20	U	20	300
1,3-Dichlorobenzene	11	U	11	300
1,4-Dichlorobenzene	12	U	12	300
3,3'-Dichlorobenzidine	83	U	83	610
2,4-Dichlorophenol	9.2	U	9.2	300
Diethyl phthalate	24	U	24	300
2,4-Dimethylphenol	61	U	61	300
Dimethyl phthalate	21	U	21	300
Di-n-butyl phthalate	27	U	27	300
4,6-Dinitro-2-methylphenol	300	U	300	610
2,4-Dinitrophenol	310	U	310	760
2,4-Dinitrotoluene	61	U	61	300
2,6-Dinitrotoluene	26	U	26	300
Di-n-octyl phthalate	13	U	13	300
Fluoranthene	33	U	33	300
Fluorene	17	U	17	300
Hexachlorobenzene	27	U	27	300
Hexachlorobutadiene	9.2	U	9.2	300
Hexachlorocyclopentadiene	46	U	46	300
Hexachloroethane	20	U	20	300
Indeno[1,2,3-cd]pyrene	20	U	20	300
Isophorone	16	U	16	300

Client: Washington Closure Hanford

Job Number: 280-14884-1
Sdg Number: J01089

Method Blank - Batch: 280-63550

Method: 8270C
Preparation: 3550C

Lab Sample ID:	MB 280-63550/1-A	Analysis Batch:	280-64085	Instrument ID:	MSS_D
Client Matrix:	Solid	Prep Batch:	280-63550	Lab File ID:	D3413.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	32.7 g
Analysis Date:	04/25/2011 1224	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	04/21/2011 2225			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
2-Methylnaphthalene	17	U	17	300
2-Methylphenol	12	U	12	300
3 & 4 Methylphenol	30	U	30	300
Naphthalene	28	U	28	300
2-Nitroaniline	46	U	46	300
3-Nitroaniline	67	U	67	300
4-Nitroaniline	67	U	67	300
Nitrobenzene	20	U	20	300
2-Nitrophenol	9.2	U	9.2	300
4-Nitrophenol	89	U	89	610
N-Nitrosodi-n-propylamine	28	U	28	300
N-Nitrosodiphenylamine	19	U	19	300
Pentachlorophenol	300	U	300	610
Phenanthrene	16	U	16	300
Phenol	17	U	17	300
Pyrene	11	U	11	300
1,2,4-Trichlorobenzene	26	U	26	300
2,4,5-Trichlorophenol	9.2	U	9.2	300
2,4,6-Trichlorophenol	9.2	U	9.2	300

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	73	50 - 120
2-Fluorophenol	73	53 - 120
Nitrobenzene-d5	72	50 - 120
Phenol-d5	70	52 - 120
Terphenyl-d14	91	55 - 120
2,4,6-Tribromophenol	82	51 - 120

Method Blank TICs- Batch: 280-63550

Cas Number	Analyte	RT	Est. Result	Qual
	Unknown	2.92	1950	N J

Client: Washington Closure Hanford

Job Number: 280-14884-1
Sdg Number: J01089

Lab Control Sample - Batch: 280-63550

Method: 8270C
Preparation: 3550C

Lab Sample ID:	LCS 280-63550/2-A	Analysis Batch:	280-64085	Instrument ID:	MSS_D
Client Matrix:	Solid	Prep Batch:	280-63550	Lab File ID:	D3403.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	32.6 g
Analysis Date:	04/25/2011 0923	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	04/21/2011 2225			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acenaphthene	2450	1870	76	52 - 120	
Anthracene	2450	1580	64	57 - 120	
Carbazole	2450	1730	70	54 - 120	
4-Chloro-3-methylphenol	2450	1850	75	57 - 120	
2-Chlorophenol	2450	1780	73	53 - 120	
1,4-Dichlorobenzene	2450	1680	68	46 - 120	
2,4-Dinitrotoluene	2450	2030	83	53 - 120	
2-Methylnaphthalene	2450	1620	66	55 - 120	
2-Methylphenol	2450	1810	74	51 - 120	
4-Nitrophenol	2450	2080	85	41 - 120	
N-Nitrosodi-n-propylamine	2450	1880	77	51 - 120	
Pentachlorophenol	2450	1910	78	30 - 120	
Phenol	2450	1790	73	54 - 120	
Pyrene	2450	1980	81	50 - 120	
1,2,4-Trichlorobenzene	2450	1630	66	50 - 120	
2,4,6-Trichlorophenol	2450	1810	74	50 - 120	

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	74	50 - 120
2-Fluorophenol	76	53 - 120
Nitrobenzene-d5	70	50 - 120
Phenol-d5	74	52 - 120
Terphenyl-d14	84	55 - 120
2,4,6-Tribromophenol	82	51 - 120

Client: Washington Closure Hanford

Job Number: 280-14884-1
Sdg Number: J01089

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-63550

Method: 8270C
Preparation: 3550C

MS Lab Sample ID:	280-14884-1	Analysis Batch:	280-64085	Instrument ID:	MSS_D
Client Matrix:	Solid	Prep Batch:	280-63550	Lab File ID:	D3404.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.7 g
Analysis Date:	04/25/2011 0942			Final Weight/Volume:	1000 uL
Prep Date:	04/21/2011 2225			Injection Volume:	0.5 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-14884-1	Analysis Batch:	280-64085	Instrument ID:	MSS_D
Client Matrix:	Solid	Prep Batch:	280-63550	Lab File ID:	D3405.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.5 g
Analysis Date:	04/25/2011 1001			Final Weight/Volume:	1000 uL
Prep Date:	04/21/2011 2225			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acenaphthene	84	84	52 - 120	3	30		
Anthracene	73	76	57 - 120	7	30		
Carbazole	81	81	54 - 120	3	30		
4-Chloro-3-methylphenol	81	86	57 - 120	10	30		
2-Chlorophenol	69	72	53 - 120	8	30		
1,4-Dichlorobenzene	63	69	46 - 120	13	30		
2,4-Dinitrotoluene	93	89	53 - 120	1	30		
2-Methylnaphthalene	74	75	55 - 120	6	30		
2-Methylphenol	67	74	51 - 120	14	30		
4-Nitrophenol	94	89	41 - 120	1	30		
N-Nitrosodi-n-propylamine	72	80	51 - 120	14	30		
Pentachlorophenol	77	77	30 - 120	3	30		
Phenol	69	74	54 - 120	10	30		
Pyrene	88	88	50 - 120	4	38		
1,2,4-Trichlorobenzene	70	71	50 - 120	6	30		
2,4,6-Trichlorophenol	78	75	50 - 120	0	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
2-Fluorobiphenyl	85	79	50 - 120
2-Fluorophenol	71	74	53 - 120
Nitrobenzene-d5	76	74	50 - 120
Phenol-d5	73	75	52 - 120
Terphenyl-d14	91	86	55 - 120
2,4,6-Tribromophenol	95	86	51 - 120

Client: Washington Closure Hanford

Job Number: 280-14884-1
Sdg Number: J01089

Method Blank - Batch: 280-64599

Method: NWTPH-Gx
Preparation: 5030B

Lab Sample ID:	MB 280-64599/3-A	Analysis Batch:	280-64919	Instrument ID:	GCV_K
Client Matrix:	Solid	Prep Batch:	280-64599	Lab File ID:	201F0601.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5.00 g
Analysis Date:	04/28/2011 1613	Units:	ug/Kg	Final Weight/Volume:	250 mL
Prep Date:	04/28/2011 1314			Injection Volume:	5 mL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Gasoline	411	J	320	1200

Surrogate	% Rec	Acceptance Limits
a,a,a-Trifluorotoluene	90	77 - 123

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-64599

Method: NWTPH-Gx
Preparation: 5030B

LCS Lab Sample ID:	LCS 280-64599/1-A	Analysis Batch:	280-64919	Instrument ID:	GCV_K
Client Matrix:	Solid	Prep Batch:	280-64599	Lab File ID:	115F0401.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5.05 g
Analysis Date:	04/28/2011 1449	Units:	ug/Kg	Final Weight/Volume:	250 mL
Prep Date:	04/28/2011 1314			Injection Volume:	5 mL
Leach Date:	N/A			Column ID:	PRIMARY
LCSD Lab Sample ID:	LCSD 280-64599/2-A	Analysis Batch:	280-64919	Instrument ID:	GCV_K
Client Matrix:	Solid	Prep Batch:	280-64599	Lab File ID:	116F0501.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5.03 g
Analysis Date:	04/28/2011 1531	Units:	ug/Kg	Final Weight/Volume:	250 mL
Prep Date:	04/28/2011 1314			Injection Volume:	5 mL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Gasoline	112	112	85 - 153	1	30		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
a,a,a-Trifluorotoluene	106	113	77 - 123

Client: Washington Closure Hanford

Job Number: 280-14884-1
Sdg Number: J01089

Method Blank - Batch: 280-63547

Method: 8081A
Preparation: 3550C

Lab Sample ID:	MB 280-63547/1-A	Analysis Batch:	280-64054	Instrument ID:	GCS_P1
Client Matrix:	Solid	Prep Batch:	280-63547	Lab File ID:	038F3801.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.1 g
Analysis Date:	04/25/2011 1826	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	04/21/2011 2215			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
4,4'-DDD	0.54	U	0.54	1.7
4,4'-DDE	0.24	U	0.24	1.7
4,4'-DDT	0.59	U	0.59	1.7
Aldrin	0.25	U	0.25	1.6
alpha-BHC	0.21	U	0.21	1.6
beta-BHC	0.66	U	0.66	1.6
delta-BHC	0.40	U	0.40	1.6
gamma-BHC (Lindane)	0.46	U	0.46	1.6
Heptachlor	0.21	U	0.21	1.6
Heptachlor epoxide	0.42	U	0.42	1.6
Endosulfan I	0.18	U	0.18	1.6
Endosulfan II	0.29	U	0.29	1.7
Endosulfan sulfate	0.28	U	0.28	1.7
Endrin	0.30	U	0.30	1.7
Endrin aldehyde	0.17	U	0.17	1.7
Endrin ketone	0.49	U	0.49	1.7
gamma-Chlordane	0.27	U	0.27	1.7
Methoxychlor	0.45	U	0.45	3.3
alpha-Chlordane	0.32	U	0.32	1.7
Dieldrin	0.21	U	0.21	1.7
Toxaphene	16	U	16	160

Surrogate	% Rec	Acceptance Limits
Tetrachloro-m-xylene	83	59 - 115
Decachlorobiphenyl	95	63 - 124

Client: Washington Closure Hanford

Job Number: 280-14884-1
Sdg Number: J01089

Lab Control Sample - Batch: 280-63547

Method: 8081A
Preparation: 3550C

Lab Sample ID:	LCS 280-63547/2-A	Analysis Batch:	280-64054	Instrument ID:	GCS_P1
Client Matrix:	Solid	Prep Batch:	280-63547	Lab File ID:	034F3401.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.2 g
Analysis Date:	04/25/2011 1720	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	04/21/2011 2215			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
4,4'-DDD	16.0	13.9	87	57 - 118	
4,4'-DDE	16.0	13.8	86	61 - 115	
4,4'-DDT	16.0	14.6	91	53 - 125	
Aldrin	16.0	13.6	85	60 - 115	
alpha-BHC	16.0	13.9	87	54 - 115	
beta-BHC	16.0	14.2	88	58 - 115	
delta-BHC	16.0	14.3	89	62 - 115	
gamma-BHC (Lindane)	16.0	13.9	87	59 - 115	
Heptachlor	16.0	14.0	87	61 - 115	
Heptachlor epoxide	16.0	14.5	90	62 - 112	
Endosulfan I	16.0	13.6	85	55 - 115	
Endosulfan II	16.0	14.1	88	60 - 115	
Endosulfan sulfate	16.0	14.5	90	58 - 118	
Endrin	16.0	16.4	103	61 - 121	
Endrin aldehyde	16.0	12.5	78	54 - 115	
Endrin ketone	16.0	13.2	83	61 - 118	
gamma-Chlordane	16.0	14.0	87	60 - 115	
Methoxychlor	16.0	14.5	91	52 - 123	
alpha-Chlordane	16.0	13.8	86	60 - 115	
Dieldrin	16.0	14.2	89	63 - 117	

Surrogate	% Rec	Acceptance Limits
Tetrachloro-m-xylene	87	59 - 115
Decachlorobiphenyl	90	63 - 124

Client: Washington Closure Hanford

Job Number: 280-14884-1
Sdg Number: J01089

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-63547

Method: 8081A
Preparation: 3550C

MS Lab Sample ID:	280-14884-1	Analysis Batch:	280-64054	Instrument ID:	GCS_P1
Client Matrix:	Solid	Prep Batch:	280-63547	Lab File ID:	036F3601.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.2 g
Analysis Date:	04/25/2011 1753			Final Weight/Volume:	10000 uL
Prep Date:	04/21/2011 2215			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-14884-1	Analysis Batch:	280-64054	Instrument ID:	GCS_P1
Client Matrix:	Solid	Prep Batch:	280-63547	Lab File ID:	037F3701.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	32.9 g
Analysis Date:	04/25/2011 1810			Final Weight/Volume:	10000 uL
Prep Date:	04/21/2011 2215			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
4,4'-DDD	82	80	57 - 118	8	20		
4,4'-DDE	80	77	61 - 115	9	15		
4,4'-DDT	87	83	53 - 125	10	29		
Aldrin	81	79	60 - 115	8	50		
alpha-BHC	85	83	54 - 115	8	17		
beta-BHC	86	82	58 - 115	11	17		
delta-BHC	85	82	62 - 115	8	19		
gamma-BHC (Lindane)	85	82	59 - 115	8	24		
Heptachlor	86	83	61 - 115	8	18		
Heptachlor epoxide	85	82	62 - 112	9	18		
Endosulfan I	80	77	55 - 115	9	26		
Endosulfan II	81	78	60 - 115	9	20		
Endosulfan sulfate	84	79	58 - 118	11	22		
Endrin	106	104	61 - 121	8	30		
Endrin aldehyde	69	60	54 - 115	19	29		
Endrin ketone	77	73	61 - 118	11	20		
gamma-Chlordane	81	81	60 - 115	5	21		
Methoxychlor	87	82	52 - 123	10	23		
alpha-Chlordane	81	79	60 - 115	9	18		
Dieldrin	83	80	63 - 117	9	25		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Tetrachloro-m-xylene	87	83	59 - 115
Decachlorobiphenyl	85	76	63 - 124

Client: Washington Closure Hanford

Job Number: 280-14884-1
Sdg Number: J01089

Method Blank - Batch: 280-63552

Method: NWTPH-Dx
Preparation: 3550C

Lab Sample ID:	MB 280-63552/1-A	Analysis Batch:	280-64212	Instrument ID:	GCS_U
Client Matrix:	Solid	Prep Batch:	280-63552	Lab File ID:	085B8501.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	32.0 g
Analysis Date:	04/24/2011 0519	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	04/21/2011 2255			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
C10-C36	930	U	930	3800
C10-C28	640	U	640	3800

Surrogate	% Rec	Acceptance Limits
o-Terphenyl	73	49 - 115

Lab Control Sample - Batch: 280-63552

Method: NWTPH-Dx
Preparation: 3550C

Lab Sample ID:	LCS 280-63552/2-A	Analysis Batch:	280-64212	Instrument ID:	GCS_U
Client Matrix:	Solid	Prep Batch:	280-63552	Lab File ID:	086B8601.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.4 g
Analysis Date:	04/24/2011 0548	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	04/21/2011 2255			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
C10-C36	63700	53800	85	57 - 115	
C10-C28	63700	53700	84	53 - 115	

Surrogate	% Rec	Acceptance Limits
o-Terphenyl	72	49 - 115

Client: Washington Closure Hanford

Job Number: 280-14884-1
Sdg Number: J01089

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-63552

Method: NWTPH-Dx
Preparation: 3550C

MS Lab Sample ID:	280-14884-1	Analysis Batch:	280-64212	Instrument ID:	GCS_U
Client Matrix:	Solid	Prep Batch:	280-63552	Lab File ID:	088B8801.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0 g
Analysis Date:	04/24/2011 0644			Final Weight/Volume:	1000 uL
Prep Date:	04/21/2011 2255			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-14884-1	Analysis Batch:	280-64212	Instrument ID:	GCS_U
Client Matrix:	Solid	Prep Batch:	280-63552	Lab File ID:	089B8901.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.7 g
Analysis Date:	04/24/2011 0712			Final Weight/Volume:	1000 uL
Prep Date:	04/21/2011 2255			Injection Volume:	1 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
C10-C36	89	88	57 - 115	5	23		
C10-C28	89	86	56 - 115	7	23		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
o-Terphenyl	76	77	49 - 115

Client: Washington Closure Hanford

Job Number: 280-14884-1
Sdg Number: J01089

Method Blank - Batch: 280-63551

Method: 8310
Preparation: 3550C

Lab Sample ID:	MB 280-63551/1-A	Analysis Batch:	280-63892	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-63551	Lab File ID:	G0425019.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.4 g
Analysis Date:	04/25/2011 1824	Units:	ug/Kg	Final Weight/Volume:	4000 uL
Prep Date:	04/21/2011 2240			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Acenaphthene	9.6	U	9.6	96
Acenaphthylene	8.6	U	8.6	96
Anthracene	2.9	U	2.9	19
Benzo[a]anthracene	3.0	U	3.0	14
Benzo[a]pyrene	6.1	U	6.1	14
Benzo[b]fluoranthene	4.0	U	4.0	14
Benzo[g,h,i]perylene	6.9	U	6.9	29
Benzo[k]fluoranthene	3.8	U	3.8	14
Chrysene	4.6	U	4.6	38
Dibenzo(a,h)anthracene	11	U	11	29
Fluoranthene	12	U	12	38
Fluorene	5.0	U	5.0	29
Indeno[1,2,3-cd]pyrene	11	U	11	29
Naphthalene	11	U	11	96
Phenanthrene	11	U	11	38
Pyrene	11	U	11	38

Surrogate	% Rec	Acceptance Limits
Terphenyl-d14 (SUR)	91	72 - 115

Client: Washington Closure Hanford

Job Number: 280-14884-1
Sdg Number: J01089

Lab Control Sample - Batch: 280-63551

Method: 8310
Preparation: 3550C

Lab Sample ID:	LCS 280-63551/2-A	Analysis Batch:	280-63892	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-63551	Lab File ID:	G0425020.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.2 g
Analysis Date:	04/25/2011 1854	Units:	ug/Kg	Final Weight/Volume:	4000 uL
Prep Date:	04/21/2011 2240			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acenaphthene	1920	1930	100	72 - 115	
Acenaphthylene	1920	1750	91	60 - 115	
Anthracene	1920	1620	84	61 - 115	
Benzo[a]anthracene	1920	1990	104	76 - 115	
Benzo[a]pyrene	1920	1670	87	69 - 115	
Benzo[b]fluoranthene	1920	1970	102	81 - 115	
Benzo[g,h,i]perylene	1920	1890	98	71 - 115	
Benzo[k]fluoranthene	1920	1800	93	85 - 115	
Chrysene	1920	1850	96	70 - 115	
Dibenzo(a,h)anthracene	1920	1850	96	79 - 115	
Fluoranthene	1920	1790	93	67 - 115	
Fluorene	1920	1760	92	72 - 115	
Indeno[1,2,3-cd]pyrene	1920	2000	104	76 - 115	
Naphthalene	1920	1810	94	77 - 115	
Phenanthrene	1920	1800	94	79 - 115	
Pyrene	1920	1800	94	77 - 115	

Surrogate	% Rec	Acceptance Limits
Terphenyl-d14 (SUR)	93	72 - 115

Client: Washington Closure Hanford

Job Number: 280-14884-1
Sdg Number: J01089

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-63551

Method: 8310
Preparation: 3550C

MS Lab Sample ID:	280-14884-1	Analysis Batch:	280-63892	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-63551	Lab File ID:	G0425022.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.3 g
Analysis Date:	04/25/2011 1955			Final Weight/Volume:	4000 uL
Prep Date:	04/21/2011 2240			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-14884-1	Analysis Batch:	280-63892	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-63551	Lab File ID:	G0425023.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.6 g
Analysis Date:	04/25/2011 2026			Final Weight/Volume:	4000 uL
Prep Date:	04/21/2011 2240			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acenaphthene	101	98	72 - 115	4	20		
Acenaphthylene	92	88	60 - 115	5	21		
Anthracene	87	84	61 - 115	4	20		
Benzo[a]anthracene	104	103	76 - 115	1	20		
Benzo[a]pyrene	89	85	69 - 115	5	20		
Benzo[b]fluoranthene	95	98	81 - 115	2	20		
Benzo[g,h,i]perylene	98	96	71 - 115	3	20		
Benzo[k]fluoranthene	93	92	85 - 115	2	20		
Chrysene	95	95	70 - 115	1	20		
Dibenzo(a,h)anthracene	97	95	79 - 115	3	20		
Fluoranthene	96	94	67 - 115	3	20		
Fluorene	91	87	72 - 115	5	20		
Indeno[1,2,3-cd]pyrene	105	103	76 - 115	3	20		
Naphthalene	98	92	77 - 115	6	20		
Phenanthrene	96	93	79 - 115	4	20		
Pyrene	97	95	77 - 115	3	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Terphenyl-d14 (SUR)	94	92	72 - 115

Client: Washington Closure Hanford

Job Number: 280-14884-1
Sdg Number: J01089

Method Blank - Batch: 280-63507

Method: 6010B
Preparation: 3050B

Lab Sample ID:	MB 280-63507/1-A	Analysis Batch:	280-64575	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-63507	Lab File ID:	26a042711.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 g
Analysis Date:	04/27/2011 1728	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/26/2011 1530				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Aluminum	0.016	U	0.016	0.050
Antimony	0.0038	U	0.0038	0.0060
Arsenic	0.0066	U	0.0066	0.010
Barium	0.00076	U	0.00076	0.0050
Beryllium	0.00033	U	0.00033	0.0020
Boron	0.0098	U	0.0098	0.020
Cadmium	0.00041	U	0.00041	0.0020
Calcium	0.14	U	0.14	0.50
Chromium	0.00058	U	0.00058	0.0020
Cobalt	0.0010	U	0.0010	0.010
Copper	0.0022	U	0.0022	0.010
Iron	0.038	U	0.038	0.050
Lead	0.0027	U	0.0027	0.0050
Magnesium	0.037	U	0.037	0.20
Manganese	0.0010	U	0.0010	0.010
Molybdenum	0.0026	U	0.0026	0.020
Nickel	0.0012	U	0.0012	0.040
Potassium	0.41	U	0.41	3.0
Selenium	0.0086	U	0.0086	0.010
Silicon	0.057	U	0.057	0.10
Silver	0.0016	U	0.0016	0.0020
Sodium	0.59	U	0.59	1.2
Vanadium	0.00094	U	0.00094	0.020
Zinc	0.0040	U	0.0040	0.010

Client: Washington Closure Hanford

Job Number: 280-14884-1
Sdg Number: J01089

Lab Control Sample - Batch: 280-63507

Method: 6010B
Preparation: 3050B

Lab Sample ID:	LCS 280-63507/2-A	Analysis Batch:	280-64575	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-63507	Lab File ID:	26a042711.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 g
Analysis Date:	04/27/2011 1730	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/26/2011 1530				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	2.00	2.67	133	82 - 116	N
Antimony	0.500	0.499	100	82 - 110	
Arsenic	1.00	0.995	100	85 - 110	
Barium	2.00	1.98	99	87 - 112	
Beryllium	0.0500	0.0486	97	84 - 114	
Boron	1.00	0.957	96	81 - 110	
Cadmium	0.100	0.104	104	87 - 110	
Calcium	50.0	48.79	98	82 - 114	
Chromium	0.200	0.201	100	84 - 114	
Cobalt	0.500	0.493	99	87 - 110	
Copper	0.250	0.256	102	88 - 110	
Iron	1.00	1.03	103	87 - 120	
Lead	0.500	0.501	100	86 - 110	
Magnesium	50.0	49.12	98	90 - 110	
Manganese	0.500	0.493	99	88 - 110	
Molybdenum	1.00	1.01	101	86 - 110	
Nickel	0.500	0.495	99	87 - 110	
Potassium	50.0	50.40	101	89 - 110	
Selenium	2.00	1.94	97	83 - 110	
Silicon	10.0	1.71	17	10 - 70	
Silver	0.0500	0.0496	99	87 - 114	
Sodium	50.0	50.98	102	90 - 112	
Vanadium	0.500	0.504	101	88 - 110	
Zinc	0.500	0.490	98	76 - 114	

Client: Washington Closure Hanford

Job Number: 280-14884-1
Sdg Number: J01089

Matrix Spike - Batch: 280-63507

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-14884-1	Analysis Batch:	280-64575	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-63507	Lab File ID:	26a042711.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.03 g
Analysis Date:	04/27/2011 1740	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/26/2011 1530				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	7280		201	9429	1074	50 - 200	4
Antimony	0.35	U	50.1	29.10	58	20 - 200	
Arsenic	1.6		100	93.18	91	76 - 111	
Barium	99.1		201	321.7	111	52 - 159	
Beryllium	0.031	U	5.01	4.46	89	72 - 105	
Boron	4.3		100	94.83	90	75 - 107	
Cadmium	0.11	B	10.0	9.84	97	40 - 130	
Calcium	4370		5010	10500	122	43 - 165	
Chromium	9.8		20.1	31.72	109	70 - 200	
Cobalt	6.9		50.1	52.84	92	72 - 106	
Copper	13.8		25.1	37.43	94	37 - 187	
Iron	16600		100	18050	1480	70 - 200	4
Lead	5.3		50.1	51.44	92	70 - 200	
Magnesium	4110		5010	9365	105	64 - 145	
Manganese	268		50.1	342.6	149	40 - 200	4
Molybdenum	0.26	B	100	91.67	91	75 - 103	
Nickel	11.4		50.1	57.55	92	61 - 126	
Potassium	1210		5010	6024	96	56 - 172	
Selenium	0.80	U	201	178.0	89	76 - 104	
Silicon	282		1000	575.3	29	20 - 200	
Silver	0.15	U	5.01	4.65	93	75 - 141	
Sodium	236		5010	5376	103	78 - 111	
Vanadium	43.9		50.1	96.96	106	50 - 169	
Zinc	35.8		50.1	82.54	93	70 - 200	

Client: Washington Closure Hanford

Job Number: 280-14884-1
Sdg Number: J01089

Duplicate - Batch: 280-63507

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-14884-1	Analysis Batch:	280-64575	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-63507	Lab File ID:	26a042711.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.15 g
Analysis Date:	04/27/2011 1737	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/26/2011 1530				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Aluminum	7280		7238	0.5	40	N
Antimony	0.35	U	0.34	NC	40	U
Arsenic	1.6		1.74	7	30	
Barium	99.1		127.7	25	30	
Beryllium	0.031	U	0.030	NC	30	U
Boron	4.3		7.17	49	30	M
Cadmium	0.11	B	0.101	4	30	B
Calcium	4370		4697	7	30	
Chromium	9.8		10.15	4	40	
Cobalt	6.9		6.88	0.06	30	
Copper	13.8		14.58	6	30	
Iron	16600		16790	1	40	
Lead	5.3		5.31	0.1	40	
Magnesium	4110		3978	3	30	
Manganese	268		271.1	1	40	
Molybdenum	0.26	B	0.23	NC	30	U
Nickel	11.4		10.12	12	30	
Potassium	1210		1163	4	40	
Selenium	0.80	U	0.77	NC	30	U
Silicon	282		309.6	9	40	
Silver	0.15	U	0.14	NC	30	U
Sodium	236		294.7	22	30	
Vanadium	43.9		45.92	5	30	
Zinc	35.8		44.60	22	40	

Client: Washington Closure Hanford

Job Number: 280-14884-1
Sdg Number: J01089

Method Blank - Batch: 280-63744

Method: 7471A
Preparation: 7471A

Lab Sample ID:	MB 280-63744/1-A	Analysis Batch:	280-64749	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-63744	Lab File ID:	110428AA.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	04/28/2011 1621	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	04/28/2011 1100				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	0.0055	U	0.0055	0.017

Lab Control Sample - Batch: 280-63744

Method: 7471A
Preparation: 7471A

Lab Sample ID:	LCS 280-63744/2-A	Analysis Batch:	280-64749	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-63744	Lab File ID:	110428AA.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	04/28/2011 1623	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	04/28/2011 1100				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.417	0.379	91	87 - 111	

Matrix Spike - Batch: 280-63744

Method: 7471A
Preparation: 7471A

Lab Sample ID:	280-14884-1	Analysis Batch:	280-64749	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-63744	Lab File ID:	110428AA.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.64 g
Analysis Date:	04/28/2011 1630	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	04/28/2011 1100				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.0055	U	0.403	0.362	90	87 - 111	

Client: Washington Closure Hanford

Job Number: 280-14884-1
Sdg Number: J01089

Duplicate - Batch: 280-63744

Method: 7471A
Preparation: 7471A

Lab Sample ID:	280-14884-1	Analysis Batch:	280-64749	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-63744	Lab File ID:	110428AA.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.64 g
Analysis Date:	04/28/2011 1628	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	04/28/2011 1100				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Mercury	0.0055	U	0.0054	NC	20	U

Client: Washington Closure Hanford

Job Number: 280-14884-1
Sdg Number: J01089

Duplicate - Batch: 280-63630

Method: D-2216
Preparation: N/A

Lab Sample ID:	280-14884-1	Analysis Batch:	280-63630	Instrument ID:	No Equipment
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	04/22/2011 1032	Units:	%	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Moisture	3.2	3.4	7	20	

3.5°C 4/21/11

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-182-072	Page 1 of 1

Collector: Rice, DD	Company Contact: JL Russell	Telephone No.: 509-380-8093	Project Coordinator: KESSNER, JH
Price Code: JR 4/19/11 ~~8L~~ 8K	Data Turnaround: JR 4/19/11 ~~21 Days~~ 15 Days		
Project Designation: ARRA 100F Remaining Sites Remediation - Soil In-Process	Sampling Location: 100 F-49 PREVERIFICATION		SAF No.: RC-182
Ice Chest No.: WCH-11-035	Field Logbook No.: EL-1651	COA: S00F498100	Method of Shipment: FedEx
Shipped To: JR 4/19/11 TestAmerica Incorporated, ~~Richland~~ Denver	Offsite Property No.: NA		Bill of Lading/Air Bill No.: 7946 7155 0960

POSSIBLE SAMPLE HAZARDS/REMARKS

None

Special Handling and/or Storage

Cool 4 degrees C

Preservation	Cool 4C	None	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C			
Type of Container	G/P	G/P	G	aGs*	aG	aG	aG			
No. of Container(s)	0	1	1	0	1 JR 4/19/11	0	0			
Volume	60mL	120mL	60mL	40mL	~~60mL~~ 250mL	60mL	60mL			

SAMPLE ANALYSIS

Sample No.	Matrix *	Sample Date	Sample Time	See item (1) in Special Instructions.	See item (2) in Special Instructions.	TPH-Diesel Range - WTPH-D +	TPH-Gasoline Range - WTPH-G	Semi-VOA - 8270A (TCL)	PAHs - 8310	Pesticides - 8081			
U1HHT6	SOIL	4-19-11	~~0950~~ 0905 JR 4/19/11	X	X	X	X	X	X	X			

CHAIN OF POSSESSION — Sign/Print Names

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
David D. Rice / David D. Rice	4-19-11 0910	Jen Russell / Jen Russell	4-19-11 0910
Jen Russell / Jen Russell	4-19-11 1425	A. Freier / A. Freier	4-19-11 1425
WCH A. Freier / A. Freier	4-20-11 0840	FED EX	
			4/21/11 930

SPECIAL INSTRUCTIONS

Please leach & hold TCLP Metals, per Joan Kessner

(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}

(2) Metals by ICP (TCLP) - 1311/6010 {Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver}; Mercury (TCLP) - 1311/7470 {Mercury}

J01089

REVIEWED BY JEB DATE 4-20-11

Matrix *

S=Soil
SE=Sediment
SO=Solid
SI=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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Project 28002142 -6010TR -Solid

Analytical Due:

Report Due: 5/6/11 Crush 11 Dy

Sample Check-in List

Date/Time Received: 4/21/11 930 GM Screen Result 13 microR/hr

Client: Washington Closure Hanford SDG #: J01089 NA[ ] SAF #: RC-182 NA [ ]

Job Number: 14884 Chain of Custody # RC-182-072

Shipping Container ID: WCH-11-035 Air Bill # 7946715509960

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: 3-5 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: [signature] Date: 4/21/11

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on ____ by ____ Person Contacted ____

[ ] No action necessary; process as is.

Project Manager [signature] Date 04/21/11

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

J1115110225022 5

Ship Date: 20APR11
ActWgt: 58.0 LB
CAD: 8897843/INET3130

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 #

THU - 21 APR A1
PRIORITY OVERNIGHT

TRK# 0201 7946 7155 0960

XH WHHA

80002
CO-US
DEN

50DG3/26A8/7EFB

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