0101222

SAF-RC-225
100K Remaining Waste Sites – Soil In-Process
FINAL DATA PACKAGE

COMPLETE COPY OF DATA PACKAGE TO:

Kathy Wendt H4-21 KW 9/19/11
INITIAL/DATE

COMMENTS:

SDG J01258 SAF-RC-225

Rad only ☑ Chem only Rad & Chem

☑ Complete Partial

Sample Location: 100-K-93

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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 280-19776-1

SDG Number: J01258

Job Description: SAF# RC-225

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

Attention: Joan H Kessner

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SEP 2011

Approved for release.
Kae E Yoder
Project Manager II
9/16/2011 12:43 PM

Kae E Yoder
Project Manager II
kae.yoder@testamericainc.com
09/16/2011

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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TestAmerica Denver 4955 Yarrow Street, Arvada, CO 80002
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ACCREDITED IN ACCORDANCE WITH nelac

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CASE NARRATIVE

Client: Washington Closure Hanford

Project: WASHINGTON CLOSURE HANFORD

Report Number: 280-19776-1

SDG #: J01258
SAF#: RC-225

Date SDG Closed: September 1, 2011
Data Deliverable: 15 Day / Summary

CLIENT ID	LAB ID	ANALYSES REQUESTED	ANALYSES PERFORMED
J1KTR4	280-19776-1	6010/7471/1311-6010-7470/WTPH-D+/8260/ 8270A/8310/8082	6010B/1311-7470A/NWTPH-Dx/8260B/ 8270C/8310/8082

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.

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 9/1/2011; the sample arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was -0.5 C.

Sample J1KTR4, requesting TCLP Metals 1311/6010B/7470A analyses, was leached and placed on hold, as instructed on the chain-of-custody.

GC/MS VOLATILES - SW846 8260B
Low levels of Carbon disulfide are present in the method blank associated with batch 280-84208. Because the concentration in the method blank is not present at a level greater than half 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 280-84208, 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/MS SEMIVOLATILES - SW846 8270C
No anomalies were encountered.

GC SEMIVOLATILES - SW846 8082 - PCBs
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

Due to insufficient sample volume, the requested Total Mercury 7471A analysis could not be performed. The client was notified on 9/13/2011.

Low levels of Chromium and Barium are present in the method blank associated with batch 280-84263. Because the concentrations in the method blank are not present at levels greater than half the reporting limit, corrective action is deemed unnecessary.

Iron, a common laboratory contaminant, is present at a level greater than the reporting limit in the method blank associated with batch 280-84263. As the associated sample amount is twenty times greater than the method blank concentration, corrective action is deemed unnecessary.

Due to insufficient sample volume, the Matrix Spike and Sample Duplicate analysis for batch 280-84263 could not be performed. A duplicate LCS (LCSD) was analyzed to provide some evidence of batch precision.

No other anomalies were encountered.

TCLP METALS - SW846 1311/7470A

Sample J1KTR4, requesting TCLP Metals 1311/6010B/7470A analyses, was leached and placed on hold, as instructed on the chain-of-custody. On 9/13/2011, the client instructed the laboratory to proceed with the TCLP Mercury 1311/7470A analysis.

Low levels of Mercury are present in the method blank associated with batch 280-85807. Because the concentration in the method blank is not present at a level greater than half the reporting limit, corrective action is deemed unnecessary.

No other anomalies were encountered.

DATA REPORTING QUALIFIERS

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

Lab Section	Qualifier	Description
GC/MS VOA		
	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.
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 Semi VOA		
	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.
Metals		
	U	Analyzed for but not detected.
	B	Estimated result. Result is less than the RL, but greater than MDL
	C	The analyte was detected in both the sample and the assoicated QC blank, and the sample concentration was </= 5X the blank concentration.
HPLC/IC		
	U	Analyzed for but not detected.

METHOD SUMMARY

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Volatile Organic Compounds (GC/MS)	TAL DEN	SW846 8260B	
Closed System Purge and Trap			SW846 5035
Semivolatile Organic Compounds (GC/MS)	TAL DEN	SW846 8270C	
Ultrasonic Extraction			SW846 3550C
Polychlorinated Biphenyls (PCBs) by Gas Chromatography	TAL DEN	SW846 8082	
Ultrasonic Extraction			SW846 3550C
Northwest - Semi-Volatile Petroleum Products (GC)	TAL DEN	NWTPH NWTPH-Dx	
Ultrasonic Extraction			SW846 3550C
PAHs (HPLC)	TAL DEN	SW846 8310	
Ultrasonic Extraction			SW846 3550C
Metals (ICP)	TAL DEN	SW846 6010B	
Preparation, Metals			SW846 3050B
TCLP Mercury	TAL DEN	SW846 7470A	
TCLP Extraction			SW846 1311
Preparation, Mercury			SW846 7470A
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: 280-19776-1
Sdg Number: J01258

Method	Analyst	Analyst ID
SW846 8260B	Reinhardt, Jason	JR
SW846 8270C	Kiekel, Daniel C	DCK
SW846 8082	Pavlakovich, Adam M	AMP
NWTPH NWTPH-Dx	Birdsell, Matthew R	MRB
SW846 6010B	Harre, John K	JKH
SW846 7470A	Bowen, Heidi E	HEB
ASTM D-2216	Doherty, Jillian A	JAD
SW846 8310	Hall, Koley J	KJH

SAMPLE SUMMARY

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-19776-1	J1KTR4	Solid	08/30/2011 1122	09/01/2011 0900

SAMPLE RESULTS

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

Client Sample ID: **J1KTR4**

Lab Sample ID: 280-19776-1
Client Matrix: Solid
% Moisture: 1.1

Date Sampled: 08/30/2011 1122
Date Received: 09/01/2011 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-85771	Instrument ID:	MSV_G
Prep Method:	5035	Prep Batch:	280-84208	Lab File ID:	G8026.D
Dilution:	1.0			Initial Weight/Volume:	5.441 g
Analysis Date:	09/09/2011 1738			Final Weight/Volume:	5 mL
Prep Date:	09/01/2011 1653				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		12	J	5.0	19
Benzene		0.44	U	0.44	4.6
Bromodichloromethane		0.20	U	0.20	4.6
Bromoform		0.21	U	0.21	4.6
Bromomethane		0.46	U	0.46	9.3
2-Butanone (MEK)		2.3	J	1.7	9.3
Carbon disulfide		0.39	U	0.39	4.6
Carbon tetrachloride		0.59	U	0.59	4.6
Chlorobenzene		0.50	U	0.50	4.6
Dibromochloromethane		0.53	U	0.53	4.6
Chloroethane		0.83	U	0.83	9.3
Chloroform		0.27	U	0.27	4.6
Chloromethane		0.72	U	0.72	9.3
1,1-Dichloroethane		0.20	U	0.20	4.6
1,2-Dichloroethane		0.65	U	0.65	4.6
1,1-Dichloroethene		0.55	U	0.55	4.6
1,2-Dichloroethene, Total		0.36	U	0.36	4.6
1,2-Dichloropropane		0.51	U	0.51	4.6
cis-1,3-Dichloropropene		1.2	U	1.2	4.6
trans-1,3-Dichloropropene		0.62	U	0.62	4.6
Ethylbenzene		0.62	U	0.62	4.6
2-Hexanone		4.5	U	4.5	19
Methylene Chloride		2.6	J	0.70	4.6
4-Methyl-2-pentanone (MIBK)		4.1	U	4.1	9.3
Styrene		0.59	U	0.59	4.6
1,1,2,2-Tetrachloroethane		0.57	U	0.57	4.6
Tetrachloroethene		0.55	U	0.55	4.6
Toluene		1.3	J	0.64	4.6
1,1,1-Trichloroethane		0.48	U	0.48	4.6
1,1,2-Trichloroethane		0.82	U	0.82	4.6
Trichloroethene		0.21	U	0.21	4.6
Vinyl chloride		1.2	U	1.2	4.6
Xylenes, Total		0.57	U	0.57	4.6

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	74		58 - 140
Toluene-d8 (Surr)	102		80 - 126
4-Bromofluorobenzene (Surr)	111		76 - 127
Dibromofluoromethane (Surr)	84		75 - 121

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

Client Sample ID: **J1KTR4**

Lab Sample ID: 280-19776-1
Client Matrix: Solid
% Moisture: 1.1

Date Sampled: 08/30/2011 1122
Date Received: 09/01/2011 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-85771	Instrument ID:	MSV_G
Prep Method:	5035	Prep Batch:	280-84208	Lab File ID:	G8026.D
Dilution:	1.0			Initial Weight/Volume:	5.441 g
Analysis Date:	09/09/2011 1738			Final Weight/Volume:	5 mL
Prep Date:	09/01/2011 1653				

Tentatively Identified Compounds **Number TIC's Found:** **0**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

Client Sample ID: **J1KTR4**

Lab Sample ID: 280-19776-1
Client Matrix: Solid
% Moisture: 1.1

Date Sampled: 08/30/2011 1122
Date Received: 09/01/2011 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-84803	Instrument ID:	MSS_G6
Prep Method:	3550C	Prep Batch:	280-84271	Lab File ID:	G6_3462.D
Dilution:	1.0			Initial Weight/Volume:	30.2 g
Analysis Date:	09/06/2011 2303			Final Weight/Volume:	1000 uL
Prep Date:	09/02/2011 1035			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		46	U	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	830
2,4-Dinitrotoluene		66	U	66	330
2,6-Dinitrotoluene		28	U	28	330
Di-n-octyl phthalate		14	U	14	330
Fluoranthene		36	U	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: 280-19776-1
Sdg Number: J01258

Client Sample ID: **J1KTR4**

Lab Sample ID: 280-19776-1
Client Matrix: Solid
% Moisture: 1.1

Date Sampled: 08/30/2011 1122
Date Received: 09/01/2011 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-84803	Instrument ID:	MSS_G6
Prep Method:	3550C	Prep Batch:	280-84271	Lab File ID:	G6_3462.D
Dilution:	1.0			Initial Weight/Volume:	30.2 g
Analysis Date:	09/06/2011 2303			Final Weight/Volume:	1000 uL
Prep Date:	09/02/2011 1035			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		73	U	73	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	76		50 - 120
2-Fluorophenol	76		53 - 120
Nitrobenzene-d5	74		50 - 120
Phenol-d5	78		52 - 120
Terphenyl-d14	92		55 - 120
2,4,6-Tribromophenol	93		51 - 120

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

Client Sample ID: **J1KTR4**

Lab Sample ID: 280-19776-1
Client Matrix: Solid
% Moisture: 1.1

Date Sampled: 08/30/2011 1122
Date Received: 09/01/2011 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-84803	Instrument ID:	MSS_G6
Prep Method:	3550C	Prep Batch:	280-84271	Lab File ID:	G6_3462.D
Dilution:	1.0			Initial Weight/Volume:	30.2 g
Analysis Date:	09/06/2011 2303			Final Weight/Volume:	1000 uL
Prep Date:	09/02/2011 1035			Injection Volume:	0.5 uL

Tentatively Identified Compounds **Number TIC's Found:** **16**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	2.84	140	N J
2213-23-2	Heptane, 2,4-dimethyl-	2.89	270	N J
	Unknown	2.96	140	N J
2216-30-0	Heptane, 2,5-dimethyl-	3.02	290	N J
	Unknown	3.10	5500	N J
100-51-6	Benzyl alcohol	4.72	12	J N J
57-11-4	Octadecanoic acid	10.00	220	N J
301-02-0	9-Octadecenamide, (Z)-	10.69	650	N J
18435-45-5	1-Nonadecene	11.02	310	N J
112-95-8	Eicosane	12.15	290	N J
112-95-8	Eicosane	12.78	220	N J
	Unknown	12.85	190	N J
	Unknown	13.76	170	N J
	Unknown	13.87	190	N J
	Unknown	14.21	800	N J
	Unknown	14.69	560	N J

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

Client Sample ID: **J1KTR4**

Lab Sample ID: 280-19776-1
Client Matrix: Solid
% Moisture: 1.1

Date Sampled: 08/30/2011 1122
Date Received: 09/01/2011 0900

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-84700	Instrument ID:	GCS_P3
Prep Method:	3550C	Prep Batch:	280-84253	Initial Weight/Volume:	30.0 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	09/04/2011 0558			Injection Volume:	1 uL
Prep Date:	09/02/2011 0913			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		2.8	U	2.8	10
Aroclor 1221		8.1	U	8.1	17
Aroclor 1232		2.0	U	2.0	10
Aroclor 1242		4.7	U	4.7	10
Aroclor 1248		4.7	U	4.7	10
Aroclor 1254		2.6	U	2.6	10
Aroclor 1260		2.6	U	2.6	10

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	80		59 - 130
Tetrachloro-m-xylene	87		53 - 128

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

Client Sample ID: **J1KTR4**

Lab Sample ID: 280-19776-1
Client Matrix: Solid
% Moisture: 1.1

Date Sampled: 08/30/2011 1122
Date Received: 09/01/2011 0900

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-85050	Instrument ID:	GCS_U2
Prep Method:	3550C	Prep Batch:	280-84282	Lab File ID:	054B0701.D
Dilution:	1.0			Initial Weight/Volume:	30.8 g
Analysis Date:	09/07/2011 1202			Final Weight/Volume:	1000 uL
Prep Date:	09/02/2011 1550			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		17000		980	3900
C10-C28		3600	J	670	3900

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	90		49 - 115

Client: Washington Closure Hanford

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Client Sample ID: **J1KTR4**

Lab Sample ID: 280-19776-1
Client Matrix: Solid
% Moisture: 1.1

Date Sampled: 08/30/2011 1122
Date Received: 09/01/2011 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-84774	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-84256	Initial Weight/Volume:	30.9 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	09/07/2011 1507			Injection Volume:	20 uL
Prep Date:	09/02/2011 0957			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		9.8	U	9.8	98
Acenaphthylene		8.8	U	8.8	98
Anthracene		3.0	U	3.0	20
Benzo[a]anthracene		3.1	U	3.1	15
Benzo[a]pyrene		6.3	U	6.3	15
Benzo[b]fluoranthene		4.1	U	4.1	15
Benzo[g,h,i]perylene		7.1	U	7.1	29
Benzo[k]fluoranthene		3.9	U	3.9	15
Chrysene		4.8	U	4.8	39
Dibenzo(a,h)anthracene		11	U	11	29
Fluoranthene		13	U	13	39
Fluorene		5.2	U	5.2	29
Indeno[1,2,3-cd]pyrene		12	U	12	29
Naphthalene		12	U	12	98
Phenanthrene		12	U	12	39
Pyrene		12	U	12	39

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	92		72 - 115

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

Client Sample ID: **J1KTR4**

Lab Sample ID: 280-19776-1
Client Matrix: Solid
% Moisture: 1.1

Date Sampled: 08/30/2011 1122
Date Received: 09/01/2011 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-84764	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-84263	Lab File ID:	25A5090611.asc
Dilution:	1.0			Initial Weight/Volume:	0.32 g
Analysis Date:	09/06/2011 2012			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 0530				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		9580		4.9	15.8
Antimony		2.4		1.2	1.9
Arsenic		12.1		2.1	3.2
Beryllium		0.10	U	0.10	0.63
Boron		3.1	U	3.1	6.3
Cadmium		1.0		0.13	0.63
Calcium		4560		44.6	158
Chromium		321		0.18	0.63
Cobalt		7.6		0.32	3.2
Copper		21.2		0.69	3.2
Iron		21800		12.0	15.8
Magnesium		4910		11.7	63.2
Manganese		418		0.32	3.2
Molybdenum		0.87	B	0.82	6.3
Nickel		18.0		0.39	12.6
Potassium		1620		130	948
Selenium		2.7	U	2.7	3.2
Silicon		653		17.9	31.6
Silver		0.51	U	0.51	0.63
Sodium		219	B	186	379
Vanadium		63.6		0.30	6.3
Zinc		146		1.3	3.2

Analysis Method:	6010B	Analysis Batch:	280-85004	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-84263	Lab File ID:	25A4090711.asc
Dilution:	1.0			Initial Weight/Volume:	0.32 g
Analysis Date:	09/07/2011 2140			Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 0530				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Barium		92.7		0.24	1.6
Lead		26.6		0.85	1.6

7470A TCLP Mercury-TCLP

Analysis Method:	7470A	Analysis Batch:	280-86128	Instrument ID:	MT_034
Prep Method:	7470A	Prep Batch:	280-85807	Lab File ID:	34B091411.txt
Dilution:	1.0	Leach Batch:	280-84245	Initial Weight/Volume:	30 mL
Analysis Date:	09/14/2011 1608			Final Weight/Volume:	30 mL
Prep Date:	09/14/2011 1130				
Leach Date:	09/02/2011 1440				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

Client Sample ID: **J1KTR4**

Lab Sample ID: 280-19776-1
Client Matrix: Solid

Date Sampled: 08/30/2011 1122
Date Received: 09/01/2011 0900

7470A TCLP Mercury-TCLP

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Mercury		0.000052	B C	0.000030	0.0020

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

General Chemistry

Client Sample ID: **J1KTR4**

Lab Sample ID: 280-19776-1
Client Matrix: Solid

Date Sampled: 08/30/2011 1122
Date Received: 09/01/2011 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	1.1		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-84162 Analysis Date: 09/01/2011 1503 DryWt Corrected: N

QUALITY CONTROL RESULTS

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Prep Batch: 280-84208					
LCS 280-84208/3-A	Lab Control Sample	T	Solid	5035	
LCSD 280-84208/6-A	Lab Control Sample Duplicate	T	Solid	5035	
MB 280-84208/1-A	Method Blank	T	Solid	5035	
280-19776-1	J1KTR4	T	Solid	5035	
Analysis Batch:280-85771					
LCS 280-84208/3-A	Lab Control Sample	T	Solid	8260B	280-84208
LCSD 280-84208/6-A	Lab Control Sample Duplicate	T	Solid	8260B	280-84208
MB 280-84208/1-A	Method Blank	T	Solid	8260B	280-84208
280-19776-1	J1KTR4	T	Solid	8260B	280-84208

Report Basis
T = Total

GC/MS Semi VOA					
Prep Batch: 280-84271					
LCS 280-84271/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-84271/1-A	Method Blank	T	Solid	3550C	
280-19776-1	J1KTR4	T	Solid	3550C	
280-19776-1MS	Matrix Spike	T	Solid	3550C	
280-19776-1MSD	Matrix Spike Duplicate	T	Solid	3550C	
Analysis Batch:280-84803					
LCS 280-84271/2-A	Lab Control Sample	T	Solid	8270C	280-84271
MB 280-84271/1-A	Method Blank	T	Solid	8270C	280-84271
280-19776-1	J1KTR4	T	Solid	8270C	280-84271
280-19776-1MS	Matrix Spike	T	Solid	8270C	280-84271
280-19776-1MSD	Matrix Spike Duplicate	T	Solid	8270C	280-84271

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 280-84253					
LCS 280-84253/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-84253/1-A	Method Blank	T	Solid	3550C	
280-19776-1	J1KTR4	T	Solid	3550C	
280-19776-1MS	Matrix Spike	T	Solid	3550C	
280-19776-1MSD	Matrix Spike Duplicate	T	Solid	3550C	
Prep Batch: 280-84282					
LCS 280-84282/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-84282/1-A	Method Blank	T	Solid	3550C	
280-19776-1	J1KTR4	T	Solid	3550C	
280-19776-1MS	Matrix Spike	T	Solid	3550C	
280-19776-1MSD	Matrix Spike Duplicate	T	Solid	3550C	
Analysis Batch:280-84700					
LCS 280-84253/2-A	Lab Control Sample	T	Solid	8082	280-84253
MB 280-84253/1-A	Method Blank	T	Solid	8082	280-84253
280-19776-1	J1KTR4	T	Solid	8082	280-84253
280-19776-1MS	Matrix Spike	T	Solid	8082	280-84253
280-19776-1MSD	Matrix Spike Duplicate	T	Solid	8082	280-84253
Analysis Batch:280-85050					
LCS 280-84282/2-A	Lab Control Sample	T	Solid	NWTPH-Dx	280-84282
MB 280-84282/1-A	Method Blank	T	Solid	NWTPH-Dx	280-84282
280-19776-1	J1KTR4	T	Solid	NWTPH-Dx	280-84282
280-19776-1MS	Matrix Spike	T	Solid	NWTPH-Dx	280-84282
280-19776-1MSD	Matrix Spike Duplicate	T	Solid	NWTPH-Dx	280-84282

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-84245					
LCS 280-84245/2-B	Lab Control Sample	P	Solid	1311	
LB 280-84245/1-B	TCLP SPLPE Leachate Blank	P	Solid	1311	
280-19776-1	J1KTR4	P	Solid	1311	
280-19776-1DU	Duplicate	P	Solid	1311	
280-19776-1MS	Matrix Spike	P	Solid	1311	
Prep Batch: 280-84263					
LCS 280-84263/2-A	Lab Control Sample	T	Solid	3050B	
LCSD 280-84263/3-A	Lab Control Sample Duplicate	T	Solid	3050B	
MB 280-84263/1-A	Method Blank	T	Solid	3050B	
280-19776-1	J1KTR4	T	Solid	3050B	
Analysis Batch:280-84764					
LCS 280-84263/2-A	Lab Control Sample	T	Solid	6010B	280-84263
LCSD 280-84263/3-A	Lab Control Sample Duplicate	T	Solid	6010B	280-84263
MB 280-84263/1-A	Method Blank	T	Solid	6010B	280-84263
280-19776-1	J1KTR4	T	Solid	6010B	280-84263
Analysis Batch:280-85004					
LCS 280-84263/2-A	Lab Control Sample	T	Solid	6010B	280-84263
LCSD 280-84263/3-A	Lab Control Sample Duplicate	T	Solid	6010B	280-84263
MB 280-84263/1-A	Method Blank	T	Solid	6010B	280-84263
280-19776-1	J1KTR4	T	Solid	6010B	280-84263
Prep Batch: 280-85807					
LCS 280-84245/2-B	Lab Control Sample	P	Solid	7470A	280-84245
LB 280-84245/1-B	TCLP SPLPE Leachate Blank	P	Solid	7470A	280-84245
280-19776-1	J1KTR4	P	Solid	7470A	280-84245
280-19776-1DU	Duplicate	P	Solid	7470A	280-84245
280-19776-1MS	Matrix Spike	P	Solid	7470A	280-84245
Analysis Batch:280-86128					
LCS 280-84245/2-B	Lab Control Sample	P	Solid	7470A	280-85807
LB 280-84245/1-B	TCLP SPLPE Leachate Blank	P	Solid	7470A	280-85807
280-19776-1	J1KTR4	P	Solid	7470A	280-85807
280-19776-1DU	Duplicate	P	Solid	7470A	280-85807
280-19776-1MS	Matrix Spike	P	Solid	7470A	280-85807

Report Basis
P = TCLP
T = Total

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-84162					
280-19776-1	J1KTR4	T	Solid	D-2216	
280-19776-1DU	Duplicate	T	Solid	D-2216	

Report Basis
T = Total

HPLC/IC					
Prep Batch: 280-84256					
LCS 280-84256/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-84256/1-A	Method Blank	T	Solid	3550C	
280-19776-1	J1KTR4	T	Solid	3550C	
280-19776-1MS	Matrix Spike	T	Solid	3550C	
280-19776-1MSD	Matrix Spike Duplicate	T	Solid	3550C	
Analysis Batch:280-84774					
LCS 280-84256/2-A	Lab Control Sample	T	Solid	8310	280-84256
MB 280-84256/1-A	Method Blank	T	Solid	8310	280-84256
280-19776-1	J1KTR4	T	Solid	8310	280-84256
280-19776-1MS	Matrix Spike	T	Solid	8310	280-84256
280-19776-1MSD	Matrix Spike Duplicate	T	Solid	8310	280-84256

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

Method Blank - Batch: 280-84208

Method: 8260B
Preparation: 5035

Lab Sample ID:	MB 280-84208/1-A	Analysis Batch:	280-85771	Instrument ID:	MSV_G
Client Matrix:	Solid	Prep Batch:	280-84208	Lab File ID:	G8019.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5.003 g
Analysis Date:	09/09/2011 1508	Units:	ug/Kg	Final Weight/Volume:	5 mL
Prep Date:	09/01/2011 1653				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acetone	5.4	U	5.4	20
Benzene	0.47	U	0.47	5.0
Bromodichloromethane	0.22	U	0.22	5.0
Bromoform	0.23	U	0.23	5.0
Bromomethane	0.50	U	0.50	10
2-Butanone (MEK)	1.8	U	1.8	10
Carbon disulfide	0.802	J	0.42	5.0
Carbon tetrachloride	0.63	U	0.63	5.0
Chlorobenzene	0.54	U	0.54	5.0
Dibromochloromethane	0.57	U	0.57	5.0
Chloroethane	0.89	U	0.89	10
Chloroform	0.29	U	0.29	5.0
Chloromethane	0.77	U	0.77	10
1,1-Dichloroethane	0.21	U	0.21	5.0
1,2-Dichloroethane	0.70	U	0.70	5.0
1,1-Dichloroethene	0.59	U	0.59	5.0
1,2-Dichloroethene, Total	0.39	U	0.39	5.0
1,2-Dichloropropane	0.55	U	0.55	5.0
cis-1,3-Dichloropropene	1.3	U	1.3	5.0
trans-1,3-Dichloropropene	0.67	U	0.67	5.0
Ethylbenzene	0.67	U	0.67	5.0
2-Hexanone	4.9	U	4.9	20
Methylene Chloride	0.75	U	0.75	5.0
4-Methyl-2-pentanone (MIBK)	4.4	U	4.4	10
Styrene	0.63	U	0.63	5.0
1,1,2,2-Tetrachloroethane	0.61	U	0.61	5.0
Tetrachloroethene	0.59	U	0.59	5.0
Toluene	0.69	U	0.69	5.0
1,1,1-Trichloroethane	0.52	U	0.52	5.0
1,1,2-Trichloroethane	0.88	U	0.88	5.0
Trichloroethene	0.23	U	0.23	5.0
Vinyl chloride	1.3	U	1.3	5.0
Xylenes, Total	0.61	U	0.61	5.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	65	58 - 140
Toluene-d8 (Surr)	84	80 - 126
4-Bromofluorobenzene (Surr)	81	76 - 127
Dibromofluoromethane (Surr)	76	75 - 121

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

Method Blank TICs- Batch: 280-84208

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

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-84208

Method: 8260B
Preparation: 5035

LCS Lab Sample ID:	LCS 280-84208/3-A	Analysis Batch:	280-85771	Instrument ID:	MSV_G
Client Matrix:	Solid	Prep Batch:	280-84208	Lab File ID:	G8015.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 g
Analysis Date:	09/09/2011 1252	Units:	ug/Kg	Final Weight/Volume:	5 mL
Prep Date:	09/01/2011 1653				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-84208/6-A	Analysis Batch:	280-85771	Instrument ID:	MSV_G
Client Matrix:	Solid	Prep Batch:	280-84208	Lab File ID:	G8017.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 g
Analysis Date:	09/09/2011 1359	Units:	ug/Kg	Final Weight/Volume:	5 mL
Prep Date:	09/01/2011 1653				
Leach Date:	N/A				

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Acetone	102	97	45 - 184	5	28		
Benzene	102	106	76 - 120	4	20		
Bromodichloromethane	103	104	74 - 125	1	20		
Bromoform	104	103	75 - 120	1	20		
Bromomethane	112	96	40 - 149	15	22		
2-Butanone (MEK)	102	95	58 - 150	7	32		
Carbon disulfide	103	100	49 - 121	3	24		
Carbon tetrachloride	111	117	69 - 147	5	20		
Chlorobenzene	103	107	74 - 120	4	20		
Dibromochloromethane	105	106	74 - 120	1	20		
Chloroethane	119	109	51 - 155	8	22		
Chloroform	103	104	77 - 125	2	20		
Chloromethane	112	108	47 - 148	4	25		
1,1-Dichloroethane	105	107	74 - 120	2	20		
1,2-Dichloroethane	96	97	62 - 142	1	20		
1,1-Dichloroethene	117	121	77 - 143	4	20		
1,2-Dichloroethene, Total	103	106	80 - 120	3	20		
1,2-Dichloropropane	98	100	74 - 120	2	20		
cis-1,3-Dichloropropene	102	107	77 - 120	5	20		
trans-1,3-Dichloropropene	106	103	71 - 120	3	20		
Ethylbenzene	109	112	78 - 120	2	20		
2-Hexanone	108	97	58 - 136	11	29		
Methylene Chloride	115	117	76 - 137	1	21		
4-Methyl-2-pentanone (MIBK)	107	97	62 - 130	10	25		
Styrene	107	111	77 - 120	4	20		
1,1,2,2-Tetrachloroethane	98	95	68 - 120	3	21		
Tetrachloroethene	107	116	71 - 120	8	20		
Toluene	101	107	72 - 120	6	20		
1,1,1-Trichloroethane	106	110	67 - 143	3	20		
1,1,2-Trichloroethane	95	99	69 - 120	4	20		
Trichloroethene	105	109	78 - 120	3	20		
Vinyl chloride	120	113	45 - 148	6	24		
Xylenes, Total	106	111	77 - 120	5	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	76	76	58 - 140

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
Toluene-d8 (Surr)	91	94	80 - 126
4-Bromofluorobenzene (Surr)	83	81	76 - 127
Dibromofluoromethane (Surr)	86	87	75 - 121

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

Method Blank - Batch: 280-84271

Method: 8270C
Preparation: 3550C

Lab Sample ID:	MB 280-84271/1-A	Analysis Batch:	280-84803	Instrument ID:	MSS_G6
Client Matrix:	Solid	Prep Batch:	280-84271	Lab File ID:	G6_3446.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.4 g
Analysis Date:	09/06/2011 1753	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	09/02/2011 1035			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Result	Qual	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	39	U	39	330
Bis(2-chloroethoxy)methane	23	U	23	330
Bis(2-chloroethyl)ether	16	U	16	330
bis (2-chloroisopropyl) ether	23	U	23	330
Bis(2-ethylhexyl) phthalate	45	U	45	330
4-Bromophenyl phenyl ether	19	U	19	330
Butyl benzyl phthalate	42	U	42	330
Carbazole	36	U	36	330
4-Chloroaniline	81	U	81	330
4-Chloro-3-methylphenol	65	U	65	330
2-Chloronaphthalene	9.9	U	9.9	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	13	U	13	330
3,3'-Dichlorobenzidine	89	U	89	650
2,4-Dichlorophenol	9.9	U	9.9	330
Diethyl phthalate	26	U	26	330
2,4-Dimethylphenol	65	U	65	330
Dimethyl phthalate	23	U	23	330
Di-n-butyl phthalate	29	U	29	330
4,6-Dinitro-2-methylphenol	330	U	330	650
2,4-Dinitrophenol	330	U	330	810
2,4-Dinitrotoluene	65	U	65	330
2,6-Dinitrotoluene	28	U	28	330
Di-n-octyl phthalate	14	U	14	330
Fluoranthene	36	U	36	330
Fluorene	18	U	18	330
Hexachlorobenzene	29	U	29	330
Hexachlorobutadiene	9.9	U	9.9	330
Hexachlorocyclopentadiene	49	U	49	330
Hexachloroethane	21	U	21	330
Indeno[1,2,3-cd]pyrene	22	U	22	330
Isophorone	17	U	17	330

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

Method Blank - Batch: 280-84271

Method: 8270C
Preparation: 3550C

Lab Sample ID:	MB 280-84271/1-A	Analysis Batch:	280-84803	Instrument ID:	MSS_G6
Client Matrix:	Solid	Prep Batch:	280-84271	Lab File ID:	G6_3446.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.4 g
Analysis Date:	09/06/2011 1753	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	09/02/2011 1035			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
2-Methylnaphthalene	19	U	19	330
2-Methylphenol	13	U	13	330
3 & 4 Methylphenol	33	U	33	330
Naphthalene	31	U	31	330
2-Nitroaniline	49	U	49	330
3-Nitroaniline	72	U	72	330
4-Nitroaniline	72	U	72	330
Nitrobenzene	22	U	22	330
2-Nitrophenol	9.9	U	9.9	330
4-Nitrophenol	96	U	96	650
N-Nitrosodi-n-propylamine	31	U	31	330
N-Nitrosodiphenylamine	21	U	21	330
Pentachlorophenol	330	U	330	650
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	9.9	U	9.9	330
2,4,6-Trichlorophenol	9.9	U	9.9	330

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	71	50 - 120
2-Fluorophenol	73	53 - 120
Nitrobenzene-d5	73	50 - 120
Phenol-d5	75	52 - 120
Terphenyl-d14	84	55 - 120
2,4,6-Tribromophenol	78	51 - 120

Method Blank TICs- Batch: 280-84271

Cas Number	Analyte	RT	Est. Result	Qual
2213-23-2	Heptane, 2,4-dimethyl-	2.89	272	N J
2216-30-0	Heptane, 2,5-dimethyl-	3.02	284	N J
	Unknown	5.00	137	N J
	Unknown	2.84	153	N J
	Unknown	5.32	197	N J
	Unknown	2.62	253	N J
	Unknown	3.10	4440	N J

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

Lab Control Sample - Batch: 280-84271

Method: 8270C
Preparation: 3550C

Lab Sample ID:	LCS 280-84271/2-A	Analysis Batch:	280-84803	Instrument ID:	MSS_G6
Client Matrix:	Solid	Prep Batch:	280-84271	Lab File ID:	G6_3447.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.6 g
Analysis Date:	09/06/2011 1813	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	09/02/2011 1035			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acenaphthene	2610	2140	82	52 - 120	
Acenaphthylene	2610	2250	86	53 - 120	
Anthracene	2610	2260	86	57 - 120	
Benzo[a]anthracene	2610	2190	84	55 - 120	
Benzo[a]pyrene	2610	2070	79	54 - 120	
Benzo[b]fluoranthene	2610	2290	88	52 - 120	
Benzo[ghi]perylene	2610	2290	87	50 - 120	
Benzo[k]fluoranthene	2610	2290	88	54 - 120	
Bis(2-chloroethoxy)methane	2610	2020	77	49 - 120	
Bis(2-chloroethyl)ether	2610	1980	76	48 - 120	
bis (2-chloroisopropyl) ether	2610	2020	77	47 - 120	
Bis(2-ethylhexyl) phthalate	2610	2300	88	51 - 120	
4-Bromophenyl phenyl ether	2610	2230	85	53 - 120	
Butyl benzyl phthalate	2610	2230	85	49 - 120	
Carbazole	2610	2300	88	54 - 120	
4-Chloroaniline	2610	1650	63	28 - 120	
4-Chloro-3-methylphenol	2610	2240	86	57 - 120	
2-Chloronaphthalene	2610	2070	79	53 - 120	
2-Chlorophenol	2610	2020	77	53 - 120	
4-Chlorophenyl phenyl ether	2610	2250	86	55 - 120	
Chrysene	2610	2220	85	55 - 120	
Dibenz(a,h)anthracene	2610	2320	89	55 - 120	
Dibenzofuran	2610	2210	84	56 - 120	
1,2-Dichlorobenzene	2610	1950	75	48 - 120	
1,3-Dichlorobenzene	2610	1900	73	46 - 120	
1,4-Dichlorobenzene	2610	1920	73	46 - 120	
3,3'-Dichlorobenzidine	2610	1350	52	34 - 120	
2,4-Dichlorophenol	2610	2190	84	53 - 120	
Diethyl phthalate	2610	2290	87	57 - 120	
2,4-Dimethylphenol	2610	2130	81	53 - 120	
Dimethyl phthalate	2610	2280	87	57 - 120	
Di-n-butyl phthalate	2610	2320	89	57 - 120	
4,6-Dinitro-2-methylphenol	2610	1980	76	30 - 120	
2,4-Dinitrophenol	2610	2110	81	15 - 120	
2,4-Dinitrotoluene	2610	2310	88	53 - 120	
2,6-Dinitrotoluene	2610	2190	84	53 - 120	
Di-n-octyl phthalate	2610	2330	89	54 - 120	
Fluoranthene	2610	2320	89	55 - 120	
Fluorene	2610	2220	85	55 - 120	
Hexachlorobenzene	2610	2240	86	51 - 120	
Hexachlorobutadiene	2610	1950	75	48 - 120	

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

Lab Control Sample - Batch: 280-84271

Method: 8270C
Preparation: 3550C

Lab Sample ID:	LCS 280-84271/2-A	Analysis Batch:	280-84803	Instrument ID:	MSS_G6
Client Matrix:	Solid	Prep Batch:	280-84271	Lab File ID:	G6_3447.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.6 g
Analysis Date:	09/06/2011 1813	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	09/02/2011 1035			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Hexachlorocyclopentadiene	2610	2140	82	35 - 120	
Hexachloroethane	2610	1870	71	46 - 120	
Indeno[1,2,3-cd]pyrene	2610	2130	82	54 - 120	
Isophorone	2610	2050	78	46 - 120	
2-Methylnaphthalene	2610	1990	76	55 - 120	
2-Methylphenol	2610	2060	79	51 - 120	
3 & 4 Methylphenol	5230	4280	82	53 - 120	
Naphthalene	2610	2020	77	50 - 120	
2-Nitroaniline	2610	2360	90	50 - 120	
3-Nitroaniline	2610	2100	80	35 - 120	
4-Nitroaniline	2610	2260	86	44 - 120	
Nitrobenzene	2610	2040	78	49 - 120	
2-Nitrophenol	2610	2020	77	53 - 120	
4-Nitrophenol	2610	2430	93	41 - 120	
N-Nitrosodi-n-propylamine	2610	2060	79	51 - 120	
N-Nitrosodiphenylamine	2230	1880	84	55 - 120	
Pentachlorophenol	2610	2210	85	30 - 120	
Phenanthrene	2610	2290	87	58 - 120	
Phenol	2610	2080	80	54 - 120	
Pyrene	2610	2210	85	50 - 120	
1,2,4-Trichlorobenzene	2610	1950	75	50 - 120	
2,4,5-Trichlorophenol	2610	2280	87	56 - 120	
2,4,6-Trichlorophenol	2610	2240	86	50 - 120	

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	80	50 - 120
2-Fluorophenol	76	53 - 120
Nitrobenzene-d5	77	50 - 120
Phenol-d5	79	52 - 120
Terphenyl-d14	87	55 - 120
2,4,6-Tribromophenol	91	51 - 120

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-84271

Method: 8270C
Preparation: 3550C

MS Lab Sample ID:	280-19776-1	Analysis Batch:	280-84803	Instrument ID:	MSS_G6
Client Matrix:	Solid	Prep Batch:	280-84271	Lab File ID:	G6_3463.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.2 g
Analysis Date:	09/06/2011 2322			Final Weight/Volume:	1000 uL
Prep Date:	09/02/2011 1035			Injection Volume:	0.5 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-19776-1	Analysis Batch:	280-84803	Instrument ID:	MSS_G6
Client Matrix:	Solid	Prep Batch:	280-84271	Lab File ID:	G6_3464.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.0 g
Analysis Date:	09/06/2011 2341			Final Weight/Volume:	1000 uL
Prep Date:	09/02/2011 1035			Injection Volume:	0.5 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acenaphthene	75	79	52 - 120	5	30		
Acenaphthylene	78	81	53 - 120	6	30		
Anthracene	87	85	57 - 120	2	30		
Benzo[a]anthracene	87	85	55 - 120	1	30		
Benzo[a]pyrene	80	79	54 - 120	1	30		
Benzo[b]fluoranthene	79	80	52 - 120	2	44		
Benzo[ghi]perylene	86	84	50 - 120	1	31		
Benzo[k]fluoranthene	94	89	54 - 120	4	30		
Bis(2-chloroethoxy)methane	55	67	49 - 120	19	30		
Bis(2-chloroethyl)ether	52	60	48 - 120	15	30		
bis (2-chloroisopropyl) ether	56	63	47 - 120	14	30		
Bis(2-ethylhexyl) phthalate	93	93	51 - 120	0	30		
4-Bromophenyl phenyl ether	86	85	53 - 120	0	30		
Butyl benzyl phthalate	90	91	49 - 120	2	30		
Carbazole	86	84	54 - 120	2	30		
4-Chloroaniline	56	59	28 - 120	6	30		
4-Chloro-3-methylphenol	85	86	57 - 120	2	30		
2-Chloronaphthalene	67	73	53 - 120	9	30		
2-Chlorophenol	55	65	53 - 120	17	30		
4-Chlorophenyl phenyl ether	83	84	55 - 120	2	30		
Chrysene	86	84	55 - 120	2	35		
Dibenz(a,h)anthracene	88	85	55 - 120	3	30		
Dibenzofuran	80	82	56 - 120	2	30		
1,2-Dichlorobenzene	51	59	48 - 120	15	30		
1,3-Dichlorobenzene	48	56	46 - 120	15	32		
1,4-Dichlorobenzene	50	56	46 - 120	13	30		
3,3'-Dichlorobenzidine	54	53	34 - 120	2	30		
2,4-Dichlorophenol	72	80	53 - 120	11	30		
Diethyl phthalate	87	86	57 - 120	1	30		
2,4-Dimethylphenol	72	80	53 - 120	11	30		
Dimethyl phthalate	84	84	57 - 120	1	30		
Di-n-butyl phthalate	91	88	57 - 120	2	30		

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-84271

Method: 8270C
Preparation: 3550C

MS Lab Sample ID:	280-19776-1	Analysis Batch:	280-84803	Instrument ID:	MSS_G6
Client Matrix:	Solid	Prep Batch:	280-84271	Lab File ID:	G6_3463.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.2 g
Analysis Date:	09/06/2011 2322			Final Weight/Volume:	1000 uL
Prep Date:	09/02/2011 1035			Injection Volume:	0.5 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-19776-1	Analysis Batch:	280-84803	Instrument ID:	MSS_G6
Client Matrix:	Solid	Prep Batch:	280-84271	Lab File ID:	G6_3464.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.0 g
Analysis Date:	09/06/2011 2341			Final Weight/Volume:	1000 uL
Prep Date:	09/02/2011 1035			Injection Volume:	0.5 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
4,6-Dinitro-2-methylphenol	77	75	30 - 120	1	30		
2,4-Dinitrophenol	70	70	15 - 120	1	34		
2,4-Dinitrotoluene	85	86	53 - 120	1	30		
2,6-Dinitrotoluene	81	82	53 - 120	2	30		
Di-n-octyl phthalate	97	97	54 - 120	0	30		
Fluoranthene	88	86	55 - 120	2	30		
Fluorene	83	84	55 - 120	2	30		
Hexachlorobenzene	84	85	51 - 120	1	30		
Hexachlorobutadiene	52	62	48 - 120	18	30		
Hexachlorocyclopentadiene	50	50	35 - 120	1	30		
Hexachloroethane	48	54	46 - 120	14	30		
Indeno[1,2,3-cd]pyrene	81	79	54 - 120	1	30		
Isophorone	60	68	46 - 120	13	30		
2-Methylnaphthalene	59	69	55 - 120	16	30		
2-Methylphenol	62	71	51 - 120	14	30		
3 & 4 Methylphenol	68	77	53 - 120	12	30		
Naphthalene	55	65	50 - 120	16	30		
2-Nitroaniline	89	88	50 - 120	0	30		
3-Nitroaniline	80	80	35 - 120	1	30		
4-Nitroaniline	89	83	44 - 120	6	30		
Nitrobenzene	56	65	49 - 120	17	30		
2-Nitrophenol	55	65	53 - 120	18	30		
4-Nitrophenol	93	92	41 - 120	0	30		
N-Nitrosodi-n-propylamine	59	67	51 - 120	14	30		
N-Nitrosodiphenylamine	84	84	55 - 120	0	36		
Pentachlorophenol	90	89	30 - 120	1	30		
Phenanthrene	87	85	58 - 120	2	30		
Phenol	60	70	54 - 120	16	30		
Pyrene	88	88	50 - 120	0	38		
1,2,4-Trichlorobenzene	53	61	50 - 120	16	30		
2,4,5-Trichlorophenol	85	83	56 - 120	2	30		
2,4,6-Trichlorophenol	84	86	50 - 120	3	30		

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-84271

Method: 8270C
Preparation: 3550C

MS Lab Sample ID:	280-19776-1	Analysis Batch:	280-84803	Instrument ID:	MSS_G6
Client Matrix:	Solid	Prep Batch:	280-84271	Lab File ID:	G6_3463.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.2 g
Analysis Date:	09/06/2011 2322			Final Weight/Volume:	1000 uL
Prep Date:	09/02/2011 1035			Injection Volume:	0.5 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-19776-1	Analysis Batch:	280-84803	Instrument ID:	MSS_G6
Client Matrix:	Solid	Prep Batch:	280-84271	Lab File ID:	G6_3464.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.0 g
Analysis Date:	09/06/2011 2341			Final Weight/Volume:	1000 uL
Prep Date:	09/02/2011 1035			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
2-Fluorobiphenyl	66	73	50 - 120
2-Fluorophenol	54	62	53 - 120
Nitrobenzene-d5	55	63	50 - 120
Phenol-d5	60	68	52 - 120
Terphenyl-d14	87	88	55 - 120
2,4,6-Tribromophenol	92	91	51 - 120

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

Method Blank - Batch: 280-84253

Method: 8082
Preparation: 3550C

Lab Sample ID:	MB 280-84253/1-A	Analysis Batch:	280-84700	Instrument ID:	GCS_P3
Client Matrix:	Solid	Prep Batch:	280-84253	Lab File ID:	053B5301.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0 g
Analysis Date:	09/04/2011 0516	Units:	ug/Kg	Final Weight/Volume:	5000 uL
Prep Date:	09/02/2011 0913			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Aroclor 1016	2.8	U	2.8	10
Aroclor 1221	8.0	U	8.0	17
Aroclor 1232	2.0	U	2.0	10
Aroclor 1242	4.7	U	4.7	10
Aroclor 1248	4.7	U	4.7	10
Aroclor 1254	2.6	U	2.6	10
Aroclor 1260	2.6	U	2.6	10

Surrogate	% Rec	Acceptance Limits
Decachlorobiphenyl	89	59 - 130
Tetrachloro-m-xylene	88	53 - 128

Lab Control Sample - Batch: 280-84253

Method: 8082
Preparation: 3550C

Lab Sample ID:	LCS 280-84253/2-A	Analysis Batch:	280-84700	Instrument ID:	GCS_P3
Client Matrix:	Solid	Prep Batch:	280-84253	Lab File ID:	054B5401.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.7 g
Analysis Date:	09/04/2011 0537	Units:	ug/Kg	Final Weight/Volume:	5000 uL
Prep Date:	09/02/2011 0913			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aroclor 1016	32.6	25.8	79	54 - 132	
Aroclor 1260	32.6	29.4	90	62 - 129	

Surrogate	% Rec	Acceptance Limits
Decachlorobiphenyl	90	59 - 130
Tetrachloro-m-xylene	86	53 - 128

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-84253

Method: 8082
Preparation: 3550C

MS Lab Sample ID:	280-19776-1	Analysis Batch:	280-84700	Instrument ID:	GCS_P3
Client Matrix:	Solid	Prep Batch:	280-84253	Lab File ID:	056B5601.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.9 g
Analysis Date:	09/04/2011 0620			Final Weight/Volume:	5000 uL
Prep Date:	09/02/2011 0913			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-19776-1	Analysis Batch:	280-84700	Instrument ID:	GCS_P3
Client Matrix:	Solid	Prep Batch:	280-84253	Lab File ID:	057B5701.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.5 g
Analysis Date:	09/04/2011 0641			Final Weight/Volume:	5000 uL
Prep Date:	09/02/2011 0913			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Aroclor 1016	83	86	54 - 132	5	26		
Aroclor 1260	100	102	62 - 129	4	26		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Decachlorobiphenyl	86	87	59 - 130
Tetrachloro-m-xylene	94	95	53 - 128

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

Method Blank - Batch: 280-84282

Method: NWTPH-Dx
Preparation: 3550C

Lab Sample ID:	MB 280-84282/1-A	Analysis Batch:	280-85050	Instrument ID:	GCS_U2
Client Matrix:	Solid	Prep Batch:	280-84282	Lab File ID:	052B0501.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.9 g
Analysis Date:	09/07/2011 1053	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	09/02/2011 1550			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
C10-C36	970	U	970	3900
C10-C28	660	U	660	3900

Surrogate	% Rec	Acceptance Limits
o-Terphenyl	89	49 - 115

Lab Control Sample - Batch: 280-84282

Method: NWTPH-Dx
Preparation: 3550C

Lab Sample ID:	LCS 280-84282/2-A	Analysis Batch:	280-85050	Instrument ID:	GCS_U2
Client Matrix:	Solid	Prep Batch:	280-84282	Lab File ID:	053B0601.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.7 g
Analysis Date:	09/07/2011 1127	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	09/02/2011 1550			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
C10-C36	65100	61400	94	57 - 115	
C10-C28	65100	61400	94	53 - 115	

Surrogate	% Rec	Acceptance Limits
o-Terphenyl	92	49 - 115

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-84282

Method: NWTPH-Dx
Preparation: 3550C

MS Lab Sample ID:	280-19776-1	Analysis Batch:	280-85050	Instrument ID:	GCS_U2
Client Matrix:	Solid	Prep Batch:	280-84282	Lab File ID:	055B0801.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0 g
Analysis Date:	09/07/2011 1236			Final Weight/Volume:	1000 uL
Prep Date:	09/02/2011 1550			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-19776-1	Analysis Batch:	280-85050	Instrument ID:	GCS_U2
Client Matrix:	Solid	Prep Batch:	280-84282	Lab File ID:	056B0901.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.6 g
Analysis Date:	09/07/2011 1310			Final Weight/Volume:	1000 uL
Prep Date:	09/02/2011 1550			Injection Volume:	1 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
C10-C36	94	75	57 - 115	19	23		
C10-C28	86	84	56 - 115	4	23		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
o-Terphenyl	92	93	49 - 115

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

Method Blank - Batch: 280-84256

Method: 8310
Preparation: 3550C

Lab Sample ID:	MB 280-84256/1-A	Analysis Batch:	280-84774	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-84256	Lab File ID:	G0907008.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.2 g
Analysis Date:	09/07/2011 1406	Units:	ug/Kg	Final Weight/Volume:	4000 uL
Prep Date:	09/02/2011 0957			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Acenaphthene	9.9	U	9.9	99
Acenaphthylene	8.9	U	8.9	99
Anthracene	3.0	U	3.0	20
Benzo[a]anthracene	3.2	U	3.2	15
Benzo[a]pyrene	6.4	U	6.4	15
Benzo[b]fluoranthene	4.2	U	4.2	15
Benzo[g,h,i]perylene	7.2	U	7.2	30
Benzo[k]fluoranthene	3.9	U	3.9	15
Chrysene	4.8	U	4.8	40
Dibenzo(a,h)anthracene	11	U	11	30
Fluoranthene	13	U	13	40
Fluorene	5.2	U	5.2	30
Indeno[1,2,3-cd]pyrene	12	U	12	30
Naphthalene	12	U	12	99
Phenanthrene	12	U	12	40
Pyrene	12	U	12	40

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

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

Lab Control Sample - Batch: 280-84256

Method: 8310
Preparation: 3550C

Lab Sample ID:	LCS 280-84256/2-A	Analysis Batch:	280-84774	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-84256	Lab File ID:	G0907009.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0 g
Analysis Date:	09/07/2011 1436	Units:	ug/Kg	Final Weight/Volume:	4000 uL
Prep Date:	09/02/2011 0957			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acenaphthene	2000	2060	103	78 - 116	
Acenaphthylene	2000	1910	95	76 - 115	
Anthracene	2000	1850	93	74 - 115	
Benzo[a]anthracene	2000	2060	103	85 - 120	
Benzo[a]pyrene	2000	1900	95	74 - 121	
Benzo[b]fluoranthene	2000	2120	106	85 - 115	
Benzo[g,h,i]perylene	2000	2060	103	85 - 120	
Benzo[k]fluoranthene	2000	2010	100	85 - 115	
Chrysene	2000	2000	100	83 - 115	
Dibenzo(a,h)anthracene	2000	2050	102	83 - 115	
Fluoranthene	2000	2040	102	83 - 115	
Fluorene	2000	1950	98	80 - 115	
Indeno[1,2,3-cd]pyrene	2000	2050	103	85 - 123	
Naphthalene	2000	1940	97	80 - 121	
Phenanthrene	2000	2010	100	80 - 115	
Pyrene	2000	1980	99	75 - 116	

Surrogate	% Rec	Acceptance Limits
Terphenyl-d14 (SUR)	89	72 - 115

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-84256

Method: 8310
Preparation: 3550C

MS Lab Sample ID:	280-19776-1	Analysis Batch:	280-84774	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-84256	Lab File ID:	G0907011.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.2 g
Analysis Date:	09/07/2011 1537			Final Weight/Volume:	4000 uL
Prep Date:	09/02/2011 0957			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-19776-1	Analysis Batch:	280-84774	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-84256	Lab File ID:	G0907012.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0 g
Analysis Date:	09/07/2011 1608			Final Weight/Volume:	4000 uL
Prep Date:	09/02/2011 0957			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acenaphthene	NaN	NaN	78 - 116	8	20		
Acenaphthylene	93	99	76 - 115	7	21		
Anthracene	84	92	74 - 115	9	20		
Benzo[a]anthracene	100	108	85 - 120	9	20		
Benzo[a]pyrene	93	101	74 - 121	8	20		
Benzo[g,h,i]perylene	98	107	85 - 120	9	20		
Benzo[k]fluoranthene	96	104	85 - 115	8	20		
Benzo[k]fluoranthene	96	105	85 - 115	10	20		
Benzo[k]fluoranthene	97	104	85 - 115	8	20		
Benzo[k]fluoranthene	97	105	85 - 115	10	20		
Chrysene	97	105	83 - 115	9	20		
Dibenzo(a,h)anthracene	98	106	83 - 115	8	20		
Fluoranthene	99	107	83 - 115	8	20		
Fluorene	96	102	80 - 115	7	20		
Indeno[1,2,3-cd]pyrene	99	107	85 - 123	9	20		
Naphthalene	94	99	80 - 121	6	20		
Phenanthrene	98	105	80 - 115	8	20		
Pyrene	96	103	75 - 116	8	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Terphenyl-d14 (SUR)	86	93	72 - 115

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

Method Blank - Batch: 280-84263

Method: 6010B
Preparation: 3050B

Lab Sample ID:	MB 280-84263/1-A	Analysis Batch:	280-84764	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-84263	Lab File ID:	25A5090611.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	09/06/2011 2005	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 0530				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Aluminum	1.6	U	1.6	5.0
Antimony	0.38	U	0.38	0.60
Arsenic	0.66	U	0.66	1.0
Beryllium	0.033	U	0.033	0.20
Boron	0.98	U	0.98	2.0
Cadmium	0.041	U	0.041	0.20
Calcium	14.1	U	14.1	50.0
Chromium	0.0660	B	0.058	0.20
Cobalt	0.10	U	0.10	1.0
Copper	0.22	U	0.22	1.0
Iron	5.26		3.8	5.0
Magnesium	3.7	U	3.7	20.0
Manganese	0.10	U	0.10	1.0
Molybdenum	0.26	U	0.26	2.0
Nickel	0.12	U	0.12	4.0
Potassium	41.0	U	41.0	300
Selenium	0.86	U	0.86	1.0
Silicon	5.7	U	5.7	10.0
Silver	0.16	U	0.16	0.20
Sodium	59.0	U	59.0	120
Vanadium	0.094	U	0.094	2.0
Zinc	0.40	U	0.40	1.0

Method Blank - Batch: 280-84263

Method: 6010B
Preparation: 3050B

Lab Sample ID:	MB 280-84263/1-A	Analysis Batch:	280-85004	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-84263	Lab File ID:	25A4090711.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	09/07/2011 2134	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 0530				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Barium	0.126	B	0.076	0.50
Lead	0.27	U	0.27	0.50

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-84263

Method: 6010B
Preparation: 3050B

LCS Lab Sample ID:	LCS 280-84263/2-A	Analysis Batch:	280-84764	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-84263	Lab File ID:	25A5090611.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	09/06/2011 2008	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 0530				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-84263/3-A	Analysis Batch:	280-84764	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-84263	Lab File ID:	25A5090611.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	09/06/2011 2010	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 0530				
Leach Date:	N/A				

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Aluminum	101	99	82 - 116	2	20		
Antimony	96	94	82 - 110	2	20		
Arsenic	99	96	85 - 110	3	20		
Beryllium	107	105	84 - 114	3	20		
Boron	96	93	81 - 110	3	20		
Cadmium	104	101	87 - 110	2	20		
Calcium	103	100	82 - 114	3	20		
Chromium	102	99	84 - 114	2	20		
Cobalt	99	97	87 - 110	2	20		
Copper	96	94	88 - 110	2	20		
Iron	100	97	87 - 120	2	20		
Magnesium	98	96	90 - 110	2	20		
Manganese	99	97	88 - 110	2	20		
Molybdenum	101	98	86 - 110	3	20		
Nickel	100	97	87 - 110	2	20		
Potassium	96	94	89 - 110	3	20		
Selenium	101	99	83 - 110	2	20		
Silicon	22	21	10 - 70	6	20		
Silver	104	102	87 - 114	2	20		
Sodium	105	102	90 - 112	3	20		
Vanadium	101	100	88 - 110	1	20		
Zinc	103	102	76 - 114	1	20		

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-84263

Method: 6010B
Preparation: 3050B

LCS Lab Sample ID:	LCS 280-84263/2-A	Analysis Batch:	280-85004	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-84263	Lab File ID:	25A4090711.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	09/07/2011 2136	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 0530				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-84263/3-A	Analysis Batch:	280-85004	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-84263	Lab File ID:	25A4090711.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	09/07/2011 2138	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	09/06/2011 0530				
Leach Date:	N/A				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Barium	95	93	87 - 112	2	20		
Lead	103	101	86 - 110	1	20		

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

TCLP SPLPE Leachate Blank - Batch: 280-85807

Method: 7470A
Preparation: 7470A
TCLP

Lab Sample ID:	LB 280-84245/1-B	Analysis Batch:	280-86128	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-85807	Lab File ID:	34B091411.txt
Dilution:	1.0	Leach Batch:	280-84245	Initial Weight/Volume:	30 mL
Analysis Date:	09/14/2011 1604	Units:	mg/L	Final Weight/Volume:	30 mL
Prep Date:	09/14/2011 1130				
Leach Date:	09/02/2011 1440				

Analyte	Result	Qual	MDL	RL
Mercury	0.0000440	B	0.000030	0.0020

Lab Control Sample - Batch: 280-85807

Method: 7470A
Preparation: 7470A
TCLP

Lab Sample ID:	LCS 280-84245/2-B	Analysis Batch:	280-86128	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-85807	Lab File ID:	34B091411.txt
Dilution:	1.0	Leach Batch:	280-84245	Initial Weight/Volume:	30 mL
Analysis Date:	09/14/2011 1606	Units:	mg/L	Final Weight/Volume:	30 mL
Prep Date:	09/14/2011 1130				
Leach Date:	09/02/2011 1440				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.00500	0.00538	108	90 - 116	

Matrix Spike - Batch: 280-85807

Method: 7470A
Preparation: 7470A
TCLP

Lab Sample ID:	280-19776-1	Analysis Batch:	280-86128	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-85807	Lab File ID:	34B091411.txt
Dilution:	1.0	Leach Batch:	280-84245	Initial Weight/Volume:	30 mL
Analysis Date:	09/14/2011 1611	Units:	mg/L	Final Weight/Volume:	30 mL
Prep Date:	09/14/2011 1130				
Leach Date:	09/02/2011 1440				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.000052	B	0.00500	0.00541	107	90 - 116	

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

Duplicate - Batch: 280-85807

Method: 7470A
Preparation: 7470A
TCLP

Lab Sample ID:	280-19776-1	Analysis Batch:	280-86128	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-85807	Lab File ID:	34B091411.txt
Dilution:	1.0	Leach Batch:	280-84245	Initial Weight/Volume:	30 mL
Analysis Date:	09/14/2011 1613	Units:	mg/L	Final Weight/Volume:	30 mL
Prep Date:	09/14/2011 1130				
Leach Date:	09/02/2011 1440				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Mercury	0.000052	B	0.0000490	6	20	B

Client: Washington Closure Hanford

Job Number: 280-19776-1
Sdg Number: J01258

Duplicate - Batch: 280-84162

Method: D-2216
Preparation: N/A

Lab Sample ID:	280-19776-1	Analysis Batch:	280-84162	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:	09/01/2011 1503	Units:	%	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Moisture	1.1	0.99	12	20	

-0.5

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-225-005	Page 1 of 1
Collector: Murrow, WR	Company Contact: Jen Russell; Telephone No.: (509) 380-8093	Project Coordinator: KESSNER, JH	Price Code: ~~8B~~ JR 8/24/11 8C; Data Turnaround: ~~7 Days~~ JR 8/24/11 15 Days
Project Designation: 100K Remaining Waste Sites - Soil, In-Process	Sampling Location: 100-K-93	SAF No.: RC-225	
Ice Chest No.: WCH-08-070	Field Logbook No.: EL-1651-01; COA: 010K932600	Method of Shipment: FedEx	
Shipped To: TestAmerica Incorporated, Richland / Denver	Offsite Property No.: A100869	Bill of Lading/Air Bill No.: See OSPC	

POSSIBLE SAMPLE HAZARDS/REMARKS

None

Special Handling and/or Storage

Cool 4C

Preservation	Cool 4C	None	Cool 4C	Freeze	Cool 4C	Cool 4C	Cool 4C			
Type of Container	G/P	G/P	G	Gs*	aG	aG	aG			
No. of Container(s)	1	1	1	3	1 JR 8/24/11	0	0			
Volume	60mL	120mL	60mL	40mL	~~60mL~~ 250mL	60mL	60mL			
SAMPLE ANALYSIS	See item (1) in Special Instructions.	See item (2) in Special Instructions.	TPH-Diesel Range - WTPH-D +	VOA - 5035/8260 (TCL)	Semi-VOA - 8270A (TCL)	PAHs - 8310	PCBs - 8082			

Sample No.	Matrix *	Sample Date	Sample Time										
J1KTR4	SOIL	8-30-11	1122	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
W. Ross Murrow W. Ross	8-30-11 1135	Jen Russell Jen Russell	8/30/11 1135
Jen Russell Jen Russell	1540 8/30/11	Chris Bingham Chris	8/30/11 JR 8/24/11 1540
Chris Bingham Chris WCH	8/31/11 JR 8/24/11 0840	Fed EX	
		~~Received By/Stored In~~	9/1/11 900

SPECIAL INSTRUCTIONS

Please leach and hold 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}

SDG J01258

REVIEWED BY JRE DATE 8-31-11

Matrix *

S=Soil
SE=Sediment
SD=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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Project 28002142 - Solid

Analytical Due:

Report Due: 9/16/11 (10 day TAT) Rush

Sample Check-in List

Date/Time Received: 9/1/11 900 GM Screen Result 12 microR/hr

Client: Washington Closure Hanford SDG #: J01258 NA[ ] SAF #: RC-225 NA [ ]

Job Number: 197716 Chain of Custody # RC-225-005

Shipping Container ID: WCH-08-070 Air Bill # 795139020460

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: -0.5 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: 9/1/11

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on ___ by ___ Person Contacted ___

[ ] No action necessary; process as is.

Project Manager [signature] Date 9/1/11

WCH-08-070
-05

From: (509) 376-7768
1162 SHIPPING DEPT
US DOE
2355 STEVENS DR

RICHLAND, WA 99354

Origin ID: PSCA

FedEx. Express

J1120110429022S

Ship Date: 31AUG11
ActWgt: 67.0 LB
CAD: 5851986/INET3180

Delivery Address Bar Code

Ref # 00D1002600
Invoice #
PO #
Dept #

SHIP TO: (303) 736-0100

BILL THIRD PARTY

KAE YODER
TEST AMERICA
4955 YARROW ST # A100865

ARVADA, CO 80002

THU - 01 SEP A1
PRIORITY OVERNIGHT

TRK# 0201 7951 3902 0460

XH WHHA

80002
CO-US
DEN

50FG2/4299/F5F4

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