

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

COMPLETE COPY OF DATA PACKAGE TO:

Kathy Wendt

H4-21

KW 4/17/12
INITIAL/DATE

COMMENTS:

SDG J01458

SAF-RC-225

Rad only

Chem only

Rad & Chem

Complete

Partial

Sample Location: 128-K-2 (11-20)

ANALYTICAL REPORT

Job Number: 280-27068-1

SDG Number: J01458

Job Description: SAF# RC-225

For:

Washington Closure Hanford
2620 Fermi Avenue
Richland, WA 99354

Attention: Joan H Kessner



Approved for release.
Michael T Dedio
Project Mgmt. Assistant
4/11/2012 5:13 PM

Designee for
Kae E Yoder
Project Manager II
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04/11/2012

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: 280-27068-1

SDG #: J01458

SAF#: RC-225

Date SDG Closed: March 28, 2012

Data Deliverable: 15 Day / Summary

<u>CLIENT ID</u>	<u>LAB ID</u>	<u>ANALYSES REQUESTED</u>	<u>ANALYSES PERFORMED</u>
J1NMM0	280-27068-1	6010/7471/WTPH-D+/8270A/8310/8082/ 8260/8081	6010B/7471A/NWTPH-Dx/8270C/8310/8082/ 8260B/8081A
J1NMM1	280-27068-2	6010/7471/WTPH-D+/8270A/8310/8082/ 8260	6010B/7471A/NWTPH-Dx/8270C/8310/8082/ 8260B/8081A
J1NMM2	280-27068-3	6010/7471/WTPH-D+/8270A/8310/8082/ 8260/8081	6010B/7471A/NWTPH-Dx/8270C/8310/8082/ 8260B/8081A
J1NMM3	280-27068-4	6010/7471/WTPH-D+/8270A/8310/8082/ 8260	6010B/7471A/NWTPH-Dx/8270C/8310/8082/ 8260B/8081A
J1NMM4	280-27068-5	6010/7471/WTPH-D+/8270A/8310/8082/ 8260/8081	6010B/7471A/NWTPH-Dx/8270C/8310/8082/ 8260B/8081A
J1NMM5	280-27068-6	6010/7471/WTPH-D+/8270A/8310/8082/ 8260/8081	6010B/7471A/NWTPH-Dx/8270C/8310/8082/ 8260B/8081A
J1NMM6	280-27068-7	6010/7471/WTPH-D+/8270A/8310/8082/ 8260/8081	6010B/7471A/NWTPH-Dx/8270C/8310/8082/ 8260B/8081A
J1NMM7	280-27068-8	6010/7471/WTPH-D+/8270A/8310/8082/ 8260/8081	6010B/7471A/NWTPH-Dx/8270C/8310/8082/ 8260B/8081A
J1NMM8	280-27068-9	6010/7471/WTPH-D+/8270A/8310/8082/ 8260/8081	6010B/7471A/NWTPH-Dx/8270C/8310/8082/ 8260B/8081A
J1NMM9	280-27068-10	6010/7471/WTPH-D+/8270A/8310/8082/ 8260/8081	6010B/7471A/NWTPH-Dx/8270C/8310/8082/ 8260B/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 samples were received on 3/28/2012; the samples arrived in good condition, properly preserved and on ice. The temperatures of the coolers at receipt were 3.7 and 2.7 C.

The 5035/8260B VOA samples were received at the laboratory at a temperature of 2.7 C; however, it can be noted that the chain-of-custody indicates that VOA samples were frozen upon collection.

GC/MS VOLATILES - SW846 8260B

The method required MS/MSD could not be performed for batch 280-113362, due to insufficient sample volume submitted by the client.

Duplicate LCS (LCSD) were analyzed to provide some evidence of batch precision.

Ethyl ether was recovered outside the control limits, biased high, in the Continuing Calibration Verification (CCV) standard associated with samples in batch 280-113362. As no detectable concentrations of Ethyl ether are present in the associated samples, data are reported as is.

No other anomalies were encountered.

GC/MS SEMIVOLATILES - SW846 8270C

Low levels of Bis(2-ethylhexyl) phthalate, a common laboratory contaminant, are present in the method blank associated with batch 280-113513. 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".

No other anomalies were encountered.

GC SEMIVOLATILES - SW846 8081A - PESTICIDES

The MS/MSD performed on sample J1NMM8 exhibited spike compound recoveries outside the control limits, and the associated sample results have been flagged "N". Several analytes also exhibited %RPD failures and have been flagged "**". The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary.

The initial calibration verification (ICV) for analytical batch 280-114549 exceeded control criteria for Endrin. The ICV recovery was above the upper control limit for Endrin. The associated samples are ND for Endrin; therefore, data are reported as is.

A Continuing Calibration Verification (CCV) standard exhibited %Difference (%D) values >15%, biased low for Toxaphene. The overall mean %D is ≤15%; therefore, method criteria have been met and corrective action is deemed unnecessary.

No other 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

The MS/MSD performed on sample J1NMM3 exhibited spike compound recoveries outside the control limits, and the associated sample results have been flagged "N". Several analytes also exhibited %RPD failures and have been flagged "**". The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary.

No other anomalies were encountered.

TOTAL METALS - SW846 6010B/7471A

Serial dilution of a digestate in batch 280-113409 indicates that physical and chemical interferences are present for several elements. Results have been flagged with an "X".

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 J1NMM9; therefore, control limits are not applicable.

The duplicate analysis of sample J1NMM9 exhibited RPD data outside the control limits for Cadmium, 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: 280-27068-1

Sdg Number: J01458

Lab Section	Qualifier	Description
GC/MS VOA	U	Analyzed for but not detected.
GC/MS Semi VOA	B	Analyte was found in the associated method blank as well as in the sample.
	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.
	N	MS, MSD: Spike recovery exceeds upper or lower control limits.
	*	MS/MSD RPD exceeded the control limit
	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
	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.
	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: 280-27068-1

Sdg Number: J01458

Lab Section	Qualifier	Description
HPLC/IC		
	U	Analyzed for but not detected.
	N	MS, MSD: Spike recovery exceeds upper or lower control limits.
	*	MS/MSD RPD exceeded the control limit

METHOD SUMMARY

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Volatile Organic Compounds (GC/MS)	TAL DEN	SW846 8260B	
Closed System Purge and Trap	TAL DEN		SW846 5035
Semivolatile Organic Compounds (GC/MS)	TAL DEN	SW846 8270C	
Ultrasonic Extraction	TAL DEN		SW846 3550C
Organochlorine Pesticides (GC)	TAL DEN	SW846 8081A	
Ultrasonic Extraction	TAL DEN		SW846 3550C
Polychlorinated Biphenyls (PCBs) by Gas Chromatography	TAL DEN	SW846 8082	
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: 280-27068-1

Sdg Number: J01458

Method	Analyst	Analyst ID
SW846 8260B	Hubbs, Lisa M	LMH
SW846 8270C	Hoffman, Michael G	MGH
SW846 8081A	Wells, David	DW
SW846 8082	Jackson, Todd D	TDJ
NWTPH NWTPH-Dx	Birdsell, Matthew R	MRB
SW846 6010B	Harre, John K	JKH
SW846 7471A	Rawlings, Brendon L	BLR
ASTM D-2216	Berry III, Paul B	PBB
SW846 8310	Fiedler, Heather K	HKF

SAMPLE SUMMARY

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-27068-1	J1NMM0	Solid	03/26/2012 0800	03/28/2012 0900
280-27068-2	J1NMM1	Solid	03/26/2012 0809	03/28/2012 0900
280-27068-3	J1NMM2	Solid	03/26/2012 0820	03/28/2012 0900
280-27068-4	J1NMM3	Solid	03/26/2012 0826	03/28/2012 0900
280-27068-5	J1NMM4	Solid	03/26/2012 0833	03/28/2012 0900
280-27068-6	J1NMM5	Solid	03/26/2012 0840	03/28/2012 0900
280-27068-7	J1NMM6	Solid	03/26/2012 0845	03/28/2012 0900
280-27068-8	J1NMM7	Solid	03/26/2012 0852	03/28/2012 0900
280-27068-9	J1NMM8	Solid	03/26/2012 0857	03/28/2012 0900
280-27068-10	J1NMM9	Solid	03/26/2012 0904	03/28/2012 0900

SAMPLE RESULTS

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM0

Lab Sample ID: 280-27068-1

Date Sampled: 03/26/2012 0800

Client Matrix: Solid

% Moisture: 5.8

Date Received: 03/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-113644	Instrument ID: MSV_G2	
Prep Method: 5035	Prep Batch: 280-113362	Lab File ID: G2_5047.D	
Dilution: 1.0		Initial Weight/Volume: 3.644 g	
Analysis Date: 03/28/2012 2008		Final Weight/Volume: 5 mL	
Prep Date: 03/28/2012 1136			

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		7.8	U	7.8	29
Benzene		0.68	U	0.68	7.3
Bromodichloromethane		0.32	U	0.32	7.3
Bromoform		0.33	U	0.33	7.3
Bromomethane		0.73	U	0.73	15
2-Butanone (MEK)		2.7	U	2.7	15
Carbon disulfide		0.61	U	0.61	7.3
Carbon tetrachloride		0.92	U	0.92	7.3
Chlorobenzene		0.79	U	0.79	7.3
Dibromochloromethane		0.83	U	0.83	7.3
Chloroethane		1.3	U	1.3	15
Chloroform		0.42	U	0.42	7.3
Chloromethane		1.1	U	1.1	15
1,1-Dichloroethane		0.31	U	0.31	7.3
1,2-Dichloroethane		1.0	U	1.0	7.3
1,1-Dichloroethene		0.86	U	0.86	7.3
1,2-Dichloroethene, Total		0.57	U	0.57	7.3
1,2-Dichloropropane		0.80	U	0.80	7.3
cis-1,3-Dichloropropene		1.9	U	1.9	7.3
trans-1,3-Dichloropropene		0.98	U	0.98	7.3
Ethylbenzene		0.98	U	0.98	7.3
2-Hexanone		7.1	U	7.1	29
Methylene Chloride		2.3	U	2.3	7.3
4-Methyl-2-pentanone (MIBK)		6.4	U	6.4	15
Styrene		0.92	U	0.92	7.3
1,1,2,2-Tetrachloroethane		0.89	U	0.89	7.3
Tetrachloroethene		0.86	U	0.86	7.3
Toluene		1.0	U	1.0	7.3
1,1,1-Trichloroethane		0.76	U	0.76	7.3
1,1,2-Trichloroethane		1.3	U	1.3	7.3
Trichloroethene		0.33	U	0.33	7.3
Vinyl chloride		2.0	U	2.0	7.3
Xylenes, Total		0.89	U	0.89	7.3

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	85		58 - 140
Toluene-d8 (Surr)	100		80 - 126
4-Bromofluorobenzene (Surr)	104		76 - 127
Dibromofluoromethane (Surr)	84		75 - 121

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1
Sdg Number: J01458

Client Sample ID: J1NMM0

Lab Sample ID: 280-27068-1

Date Sampled: 03/26/2012 0800

Client Matrix: Solid

% Moisture: 5.8

Date Received: 03/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B

Analysis Batch: 280-113644

Instrument ID: MSV_G2

Prep Method: 5035

Prep Batch: 280-113362

Lab File ID: G2_5047.D

Dilution: 1.0

Initial Weight/Volume: 3.644 g

Analysis Date: 03/28/2012 2008

Final Weight/Volume: 5 mL

Prep Date: 03/28/2012 1136

Tentatively Identified Compounds

Number TIC's Found: 0

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

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM1

Lab Sample ID: 280-27068-2

Date Sampled: 03/26/2012 0809

Client Matrix: Solid

% Moisture: 3.7

Date Received: 03/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-113644	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-113362	Lab File ID:	G2_5048.D
Dilution:	1.0			Initial Weight/Volume:	4.601 g
Analysis Date:	03/28/2012 2027			Final Weight/Volume:	5 mL
Prep Date:	03/28/2012 1136				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		6.1	U	6.1	23
Benzene		0.53	U	0.53	5.6
Bromodichloromethane		0.25	U	0.25	5.6
Bromoform		0.26	U	0.26	5.6
Bromomethane		0.56	U	0.56	11
2-Butanone (MEK)		2.1	U	2.1	11
Carbon disulfide		0.47	U	0.47	5.6
Carbon tetrachloride		0.71	U	0.71	5.6
Chlorobenzene		0.61	U	0.61	5.6
Dibromochloromethane		0.64	U	0.64	5.6
Chloroethane		1.0	U	1.0	11
Chloroform		0.33	U	0.33	5.6
Chloromethane		0.87	U	0.87	11
1,1-Dichloroethane		0.24	U	0.24	5.6
1,2-Dichloroethane		0.79	U	0.79	5.6
1,1-Dichloroethene		0.67	U	0.67	5.6
1,2-Dichloroethene, Total		0.44	U	0.44	5.6
1,2-Dichloropropane		0.62	U	0.62	5.6
cis-1,3-Dichloropropene		1.5	U	1.5	5.6
trans-1,3-Dichloropropene		0.76	U	0.76	5.6
Ethylbenzene		0.76	U	0.76	5.6
2-Hexanone		5.5	U	5.5	23
Methylene Chloride		1.8	U	1.8	5.6
4-Methyl-2-pentanone (MIBK)		4.9	U	4.9	11
Styrene		0.71	U	0.71	5.6
1,1,2,2-Tetrachloroethane		0.69	U	0.69	5.6
Tetrachloroethene		0.67	U	0.67	5.6
Toluene		0.78	U	0.78	5.6
1,1,1-Trichloroethane		0.59	U	0.59	5.6
1,1,2-Trichloroethane		0.99	U	0.99	5.6
Trichloroethene		0.26	U	0.26	5.6
Vinyl chloride		1.5	U	1.5	5.6
Xylenes, Total		0.69	U	0.69	5.6

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	87		58 - 140
Toluene-d8 (Surr)	101		80 - 126
4-Bromofluorobenzene (Surr)	100		76 - 127
Dibromofluoromethane (Surr)	85		75 - 121

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1
Sdg Number: J01458

Client Sample ID: J1NMM1

Lab Sample ID: 280-27068-2

Date Sampled: 03/26/2012 0809

Client Matrix: Solid

% Moisture: 3.7

Date Received: 03/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B

Analysis Batch: 280-113644

Instrument ID: MSV_G2

Prep Method: 5035

Prep Batch: 280-113362

Lab File ID: G2_5048.D

Dilution: 1.0

Initial Weight/Volume: 4.601 g

Analysis Date: 03/28/2012 2027

Final Weight/Volume: 5 mL

Prep Date: 03/28/2012 1136

Tentatively Identified Compounds

Number TIC's Found: 0

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

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM2

Lab Sample ID: 280-27068-3

Date Sampled: 03/26/2012 0820

Client Matrix: Solid

% Moisture: 5.3

Date Received: 03/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-113644	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-113362	Lab File ID:	G2_5057.D
Dilution:	1.0			Initial Weight/Volume:	4.594 g
Analysis Date:	03/28/2012 2325			Final Weight/Volume:	5 mL
Prep Date:	03/28/2012 1136				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		6.2	U	6.2	23
Benzene		0.54	U	0.54	5.7
Bromodichloromethane		0.25	U	0.25	5.7
Bromoform		0.26	U	0.26	5.7
Bromomethane		0.57	U	0.57	11
2-Butanone (MEK)		2.1	U	2.1	11
Carbon disulfide		0.48	U	0.48	5.7
Carbon tetrachloride		0.72	U	0.72	5.7
Chlorobenzene		0.62	U	0.62	5.7
Dibromochloromethane		0.66	U	0.66	5.7
Chloroethane		1.0	U	1.0	11
Chloroform		0.33	U	0.33	5.7
Chloromethane		0.89	U	0.89	11
1,1-Dichloroethane		0.24	U	0.24	5.7
1,2-Dichloroethane		0.80	U	0.80	5.7
1,1-Dichloroethene		0.68	U	0.68	5.7
1,2-Dichloroethene, Total		0.45	U	0.45	5.7
1,2-Dichloropropane		0.63	U	0.63	5.7
cis-1,3-Dichloropropene		1.5	U	1.5	5.7
trans-1,3-Dichloropropene		0.77	U	0.77	5.7
Ethylbenzene		0.77	U	0.77	5.7
2-Hexanone		5.6	U	5.6	23
Methylene Chloride		1.8	U	1.8	5.7
4-Methyl-2-pentanone (MIBK)		5.0	U	5.0	11
Styrene		0.72	U	0.72	5.7
1,1,2,2-Tetrachloroethane		0.70	U	0.70	5.7
Tetrachloroethene		0.68	U	0.68	5.7
Toluene		0.79	U	0.79	5.7
1,1,1-Trichloroethane		0.60	U	0.60	5.7
1,1,2-Trichloroethane		1.0	U	1.0	5.7
Trichloroethene		0.26	U	0.26	5.7
Vinyl chloride		1.5	U	1.5	5.7
Xylenes, Total		0.70	U	0.70	5.7

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	86		58 - 140
Toluene-d8 (Surr)	104		80 - 126
4-Bromofluorobenzene (Surr)	108		76 - 127
Dibromofluoromethane (Surr)	86		75 - 121

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1
Sdg Number: J01458

Client Sample ID: J1NMM2

Lab Sample ID: 280-27068-3

Date Sampled: 03/26/2012 0820

Client Matrix: Solid

% Moisture: 5.3

Date Received: 03/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B

Analysis Batch: 280-113644

Instrument ID: MSV_G2

Prep Method: 5035

Prep Batch: 280-113362

Lab File ID: G2_5057.D

Dilution: 1.0

Initial Weight/Volume: 4.594 g

Analysis Date: 03/28/2012 2325

Final Weight/Volume: 5 mL

Prep Date: 03/28/2012 1136

Tentatively Identified Compounds

Number TIC's Found: 0

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

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM3

Lab Sample ID: 280-27068-4

Date Sampled: 03/26/2012 0826

Client Matrix: Solid

% Moisture: 5.0

Date Received: 03/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B	Analysis Batch: 280-113644	Instrument ID: MSV_G2	
Prep Method: 5035	Prep Batch: 280-113362	Lab File ID: G2_5050.D	
Dilution: 1.0		Initial Weight/Volume: 4.222 g	
Analysis Date: 03/28/2012 2106		Final Weight/Volume: 5 mL	
Prep Date: 03/28/2012 1136			

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		6.7	U	6.7	25
Benzene		0.59	U	0.59	6.2
Bromodichloromethane		0.27	U	0.27	6.2
Bromoform		0.29	U	0.29	6.2
Bromomethane		0.62	U	0.62	12
2-Butanone (MEK)		2.3	U	2.3	12
Carbon disulfide		0.52	U	0.52	6.2
Carbon tetrachloride		0.79	U	0.79	6.2
Chlorobenzene		0.67	U	0.67	6.2
Dibromochloromethane		0.71	U	0.71	6.2
Chloroethane		1.1	U	1.1	12
Chloroform		0.36	U	0.36	6.2
Chloromethane		0.96	U	0.96	12
1,1-Dichloroethane		0.26	U	0.26	6.2
1,2-Dichloroethane		0.87	U	0.87	6.2
1,1-Dichloroethene		0.74	U	0.74	6.2
1,2-Dichloroethene, Total		0.49	U	0.49	6.2
1,2-Dichloropropane		0.69	U	0.69	6.2
cis-1,3-Dichloropropene		1.6	U	1.6	6.2
trans-1,3-Dichloropropene		0.84	U	0.84	6.2
Ethylbenzene		0.84	U	0.84	6.2
2-Hexanone		6.1	U	6.1	25
Methylene Chloride		2.0	U	2.0	6.2
4-Methyl-2-pentanone (MIBK)		5.4	U	5.4	12
Styrene		0.79	U	0.79	6.2
1,1,2,2-Tetrachloroethane		0.76	U	0.76	6.2
Tetrachloroethene		0.74	U	0.74	6.2
Toluene		0.86	U	0.86	6.2
1,1,1-Trichloroethane		0.65	U	0.65	6.2
1,1,2-Trichloroethane		1.1	U	1.1	6.2
Trichloroethene		0.29	U	0.29	6.2
Vinyl chloride		1.7	U	1.7	6.2
Xylenes, Total		0.76	U	0.76	6.2

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	87		58 - 140
Toluene-d8 (Surr)	101		80 - 126
4-Bromofluorobenzene (Surr)	101		76 - 127
Dibromofluoromethane (Surr)	86		75 - 121

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM3

Lab Sample ID: 280-27068-4

Date Sampled: 03/26/2012 0826

Client Matrix: Solid

% Moisture: 5.0

Date Received: 03/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B

Analysis Batch: 280-113644

Instrument ID: MSV_G2

Prep Method: 5035

Prep Batch: 280-113362

Lab File ID: G2_5050.D

Dilution: 1.0

Initial Weight/Volume: 4.222 g

Analysis Date: 03/28/2012 2106

Final Weight/Volume: 5 mL

Prep Date: 03/28/2012 1136

Tentatively Identified Compounds

Number TIC's Found: 0

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

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM4

Lab Sample ID: 280-27068-5

Date Sampled: 03/26/2012 0833

Client Matrix: Solid

% Moisture: 6.1

Date Received: 03/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-113644	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-113362	Lab File ID:	G2_5051.D
Dilution:	1.0			Initial Weight/Volume:	3.181 g
Analysis Date:	03/28/2012 2125			Final Weight/Volume:	5 mL
Prep Date:	03/28/2012 1136				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		9.0	U	9.0	33
Benzene		0.79	U	0.79	8.4
Bromodichloromethane		0.37	U	0.37	8.4
Bromoform		0.38	U	0.38	8.4
Bromomethane		0.84	U	0.84	17
2-Butanone (MEK)		3.1	U	3.1	17
Carbon disulfide		0.70	U	0.70	8.4
Carbon tetrachloride		1.1	U	1.1	8.4
Chlorobenzene		0.90	U	0.90	8.4
Dibromochloromethane		0.95	U	0.95	8.4
Chloroethane		1.5	U	1.5	17
Chloroform		0.49	U	0.49	8.4
Chloromethane		1.3	U	1.3	17
1,1-Dichloroethane		0.35	U	0.35	8.4
1,2-Dichloroethane		1.2	U	1.2	8.4
1,1-Dichloroethene		0.99	U	0.99	8.4
1,2-Dichloroethene, Total		0.65	U	0.65	8.4
1,2-Dichloropropane		0.92	U	0.92	8.4
cis-1,3-Dichloropropene		2.2	U	2.2	8.4
trans-1,3-Dichloropropene		1.1	U	1.1	8.4
Ethylbenzene		1.1	U	1.1	8.4
2-Hexanone		8.2	U	8.2	33
Methylene Chloride		2.7	U	2.7	8.4
4-Methyl-2-pentanone (MIBK)		7.3	U	7.3	17
Styrene		1.1	U	1.1	8.4
1,1,2,2-Tetrachloroethane		1.0	U	1.0	8.4
Tetrachloroethene		0.99	U	0.99	8.4
Toluene		1.2	U	1.2	8.4
1,1,1-Trichloroethane		0.87	U	0.87	8.4
1,1,2-Trichloroethane		1.5	U	1.5	8.4
Trichloroethene		0.38	U	0.38	8.4
Vinyl chloride		2.2	U	2.2	8.4
Xylenes, Total		1.0	U	1.0	8.4

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	89		58 - 140
Toluene-d8 (Surr)	102		80 - 126
4-Bromofluorobenzene (Surr)	101		76 - 127
Dibromofluoromethane (Surr)	87		75 - 121

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM4

Lab Sample ID: 280-27068-5

Date Sampled: 03/26/2012 0833

Client Matrix: Solid

% Moisture: 6.1

Date Received: 03/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B

Analysis Batch: 280-113644

Instrument ID: MSV_G2

Prep Method: 5035

Prep Batch: 280-113362

Lab File ID: G2_5051.D

Dilution: 1.0

Initial Weight/Volume: 3.181 g

Analysis Date: 03/28/2012 2125

Final Weight/Volume: 5 mL

Prep Date: 03/28/2012 1136

Tentatively Identified Compounds

Number TIC's Found: 0

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

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM5

Lab Sample ID: 280-27068-6

Date Sampled: 03/26/2012 0840

Client Matrix: Solid

% Moisture: 5.0

Date Received: 03/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-113644	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-113362	Lab File ID:	G2_5052.D
Dilution:	1.0			Initial Weight/Volume:	5.458 g
Analysis Date:	03/28/2012 2144			Final Weight/Volume:	5 mL
Prep Date:	03/28/2012 1136				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		5.2	U	5.2	19
Benzene		0.45	U	0.45	4.8
Bromodichloromethane		0.21	U	0.21	4.8
Bromoform		0.22	U	0.22	4.8
Bromomethane		0.48	U	0.48	9.6
2-Butanone (MEK)		1.8	U	1.8	9.6
Carbon disulfide		0.40	U	0.40	4.8
Carbon tetrachloride		0.61	U	0.61	4.8
Chlorobenzene		0.52	U	0.52	4.8
Dibromochloromethane		0.55	U	0.55	4.8
Chloroethane		0.86	U	0.86	9.6
Chloroform		0.28	U	0.28	4.8
Chloromethane		0.74	U	0.74	9.6
1,1-Dichloroethane		0.20	U	0.20	4.8
1,2-Dichloroethane		0.67	U	0.67	4.8
1,1-Dichloroethene		0.57	U	0.57	4.8
1,2-Dichloroethene, Total		0.38	U	0.38	4.8
1,2-Dichloropropane		0.53	U	0.53	4.8
cis-1,3-Dichloropropene		1.2	U	1.2	4.8
trans-1,3-Dichloropropene		0.65	U	0.65	4.8
Ethylbenzene		0.65	U	0.65	4.8
2-Hexanone		4.7	U	4.7	19
Methylene Chloride		1.5	U	1.5	4.8
4-Methyl-2-pentanone (MIBK)		4.2	U	4.2	9.6
Styrene		0.61	U	0.61	4.8
1,1,2,2-Tetrachloroethane		0.59	U	0.59	4.8
Tetrachloroethene		0.57	U	0.57	4.8
Toluene		0.67	U	0.67	4.8
1,1,1-Trichloroethane		0.50	U	0.50	4.8
1,1,2-Trichloroethane		0.85	U	0.85	4.8
Trichloroethene		0.22	U	0.22	4.8
Vinyl chloride		1.3	U	1.3	4.8
Xylenes, Total		0.59	U	0.59	4.8

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	106		58 - 140
Toluene-d8 (Surr)	120		80 - 126
4-Bromofluorobenzene (Surr)	116		76 - 127
Dibromofluoromethane (Surr)	104		75 - 121

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1
Sdg Number: J01458

Client Sample ID: J1NMM5

Lab Sample ID: 280-27068-6

Date Sampled: 03/26/2012 0840

Client Matrix: Solid

% Moisture: 5.0

Date Received: 03/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B

Analysis Batch: 280-113644

Instrument ID: MSV_G2

Prep Method: 5035

Prep Batch: 280-113362

Lab File ID: G2_5052.D

Dilution: 1.0

Initial Weight/Volume: 5.458 g

Analysis Date: 03/28/2012 2144

Final Weight/Volume: 5 mL

Prep Date: 03/28/2012 1136

Tentatively Identified Compounds

Number TIC's Found: 0

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

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM6

Lab Sample ID: 280-27068-7

Date Sampled: 03/26/2012 0845

Client Matrix: Solid

% Moisture: 8.3

Date Received: 03/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-113644	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-113362	Lab File ID:	G2_5053.D
Dilution:	1.0			Initial Weight/Volume:	6.899 g
Analysis Date:	03/28/2012 2203			Final Weight/Volume:	5 mL
Prep Date:	03/28/2012 1136				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		4.3	U	4.3	16
Benzene		0.37	U	0.37	4.0
Bromodichloromethane		0.17	U	0.17	4.0
Bromoform		0.18	U	0.18	4.0
Bromomethane		0.40	U	0.40	7.9
2-Butanone (MEK)		1.4	U	1.4	7.9
Carbon disulfide		0.33	U	0.33	4.0
Carbon tetrachloride		0.50	U	0.50	4.0
Chlorobenzene		0.43	U	0.43	4.0
Dibromochloromethane		0.45	U	0.45	4.0
Chloroethane		0.70	U	0.70	7.9
Chloroform		0.23	U	0.23	4.0
Chloromethane		0.61	U	0.61	7.9
1,1-Dichloroethane		0.17	U	0.17	4.0
1,2-Dichloroethane		0.55	U	0.55	4.0
1,1-Dichloroethene		0.47	U	0.47	4.0
1,2-Dichloroethene, Total		0.31	U	0.31	4.0
1,2-Dichloropropane		0.43	U	0.43	4.0
cis-1,3-Dichloropropene		1.0	U	1.0	4.0
trans-1,3-Dichloropropene		0.53	U	0.53	4.0
Ethylbenzene		0.53	U	0.53	4.0
2-Hexanone		3.9	U	3.9	16
Methylene Chloride		1.3	U	1.3	4.0
4-Methyl-2-pentanone (MIBK)		3.4	U	3.4	7.9
Styrene		0.50	U	0.50	4.0
1,1,2,2-Tetrachloroethane		0.48	U	0.48	4.0
Tetrachloroethene		0.47	U	0.47	4.0
Toluene		0.55	U	0.55	4.0
1,1,1-Trichloroethane		0.41	U	0.41	4.0
1,1,2-Trichloroethane		0.70	U	0.70	4.0
Trichloroethene		0.18	U	0.18	4.0
Vinyl chloride		1.1	U	1.1	4.0
Xylenes, Total		0.48	U	0.48	4.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	89		58 - 140
Toluene-d8 (Surr)	100		80 - 126
4-Bromofluorobenzene (Surr)	99		76 - 127
Dibromofluoromethane (Surr)	87		75 - 121

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1
Sdg Number: J01458

Client Sample ID: J1NMM6

Lab Sample ID: 280-27068-7

Date Sampled: 03/26/2012 0845

Client Matrix: Solid

% Moisture: 8.3

Date Received: 03/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B

Analysis Batch: 280-113644

Instrument ID: MSV_G2

Prep Method: 5035

Prep Batch: 280-113362

Lab File ID: G2_5053.D

Dilution: 1.0

Initial Weight/Volume: 6.899 g

Analysis Date: 03/28/2012 2203

Final Weight/Volume: 5 mL

Prep Date: 03/28/2012 1136

Tentatively Identified Compounds

Number TIC's Found: 0

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

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM7

Lab Sample ID: 280-27068-8

Date Sampled: 03/26/2012 0852

Client Matrix: Solid

% Moisture: 4.1

Date Received: 03/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-113644	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-113362	Lab File ID:	G2_5054.D
Dilution:	1.0			Initial Weight/Volume:	4.712 g
Analysis Date:	03/28/2012 2222			Final Weight/Volume:	5 mL
Prep Date:	03/28/2012 1136				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		6.0	U	6.0	22
Benzene		0.52	U	0.52	5.5
Bromodichloromethane		0.24	U	0.24	5.5
Bromoform		0.25	U	0.25	5.5
Bromomethane		0.55	U	0.55	11
2-Butanone (MEK)		2.0	U	2.0	11
Carbon disulfide		0.46	U	0.46	5.5
Carbon tetrachloride		0.70	U	0.70	5.5
Chlorobenzene		0.60	U	0.60	5.5
Dibromochloromethane		0.63	U	0.63	5.5
Chloroethane		0.99	U	0.99	11
Chloroform		0.32	U	0.32	5.5
Chloromethane		0.85	U	0.85	11
1,1-Dichloroethane		0.23	U	0.23	5.5
1,2-Dichloroethane		0.77	U	0.77	5.5
1,1-Dichloroethene		0.65	U	0.65	5.5
1,2-Dichloroethene, Total		0.43	U	0.43	5.5
1,2-Dichloropropane		0.61	U	0.61	5.5
cis-1,3-Dichloropropene		1.4	U	1.4	5.5
trans-1,3-Dichloropropene		0.74	U	0.74	5.5
Ethylbenzene		0.74	U	0.74	5.5
2-Hexanone		5.4	U	5.4	22
Methylene Chloride		1.8	U	1.8	5.5
4-Methyl-2-pentanone (MIBK)		4.8	U	4.8	11
Styrene		0.70	U	0.70	5.5
1,1,2,2-Tetrachloroethane		0.68	U	0.68	5.5
Tetrachloroethene		0.65	U	0.65	5.5
Toluene		0.76	U	0.76	5.5
1,1,1-Trichloroethane		0.58	U	0.58	5.5
1,1,2-Trichloroethane		0.97	U	0.97	5.5
Trichloroethene		0.25	U	0.25	5.5
Vinyl chloride		1.5	U	1.5	5.5
Xylenes, Total		0.68	U	0.68	5.5

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	88		58 - 140
Toluene-d8 (Surr)	101		80 - 126
4-Bromofluorobenzene (Surr)	99		76 - 127
Dibromofluoromethane (Surr)	87		75 - 121

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1
Sdg Number: J01458

Client Sample ID: J1NMM7

Lab Sample ID: 280-27068-8

Date Sampled: 03/26/2012 0852

Client Matrix: Solid

% Moisture: 4.1

Date Received: 03/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B

Analysis Batch: 280-113644

Instrument ID: MSV_G2

Prep Method: 5035

Prep Batch: 280-113362

Lab File ID: G2_5054.D

Dilution: 1.0

Initial Weight/Volume: 4.712 g

Analysis Date: 03/28/2012 2222

Final Weight/Volume: 5 mL

Prep Date: 03/28/2012 1136

Tentatively Identified Compounds

Number TIC's Found: 0

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

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM8

Lab Sample ID: 280-27068-9

Date Sampled: 03/26/2012 0857

Client Matrix: Solid

% Moisture: 3.3

Date Received: 03/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-113644	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-113362	Lab File ID:	G2_5055.D
Dilution:	1.0			Initial Weight/Volume:	5.322 g
Analysis Date:	03/28/2012 2241			Final Weight/Volume:	5 mL
Prep Date:	03/28/2012 1149				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		5.2	U	5.2	19
Benzene		0.46	U	0.46	4.9
Bromodichloromethane		0.21	U	0.21	4.9
Bromoform		0.22	U	0.22	4.9
Bromomethane		0.49	U	0.49	9.7
2-Butanone (MEK)		1.8	U	1.8	9.7
Carbon disulfide		0.41	U	0.41	4.9
Carbon tetrachloride		0.61	U	0.61	4.9
Chlorobenzene		0.52	U	0.52	4.9
Dibromochloromethane		0.55	U	0.55	4.9
Chloroethane		0.86	U	0.86	9.7
Chloroform		0.28	U	0.28	4.9
Chloromethane		0.75	U	0.75	9.7
1,1-Dichloroethane		0.20	U	0.20	4.9
1,2-Dichloroethane		0.68	U	0.68	4.9
1,1-Dichloroethene		0.57	U	0.57	4.9
1,2-Dichloroethene, Total		0.38	U	0.38	4.9
1,2-Dichloropropane		0.53	U	0.53	4.9
cis-1,3-Dichloropropene		1.3	U	1.3	4.9
trans-1,3-Dichloropropene		0.65	U	0.65	4.9
Ethylbenzene		0.65	U	0.65	4.9
2-Hexanone		4.8	U	4.8	19
Methylene Chloride		1.6	U	1.6	4.9
4-Methyl-2-pentanone (MIBK)		4.2	U	4.2	9.7
Styrene		0.61	U	0.61	4.9
1,1,2,2-Tetrachloroethane		0.59	U	0.59	4.9
Tetrachloroethene		0.57	U	0.57	4.9
Toluene		0.67	U	0.67	4.9
1,1,1-Trichloroethane		0.51	U	0.51	4.9
1,1,2-Trichloroethane		0.85	U	0.85	4.9
Trichloroethene		0.22	U	0.22	4.9
Vinyl chloride		1.3	U	1.3	4.9
Xylenes, Total		0.59	U	0.59	4.9

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	88		58 - 140
Toluene-d8 (Surr)	102		80 - 126
4-Bromofluorobenzene (Surr)	97		76 - 127
Dibromofluoromethane (Surr)	86		75 - 121

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1
Sdg Number: J01458

Client Sample ID: J1NMM8

Lab Sample ID: 280-27068-9

Date Sampled: 03/26/2012 0857

Client Matrix: Solid

% Moisture: 3.3

Date Received: 03/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B

Analysis Batch: 280-113644

Instrument ID: MSV_G2

Prep Method: 5035

Prep Batch: 280-113362

Lab File ID: G2_5055.D

Dilution: 1.0

Initial Weight/Volume: 5.322 g

Analysis Date: 03/28/2012 2241

Final Weight/Volume: 5 mL

Prep Date: 03/28/2012 1149

Tentatively Identified Compounds

Number TIC's Found: 0

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

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM9

Lab Sample ID: 280-27068-10

Date Sampled: 03/26/2012 0904

Client Matrix: Solid

% Moisture: 3.7

Date Received: 03/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-113644	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-113362	Lab File ID:	G2_5056.D
Dilution:	1.0			Initial Weight/Volume:	5.612 g
Analysis Date:	03/28/2012 2300			Final Weight/Volume:	5 mL
Prep Date:	03/28/2012 1149				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		5.0	U	5.0	18
Benzene		0.43	U	0.43	4.6
Bromodichloromethane		0.20	U	0.20	4.6
Bromoform		0.21	U	0.21	4.6
Bromomethane		0.46	U	0.46	9.2
2-Butanone (MEK)		1.7	U	1.7	9.2
Carbon disulfide		0.39	U	0.39	4.6
Carbon tetrachloride		0.58	U	0.58	4.6
Chlorobenzene		0.50	U	0.50	4.6
Dibromochloromethane		0.53	U	0.53	4.6
Chloroethane		0.82	U	0.82	9.2
Chloroform		0.27	U	0.27	4.6
Chloromethane		0.71	U	0.71	9.2
1,1-Dichloroethane		0.19	U	0.19	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	18
Methylene Chloride		1.5	U	1.5	4.6
4-Methyl-2-pentanone (MIBK)		4.0	U	4.0	9.2
Styrene		0.58	U	0.58	4.6
1,1,2,2-Tetrachloroethane		0.56	U	0.56	4.6
Tetrachloroethene		0.55	U	0.55	4.6
Toluene		0.64	U	0.64	4.6
1,1,1-Trichloroethane		0.48	U	0.48	4.6
1,1,2-Trichloroethane		0.81	U	0.81	4.6
Trichloroethene		0.21	U	0.21	4.6
Vinyl chloride		1.2	U	1.2	4.6
Xylenes, Total		0.56	U	0.56	4.6

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	90		58 - 140
Toluene-d8 (Surr)	103		80 - 126
4-Bromofluorobenzene (Surr)	101		76 - 127
Dibromofluoromethane (Surr)	88		75 - 121

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1
Sdg Number: J01458

Client Sample ID: J1NMM9

Lab Sample ID: 280-27068-10

Date Sampled: 03/26/2012 0904

Client Matrix: Solid

% Moisture: 3.7

Date Received: 03/28/2012 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method: 8260B

Analysis Batch: 280-113644

Instrument ID: MSV_G2

Prep Method: 5035

Prep Batch: 280-113362

Lab File ID: G2_5056.D

Dilution: 1.0

Initial Weight/Volume: 5.612 g

Analysis Date: 03/28/2012 2300

Final Weight/Volume: 5 mL

Prep Date: 03/28/2012 1149

Tentatively Identified Compounds

Number TIC's Found: 0

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

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM0

Lab Sample ID: 280-27068-1

Date Sampled: 03/26/2012 0800

Client Matrix: Solid

% Moisture: 5.8

Date Received: 03/28/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-114466	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-113513	Lab File ID:	Y7053.D
Dilution:	1.0			Initial Weight/Volume:	30.0 g
Analysis Date:	04/05/2012 2251			Final Weight/Volume:	1000 uL
Prep Date:	03/29/2012 1555			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		11	U	11	350
Acenaphthylene		18	U	18	350
Anthracene		18	U	18	350
Benzo[a]anthracene		21	U	21	350
Benzo[a]pyrene		21	U	21	350
Benzo[b]fluoranthene		28	U	28	350
Benzo[ghi]perylene		17	U	17	350
Benzo[k]fluoranthene		42	U	42	350
Bis(2-chloroethoxy)methane		24	U	24	350
Bis(2-chloroethyl)ether		18	U	18	350
bis (2-chloroisopropyl) ether		24	U	24	350
Bis(2-ethylhexyl) phthalate		87	J B	49	350
4-Bromophenyl phenyl ether		20	U	20	350
Butyl benzyl phthalate		46	U	46	350
Carbazole		38	U	38	350
4-Chloroaniline		87	U	87	350
4-Chloro-3-methylphenol		70	U	70	350
2-Chloronaphthalene		11	U	11	350
2-Chlorophenol		22	U	22	350
4-Chlorophenyl phenyl ether		22	U	22	350
Chrysene		29	U	29	350
Dibenz(a,h)anthracene		20	U	20	350
Dibenzofuran		21	U	21	350
1,2-Dichlorobenzene		23	U	23	350
1,3-Dichlorobenzene		13	U	13	350
1,4-Dichlorobenzene		14	U	14	350
3,3'-Dichlorobenzidine		96	U	96	700
2,4-Dichlorophenol		11	U	11	350
Diethyl phthalate		28	U	28	350
2,4-Dimethylphenol		70	U	70	350
Dimethyl phthalate		24	U	24	350
Di-n-butyl phthalate		31	U	31	350
4,6-Dinitro-2-methylphenol		350	U	350	700
2,4-Dinitrophenol		350	U	350	880
2,4-Dinitrotoluene		70	U	70	350
2,6-Dinitrotoluene		30	U	30	350
Di-n-octyl phthalate		15	U	15	350
Fluoranthene		38	U	38	350
Fluorene		19	U	19	350
Hexachlorobenzene		31	U	31	350
Hexachlorobutadiene		11	U	11	350
Hexachlorocyclopentadiene		53	U	53	350
Hexachloroethane		23	U	23	350
Indeno[1,2,3-cd]pyrene		23	U	23	350
Isophorone		18	U	18	350
2-Methylnaphthalene		20	U	20	350

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM0

Lab Sample ID: 280-27068-1

Date Sampled: 03/26/2012 0800

Client Matrix: Solid

% Moisture: 5.8

Date Received: 03/28/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-114466	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-113513	Lab File ID:	Y7053.D
Dilution:	1.0			Initial Weight/Volume:	30.0 g
Analysis Date:	04/05/2012 2251			Final Weight/Volume:	1000 uL
Prep Date:	03/29/2012 1555			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2-Methylphenol		14	U	14	350
3 & 4 Methylphenol		35	U	35	350
Naphthalene		33	U	33	350
2-Nitroaniline		53	U	53	350
3-Nitroaniline		77	U	77	350
4-Nitroaniline		77	U	77	350
Nitrobenzene		23	U	23	350
2-Nitrophenol		11	U	11	350
4-Nitrophenol		100	U	100	700
N-Nitrosodi-n-propylamine		33	U	33	350
N-Nitrosodiphenylamine		22	U	22	350
Pentachlorophenol		350	U	350	700
Phenanthrene		18	U	18	350
Phenol		19	U	19	350
Pyrene		13	U	13	350
1,2,4-Trichlorobenzene		30	U	30	350
2,4,5-Trichlorophenol		11	U	11	350
2,4,6-Trichlorophenol		11	U	11	350

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	78		50 - 120
2-Fluorophenol	76		53 - 120
Nitrobenzene-d5	77		50 - 120
Phenol-d5	77		52 - 120
Terphenyl-d14	85		55 - 120
2,4,6-Tribromophenol	89		51 - 120

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1
Sdg Number: J01458

Client Sample ID: J1NMM0

Lab Sample ID: 280-27068-1

Date Sampled: 03/26/2012 0800

Client Matrix: Solid

% Moisture: 5.8

Date Received: 03/28/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270C

Analysis Batch: 280-114466

Instrument ID: MSS_Y

Prep Method: 3550C

Prep Batch: 280-113513

Lab File ID: Y7053.D

Dilution: 1.0

Initial Weight/Volume: 30.0 g

Analysis Date: 04/05/2012 2251

Final Weight/Volume: 1000 uL

Prep Date: 03/29/2012 1555

Injection Volume: 0.5 uL

Tentatively Identified Compounds

Number TIC's Found: 7

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	1.62	180	N J
	Unknown	3.00	3000	N J
100-51-6	Benzyl alcohol	4.59	41	B N J
65-85-0	Benzoic acid	5.38	510	N J
2605-67-6	Acetic acid, (triphenylphosphoranylidene	11.15	280	N J
112-95-8	Eicosane	11.86	140	N J
	Unknown	13.78	190	N J

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM1

Lab Sample ID: 280-27068-2

Date Sampled: 03/26/2012 0809

Client Matrix: Solid

% Moisture: 3.7

Date Received: 03/28/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-114466	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-113513	Lab File ID:	Y7054.D
Dilution:	1.0			Initial Weight/Volume:	30.6 g
Analysis Date:	04/05/2012 2310			Final Weight/Volume:	1000 uL
Prep Date:	03/29/2012 1555			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	340
Acenaphthylene		17	U	17	340
Anthracene		17	U	17	340
Benzo[a]anthracene		20	U	20	340
Benzo[a]pyrene		20	U	20	340
Benzo[b]fluoranthene		27	U	27	340
Benzo[ghi]perylene		16	U	16	340
Benzo[k]fluoranthene		41	U	41	340
Bis(2-chloroethoxy)methane		23	U	23	340
Bis(2-chloroethyl)ether		17	U	17	340
bis (2-chloroisopropyl) ether		23	U	23	340
Bis(2-ethylhexyl) phthalate		79	J B	47	340
4-Bromophenyl phenyl ether		19	U	19	340
Butyl benzyl phthalate		44	U	44	340
Carbazole		37	U	37	340
4-Chloroaniline		83	U	83	340
4-Chloro-3-methylphenol		67	U	67	340
2-Chloronaphthalene		10	U	10	340
2-Chlorophenol		21	U	21	340
4-Chlorophenyl phenyl ether		21	U	21	340
Chrysene		27	U	27	340
Dibenz(a,h)anthracene		19	U	19	340
Dibenzofuran		20	U	20	340
1,2-Dichlorobenzene		22	U	22	340
1,3-Dichlorobenzene		12	U	12	340
1,4-Dichlorobenzene		14	U	14	340
3,3'-Dichlorobenzidine		92	U	92	670
2,4-Dichlorophenol		10	U	10	340
Diethyl phthalate		26	U	26	340
2,4-Dimethylphenol		67	U	67	340
Dimethyl phthalate		23	U	23	340
Di-n-butyl phthalate		30	U	30	340
4,6-Dinitro-2-methylphenol		340	U	340	670
2,4-Dinitrophenol		340	U	340	840
2,4-Dinitrotoluene		67	U	67	340
2,6-Dinitrotoluene		29	U	29	340
Di-n-octyl phthalate		15	U	15	340
Fluoranthene		37	U	37	340
Fluorene		18	U	18	340
Hexachlorobenzene		30	U	30	340
Hexachlorobutadiene		10	U	10	340
Hexachlorocyclopentadiene		51	U	51	340
Hexachloroethane		22	U	22	340
Indeno[1,2,3-cd]pyrene		22	U	22	340
Isophorone		17	U	17	340
2-Methylnaphthalene		19	U	19	340

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM1

Lab Sample ID: 280-27068-2

Date Sampled: 03/26/2012 0809

Client Matrix: Solid

% Moisture: 3.7

Date Received: 03/28/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-114466	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-113513	Lab File ID:	Y7054.D
Dilution:	1.0			Initial Weight/Volume:	30.6 g
Analysis Date:	04/05/2012 2310			Final Weight/Volume:	1000 uL
Prep Date:	03/29/2012 1555			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2-Methylphenol		13	U	13	340
3 & 4 Methylphenol		34	U	34	340
Naphthalene		32	U	32	340
2-Nitroaniline		51	U	51	340
3-Nitroaniline		74	U	74	340
4-Nitroaniline		74	U	74	340
Nitrobenzene		22	U	22	340
2-Nitrophenol		10	U	10	340
4-Nitrophenol		99	U	99	670
N-Nitrosodi-n-propylamine		32	U	32	340
N-Nitrosodiphenylamine		21	U	21	340
Pentachlorophenol		340	U	340	670
Phenanthrene		17	U	17	340
Phenol		18	U	18	340
Pyrene		12	U	12	340
1,2,4-Trichlorobenzene		29	U	29	340
2,4,5-Trichlorophenol		10	U	10	340
2,4,6-Trichlorophenol		10	U	10	340

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	82		50 - 120
2-Fluorophenol	81		53 - 120
Nitrobenzene-d5	85		50 - 120
Phenol-d5	82		52 - 120
Terphenyl-d14	90		55 - 120
2,4,6-Tribromophenol	87		51 - 120

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM1

Lab Sample ID: 280-27068-2

Date Sampled: 03/26/2012 0809

Client Matrix: Solid

% Moisture: 3.7

Date Received: 03/28/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270C

Analysis Batch: 280-114466

Instrument ID: MSS_Y

Prep Method: 3550C

Prep Batch: 280-113513

Lab File ID: Y7054.D

Dilution: 1.0

Initial Weight/Volume: 30.6 g

Analysis Date: 04/05/2012 2310

Final Weight/Volume: 1000 uL

Prep Date: 03/29/2012 1555

Injection Volume: 0.5 uL

Tentatively Identified Compounds

Number TIC's Found: 4

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	1.62	160	N J
	Unknown	3.00	3200	N J
100-51-6	Benzyl alcohol	4.59	35	B N J
	Unknown	11.15	240	N J

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM2

Lab Sample ID: 280-27068-3

Date Sampled: 03/26/2012 0820

Client Matrix: Solid

% Moisture: 5.3

Date Received: 03/28/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-114466	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-113513	Lab File ID:	Y7055.D
Dilution:	1.0			Initial Weight/Volume:	31.2 g
Analysis Date:	04/05/2012 2330			Final Weight/Volume:	1000 uL
Prep Date:	03/29/2012 1555			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	340
Acenaphthylene		17	U	17	340
Anthracene		17	U	17	340
Benzo[a]anthracene		20	U	20	340
Benzo[a]pyrene		20	U	20	340
Benzo[b]fluoranthene		27	U	27	340
Benzo[ghi]perylene		16	U	16	340
Benzo[k]fluoranthene		41	U	41	340
Bis(2-chloroethoxy)methane		23	U	23	340
Bis(2-chloroethyl)ether		17	U	17	340
bis (2-chloroisopropyl) ether		23	U	23	340
Bis(2-ethylhexyl) phthalate		89	J B	47	340
4-Bromophenyl phenyl ether		19	U	19	340
Butyl benzyl phthalate		44	U	44	340
Carbazole		37	U	37	340
4-Chloroaniline		83	U	83	340
4-Chloro-3-methylphenol		67	U	67	340
2-Chloronaphthalene		10	U	10	340
2-Chlorophenol		21	U	21	340
4-Chlorophenyl phenyl ether		21	U	21	340
Chrysene		27	U	27	340
Dibenz(a,h)anthracene		19	U	19	340
Dibenzofuran		20	U	20	340
1,2-Dichlorobenzene		22	U	22	340
1,3-Dichlorobenzene		12	U	12	340
1,4-Dichlorobenzene		14	U	14	340
3,3'-Dichlorobenzidine		91	U	91	670
2,4-Dichlorophenol		10	U	10	340
Diethyl phthalate		26	U	26	340
2,4-Dimethylphenol		67	U	67	340
Dimethyl phthalate		23	U	23	340
Di-n-butyl phthalate		29	U	29	340
4,6-Dinitro-2-methylphenol		340	U	340	670
2,4-Dinitrophenol		340	U	340	840
2,4-Dinitrotoluene		67	U	67	340
2,6-Dinitrotoluene		28	U	28	340
Di-n-octyl phthalate		15	U	15	340
Fluoranthene		37	U	37	340
Fluorene		18	U	18	340
Hexachlorobenzene		29	U	29	340
Hexachlorobutadiene		10	U	10	340
Hexachlorocyclopentadiene		51	U	51	340
Hexachloroethane		22	U	22	340
Indeno[1,2,3-cd]pyrene		22	U	22	340
Isophorone		17	U	17	340
2-Methylnaphthalene		19	U	19	340

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM2

Lab Sample ID: 280-27068-3

Date Sampled: 03/26/2012 0820

Client Matrix: Solid

% Moisture: 5.3

Date Received: 03/28/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-114466	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-113513	Lab File ID:	Y7055.D
Dilution:	1.0			Initial Weight/Volume:	31.2 g
Analysis Date:	04/05/2012 2330			Final Weight/Volume:	1000 uL
Prep Date:	03/29/2012 1555			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2-Methylphenol		13	U	13	340
3 & 4 Methylphenol		34	U	34	340
Naphthalene		31	U	31	340
2-Nitroaniline		51	U	51	340
3-Nitroaniline		74	U	74	340
4-Nitroaniline		74	U	74	340
Nitrobenzene		22	U	22	340
2-Nitrophenol		10	U	10	340
4-Nitrophenol		99	U	99	670
N-Nitrosodi-n-propylamine		31	U	31	340
N-Nitrosodiphenylamine		21	U	21	340
Pentachlorophenol		340	U	340	670
Phenanthrene		17	U	17	340
Phenol		18	U	18	340
Pyrene		12	U	12	340
1,2,4-Trichlorobenzene		28	U	28	340
2,4,5-Trichlorophenol		10	U	10	340
2,4,6-Trichlorophenol		10	U	10	340

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	82		50 - 120
2-Fluorophenol	82		53 - 120
Nitrobenzene-d5	86		50 - 120
Phenol-d5	82		52 - 120
Terphenyl-d14	93		55 - 120
2,4,6-Tribromophenol	89		51 - 120

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM2

Lab Sample ID: 280-27068-3

Date Sampled: 03/26/2012 0820

Client Matrix: Solid

% Moisture: 5.3

Date Received: 03/28/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-114466	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-113513	Lab File ID:	Y7055.D
Dilution:	1.0			Initial Weight/Volume:	31.2 g
Analysis Date:	04/05/2012 2330			Final Weight/Volume:	1000 uL
Prep Date:	03/29/2012 1555			Injection Volume:	0.5 uL

Tentatively Identified Compounds

Number TIC's Found: 5

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	1.62	170	N J
	Unknown	3.00	3300	N J
100-51-6	Benzyl alcohol	4.60	29	B J N
301-02-0	9-Octadecenamide, (Z)-	10.53	140	N J
791-28-6	Phosphine oxide, triphenyl-	11.15	250	N J

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM3

Lab Sample ID: 280-27068-4

Date Sampled: 03/26/2012 0826

Client Matrix: Solid

% Moisture: 5.0

Date Received: 03/28/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-114466	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-113513	Lab File ID:	Y7058.D
Dilution:	1.0			Initial Weight/Volume:	30.8 g
Analysis Date:	04/06/2012 0028			Final Weight/Volume:	1000 uL
Prep Date:	03/29/2012 1555			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		11	U	11	340
Acenaphthylene		17	U	17	340
Anthracene		17	U	17	340
Benzo[a]anthracene		21	U	21	340
Benzo[a]pyrene		21	U	21	340
Benzo[b]fluoranthene		27	U	27	340
Benzo[ghi]perylene		16	U	16	340
Benzo[k]fluoranthene		41	U	41	340
Bis(2-chloroethoxy)methane		24	U	24	340
Bis(2-chloroethyl)ether		17	U	17	340
bis (2-chloroisopropyl) ether		24	U	24	340
Bis(2-ethylhexyl) phthalate		76	J B	47	340
4-Bromophenyl phenyl ether		19	U	19	340
Butyl benzyl phthalate		44	U	44	340
Carbazole		37	U	37	340
4-Chloroaniline		84	U	84	340
4-Chloro-3-methylphenol		68	U	68	340
2-Chloronaphthalene		10	U	10	340
2-Chlorophenol		22	U	22	340
4-Chlorophenyl phenyl ether		22	U	22	340
Chrysene		28	U	28	340
Dibenz(a,h)anthracene		19	U	19	340
Dibenzofuran		21	U	21	340
1,2-Dichlorobenzene		23	U	23	340
1,3-Dichlorobenzene		12	U	12	340
1,4-Dichlorobenzene		14	U	14	340
3,3'-Dichlorobenzidine		92	U	92	680
2,4-Dichlorophenol		10	U	10	340
Diethyl phthalate		27	U	27	340
2,4-Dimethylphenol		68	U	68	340
Dimethyl phthalate		24	U	24	340
Di-n-butyl phthalate		30	U	30	340
4,6-Dinitro-2-methylphenol		340	U	340	680
2,4-Dinitrophenol		340	U	340	850
2,4-Dinitrotoluene		68	U	68	340
2,6-Dinitrotoluene		29	U	29	340
Di-n-octyl phthalate		15	U	15	340
Fluoranthene		37	U	37	340
Fluorene		18	U	18	340
Hexachlorobenzene		30	U	30	340
Hexachlorobutadiene		10	U	10	340
Hexachlorocyclopentadiene		51	U	51	340
Hexachloroethane		22	U	22	340
Indeno[1,2,3-cd]pyrene		23	U	23	340
Isophorone		17	U	17	340
2-Methylnaphthalene		19	U	19	340

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM3

Lab Sample ID: 280-27068-4

Date Sampled: 03/26/2012 0826

Client Matrix: Solid

% Moisture: 5.0

Date Received: 03/28/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-114466	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-113513	Lab File ID:	Y7058.D
Dilution:	1.0			Initial Weight/Volume:	30.8 g
Analysis Date:	04/06/2012 0028			Final Weight/Volume:	1000 uL
Prep Date:	03/29/2012 1555			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2-Methylphenol		13	U	13	340
3 & 4 Methylphenol		34	U	34	340
Naphthalene		32	U	32	340
2-Nitroaniline		51	U	51	340
3-Nitroaniline		75	U	75	340
4-Nitroaniline		74	U	74	340
Nitrobenzene		23	U	23	340
2-Nitrophenol		10	U	10	340
4-Nitrophenol		99	U	99	680
N-Nitrosodi-n-propylamine		32	U	32	340
N-Nitrosodiphenylamine		22	U	22	340
Pentachlorophenol		340	U	340	680
Phenanthrene		17	U	17	340
Phenol		18	U	18	340
Pyrene		12	U	12	340
1,2,4-Trichlorobenzene		29	U	29	340
2,4,5-Trichlorophenol		10	U	10	340
2,4,6-Trichlorophenol		10	U	10	340

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	79		50 - 120
2-Fluorophenol	79		53 - 120
Nitrobenzene-d5	81		50 - 120
Phenol-d5	80		52 - 120
Terphenyl-d14	86		55 - 120
2,4,6-Tribromophenol	85		51 - 120

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM3

Lab Sample ID: 280-27068-4

Date Sampled: 03/26/2012 0826

Client Matrix: Solid

% Moisture: 5.0

Date Received: 03/28/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270C

Analysis Batch: 280-114466

Instrument ID: MSS_Y

Prep Method: 3550C

Prep Batch: 280-113513

Lab File ID: Y7058.D

Dilution: 1.0

Initial Weight/Volume: 30.8 g

Analysis Date: 04/06/2012 0028

Final Weight/Volume: 1000 uL

Prep Date: 03/29/2012 1555

Injection Volume: 0.5 uL

Tentatively Identified Compounds

Number TIC's Found: 4

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	1.62	150	N J
	Unknown	3.00	3000	N J
100-51-6	Benzyl alcohol	4.59	31	B N J
791-28-6	Phosphine oxide, triphenyl-	11.15	230	N J

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM4

Lab Sample ID: 280-27068-5

Date Sampled: 03/26/2012 0833

Client Matrix: Solid

% Moisture: 6.1

Date Received: 03/28/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-114466	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-113513	Lab File ID:	Y7059.D
Dilution:	1.0			Initial Weight/Volume:	32.2 g
Analysis Date:	04/06/2012 0048			Final Weight/Volume:	1000 uL
Prep Date:	03/29/2012 1555			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		16	U	16	330
bis (2-chloroisopropyl) ether		23	U	23	330
Bis(2-ethylhexyl) phthalate		73	J B	46	330
4-Bromophenyl phenyl ether		19	U	19	330
Butyl benzyl phthalate		43	U	43	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	820
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		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

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM4

Lab Sample ID: 280-27068-5

Date Sampled: 03/26/2012 0833

Client Matrix: Solid

% Moisture: 6.1

Date Received: 03/28/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-114466	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-113513	Lab File ID:	Y7059.D
Dilution:	1.0			Initial Weight/Volume:	32.2 g
Analysis Date:	04/06/2012 0048			Final Weight/Volume:	1000 uL
Prep Date:	03/29/2012 1555			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		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	Qualifier	Acceptance Limits
2-Fluorobiphenyl	78		50 - 120
2-Fluorophenol	74		53 - 120
Nitrobenzene-d5	76		50 - 120
Phenol-d5	76		52 - 120
Terphenyl-d14	88		55 - 120
2,4,6-Tribromophenol	88		51 - 120

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1
Sdg Number: J01458

Client Sample ID: J1NMM4

Lab Sample ID: 280-27068-5

Date Sampled: 03/26/2012 0833

Client Matrix: Solid

% Moisture: 6.1

Date Received: 03/28/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270C

Analysis Batch: 280-114466

Instrument ID: MSS_Y

Prep Method: 3550C

Prep Batch: 280-113513

Lab File ID: Y7059.D

Dilution: 1.0

Initial Weight/Volume: 32.2 g

Analysis Date: 04/06/2012 0048

Final Weight/Volume: 1000 uL

Prep Date: 03/29/2012 1555

Injection Volume: 0.5 uL

Tentatively Identified Compounds

Number TIC's Found: 6

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	1.62	150	N J
	Unknown	3.00	2900	N J
100-51-6	Benzyl alcohol	4.59	37	B N J
2605-67-6	Acetic acid, (triphenylphosphoranylidene	11.15	240	N J
112-95-8	Eicosane	11.86	220	N J
	Unknown	13.79	220	N J

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM5

Lab Sample ID: 280-27068-6

Date Sampled: 03/26/2012 0840

Client Matrix: Solid

% Moisture: 5.0

Date Received: 03/28/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-114466	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-113513	Lab File ID:	Y7060.D
Dilution:	1.0			Initial Weight/Volume:	30.9 g
Analysis Date:	04/06/2012 0107			Final Weight/Volume:	1000 uL
Prep Date:	03/29/2012 1555			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		11	U	11	340
Acenaphthylene		17	U	17	340
Anthracene		17	U	17	340
Benzo[a]anthracene		20	U	20	340
Benzo[a]pyrene		20	U	20	340
Benzo[b]fluoranthene		27	U	27	340
Benzo[ghi]perylene		16	U	16	340
Benzo[k]fluoranthene		41	U	41	340
Bis(2-chloroethoxy)methane		24	U	24	340
Bis(2-chloroethyl)ether		17	U	17	340
bis (2-chloroisopropyl) ether		24	U	24	340
Bis(2-ethylhexyl) phthalate		78	J B	47	340
4-Bromophenyl phenyl ether		19	U	19	340
Butyl benzyl phthalate		44	U	44	340
Carbazole		37	U	37	340
4-Chloroaniline		84	U	84	340
4-Chloro-3-methylphenol		67	U	67	340
2-Chloronaphthalene		10	U	10	340
2-Chlorophenol		21	U	21	340
4-Chlorophenyl phenyl ether		21	U	21	340
Chrysene		28	U	28	340
Dibenz(a,h)anthracene		19	U	19	340
Dibenzofuran		20	U	20	340
1,2-Dichlorobenzene		22	U	22	340
1,3-Dichlorobenzene		12	U	12	340
1,4-Dichlorobenzene		14	U	14	340
3,3'-Dichlorobenzidine		92	U	92	670
2,4-Dichlorophenol		10	U	10	340
Diethyl phthalate		27	U	27	340
2,4-Dimethylphenol		67	U	67	340
Dimethyl phthalate		24	U	24	340
Di-n-butyl phthalate		30	U	30	340
4,6-Dinitro-2-methylphenol		340	U	340	670
2,4-Dinitrophenol		340	U	340	840
2,4-Dinitrotoluene		67	U	67	340
2,6-Dinitrotoluene		29	U	29	340
Di-n-octyl phthalate		15	U	15	340
Fluoranthene		37	U	37	340
Fluorene		18	U	18	340
Hexachlorobenzene		30	U	30	340
Hexachlorobutadiene		10	U	10	340
Hexachlorocyclopentadiene		51	U	51	340
Hexachloroethane		22	U	22	340
Indeno[1,2,3-cd]pyrene		22	U	22	340
Isophorone		17	U	17	340
2-Methylnaphthalene		19	U	19	340

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM5

Lab Sample ID: 280-27068-6

Date Sampled: 03/26/2012 0840

Client Matrix: Solid

% Moisture: 5.0

Date Received: 03/28/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-114466	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-113513	Lab File ID:	Y7060.D
Dilution:	1.0			Initial Weight/Volume:	30.9 g
Analysis Date:	04/06/2012 0107			Final Weight/Volume:	1000 uL
Prep Date:	03/29/2012 1555			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2-Methylphenol		13	U	13	340
3 & 4 Methylphenol		34	U	34	340
Naphthalene		32	U	32	340
2-Nitroaniline		51	U	51	340
3-Nitroaniline		75	U	75	340
4-Nitroaniline		74	U	74	340
Nitrobenzene		22	U	22	340
2-Nitrophenol		10	U	10	340
4-Nitrophenol		99	U	99	670
N-Nitrosodi-n-propylamine		32	U	32	340
N-Nitrosodiphenylamine		21	U	21	340
Pentachlorophenol		340	U	340	670
Phenanthrene		17	U	17	340
Phenol		18	U	18	340
Pyrene		12	U	12	340
1,2,4-Trichlorobenzene		29	U	29	340
2,4,5-Trichlorophenol		10	U	10	340
2,4,6-Trichlorophenol		10	U	10	340

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	75		50 - 120
2-Fluorophenol	72		53 - 120
Nitrobenzene-d5	76		50 - 120
Phenol-d5	75		52 - 120
Terphenyl-d14	86		55 - 120
2,4,6-Tribromophenol	79		51 - 120

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM5

Lab Sample ID: 280-27068-6

Date Sampled: 03/26/2012 0840

Client Matrix: Solid

% Moisture: 5.0

Date Received: 03/28/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-114466	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-113513	Lab File ID:	Y7060.D
Dilution:	1.0			Initial Weight/Volume:	30.9 g
Analysis Date:	04/06/2012 0107			Final Weight/Volume:	1000 uL
Prep Date:	03/29/2012 1555			Injection Volume:	0.5 uL

Tentatively Identified Compounds **Number TIC's Found: 5**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	1.62	180	N J
	Unknown	3.00	3000	N J
100-51-6	Benzyl alcohol	4.60	41	B N J
	Unknown	10.53	160	N J
791-28-6	Phosphine oxide, triphenyl-	11.15	240	N J

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM6

Lab Sample ID: 280-27068-7

Date Sampled: 03/26/2012 0845

Client Matrix: Solid

% Moisture: 8.3

Date Received: 03/28/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-114466	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-113513	Lab File ID:	Y7061.D
Dilution:	1.0			Initial Weight/Volume:	32.9 g
Analysis Date:	04/06/2012 0126			Final Weight/Volume:	1000 uL
Prep Date:	03/29/2012 1555			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		75	J B	46	330
4-Bromophenyl phenyl ether		19	U	19	330
Butyl benzyl phthalate		43	U	43	330
Carbazole		36	U	36	330
4-Chloroaniline		81	U	81	330
4-Chloro-3-methylphenol		66	U	66	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		14	U	14	330
3,3'-Dichlorobenzidine		90	U	90	660
2,4-Dichlorophenol		9.9	U	9.9	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		36	U	36	330
Fluorene		18	U	18	330
Hexachlorobenzene		29	U	29	330
Hexachlorobutadiene		9.9	U	9.9	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

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM6

Lab Sample ID: 280-27068-7

Date Sampled: 03/26/2012 0845

Client Matrix: Solid

% Moisture: 8.3

Date Received: 03/28/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-114466	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-113513	Lab File ID:	Y7061.D
Dilution:	1.0			Initial Weight/Volume:	32.9 g
Analysis Date:	04/06/2012 0126			Final Weight/Volume:	1000 uL
Prep Date:	03/29/2012 1555			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		9.9	U	9.9	330
4-Nitrophenol		96	U	96	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		9.9	U	9.9	330
2,4,6-Trichlorophenol		9.9	U	9.9	330

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	79		50 - 120
2-Fluorophenol	78		53 - 120
Nitrobenzene-d5	82		50 - 120
Phenol-d5	80		52 - 120
Terphenyl-d14	91		55 - 120
2,4,6-Tribromophenol	86		51 - 120

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM6

Lab Sample ID: 280-27068-7

Date Sampled: 03/26/2012 0845

Client Matrix: Solid

% Moisture: 8.3

Date Received: 03/28/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270C

Analysis Batch: 280-114466

Instrument ID: MSS_Y

Prep Method: 3550C

Prep Batch: 280-113513

Lab File ID: Y7061.D

Dilution: 1.0

Initial Weight/Volume: 32.9 g

Analysis Date: 04/06/2012 0126

Final Weight/Volume: 1000 uL

Prep Date: 03/29/2012 1555

Injection Volume: 0.5 uL

Tentatively Identified Compounds

Number TIC's Found: 4

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	1.62	160	N J
	Unknown	3.00	3100	N J
100-51-6	Benzyl alcohol	4.59	40	B N J
791-28-6	Phosphine oxide, triphenyl-	11.15	240	N J

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM7

Lab Sample ID: 280-27068-8

Date Sampled: 03/26/2012 0852

Client Matrix: Solid

% Moisture: 4.1

Date Received: 03/28/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-114466	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-113513	Lab File ID:	Y7062.D
Dilution:	1.0			Initial Weight/Volume:	30.4 g
Analysis Date:	04/06/2012 0146			Final Weight/Volume:	1000 uL
Prep Date:	03/29/2012 1555			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		11	U	11	340
Acenaphthylene		18	U	18	340
Anthracene		18	U	18	340
Benzo[a]anthracene		21	U	21	340
Benzo[a]pyrene		21	U	21	340
Benzo[b]fluoranthene		27	U	27	340
Benzo[ghi]perylene		16	U	16	340
Benzo[k]fluoranthene		41	U	41	340
Bis(2-chloroethoxy)methane		24	U	24	340
Bis(2-chloroethyl)ether		17	U	17	340
bis (2-chloroisopropyl) ether		24	U	24	340
Bis(2-ethylhexyl) phthalate		75	J B	47	340
4-Bromophenyl phenyl ether		20	U	20	340
Butyl benzyl phthalate		44	U	44	340
Carbazole		37	U	37	340
4-Chloroaniline		84	U	84	340
4-Chloro-3-methylphenol		68	U	68	340
2-Chloronaphthalene		10	U	10	340
2-Chlorophenol		22	U	22	340
4-Chlorophenyl phenyl ether		22	U	22	340
Chrysene		28	U	28	340
Dibenz(a,h)anthracene		20	U	20	340
Dibenzofuran		21	U	21	340
1,2-Dichlorobenzene		23	U	23	340
1,3-Dichlorobenzene		12	U	12	340
1,4-Dichlorobenzene		14	U	14	340
3,3'-Dichlorobenzidine		93	U	93	680
2,4-Dichlorophenol		10	U	10	340
Diethyl phthalate		27	U	27	340
2,4-Dimethylphenol		68	U	68	340
Dimethyl phthalate		24	U	24	340
Di-n-butyl phthalate		30	U	30	340
4,6-Dinitro-2-methylphenol		340	U	340	680
2,4-Dinitrophenol		340	U	340	850
2,4-Dinitrotoluene		68	U	68	340
2,6-Dinitrotoluene		29	U	29	340
Di-n-octyl phthalate		15	U	15	340
Fluoranthene		37	U	37	340
Fluorene		19	U	19	340
Hexachlorobenzene		30	U	30	340
Hexachlorobutadiene		10	U	10	340
Hexachlorocyclopentadiene		51	U	51	340
Hexachloroethane		22	U	22	340
Indeno[1,2,3-cd]pyrene		23	U	23	340
Isophorone		18	U	18	340
2-Methylnaphthalene		20	U	20	340

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM7

Lab Sample ID: 280-27068-8

Date Sampled: 03/26/2012 0852

Client Matrix: Solid

% Moisture: 4.1

Date Received: 03/28/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-114466	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-113513	Lab File ID:	Y7062.D
Dilution:	1.0			Initial Weight/Volume:	30.4 g
Analysis Date:	04/06/2012 0146			Final Weight/Volume:	1000 uL
Prep Date:	03/29/2012 1555			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2-Methylphenol		13	U	13	340
3 & 4 Methylphenol		34	U	34	340
Naphthalene		32	U	32	340
2-Nitroaniline		51	U	51	340
3-Nitroaniline		75	U	75	340
4-Nitroaniline		75	U	75	340
Nitrobenzene		23	U	23	340
2-Nitrophenol		10	U	10	340
4-Nitrophenol		100	U	100	680
N-Nitrosodi-n-propylamine		32	U	32	340
N-Nitrosodiphenylamine		22	U	22	340
Pentachlorophenol		340	U	340	680
Phenanthrene		18	U	18	340
Phenol		19	U	19	340
Pyrene		12	U	12	340
1,2,4-Trichlorobenzene		29	U	29	340
2,4,5-Trichlorophenol		10	U	10	340
2,4,6-Trichlorophenol		10	U	10	340

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	80		50 - 120
2-Fluorophenol	77		53 - 120
Nitrobenzene-d5	79		50 - 120
Phenol-d5	78		52 - 120
Terphenyl-d14	89		55 - 120
2,4,6-Tribromophenol	81		51 - 120

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1
Sdg Number: J01458

Client Sample ID: J1NMM7

Lab Sample ID: 280-27068-8

Date Sampled: 03/26/2012 0852

Client Matrix: Solid

% Moisture: 4.1

Date Received: 03/28/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270C

Analysis Batch: 280-114466

Instrument ID: MSS_Y

Prep Method: 3550C

Prep Batch: 280-113513

Lab File ID: Y7062.D

Dilution: 1.0

Initial Weight/Volume: 30.4 g

Analysis Date: 04/06/2012 0146

Final Weight/Volume: 1000 uL

Prep Date: 03/29/2012 1555

Injection Volume: 0.5 uL

Tentatively Identified Compounds

Number TIC's Found: 3

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	3.00	3300	N J
100-51-6	Benzyl alcohol	4.59	38	B N J
	Unknown	11.15	230	N J

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM8

Lab Sample ID: 280-27068-9

Date Sampled: 03/26/2012 0857

Client Matrix: Solid

% Moisture: 3.3

Date Received: 03/28/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-114466	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-113513	Lab File ID:	Y7063.D
Dilution:	1.0			Initial Weight/Volume:	31.4 g
Analysis Date:	04/06/2012 0205			Final Weight/Volume:	1000 uL
Prep Date:	03/29/2012 1555			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		16	U	16	330
bis (2-chloroisopropyl) ether		23	U	23	330
Bis(2-ethylhexyl) phthalate		72	J B	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
2-Methylnaphthalene		19	U	19	330

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM8

Lab Sample ID: 280-27068-9

Date Sampled: 03/26/2012 0857

Client Matrix: Solid

% Moisture: 3.3

Date Received: 03/28/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-114466	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-113513	Lab File ID:	Y7063.D
Dilution:	1.0			Initial Weight/Volume:	31.4 g
Analysis Date:	04/06/2012 0205			Final Weight/Volume:	1000 uL
Prep Date:	03/29/2012 1555			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		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	Qualifier	Acceptance Limits
2-Fluorobiphenyl	81		50 - 120
2-Fluorophenol	81		53 - 120
Nitrobenzene-d5	82		50 - 120
Phenol-d5	82		52 - 120
Terphenyl-d14	91		55 - 120
2,4,6-Tribromophenol	82		51 - 120

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1
Sdg Number: J01458

Client Sample ID: J1NMM8

Lab Sample ID: 280-27068-9

Date Sampled: 03/26/2012 0857

Client Matrix: Solid

% Moisture: 3.3

Date Received: 03/28/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method: 8270C

Analysis Batch: 280-114466

Instrument ID: MSS_Y

Prep Method: 3550C

Prep Batch: 280-113513

Lab File ID: Y7063.D

Dilution: 1.0

Initial Weight/Volume: 31.4 g

Analysis Date: 04/06/2012 0205

Final Weight/Volume: 1000 uL

Prep Date: 03/29/2012 1555

Injection Volume: 0.5 uL

Tentatively Identified Compounds

Number TIC's Found: 3

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	2.99	2900	N J
100-51-6	Benzyl alcohol	4.59	31	B N J
791-28-6	Phosphine oxide, triphenyl-	11.15	250	N J

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM9

Lab Sample ID: 280-27068-10

Date Sampled: 03/26/2012 0904

Client Matrix: Solid

% Moisture: 3.7

Date Received: 03/28/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-114466	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-113513	Lab File ID:	Y7064.D
Dilution:	1.0			Initial Weight/Volume:	31.1 g
Analysis Date:	04/06/2012 0225			Final Weight/Volume:	1000 uL
Prep Date:	03/29/2012 1555			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		72	J B	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

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM9

Lab Sample ID: 280-27068-10

Date Sampled: 03/26/2012 0904

Client Matrix: Solid

% Moisture: 3.7

Date Received: 03/28/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-114466	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-113513	Lab File ID:	Y7064.D
Dilution:	1.0			Initial Weight/Volume:	31.1 g
Analysis Date:	04/06/2012 0225			Final Weight/Volume:	1000 uL
Prep Date:	03/29/2012 1555			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	80		50 - 120
2-Fluorophenol	79		53 - 120
Nitrobenzene-d5	83		50 - 120
Phenol-d5	80		52 - 120
Terphenyl-d14	90		55 - 120
2,4,6-Tribromophenol	80		51 - 120

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1
Sdg Number: J01458

Client Sample ID: J1NMM9

Lab Sample ID: 280-27068-10
Client Matrix: Solid

% Moisture: 3.7

Date Sampled: 03/26/2012 0904
Date Received: 03/28/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-114466	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-113513	Lab File ID:	Y7064.D
Dilution:	1.0			Initial Weight/Volume:	31.1 g
Analysis Date:	04/06/2012 0225			Final Weight/Volume:	1000 uL
Prep Date:	03/29/2012 1555			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	3.00	3200	N J
100-51-6	Benzyl alcohol	4.59	36	B N J
791-28-6	Phosphine oxide, triphenyl-	11.15	210	N J

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM0

Lab Sample ID: 280-27068-1

Date Sampled: 03/26/2012 0800

Client Matrix: Solid

% Moisture: 5.8

Date Received: 03/28/2012 0900

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-114549	Instrument ID:	GCS_P2
Prep Method:	3550C	Prep Batch:	280-114269	Initial Weight/Volume:	31.6 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	04/05/2012 1949			Injection Volume:	1 uL
Prep Date:	04/04/2012 1628			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.55	U	0.55	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	1.7
alpha-BHC		0.22	U	0.22	1.7
beta-BHC		0.67	U	0.67	1.7
delta-BHC		0.40	U	0.40	1.7
gamma-BHC (Lindane)		0.47	U	0.47	1.7
Heptachlor		0.22	U	0.22	1.7
Heptachlor epoxide		0.43	U	0.43	1.7
Endosulfan I		0.18	U	0.18	1.7
Endosulfan II		0.29	U	0.29	1.7
Endosulfan sulfate		0.28	U	0.28	1.7
Endrin		0.31	U	0.31	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		0.33	U	0.33	1.7
Dieldrin		0.21	U	0.21	1.7
Toxaphene		16	U	16	170
Surrogate		%Rec	Qualifier	Acceptance Limits	
Tetrachloro-m-xylene		101		59 - 115	
Decachlorobiphenyl		95		63 - 124	

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM1

Lab Sample ID: 280-27068-2

Date Sampled: 03/26/2012 0809

Client Matrix: Solid

% Moisture: 3.7

Date Received: 03/28/2012 0900

8081A Organochlorine Pesticides (GC)

Analysis Method: 8081A	Analysis Batch: 280-114549	Instrument ID: GCS_P2
Prep Method: 3550C	Prep Batch: 280-114269	Initial Weight/Volume: 30.7 g
Dilution: 1.0		Final Weight/Volume: 10000 uL
Analysis Date: 04/05/2012 2006		Injection Volume: 1 uL
Prep Date: 04/04/2012 1628		Result Type: PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.55	U	0.55	1.7
4,4'-DDE		0.24	U	0.24	1.7
4,4'-DDT		0.60	U	0.60	1.7
Aldrin		0.25	U	0.25	1.7
alpha-BHC		0.22	U	0.22	1.7
beta-BHC		0.67	U	0.67	1.7
delta-BHC		0.41	U	0.41	1.7
gamma-BHC (Lindane)		0.47	U	0.47	1.7
Heptachlor		0.22	U	0.22	1.7
Heptachlor epoxide		0.43	U	0.43	1.7
Endosulfan I		0.18	U	0.18	1.7
Endosulfan II		0.29	U	0.29	1.7
Endosulfan sulfate		0.28	U	0.28	1.7
Endrin		0.31	U	0.31	1.7
Endrin aldehyde		0.17	U	0.17	1.7
Endrin ketone		0.50	U	0.50	1.7
gamma-Chlordane		0.27	U	0.27	1.7
Methoxychlor		0.46	U	0.46	3.3
alpha-Chlordane		0.33	U	0.33	1.7
Dieldrin		0.21	U	0.21	1.7
Toxaphene		16	U	16	170
Surrogate		%Rec	Qualifier	Acceptance Limits	
Tetrachloro-m-xylene		101		59 - 115	
Decachlorobiphenyl		98		63 - 124	

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM2

Lab Sample ID: 280-27068-3

Date Sampled: 03/26/2012 0820

Client Matrix: Solid

% Moisture: 5.3

Date Received: 03/28/2012 0900

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-114549	Instrument ID:	GCS_P2
Prep Method:	3550C	Prep Batch:	280-114269	Initial Weight/Volume:	30.5 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	04/05/2012 2022			Injection Volume:	1 uL
Prep Date:	04/04/2012 1628			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.57	U	0.57	1.8
4,4'-DDE		0.25	U	0.25	1.8
4,4'-DDT		0.61	U	0.61	1.8
Aldrin		0.26	U	0.26	1.7
alpha-BHC		0.22	U	0.22	1.7
beta-BHC		0.69	U	0.69	1.7
delta-BHC		0.42	U	0.42	1.7
gamma-BHC (Lindane)		0.48	U	0.48	1.7
Heptachlor		0.22	U	0.22	1.7
Heptachlor epoxide		0.44	U	0.44	1.7
Endosulfan I		0.18	U	0.18	1.7
Endosulfan II		0.30	U	0.30	1.8
Endosulfan sulfate		0.29	U	0.29	1.8
Endrin		0.32	U	0.32	1.8
Endrin aldehyde		0.18	U	0.18	1.8
Endrin ketone		0.51	U	0.51	1.8
gamma-Chlordane		0.28	U	0.28	1.8
Methoxychlor		0.47	U	0.47	3.4
alpha-Chlordane		0.34	U	0.34	1.8
Dieldrin		0.22	U	0.22	1.8
Toxaphene		16	U	16	170
Surrogate		%Rec	Qualifier	Acceptance Limits	
Tetrachloro-m-xylene		98		59 - 115	
Decachlorobiphenyl		96		63 - 124	

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM3

Lab Sample ID: 280-27068-4

Date Sampled: 03/26/2012 0826

Client Matrix: Solid

% Moisture: 5.0

Date Received: 03/28/2012 0900

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-114549	Instrument ID:	GCS_P2
Prep Method:	3550C	Prep Batch:	280-114269	Initial Weight/Volume:	31.5 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	04/05/2012 2039			Injection Volume:	1 uL
Prep Date:	04/04/2012 1628			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.55	U	0.55	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	1.7
alpha-BHC		0.21	U	0.21	1.7
beta-BHC		0.67	U	0.67	1.7
delta-BHC		0.40	U	0.40	1.7
gamma-BHC (Lindane)		0.47	U	0.47	1.7
Heptachlor		0.21	U	0.21	1.7
Heptachlor epoxide		0.43	U	0.43	1.7
Endosulfan I		0.18	U	0.18	1.7
Endosulfan II		0.29	U	0.29	1.7
Endosulfan sulfate		0.28	U	0.28	1.7
Endrin		0.31	U	0.31	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	170
Surrogate		%Rec	Qualifier	Acceptance Limits	
Tetrachloro-m-xylene		102		59 - 115	
Decachlorobiphenyl		97		63 - 124	

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM4

Lab Sample ID: 280-27068-5

Date Sampled: 03/26/2012 0833

Client Matrix: Solid

% Moisture: 6.1

Date Received: 03/28/2012 0900

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-114549	Instrument ID:	GCS_P2
Prep Method:	3550C	Prep Batch:	280-114269	Initial Weight/Volume:	30.4 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	04/05/2012 2055			Injection Volume:	1 uL
Prep Date:	04/04/2012 1628			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.57	U	0.57	1.8
4,4'-DDE		0.25	U	0.25	1.8
4,4'-DDT		0.62	U	0.62	1.8
Aldrin		0.26	U	0.26	1.7
alpha-BHC		0.22	U	0.22	1.7
beta-BHC		0.70	U	0.70	1.7
delta-BHC		0.42	U	0.42	1.7
gamma-BHC (Lindane)		0.49	U	0.49	1.7
Heptachlor		0.22	U	0.22	1.7
Heptachlor epoxide		0.45	U	0.45	1.7
Endosulfan I		0.18	U	0.18	1.7
Endosulfan II		0.30	U	0.30	1.8
Endosulfan sulfate		0.29	U	0.29	1.8
Endrin		0.32	U	0.32	1.8
Endrin aldehyde		0.18	U	0.18	1.8
Endrin ketone		0.51	U	0.51	1.8
gamma-Chlordane		0.28	U	0.28	1.8
Methoxychlor		0.47	U	0.47	3.5
alpha-Chlordane		0.34	U	0.34	1.8
Dieldrin		0.22	U	0.22	1.8
Toxaphene		17	U	17	170
Surrogate		%Rec	Qualifier	Acceptance Limits	
Tetrachloro-m-xylene		101		59 - 115	
Decachlorobiphenyl		101		63 - 124	

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM5

Lab Sample ID: 280-27068-6

Date Sampled: 03/26/2012 0840

Client Matrix: Solid

% Moisture: 5.0

Date Received: 03/28/2012 0900

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-114549	Instrument ID:	GCS_P2
Prep Method:	3550C	Prep Batch:	280-114269	Initial Weight/Volume:	31.0 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	04/05/2012 2112			Injection Volume:	1 uL
Prep Date:	04/04/2012 1628			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.56	U	0.56	1.7
4,4'-DDE		0.24	U	0.24	1.7
4,4'-DDT		0.60	U	0.60	1.7
Aldrin		0.26	U	0.26	1.7
alpha-BHC		0.22	U	0.22	1.7
beta-BHC		0.68	U	0.68	1.7
delta-BHC		0.41	U	0.41	1.7
gamma-BHC (Lindane)		0.47	U	0.47	1.7
Heptachlor		0.22	U	0.22	1.7
Heptachlor epoxide		0.43	U	0.43	1.7
Endosulfan I		0.18	U	0.18	1.7
Endosulfan II		0.29	U	0.29	1.7
Endosulfan sulfate		0.28	U	0.28	1.7
Endrin		0.31	U	0.31	1.7
Endrin aldehyde		0.17	U	0.17	1.7
Endrin ketone		0.50	U	0.50	1.7
gamma-Chlordane		0.27	U	0.27	1.7
Methoxychlor		0.46	U	0.46	3.4
alpha-Chlordane		0.33	U	0.33	1.7
Dieldrin		0.21	U	0.21	1.7
Toxaphene		16	U	16	170
Surrogate		%Rec	Qualifier	Acceptance Limits	
Tetrachloro-m-xylene		94		59 - 115	
Decachlorobiphenyl		92		63 - 124	

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM6

Lab Sample ID: 280-27068-7

Date Sampled: 03/26/2012 0845

Client Matrix: Solid

% Moisture: 8.3

Date Received: 03/28/2012 0900

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-114549	Instrument ID:	GCS_P2
Prep Method:	3550C	Prep Batch:	280-114269	Initial Weight/Volume:	31.5 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	04/05/2012 2218			Injection Volume:	1 uL
Prep Date:	04/04/2012 1628			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.57	U	0.57	1.8
4,4'-DDE		0.25	U	0.25	1.8
4,4'-DDT		0.61	U	0.61	1.8
Aldrin		0.26	U	0.26	1.7
alpha-BHC		0.22	U	0.22	1.7
beta-BHC		0.69	U	0.69	1.7
delta-BHC		0.42	U	0.42	1.7
gamma-BHC (Lindane)		0.48	U	0.48	1.7
Heptachlor		0.22	U	0.22	1.7
Heptachlor epoxide		0.44	U	0.44	1.7
Endosulfan I		0.18	U	0.18	1.7
Endosulfan II		0.30	U	0.30	1.8
Endosulfan sulfate		0.29	U	0.29	1.8
Endrin		0.32	U	0.32	1.8
Endrin aldehyde		0.18	U	0.18	1.8
Endrin ketone		0.51	U	0.51	1.8
gamma-Chlordane		0.28	U	0.28	1.8
Methoxychlor		0.47	U	0.47	3.4
alpha-Chlordane		0.34	U	0.34	1.8
Dieldrin		0.22	U	0.22	1.8
Toxaphene		16	U	16	170
Surrogate		%Rec	Qualifier	Acceptance Limits	
Tetrachloro-m-xylene		104		59 - 115	
Decachlorobiphenyl		102		63 - 124	

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM7

Lab Sample ID: 280-27068-8

Date Sampled: 03/26/2012 0852

Client Matrix: Solid

% Moisture: 4.1

Date Received: 03/28/2012 0900

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-114549	Instrument ID:	GCS_P2
Prep Method:	3550C	Prep Batch:	280-114269	Initial Weight/Volume:	30.8 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	04/05/2012 2234			Injection Volume:	1 uL
Prep Date:	04/04/2012 1628			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.55	U	0.55	1.7
4,4'-DDE		0.24	U	0.24	1.7
4,4'-DDT		0.60	U	0.60	1.7
Aldrin		0.26	U	0.26	1.7
alpha-BHC		0.22	U	0.22	1.7
beta-BHC		0.67	U	0.67	1.7
delta-BHC		0.41	U	0.41	1.7
gamma-BHC (Lindane)		0.47	U	0.47	1.7
Heptachlor		0.22	U	0.22	1.7
Heptachlor epoxide		0.43	U	0.43	1.7
Endosulfan I		0.18	U	0.18	1.7
Endosulfan II		0.29	U	0.29	1.7
Endosulfan sulfate		0.28	U	0.28	1.7
Endrin		0.31	U	0.31	1.7
Endrin aldehyde		0.17	U	0.17	1.7
Endrin ketone		0.50	U	0.50	1.7
gamma-Chlordane		0.27	U	0.27	1.7
Methoxychlor		0.46	U	0.46	3.4
alpha-Chlordane		0.33	U	0.33	1.7
Dieldrin		0.21	U	0.21	1.7
Toxaphene		16	U	16	170
Surrogate		%Rec	Qualifier	Acceptance Limits	
Tetrachloro-m-xylene		103		59 - 115	
Decachlorobiphenyl		102		63 - 124	

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM8

Lab Sample ID: 280-27068-9

Date Sampled: 03/26/2012 0857

Client Matrix: Solid

% Moisture: 3.3

Date Received: 03/28/2012 0900

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-114549	Instrument ID:	GCS_P2
Prep Method:	3550C	Prep Batch:	280-114269	Initial Weight/Volume:	30.4 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	04/05/2012 2251			Injection Volume:	1 uL
Prep Date:	04/04/2012 1628			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.56	U	0.56	1.7
4,4'-DDE		0.24	U	0.24	1.7
4,4'-DDT		0.60	U	0.60	1.7
Aldrin		0.26	U	0.26	1.7
alpha-BHC		0.22	U	0.22	1.7
beta-BHC		0.68	U	0.68	1.7
delta-BHC		0.41	U	0.41	1.7
gamma-BHC (Lindane)		0.47	U	0.47	1.7
Heptachlor		0.22	U	0.22	1.7
Heptachlor epoxide		0.43	U	0.43	1.7
Endosulfan I		0.18	U	0.18	1.7
Endosulfan II		0.29	U N	0.29	1.7
Endosulfan sulfate		0.28	U N	0.28	1.7
Endrin		0.31	U	0.31	1.7
Endrin aldehyde		0.17	U N	0.17	1.7
Endrin ketone		0.50	U N	0.50	1.7
gamma-Chlordane		0.27	U	0.27	1.7
Methoxychlor		0.46	U N	0.46	3.4
alpha-Chlordane		0.33	U	0.33	1.7
Dieldrin		0.21	U	0.21	1.7
Toxaphene		16	U	16	170
Surrogate		%Rec	Qualifier	Acceptance Limits	
Tetrachloro-m-xylene		106		59 - 115	
Decachlorobiphenyl		105		63 - 124	

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM9

Lab Sample ID: 280-27068-10

Date Sampled: 03/26/2012 0904

Client Matrix: Solid

% Moisture: 3.7

Date Received: 03/28/2012 0900

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-114549	Instrument ID:	GCS_P2
Prep Method:	3550C	Prep Batch:	280-114269	Initial Weight/Volume:	32.6 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	04/05/2012 2340			Injection Volume:	1 uL
Prep Date:	04/04/2012 1628			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.52	U	0.52	1.6
4,4'-DDE		0.23	U	0.23	1.6
4,4'-DDT		0.56	U	0.56	1.6
Aldrin		0.24	U	0.24	1.6
alpha-BHC		0.20	U	0.20	1.6
beta-BHC		0.63	U	0.63	1.6
delta-BHC		0.38	U	0.38	1.6
gamma-BHC (Lindane)		0.44	U	0.44	1.6
Heptachlor		0.20	U	0.20	1.6
Heptachlor epoxide		0.41	U	0.41	1.6
Endosulfan I		0.17	U	0.17	1.6
Endosulfan II		0.27	U	0.27	1.6
Endosulfan sulfate		0.26	U	0.26	1.6
Endrin		0.29	U	0.29	1.6
Endrin aldehyde		0.16	U	0.16	1.6
Endrin ketone		0.47	U	0.47	1.6
gamma-Chlordane		0.25	U	0.25	1.6
Methoxychlor		0.43	U	0.43	3.2
alpha-Chlordane		0.31	U	0.31	1.6
Dieldrin		0.20	U	0.20	1.6
Toxaphene		15	U	15	160
Surrogate		%Rec	Qualifier	Acceptance Limits	
Tetrachloro-m-xylene		100		59 - 115	
Decachlorobiphenyl		101		63 - 124	

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM0

Lab Sample ID: 280-27068-1

Date Sampled: 03/26/2012 0800

Client Matrix: Solid

% Moisture: 5.8

Date Received: 03/28/2012 0900

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-114315	Instrument ID:	GCS_W
Prep Method:	3550C	Prep Batch:	280-113534	Initial Weight/Volume:	30.4 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	04/04/2012 1054			Injection Volume:	1 uL
Prep Date:	03/29/2012 1416			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		2.9	U	2.9	10
Aroclor 1221		8.4	U	8.4	17
Aroclor 1232		2.1	U	2.1	10
Aroclor 1242		4.9	U	4.9	10
Aroclor 1248		4.9	U	4.9	10
Aroclor 1254		2.7	U	2.7	10
Aroclor 1260		2.7	U	2.7	10

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	92		59 - 130
Tetrachloro-m-xylene	90		53 - 128

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM1

Lab Sample ID: 280-27068-2

Date Sampled: 03/26/2012 0809

Client Matrix: Solid

% Moisture: 3.7

Date Received: 03/28/2012 0900

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-114315	Instrument ID:	GCS_W
Prep Method:	3550C	Prep Batch:	280-113534	Initial Weight/Volume:	31.0 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	04/04/2012 1117			Injection Volume:	1 uL
Prep Date:	03/29/2012 1416			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	97		59 - 130
Tetrachloro-m-xylene	83		53 - 128

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM2

Lab Sample ID: 280-27068-3

Date Sampled: 03/26/2012 0820

Client Matrix: Solid

% Moisture: 5.3

Date Received: 03/28/2012 0900

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-114315	Instrument ID:	GCS_W
Prep Method:	3550C	Prep Batch:	280-113534	Initial Weight/Volume:	30.4 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	04/04/2012 1140			Injection Volume:	1 uL
Prep Date:	03/29/2012 1416			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		2.9	U	2.9	10
Aroclor 1221		8.4	U	8.4	17
Aroclor 1232		2.1	U	2.1	10
Aroclor 1242		4.9	U	4.9	10
Aroclor 1248		4.9	U	4.9	10
Aroclor 1254		2.7	U	2.7	10
Aroclor 1260		2.7	U	2.7	10

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	91		59 - 130
Tetrachloro-m-xylene	90		53 - 128

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM3

Lab Sample ID: 280-27068-4

Date Sampled: 03/26/2012 0826

Client Matrix: Solid

% Moisture: 5.0

Date Received: 03/28/2012 0900

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-114315	Instrument ID:	GCS_W
Prep Method:	3550C	Prep Batch:	280-113534	Initial Weight/Volume:	30.2 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	04/04/2012 1203			Injection Volume:	1 uL
Prep Date:	03/29/2012 1416			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		2.9	U	2.9	10
Aroclor 1221		8.4	U	8.4	17
Aroclor 1232		2.1	U	2.1	10
Aroclor 1242		4.9	U	4.9	10
Aroclor 1248		4.9	U	4.9	10
Aroclor 1254		2.7	U	2.7	10
Aroclor 1260		2.7	U	2.7	10

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	90		59 - 130
Tetrachloro-m-xylene	79		53 - 128

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM4

Lab Sample ID: 280-27068-5

Date Sampled: 03/26/2012 0833

Client Matrix: Solid

% Moisture: 6.1

Date Received: 03/28/2012 0900

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-114315	Instrument ID:	GCS_W
Prep Method:	3550C	Prep Batch:	280-113534	Initial Weight/Volume:	30.0 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	04/04/2012 1227			Injection Volume:	1 uL
Prep Date:	03/29/2012 1416			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		2.9	U	2.9	11
Aroclor 1221		8.5	U	8.5	18
Aroclor 1232		2.1	U	2.1	11
Aroclor 1242		5.0	U	5.0	11
Aroclor 1248		5.0	U	5.0	11
Aroclor 1254		2.8	U	2.8	11
Aroclor 1260		2.8	U	2.8	11

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	93		59 - 130
Tetrachloro-m-xylene	84		53 - 128

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM5

Lab Sample ID: 280-27068-6

Date Sampled: 03/26/2012 0840

Client Matrix: Solid

% Moisture: 5.0

Date Received: 03/28/2012 0900

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-114315	Instrument ID:	GCS_W
Prep Method:	3550C	Prep Batch:	280-113534	Initial Weight/Volume:	31.0 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	04/04/2012 1250			Injection Volume:	1 uL
Prep Date:	03/29/2012 1416			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		2.8	U	2.8	10
Aroclor 1221		8.2	U	8.2	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	99		59 - 130
Tetrachloro-m-xylene	87		53 - 128

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM6

Lab Sample ID: 280-27068-7

Date Sampled: 03/26/2012 0845

Client Matrix: Solid

% Moisture: 8.3

Date Received: 03/28/2012 0900

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-114315	Instrument ID:	GCS_W
Prep Method:	3550C	Prep Batch:	280-113534	Initial Weight/Volume:	30.0 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	04/04/2012 1422			Injection Volume:	1 uL
Prep Date:	03/29/2012 1416			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		3.0	U	3.0	11
Aroclor 1221		8.7	U	8.7	18
Aroclor 1232		2.2	U	2.2	11
Aroclor 1242		5.1	U	5.1	11
Aroclor 1248		5.1	U	5.1	11
Aroclor 1254		2.8	U	2.8	11
Aroclor 1260		2.8	U	2.8	11

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	99		59 - 130
Tetrachloro-m-xylene	88		53 - 128

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM7

Lab Sample ID: 280-27068-8

Date Sampled: 03/26/2012 0852

Client Matrix: Solid

% Moisture: 4.1

Date Received: 03/28/2012 0900

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-114315	Instrument ID:	GCS_W
Prep Method:	3550C	Prep Batch:	280-113534	Initial Weight/Volume:	30.9 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	04/04/2012 1446			Injection Volume:	1 uL
Prep Date:	03/29/2012 1416			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	100		59 - 130
Tetrachloro-m-xylene	90		53 - 128

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM8

Lab Sample ID: 280-27068-9

Date Sampled: 03/26/2012 0857

Client Matrix: Solid

% Moisture: 3.3

Date Received: 03/28/2012 0900

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-114315	Instrument ID:	GCS_W
Prep Method:	3550C	Prep Batch:	280-113534	Initial Weight/Volume:	31.0 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	04/04/2012 1509			Injection Volume:	1 uL
Prep Date:	03/29/2012 1416			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	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	Qualifier	Acceptance Limits
Decachlorobiphenyl	101		59 - 130
Tetrachloro-m-xylene	91		53 - 128

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1
Sdg Number: J01458

Client Sample ID: J1NMM9

Lab Sample ID: 280-27068-10
Client Matrix: Solid

% Moisture: 3.7

Date Sampled: 03/26/2012 0904
Date Received: 03/28/2012 0900

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-114315	Instrument ID:	GCS_W
Prep Method:	3550C	Prep Batch:	280-113534	Initial Weight/Volume:	30.5 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	04/04/2012 1532			Injection Volume:	1 uL
Prep Date:	03/29/2012 1416			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		2.8	U	2.8	10
Aroclor 1221		8.2	U	8.2	17
Aroclor 1232		2.0	U	2.0	10
Aroclor 1242		4.8	U	4.8	10
Aroclor 1248		4.8	U	4.8	10
Aroclor 1254		2.7	U	2.7	10
Aroclor 1260		2.7	U	2.7	10

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	101		59 - 130
Tetrachloro-m-xylene	90		53 - 128

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM0

Lab Sample ID: 280-27068-1

Date Sampled: 03/26/2012 0800

Client Matrix: Solid

% Moisture: 5.8

Date Received: 03/28/2012 0900

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-113934	Instrument ID:	GCS_U
Prep Method:	3550C	Prep Batch:	280-113528	Lab File ID:	007B0701.D
Dilution:	1.0			Initial Weight/Volume:	30.5 g
Analysis Date:	03/30/2012 1426			Final Weight/Volume:	1000 uL
Prep Date:	03/29/2012 1209			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		13000		1000	4200
C10-C28		4500		710	4200

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	100		49 - 115

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM1

Lab Sample ID: 280-27068-2

Date Sampled: 03/26/2012 0809

Client Matrix: Solid

% Moisture: 3.7

Date Received: 03/28/2012 0900

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-113934	Instrument ID:	GCS_U
Prep Method:	3550C	Prep Batch:	280-113528	Lab File ID:	008B0801.D
Dilution:	1.0			Initial Weight/Volume:	31.2 g
Analysis Date:	03/30/2012 1454			Final Weight/Volume:	1000 uL
Prep Date:	03/29/2012 1209			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		3800	J	1000	4000
C10-C28		2200	J	680	4000

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	100		49 - 115

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1
Sdg Number: J01458

Client Sample ID: J1NMM2

Lab Sample ID: 280-27068-3

Date Sampled: 03/26/2012 0820

Client Matrix: Solid

% Moisture: 5.3

Date Received: 03/28/2012 0900

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-113934	Instrument ID:	GCS_U
Prep Method:	3550C	Prep Batch:	280-113528	Lab File ID:	009B0901.D
Dilution:	1.0			Initial Weight/Volume:	30.4 g
Analysis Date:	03/30/2012 1523			Final Weight/Volume:	1000 uL
Prep Date:	03/29/2012 1209			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		11000		1000	4200
C10-C28		5800		710	4200

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	87		49 - 115

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM3

Lab Sample ID: 280-27068-4

Date Sampled: 03/26/2012 0826

Client Matrix: Solid

% Moisture: 5.0

Date Received: 03/28/2012 0900

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-113934	Instrument ID:	GCS_U
Prep Method:	3550C	Prep Batch:	280-113528	Lab File ID:	010B1001.D
Dilution:	1.0			Initial Weight/Volume:	30.0 g
Analysis Date:	03/30/2012 1551			Final Weight/Volume:	1000 uL
Prep Date:	03/29/2012 1209			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		5300		1000	4200
C10-C28		2900	J	710	4200

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	95		49 - 115

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1
Sdg Number: J01458

Client Sample ID: J1NMM4

Lab Sample ID: 280-27068-5

Date Sampled: 03/26/2012 0833

Client Matrix: Solid

% Moisture: 6.1

Date Received: 03/28/2012 0900

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-113934	Instrument ID:	GCS_U
Prep Method:	3550C	Prep Batch:	280-113528	Lab File ID:	011B1101.D
Dilution:	1.0			Initial Weight/Volume:	30.1 g
Analysis Date:	03/30/2012 1619			Final Weight/Volume:	1000 uL
Prep Date:	03/29/2012 1209			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		34000		1100	4200
C10-C28		14000		720	4200

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	101		49 - 115

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM5

Lab Sample ID: 280-27068-6

Date Sampled: 03/26/2012 0840

Client Matrix: Solid

% Moisture: 5.0

Date Received: 03/28/2012 0900

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-113934	Instrument ID:	GCS_U
Prep Method:	3550C	Prep Batch:	280-113528	Lab File ID:	014B1401.D
Dilution:	1.0			Initial Weight/Volume:	30.1 g
Analysis Date:	03/30/2012 1744			Final Weight/Volume:	1000 uL
Prep Date:	03/29/2012 1209			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		3300	J	1000	4200
C10-C28		2100	J	710	4200

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	104		49 - 115

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1
Sdg Number: J01458

Client Sample ID: J1NMM6

Lab Sample ID: 280-27068-7

Date Sampled: 03/26/2012 0845

Client Matrix: Solid

% Moisture: 8.3

Date Received: 03/28/2012 0900

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-113934	Instrument ID:	GCS_U
Prep Method:	3550C	Prep Batch:	280-113528	Lab File ID:	015B1501.D
Dilution:	1.0			Initial Weight/Volume:	30.4 g
Analysis Date:	03/30/2012 1812			Final Weight/Volume:	1000 uL
Prep Date:	03/29/2012 1209			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		1300	J	1100	4300
C10-C28		840	J	730	4300

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	86		49 - 115

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM7

Lab Sample ID: 280-27068-8

Date Sampled: 03/26/2012 0852

Client Matrix: Solid

% Moisture: 4.1

Date Received: 03/28/2012 0900

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-113934	Instrument ID:	GCS_U
Prep Method:	3550C	Prep Batch:	280-113528	Lab File ID:	016B1601.D
Dilution:	1.0			Initial Weight/Volume:	30.8 g
Analysis Date:	03/30/2012 1840			Final Weight/Volume:	1000 uL
Prep Date:	03/29/2012 1209			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		6600		1000	4100
C10-C28		4400		690	4100

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	83		49 - 115

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1
Sdg Number: J01458

Client Sample ID: J1NMM8

Lab Sample ID: 280-27068-9

Date Sampled: 03/26/2012 0857

Client Matrix: Solid

% Moisture: 3.3

Date Received: 03/28/2012 0900

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-113934	Instrument ID:	GCS_U
Prep Method:	3550C	Prep Batch:	280-113528	Lab File ID:	017B1701.D
Dilution:	1.0			Initial Weight/Volume:	31.1 g
Analysis Date:	03/30/2012 1908			Final Weight/Volume:	1000 uL
Prep Date:	03/29/2012 1209			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		3900	J	990	4000
C10-C28		2500	J	680	4000

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	97		49 - 115

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1
Sdg Number: J01458

Client Sample ID: J1NMM9

Lab Sample ID: 280-27068-10
Client Matrix: Solid

% Moisture: 3.7

Date Sampled: 03/26/2012 0904
Date Received: 03/28/2012 0900

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-113934	Instrument ID:	GCS_U
Prep Method:	3550C	Prep Batch:	280-113528	Lab File ID:	018B1801.D
Dilution:	1.0			Initial Weight/Volume:	31.4 g
Analysis Date:	03/30/2012 1936			Final Weight/Volume:	1000 uL
Prep Date:	03/29/2012 1209			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		2600	J	990	4000
C10-C28		1600	J	670	4000

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	91		49 - 115

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM0

Lab Sample ID: 280-27068-1

Date Sampled: 03/26/2012 0800

Client Matrix: Solid

% Moisture: 5.8

Date Received: 03/28/2012 0900

8310 PAHs (HPLC)

Analysis Method: 8310	Analysis Batch: 280-113727	Instrument ID: CHHPLC_G
Prep Method: 3550C	Prep Batch: 280-113522	Initial Weight/Volume: 31.1 g
Dilution: 1.0		Final Weight/Volume: 4000 uL
Analysis Date: 03/31/2012 0145		Injection Volume: 20 uL
Prep Date: 03/29/2012 1327		Result Type: PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	100
Acenaphthylene		9.2	U	9.2	100
Anthracene		3.1	U	3.1	20
Benzo[a]anthracene		3.3	U	3.3	15
Benzo[a]pyrene		6.6	U	6.6	15
Benzo[b]fluoranthene		4.3	U	4.3	15
Benzo[g,h,i]perylene		7.4	U	7.4	31
Benzo[k]fluoranthene		4.0	U	4.0	15
Chrysene		5.0	U	5.0	41
Dibenzo(a,h)anthracene		11	U	11	31
Fluoranthene		13	U	13	41
Fluorene		5.4	U	5.4	31
Indeno[1,2,3-cd]pyrene		12	U	12	31
Naphthalene		12	U	12	100
Phenanthrene		12	U	12	41
Pyrene		12	U	12	41
Surrogate		%Rec	Qualifier	Acceptance Limits	
Terphenyl-d14 (SUR)		84		72 - 115	

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM1

Lab Sample ID: 280-27068-2

Date Sampled: 03/26/2012 0809

Client Matrix: Solid

% Moisture: 3.7

Date Received: 03/28/2012 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-113727	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-113522	Initial Weight/Volume:	30.3 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	03/31/2012 0215			Injection Volume:	20 uL
Prep Date:	03/29/2012 1327			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	100
Acenaphthylene		9.3	U	9.3	100
Anthracene		3.1	U	3.1	21
Benzo[a]anthracene		3.3	U	3.3	15
Benzo[a]pyrene		6.6	U	6.6	15
Benzo[b]fluoranthene		4.3	U	4.3	15
Benzo[g,h,i]perylene		7.4	U	7.4	31
Benzo[k]fluoranthene		4.1	U	4.1	15
Chrysene		5.0	U	5.0	41
Dibenzo(a,h)anthracene		11	U	11	31
Fluoranthene		13	U	13	41
Fluorene		5.4	U	5.4	31
Indeno[1,2,3-cd]pyrene		12	U	12	31
Naphthalene		12	U	12	100
Phenanthrene		12	U	12	41
Pyrene		12	U	12	41
Surrogate		%Rec	Qualifier	Acceptance Limits	
Terphenyl-d14 (SUR)		85		72 - 115	

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM2

Lab Sample ID: 280-27068-3

Date Sampled: 03/26/2012 0820

Client Matrix: Solid

% Moisture: 5.3

Date Received: 03/28/2012 0900

8310 PAHs (HPLC)

Analysis Method: 8310	Analysis Batch: 280-113727	Instrument ID: CHHPLC_G
Prep Method: 3550C	Prep Batch: 280-113522	Initial Weight/Volume: 31.4 g
Dilution: 1.0		Final Weight/Volume: 4000 uL
Analysis Date: 03/31/2012 0246		Injection Volume: 20 uL
Prep Date: 03/29/2012 1327		Result Type: PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	100
Acenaphthylene		9.1	U	9.1	100
Anthracene		3.1	U	3.1	20
Benzo[a]anthracene		3.2	U	3.2	15
Benzo[a]pyrene		6.5	U	6.5	15
Benzo[b]fluoranthene		4.2	U	4.2	15
Benzo[g,h,i]perylene		7.3	U	7.3	30
Benzo[k]fluoranthene		4.0	U	4.0	15
Chrysene		4.9	U	4.9	40
Dibenzo(a,h)anthracene		11	U	11	30
Fluoranthene		13	U	13	40
Fluorene		5.3	U	5.3	30
Indeno[1,2,3-cd]pyrene		12	U	12	30
Naphthalene		12	U	12	100
Phenanthrene		12	U	12	40
Pyrene		12	U	12	40
Surrogate		%Rec	Qualifier	Acceptance Limits	
Terphenyl-d14 (SUR)		83		72 - 115	

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM3

Lab Sample ID: 280-27068-4

Date Sampled: 03/26/2012 0826

Client Matrix: Solid

% Moisture: 5.0

Date Received: 03/28/2012 0900

8310 PAHs (HPLC)

Analysis Method: 8310	Analysis Batch: 280-113727	Instrument ID: CHHPLC_G	
Prep Method: 3550C	Prep Batch: 280-113522	Initial Weight/Volume: 30.8 g	
Dilution: 1.0		Final Weight/Volume: 4000 uL	
Analysis Date: 03/31/2012 0316		Injection Volume: 20 uL	
Prep Date: 03/29/2012 1327		Result Type: PRIMARY	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	100
Acenaphthylene		9.2	U N	9.2	100
Anthracene		3.1	U	3.1	21
Benzo[a]anthracene		3.3	U	3.3	15
Benzo[a]pyrene		6.6	U	6.6	15
Benzo[b]fluoranthene		4.3	U N	4.3	15
Benzo[g,h,i]perylene		7.4	U N	7.4	31
Benzo[k]fluoranthene		4.0	U N	4.0	15
Chrysene		5.0	U	5.0	41
Dibenzo(a,h)anthracene		11	U N	11	31
Fluoranthene		13	U	13	41
Fluorene		5.4	U N	5.4	31
Indeno[1,2,3-cd]pyrene		12	U N	12	31
Naphthalene		12	U N	12	100
Phenanthrene		12	U	12	41
Pyrene		12	U	12	41
Surrogate		%Rec	Qualifier	Acceptance Limits	
Terphenyl-d14 (SUR)		83		72 - 115	

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM4

Lab Sample ID: 280-27068-5

Date Sampled: 03/26/2012 0833

Client Matrix: Solid

% Moisture: 6.1

Date Received: 03/28/2012 0900

8310 PAHs (HPLC)

Analysis Method: 8310	Analysis Batch: 280-113727	Instrument ID: CHHPLC_G	
Prep Method: 3550C	Prep Batch: 280-113522	Initial Weight/Volume: 31.4 g	
Dilution: 1.0		Final Weight/Volume: 4000 uL	
Analysis Date: 03/31/2012 0448		Injection Volume: 20 uL	
Prep Date: 03/29/2012 1327		Result Type: PRIMARY	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	100
Acenaphthylene		9.2	U	9.2	100
Anthracene		3.1	U	3.1	20
Benzo[a]anthracene		3.2	U	3.2	15
Benzo[a]pyrene		6.5	U	6.5	15
Benzo[b]fluoranthene		4.3	U	4.3	15
Benzo[g,h,i]perylene		7.3	U	7.3	31
Benzo[k]fluoranthene		4.0	U	4.0	15
Chrysene		4.9	U	4.9	41
Dibenzo(a,h)anthracene		11	U	11	31
Fluoranthene		13	U	13	41
Fluorene		5.4	U	5.4	31
Indeno[1,2,3-cd]pyrene		12	U	12	31
Naphthalene		12	U	12	100
Phenanthrene		12	U	12	41
Pyrene		12	U	12	41
Surrogate		%Rec	Qualifier	Acceptance Limits	
Terphenyl-d14 (SUR)		84		72 - 115	

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM5

Lab Sample ID: 280-27068-6

Date Sampled: 03/26/2012 0840

Client Matrix: Solid

% Moisture: 5.0

Date Received: 03/28/2012 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-113727	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-113522	Initial Weight/Volume:	30.2 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	03/31/2012 0518			Injection Volume:	20 uL
Prep Date:	03/29/2012 1327			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	100
Acenaphthylene		9.4	U	9.4	100
Anthracene		3.2	U	3.2	21
Benzo[a]anthracene		3.3	U	3.3	16
Benzo[a]pyrene		6.7	U	6.7	16
Benzo[b]fluoranthene		4.4	U	4.4	16
Benzo[g,h,i]perylene		7.5	U	7.5	31
Benzo[k]fluoranthene		4.1	U	4.1	16
Chrysene		5.1	U	5.1	42
Dibenzo(a,h)anthracene		12	U	12	31
Fluoranthene		14	U	14	42
Fluorene		5.5	U	5.5	31
Indeno[1,2,3-cd]pyrene		13	U	13	31
Naphthalene		13	U	13	100
Phenanthrene		13	U	13	42
Pyrene		13	U	13	42
Surrogate		%Rec	Qualifier	Acceptance Limits	
Terphenyl-d14 (SUR)		83		72 - 115	

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM6

Lab Sample ID: 280-27068-7

Date Sampled: 03/26/2012 0845

Client Matrix: Solid

% Moisture: 8.3

Date Received: 03/28/2012 0900

8310 PAHs (HPLC)

Analysis Method: 8310	Analysis Batch: 280-113727	Instrument ID: CHHPLC_G
Prep Method: 3550C	Prep Batch: 280-113522	Initial Weight/Volume: 30.1 g
Dilution: 1.0		Final Weight/Volume: 4000 uL
Analysis Date: 03/31/2012 0619		Injection Volume: 20 uL
Prep Date: 03/29/2012 1327		Result Type: PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		11	U	11	110
Acenaphthylene		9.8	U	9.8	110
Anthracene		3.3	U	3.3	22
Benzo[a]anthracene		3.5	U	3.5	16
Benzo[a]pyrene		7.0	U	7.0	16
Benzo[b]fluoranthene		4.6	U	4.6	16
Benzo[g,h,i]perylene		7.8	U	7.8	33
Benzo[k]fluoranthene		4.3	U	4.3	16
Chrysene		5.3	U	5.3	43
Dibenzo(a,h)anthracene		12	U	12	33
Fluoranthene		14	U	14	43
Fluorene		5.7	U	5.7	33
Indeno[1,2,3-cd]pyrene		13	U	13	33
Naphthalene		13	U	13	110
Phenanthrene		13	U	13	43
Pyrene		13	U	13	43
Surrogate		%Rec	Qualifier	Acceptance Limits	
Terphenyl-d14 (SUR)		84		72 - 115	

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM7

Lab Sample ID: 280-27068-8

Date Sampled: 03/26/2012 0852

Client Matrix: Solid

% Moisture: 4.1

Date Received: 03/28/2012 0900

8310 PAHs (HPLC)

Analysis Method: 8310	Analysis Batch: 280-113727	Instrument ID: CHHPLC_G	
Prep Method: 3550C	Prep Batch: 280-113522	Initial Weight/Volume: 30.2 g	
Dilution: 1.0		Final Weight/Volume: 4000 uL	
Analysis Date: 03/31/2012 0650		Injection Volume: 20 uL	
Prep Date: 03/29/2012 1327		Result Type: PRIMARY	

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	100
Acenaphthylene		9.3	U	9.3	100
Anthracene		3.2	U	3.2	21
Benzo[a]anthracene		3.3	U	3.3	16
Benzo[a]pyrene		6.6	U	6.6	16
Benzo[b]fluoranthene		4.4	U	4.4	16
Benzo[g,h,i]perylene		7.5	U	7.5	31
Benzo[k]fluoranthene		4.1	U	4.1	16
Chrysene		5.0	U	5.0	41
Dibenzo(a,h)anthracene		11	U	11	31
Fluoranthene		13	U	13	41
Fluorene		5.5	U	5.5	31
Indeno[1,2,3-cd]pyrene		12	U	12	31
Naphthalene		12	U	12	100
Phenanthrene		12	U	12	41
Pyrene		12	U	12	41
Surrogate		%Rec	Qualifier	Acceptance Limits	
Terphenyl-d14 (SUR)		84		72 - 115	

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM8

Lab Sample ID: 280-27068-9

Date Sampled: 03/26/2012 0857

Client Matrix: Solid

% Moisture: 3.3

Date Received: 03/28/2012 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-113727	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-113522	Initial Weight/Volume:	30.9 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	03/31/2012 0720			Injection Volume:	20 uL
Prep Date:	03/29/2012 1327			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	100
Acenaphthylene		9.0	U	9.0	100
Anthracene		3.1	U	3.1	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		4.0	U	4.0	15
Chrysene		4.9	U	4.9	40
Dibenzo(a,h)anthracene		11	U	11	30
Fluoranthene		13	U	13	40
Fluorene		5.3	U	5.3	30
Indeno[1,2,3-cd]pyrene		12	U	12	30
Naphthalene		12	U	12	100
Phenanthrene		12	U	12	40
Pyrene		12	U	12	40
Surrogate		%Rec	Qualifier	Acceptance Limits	
Terphenyl-d14 (SUR)		84		72 - 115	

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM9

Lab Sample ID: 280-27068-10

Date Sampled: 03/26/2012 0904

Client Matrix: Solid

% Moisture: 3.7

Date Received: 03/28/2012 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-113727	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-113522	Initial Weight/Volume:	31.8 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	03/31/2012 0751			Injection Volume:	20 uL
Prep Date:	03/29/2012 1327			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		4.7	U	4.7	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)		94		72 - 115	

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM0

Lab Sample ID: 280-27068-1

Date Sampled: 03/26/2012 0800

Client Matrix: Solid

% Moisture: 5.8

Date Received: 03/28/2012 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-113660	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-113409	Lab File ID:	25A2032912.asc
Dilution:	1.0			Initial Weight/Volume:	1.18 g
Analysis Date:	03/29/2012 1607			Final Weight/Volume:	100 mL
Prep Date:	03/29/2012 0730				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8520		1.4	4.5
Antimony		0.36	B	0.34	0.54
Arsenic		2.7		0.59	0.90
Barium		80.5		0.068	0.45
Beryllium		0.46		0.030	0.18
Boron		1.7	B	0.88	1.8
Cadmium		0.14	B	0.037	0.18
Calcium		3160	X	12.7	45.0
Chromium		11.5		0.052	0.18
Cobalt		6.0	X	0.090	0.90
Copper		13.3		0.20	0.90
Iron		16900		3.4	4.5
Lead		6.2		0.24	0.45
Magnesium		3820	X	3.3	18.0
Manganese		309		0.090	0.90
Molybdenum		0.23	U	0.23	1.8
Nickel		10.3	X	0.11	3.6
Potassium		2320		36.9	270
Selenium		0.77	U	0.77	0.90
Silicon		467	X	5.1	9.0
Silver		0.14	U	0.14	0.18
Sodium		183		53.1	108
Vanadium		34.4		0.085	1.8
Zinc		44.4	X	0.36	0.90

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-113879	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-113397	Lab File ID:	120330taa.txt
Dilution:	1.0			Initial Weight/Volume:	0.56 g
Analysis Date:	03/30/2012 1647			Final Weight/Volume:	50 mL
Prep Date:	03/30/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0063	U	0.0063	0.019

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1
Sdg Number: J01458

Client Sample ID: J1NMM1

Lab Sample ID: 280-27068-2

Date Sampled: 03/26/2012 0809

Client Matrix: Solid

% Moisture: 3.7

Date Received: 03/28/2012 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-113660	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-113409	Lab File ID:	25A2032912.asc
Dilution:	1.0			Initial Weight/Volume:	1.10 g
Analysis Date:	03/29/2012 1610			Final Weight/Volume:	100 mL
Prep Date:	03/29/2012 0730				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8160		1.5	4.7
Antimony		0.36	U	0.36	0.57
Arsenic		2.3		0.62	0.94
Barium		77.0		0.072	0.47
Beryllium		0.50		0.031	0.19
Boron		1.4	B	0.93	1.9
Cadmium		0.12	B	0.039	0.19
Calcium		3130	X	13.3	47.2
Chromium		11.1		0.055	0.19
Cobalt		6.4	X	0.094	0.94
Copper		13.8		0.20	0.94
Iron		17400		3.6	4.7
Lead		4.3		0.25	0.47
Magnesium		3830	X	3.5	18.9
Manganese		323		0.094	0.94
Molybdenum		0.25	U	0.25	1.9
Nickel		10.4	X	0.12	3.8
Potassium		1670		38.7	283
Selenium		0.81	U	0.81	0.94
Silicon		608	X	5.3	9.4
Silver		0.15	U	0.15	0.19
Sodium		182		55.7	113
Vanadium		39.3		0.089	1.9
Zinc		37.2	X	0.38	0.94

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-113879	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-113397	Lab File ID:	120330taa.txt
Dilution:	1.0			Initial Weight/Volume:	0.66 g
Analysis Date:	03/30/2012 1653			Final Weight/Volume:	50 mL
Prep Date:	03/30/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0052	U	0.0052	0.016

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM2

Lab Sample ID: 280-27068-3

Date Sampled: 03/26/2012 0820

Client Matrix: Solid

% Moisture: 5.3

Date Received: 03/28/2012 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-113660	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-113409	Lab File ID:	25A2032912.asc
Dilution:	1.0			Initial Weight/Volume:	1.10 g
Analysis Date:	03/29/2012 1612			Final Weight/Volume:	100 mL
Prep Date:	03/29/2012 0730				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8350		1.5	4.8
Antimony		0.36	U	0.36	0.58
Arsenic		2.0		0.63	0.96
Barium		77.9		0.073	0.48
Beryllium		0.49		0.032	0.19
Boron		1.7	B	0.94	1.9
Cadmium		0.094	B	0.039	0.19
Calcium		3410	X	13.5	48.0
Chromium		11.2		0.056	0.19
Cobalt		6.4	X	0.096	0.96
Copper		15.5		0.21	0.96
Iron		18100		3.6	4.8
Lead		4.1		0.26	0.48
Magnesium		3870	X	3.6	19.2
Manganese		311		0.096	0.96
Molybdenum		0.25	U	0.25	1.9
Nickel		10.9	X	0.12	3.8
Potassium		2080		39.4	288
Selenium		0.83	U	0.83	0.96
Silicon		650	X	5.4	9.6
Silver		0.15	U	0.15	0.19
Sodium		188		56.7	115
Vanadium		39.4		0.090	1.9
Zinc		36.1	X	0.38	0.96

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-113879	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-113397	Lab File ID:	120330taa.txt
Dilution:	1.0			Initial Weight/Volume:	0.58 g
Analysis Date:	03/30/2012 1656			Final Weight/Volume:	50 mL
Prep Date:	03/30/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0060	U	0.0060	0.019

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM3

Lab Sample ID: 280-27068-4

Date Sampled: 03/26/2012 0826

Client Matrix: Solid

% Moisture: 5.0

Date Received: 03/28/2012 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-113660	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-113409	Lab File ID:	25A2032912.asc
Dilution:	1.0			Initial Weight/Volume:	1.00 g
Analysis Date:	03/29/2012 1614			Final Weight/Volume:	100 mL
Prep Date:	03/29/2012 0730				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8670		1.6	5.3
Antimony		0.40	U	0.40	0.63
Arsenic		2.4		0.69	1.1
Barium		75.1		0.080	0.53
Beryllium		0.49		0.035	0.21
Boron		1.5	B	1.0	2.1
Cadmium		0.086	B	0.043	0.21
Calcium		3140	X	14.8	52.6
Chromium		11.4		0.061	0.21
Cobalt		6.4	X	0.11	1.1
Copper		13.9		0.23	1.1
Iron		17300		4.0	5.3
Lead		4.7		0.28	0.53
Magnesium		3790	X	3.9	21.0
Manganese		312		0.11	1.1
Molybdenum		0.27	U	0.27	2.1
Nickel		10.5	X	0.13	4.2
Potassium		1950		43.1	316
Selenium		0.91	U	0.91	1.1
Silicon		561	X	6.0	10.5
Silver		0.17	U	0.17	0.21
Sodium		205		62.1	126
Vanadium		36.2		0.099	2.1
Zinc		38.0	X	0.42	1.1

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-113879	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-113397	Lab File ID:	120330taa.txt
Dilution:	1.0			Initial Weight/Volume:	0.51 g
Analysis Date:	03/30/2012 1658			Final Weight/Volume:	50 mL
Prep Date:	03/30/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0068	U	0.0068	0.021

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM4

Lab Sample ID: 280-27068-5

Date Sampled: 03/26/2012 0833

Client Matrix: Solid

% Moisture: 6.1

Date Received: 03/28/2012 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-113660	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-113409	Lab File ID:	25A2032912.asc
Dilution:	1.0			Initial Weight/Volume:	1.05 g
Analysis Date:	03/29/2012 1616			Final Weight/Volume:	100 mL
Prep Date:	03/29/2012 0730				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		9990		1.6	5.1
Antimony		0.39	U	0.39	0.61
Arsenic		2.9		0.67	1.0
Barium		88.7		0.077	0.51
Beryllium		0.55		0.033	0.20
Boron		2.0		0.99	2.0
Cadmium		0.20		0.042	0.20
Calcium		3960	X	14.3	50.7
Chromium		12.6		0.059	0.20
Cobalt		6.8	X	0.10	1.0
Copper		19.7		0.22	1.0
Iron		19100		3.9	5.1
Lead		11.3		0.27	0.51
Magnesium		4120	X	3.8	20.3
Manganese		360		0.10	1.0
Molybdenum		0.26	U	0.26	2.0
Nickel		11.6	X	0.12	4.1
Potassium		2320		41.6	304
Selenium		0.87	U	0.87	1.0
Silicon		723	X	5.7	10.1
Silver		0.16	U	0.16	0.20
Sodium		213		59.8	122
Vanadium		40.0		0.095	2.0
Zinc		61.7	X	0.40	1.0

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-113879	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-113397	Lab File ID:	120330taa.txt
Dilution:	1.0			Initial Weight/Volume:	0.56 g
Analysis Date:	03/30/2012 1700			Final Weight/Volume:	50 mL
Prep Date:	03/30/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.17		0.0063	0.019

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM5

Lab Sample ID: 280-27068-6

Date Sampled: 03/26/2012 0840

Client Matrix: Solid

% Moisture: 5.0

Date Received: 03/28/2012 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-113660	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-113409	Lab File ID:	25A2032912.asc
Dilution:	1.0			Initial Weight/Volume:	1.16 g
Analysis Date:	03/29/2012 1628			Final Weight/Volume:	100 mL
Prep Date:	03/29/2012 0730				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8230		1.4	4.5
Antimony		0.34	U	0.34	0.54
Arsenic		2.1		0.60	0.91
Barium		75.2		0.069	0.45
Beryllium		0.49		0.030	0.18
Boron		1.4	B	0.89	1.8
Cadmium		0.090	B	0.037	0.18
Calcium		3270	X	12.8	45.4
Chromium		10.1		0.053	0.18
Cobalt		6.7	X	0.091	0.91
Copper		14.8		0.20	0.91
Iron		18300		3.4	4.5
Lead		4.1		0.24	0.45
Magnesium		3760	X	3.4	18.1
Manganese		314		0.091	0.91
Molybdenum		0.24	U	0.24	1.8
Nickel		9.9	X	0.11	3.6
Potassium		1810		37.2	272
Selenium		0.78	U	0.78	0.91
Silicon		678	X	5.1	9.1
Silver		0.15	U	0.15	0.18
Sodium		192		53.5	109
Vanadium		36.5		0.085	1.8
Zinc		35.6	X	0.36	0.91

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-113879	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-113397	Lab File ID:	120330taa.txt
Dilution:	1.0			Initial Weight/Volume:	0.51 g
Analysis Date:	03/30/2012 1703			Final Weight/Volume:	50 mL
Prep Date:	03/30/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0068	U	0.0068	0.021

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM6

Lab Sample ID: 280-27068-7

Date Sampled: 03/26/2012 0845

Client Matrix: Solid

% Moisture: 8.3

Date Received: 03/28/2012 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-113660	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-113409	Lab File ID:	25A2032912.asc
Dilution:	1.0			Initial Weight/Volume:	1.10 g
Analysis Date:	03/29/2012 1630			Final Weight/Volume:	100 mL
Prep Date:	03/29/2012 0730				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		10000		1.5	5.0
Antimony		0.38	U	0.38	0.59
Arsenic		3.1		0.65	0.99
Barium		91.1		0.075	0.50
Beryllium		0.56		0.033	0.20
Boron		1.6	B	0.97	2.0
Cadmium		0.098	B	0.041	0.20
Calcium		3950	X	14.0	49.6
Chromium		12.9		0.058	0.20
Cobalt		7.6	X	0.099	0.99
Copper		16.8		0.22	0.99
Iron		20200		3.8	5.0
Lead		4.9		0.27	0.50
Magnesium		4260	X	3.7	19.8
Manganese		366		0.099	0.99
Molybdenum		0.26	U	0.26	2.0
Nickel		12.1	X	0.12	4.0
Potassium		2380		40.7	297
Selenium		0.85	U	0.85	0.99
Silicon		646	X	5.6	9.9
Silver		0.16	U	0.16	0.20
Sodium		206		58.5	119
Vanadium		41.1		0.093	2.0
Zinc		43.0	X	0.39	0.99

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-113879	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-113397	Lab File ID:	120330taa.txt
Dilution:	1.0			Initial Weight/Volume:	0.63 g
Analysis Date:	03/30/2012 1705			Final Weight/Volume:	50 mL
Prep Date:	03/30/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0057	U	0.0057	0.018

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM7

Lab Sample ID: 280-27068-8

Date Sampled: 03/26/2012 0852

Client Matrix: Solid

% Moisture: 4.1

Date Received: 03/28/2012 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-113660	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-113409	Lab File ID:	25A2032912.asc
Dilution:	1.0			Initial Weight/Volume:	1.11 g
Analysis Date:	03/29/2012 1632			Final Weight/Volume:	100 mL
Prep Date:	03/29/2012 0730				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		9010		1.5	4.7
Antimony		0.36	U	0.36	0.56
Arsenic		2.6		0.62	0.94
Barium		78.9		0.071	0.47
Beryllium		0.52		0.031	0.19
Boron		1.3	B	0.92	1.9
Cadmium		0.095	B	0.039	0.19
Calcium		3450	X	13.3	47.0
Chromium		12.1		0.055	0.19
Cobalt		6.9	X	0.094	0.94
Copper		15.8		0.20	0.94
Iron		18000		3.6	4.7
Lead		4.8		0.25	0.47
Magnesium		4140	X	3.5	18.8
Manganese		325		0.094	0.94
Molybdenum		0.24	U	0.24	1.9
Nickel		12.1	X	0.12	3.8
Potassium		1970		38.5	282
Silicon		398	X	5.3	9.4
Silver		0.15	U	0.15	0.19
Sodium		243		55.5	113
Vanadium		38.6		0.088	1.9
Zinc		38.8	X	0.37	0.94

Analysis Method:	6010B	Analysis Batch:	280-114157	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-113409	Lab File ID:	25A2040312.asc
Dilution:	1.0			Initial Weight/Volume:	1.11 g
Analysis Date:	04/03/2012 1511			Final Weight/Volume:	100 mL
Prep Date:	03/29/2012 0730				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Selenium		0.81	U	0.81	0.94

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-113879	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-113397	Lab File ID:	120330taa.txt
Dilution:	1.0			Initial Weight/Volume:	0.50 g
Analysis Date:	03/30/2012 1712			Final Weight/Volume:	50 mL
Prep Date:	03/30/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0069	U	0.0069	0.021

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM8

Lab Sample ID: 280-27068-9

Date Sampled: 03/26/2012 0857

Client Matrix: Solid

% Moisture: 3.3

Date Received: 03/28/2012 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-113660	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-113409	Lab File ID:	25A2032912.asc
Dilution:	1.0			Initial Weight/Volume:	1.11 g
Analysis Date:	03/29/2012 1635			Final Weight/Volume:	100 mL
Prep Date:	03/29/2012 0730				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8590		1.4	4.7
Antimony		0.35	U	0.35	0.56
Arsenic		3.7		0.61	0.93
Barium		68.3		0.071	0.47
Beryllium		0.50		0.031	0.19
Boron		1.0	B	0.91	1.9
Cadmium		0.078	B	0.038	0.19
Calcium		3620	X	13.1	46.6
Chromium		12.5		0.054	0.19
Cobalt		7.5	X	0.093	0.93
Copper		19.5		0.20	0.93
Iron		19200		3.5	4.7
Lead		5.0		0.25	0.47
Magnesium		5020	X	3.4	18.6
Manganese		307		0.093	0.93
Molybdenum		0.24	U	0.24	1.9
Nickel		13.5	X	0.11	3.7
Potassium		1380		38.2	279
Selenium		0.80	U	0.80	0.93
Silicon		883	X	5.3	9.3
Silver		0.15	U	0.15	0.19
Sodium		248		55.0	112
Vanadium		40.1		0.088	1.9
Zinc		37.2	X	0.37	0.93

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-113879	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-113397	Lab File ID:	120330taa.txt
Dilution:	1.0			Initial Weight/Volume:	0.57 g
Analysis Date:	03/30/2012 1714			Final Weight/Volume:	50 mL
Prep Date:	03/30/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0060	U	0.0060	0.019

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Client Sample ID: J1NMM9

Lab Sample ID: 280-27068-10

Date Sampled: 03/26/2012 0904

Client Matrix: Solid

% Moisture: 3.7

Date Received: 03/28/2012 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-113660	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-113409	Lab File ID:	25A2032912.asc
Dilution:	1.0			Initial Weight/Volume:	1.03 g
Analysis Date:	03/29/2012 1637			Final Weight/Volume:	100 mL
Prep Date:	03/29/2012 0730				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		6510		1.6	5.0
Antimony		0.38	U	0.38	0.60
Arsenic		3.0		0.67	1.0
Barium		43.6		0.077	0.50
Beryllium		0.41		0.033	0.20
Boron		0.99	U	0.99	2.0
Cadmium		0.065	B M	0.041	0.20
Calcium		4640	X	14.2	50.4
Chromium		12.1		0.058	0.20
Cobalt		6.3	X	0.10	1.0
Copper		22.1		0.22	1.0
Iron		17000		3.8	5.0
Lead		3.1		0.27	0.50
Magnesium		4650	X	3.7	20.2
Manganese		232		0.10	1.0
Molybdenum		0.26	U	0.26	2.0
Nickel		11.2	X	0.12	4.0
Potassium		831		41.3	302
Selenium		0.87	U	0.87	1.0
Silicon		302	X	5.7	10.1
Silver		0.16	U	0.16	0.20
Sodium		236		59.5	121
Vanadium		36.3		0.095	2.0
Zinc		34.0	X	0.40	1.0

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-113879	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-113397	Lab File ID:	120330taa.txt
Dilution:	1.0			Initial Weight/Volume:	0.55 g
Analysis Date:	03/30/2012 1717			Final Weight/Volume:	50 mL
Prep Date:	03/30/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0063	U	0.0063	0.019

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

General Chemistry

Client Sample ID: J1NMM0

Lab Sample ID: 280-27068-1

Date Sampled: 03/26/2012 0800

Client Matrix: Solid

Date Received: 03/28/2012 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	5.8		%	0.10	0.10	1.0	D-2216
	Analysis Batch: 280-113366		Analysis Date: 03/28/2012 1146				DryWt Corrected: N

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

General Chemistry

Client Sample ID: J1NMM1

Lab Sample ID: 280-27068-2

Date Sampled: 03/26/2012 0809

Client Matrix: Solid

Date Received: 03/28/2012 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	3.7		%	0.10	0.10	1.0	D-2216
	Analysis Batch: 280-113366		Analysis Date: 03/28/2012 1146				DryWt Corrected: N

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

General Chemistry

Client Sample ID: J1NMM2

Lab Sample ID: 280-27068-3

Date Sampled: 03/26/2012 0820

Client Matrix: Solid

Date Received: 03/28/2012 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	5.3		%	0.10	0.10	1.0	D-2216
	Analysis Batch: 280-113366		Analysis Date: 03/28/2012 1146				DryWt Corrected: N

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

General Chemistry

Client Sample ID: J1NMM3

Lab Sample ID: 280-27068-4

Date Sampled: 03/26/2012 0826

Client Matrix: Solid

Date Received: 03/28/2012 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	5.0		%	0.10	0.10	1.0	D-2216
	Analysis Batch: 280-113366		Analysis Date: 03/28/2012 1146				DryWt Corrected: N

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

General Chemistry

Client Sample ID: J1NMM4

Lab Sample ID: 280-27068-5

Date Sampled: 03/26/2012 0833

Client Matrix: Solid

Date Received: 03/28/2012 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	6.1		%	0.10	0.10	1.0	D-2216
	Analysis Batch: 280-113366		Analysis Date: 03/28/2012 1146				DryWt Corrected: N

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

General Chemistry

Client Sample ID: J1NMM5

Lab Sample ID: 280-27068-6

Date Sampled: 03/26/2012 0840

Client Matrix: Solid

Date Received: 03/28/2012 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	5.0		%	0.10	0.10	1.0	D-2216
	Analysis Batch: 280-113366		Analysis Date: 03/28/2012 1146				DryWt Corrected: N

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

General Chemistry

Client Sample ID: J1NMM6

Lab Sample ID: 280-27068-7

Date Sampled: 03/26/2012 0845

Client Matrix: Solid

Date Received: 03/28/2012 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	8.3		%	0.10	0.10	1.0	D-2216
	Analysis Batch: 280-113366		Analysis Date: 03/28/2012 1146				DryWt Corrected: N

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

General Chemistry

Client Sample ID: J1NMM7

Lab Sample ID: 280-27068-8

Date Sampled: 03/26/2012 0852

Client Matrix: Solid

Date Received: 03/28/2012 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	4.1		%	0.10	0.10	1.0	D-2216
	Analysis Batch: 280-113366	Analysis Date: 03/28/2012 1146					DryWt Corrected: N

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

General Chemistry

Client Sample ID: J1NMM8

Lab Sample ID: 280-27068-9

Date Sampled: 03/26/2012 0857

Client Matrix: Solid

Date Received: 03/28/2012 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	3.3		%	0.10	0.10	1.0	D-2216
	Analysis Batch: 280-113366		Analysis Date: 03/28/2012 1146				DryWt Corrected: N

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

General Chemistry

Client Sample ID: J1NMM9

Lab Sample ID: 280-27068-10

Date Sampled: 03/26/2012 0904

Client Matrix: Solid

Date Received: 03/28/2012 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	3.7		%	0.10	0.10	1.0	D-2216
	Analysis Batch: 280-113366		Analysis Date: 03/28/2012 1146				DryWt Corrected: N

QUALITY CONTROL RESULTS

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

QC Association Summary

Lab Sample ID	Client Sample ID	Report		Method	Prep Batch
		Basis	Client Matrix		
GC/MS VOA					
Prep Batch: 280-113362					
LCS 280-113362/3-A	Lab Control Sample	T	Solid	5035	
LCSD 280-113362/4-A	Lab Control Sample Duplicate	T	Solid	5035	
MB 280-113362/1-A	Method Blank	T	Solid	5035	
280-27068-1	J1NMM0	T	Solid	5035	
280-27068-2	J1NMM1	T	Solid	5035	
280-27068-3	J1NMM2	T	Solid	5035	
280-27068-4	J1NMM3	T	Solid	5035	
280-27068-5	J1NMM4	T	Solid	5035	
280-27068-6	J1NMM5	T	Solid	5035	
280-27068-7	J1NMM6	T	Solid	5035	
280-27068-8	J1NMM7	T	Solid	5035	
280-27068-9	J1NMM8	T	Solid	5035	
280-27068-10	J1NMM9	T	Solid	5035	
Analysis Batch:280-113644					
LCS 280-113362/3-A	Lab Control Sample	T	Solid	8260B	280-113362
LCSD 280-113362/4-A	Lab Control Sample Duplicate	T	Solid	8260B	280-113362
MB 280-113362/1-A	Method Blank	T	Solid	8260B	280-113362
280-27068-1	J1NMM0	T	Solid	8260B	280-113362
280-27068-2	J1NMM1	T	Solid	8260B	280-113362
280-27068-3	J1NMM2	T	Solid	8260B	280-113362
280-27068-4	J1NMM3	T	Solid	8260B	280-113362
280-27068-5	J1NMM4	T	Solid	8260B	280-113362
280-27068-6	J1NMM5	T	Solid	8260B	280-113362
280-27068-7	J1NMM6	T	Solid	8260B	280-113362
280-27068-8	J1NMM7	T	Solid	8260B	280-113362
280-27068-9	J1NMM8	T	Solid	8260B	280-113362
280-27068-10	J1NMM9	T	Solid	8260B	280-113362

Report Basis

T = Total

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 280-113513					
LCS 280-113513/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-113513/1-A	Method Blank	T	Solid	3550C	
280-27068-1	J1NMM0	T	Solid	3550C	
280-27068-2	J1NMM1	T	Solid	3550C	
280-27068-3	J1NMM2	T	Solid	3550C	
280-27068-3MS	Matrix Spike	T	Solid	3550C	
280-27068-3MSD	Matrix Spike Duplicate	T	Solid	3550C	
280-27068-4	J1NMM3	T	Solid	3550C	
280-27068-5	J1NMM4	T	Solid	3550C	
280-27068-6	J1NMM5	T	Solid	3550C	
280-27068-7	J1NMM6	T	Solid	3550C	
280-27068-8	J1NMM7	T	Solid	3550C	
280-27068-9	J1NMM8	T	Solid	3550C	
280-27068-10	J1NMM9	T	Solid	3550C	
Analysis Batch:280-114466					
LCS 280-113513/2-A	Lab Control Sample	T	Solid	8270C	280-113513
MB 280-113513/1-A	Method Blank	T	Solid	8270C	280-113513
280-27068-1	J1NMM0	T	Solid	8270C	280-113513
280-27068-2	J1NMM1	T	Solid	8270C	280-113513
280-27068-3	J1NMM2	T	Solid	8270C	280-113513
280-27068-3MS	Matrix Spike	T	Solid	8270C	280-113513
280-27068-3MSD	Matrix Spike Duplicate	T	Solid	8270C	280-113513
280-27068-4	J1NMM3	T	Solid	8270C	280-113513
280-27068-5	J1NMM4	T	Solid	8270C	280-113513
280-27068-6	J1NMM5	T	Solid	8270C	280-113513
280-27068-7	J1NMM6	T	Solid	8270C	280-113513
280-27068-8	J1NMM7	T	Solid	8270C	280-113513
280-27068-9	J1NMM8	T	Solid	8270C	280-113513
280-27068-10	J1NMM9	T	Solid	8270C	280-113513

Report Basis

T = Total

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 280-113528					
LCS 280-113528/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-113528/1-A	Method Blank	T	Solid	3550C	
280-27068-1	J1NMM0	T	Solid	3550C	
280-27068-2	J1NMM1	T	Solid	3550C	
280-27068-3	J1NMM2	T	Solid	3550C	
280-27068-4	J1NMM3	T	Solid	3550C	
280-27068-5	J1NMM4	T	Solid	3550C	
280-27068-5MS	Matrix Spike	T	Solid	3550C	
280-27068-5MSD	Matrix Spike Duplicate	T	Solid	3550C	
280-27068-6	J1NMM5	T	Solid	3550C	
280-27068-7	J1NMM6	T	Solid	3550C	
280-27068-8	J1NMM7	T	Solid	3550C	
280-27068-9	J1NMM8	T	Solid	3550C	
280-27068-10	J1NMM9	T	Solid	3550C	
Prep Batch: 280-113534					
LCS 280-113534/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-113534/1-A	Method Blank	T	Solid	3550C	
280-27068-1	J1NMM0	T	Solid	3550C	
280-27068-2	J1NMM1	T	Solid	3550C	
280-27068-3	J1NMM2	T	Solid	3550C	
280-27068-4	J1NMM3	T	Solid	3550C	
280-27068-5	J1NMM4	T	Solid	3550C	
280-27068-6	J1NMM5	T	Solid	3550C	
280-27068-6MS	Matrix Spike	T	Solid	3550C	
280-27068-6MSD	Matrix Spike Duplicate	T	Solid	3550C	
280-27068-7	J1NMM6	T	Solid	3550C	
280-27068-8	J1NMM7	T	Solid	3550C	
280-27068-9	J1NMM8	T	Solid	3550C	
280-27068-10	J1NMM9	T	Solid	3550C	

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

QC Association Summary

Lab Sample ID	Client Sample ID	Report		Method	Prep Batch
		Basis	Client Matrix		
GC Semi VOA					
Analysis Batch:280-113934					
LCS 280-113528/2-A	Lab Control Sample	T	Solid	NWTPH-Dx	280-113528
MB 280-113528/1-A	Method Blank	T	Solid	NWTPH-Dx	280-113528
280-27068-1	J1NMM0	T	Solid	NWTPH-Dx	280-113528
280-27068-2	J1NMM1	T	Solid	NWTPH-Dx	280-113528
280-27068-3	J1NMM2	T	Solid	NWTPH-Dx	280-113528
280-27068-4	J1NMM3	T	Solid	NWTPH-Dx	280-113528
280-27068-5	J1NMM4	T	Solid	NWTPH-Dx	280-113528
280-27068-5MS	Matrix Spike	T	Solid	NWTPH-Dx	280-113528
280-27068-5MSD	Matrix Spike Duplicate	T	Solid	NWTPH-Dx	280-113528
280-27068-6	J1NMM5	T	Solid	NWTPH-Dx	280-113528
280-27068-7	J1NMM6	T	Solid	NWTPH-Dx	280-113528
280-27068-8	J1NMM7	T	Solid	NWTPH-Dx	280-113528
280-27068-9	J1NMM8	T	Solid	NWTPH-Dx	280-113528
280-27068-10	J1NMM9	T	Solid	NWTPH-Dx	280-113528
Prep Batch: 280-114269					
LCS 280-114269/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-114269/1-A	Method Blank	T	Solid	3550C	
280-27068-1	J1NMM0	T	Solid	3550C	
280-27068-2	J1NMM1	T	Solid	3550C	
280-27068-3	J1NMM2	T	Solid	3550C	
280-27068-4	J1NMM3	T	Solid	3550C	
280-27068-5	J1NMM4	T	Solid	3550C	
280-27068-6	J1NMM5	T	Solid	3550C	
280-27068-7	J1NMM6	T	Solid	3550C	
280-27068-8	J1NMM7	T	Solid	3550C	
280-27068-9	J1NMM8	T	Solid	3550C	
280-27068-9MS	Matrix Spike	T	Solid	3550C	
280-27068-9MSD	Matrix Spike Duplicate	T	Solid	3550C	
280-27068-10	J1NMM9	T	Solid	3550C	

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

QC Association Summary

Lab Sample ID	Client Sample ID	Report		Method	Prep Batch
		Basis	Client Matrix		
GC Semi VOA					
Analysis Batch:280-114315					
LCS 280-113534/2-A	Lab Control Sample	T	Solid	8082	280-113534
MB 280-113534/1-A	Method Blank	T	Solid	8082	280-113534
280-27068-1	J1NMM0	T	Solid	8082	280-113534
280-27068-2	J1NMM1	T	Solid	8082	280-113534
280-27068-3	J1NMM2	T	Solid	8082	280-113534
280-27068-4	J1NMM3	T	Solid	8082	280-113534
280-27068-5	J1NMM4	T	Solid	8082	280-113534
280-27068-6	J1NMM5	T	Solid	8082	280-113534
280-27068-6MS	Matrix Spike	T	Solid	8082	280-113534
280-27068-6MSD	Matrix Spike Duplicate	T	Solid	8082	280-113534
280-27068-7	J1NMM6	T	Solid	8082	280-113534
280-27068-8	J1NMM7	T	Solid	8082	280-113534
280-27068-9	J1NMM8	T	Solid	8082	280-113534
280-27068-10	J1NMM9	T	Solid	8082	280-113534
Analysis Batch:280-114549					
LCS 280-114269/2-A	Lab Control Sample	T	Solid	8081A	280-114269
MB 280-114269/1-A	Method Blank	T	Solid	8081A	280-114269
280-27068-1	J1NMM0	T	Solid	8081A	280-114269
280-27068-2	J1NMM1	T	Solid	8081A	280-114269
280-27068-3	J1NMM2	T	Solid	8081A	280-114269
280-27068-4	J1NMM3	T	Solid	8081A	280-114269
280-27068-5	J1NMM4	T	Solid	8081A	280-114269
280-27068-6	J1NMM5	T	Solid	8081A	280-114269
280-27068-7	J1NMM6	T	Solid	8081A	280-114269
280-27068-8	J1NMM7	T	Solid	8081A	280-114269
280-27068-9	J1NMM8	T	Solid	8081A	280-114269
280-27068-9MS	Matrix Spike	T	Solid	8081A	280-114269
280-27068-9MSD	Matrix Spike Duplicate	T	Solid	8081A	280-114269
280-27068-10	J1NMM9	T	Solid	8081A	280-114269

Report Basis

T = Total

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

QC Association Summary

Lab Sample ID	Client Sample ID	Report		Method	Prep Batch
		Basis	Client Matrix		
Metals					
Prep Batch: 280-113397					
LCS 280-113397/2-A	Lab Control Sample	T	Solid	7471A	
MB 280-113397/1-A	Method Blank	T	Solid	7471A	
280-27068-1	J1NMM0	T	Solid	7471A	
280-27068-1DU	Duplicate	T	Solid	7471A	
280-27068-1MS	Matrix Spike	T	Solid	7471A	
280-27068-2	J1NMM1	T	Solid	7471A	
280-27068-3	J1NMM2	T	Solid	7471A	
280-27068-4	J1NMM3	T	Solid	7471A	
280-27068-5	J1NMM4	T	Solid	7471A	
280-27068-6	J1NMM5	T	Solid	7471A	
280-27068-7	J1NMM6	T	Solid	7471A	
280-27068-8	J1NMM7	T	Solid	7471A	
280-27068-9	J1NMM8	T	Solid	7471A	
280-27068-10	J1NMM9	T	Solid	7471A	
Prep Batch: 280-113409					
LCS 280-113409/2-A	Lab Control Sample	T	Solid	3050B	
MB 280-113409/1-A	Method Blank	T	Solid	3050B	
280-27068-1	J1NMM0	T	Solid	3050B	
280-27068-2	J1NMM1	T	Solid	3050B	
280-27068-3	J1NMM2	T	Solid	3050B	
280-27068-4	J1NMM3	T	Solid	3050B	
280-27068-5	J1NMM4	T	Solid	3050B	
280-27068-6	J1NMM5	T	Solid	3050B	
280-27068-7	J1NMM6	T	Solid	3050B	
280-27068-8	J1NMM7	T	Solid	3050B	
280-27068-9	J1NMM8	T	Solid	3050B	
280-27068-10	J1NMM9	T	Solid	3050B	
280-27068-10DU	Duplicate	T	Solid	3050B	
280-27068-10MS	Matrix Spike	T	Solid	3050B	

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

QC Association Summary

Lab Sample ID	Client Sample ID	Report		Method	Prep Batch
		Basis	Client Matrix		
Metals					
Analysis Batch:280-113660					
LCS 280-113409/2-A	Lab Control Sample	T	Solid	6010B	280-113409
MB 280-113409/1-A	Method Blank	T	Solid	6010B	280-113409
280-27068-1	J1NMM0	T	Solid	6010B	280-113409
280-27068-2	J1NMM1	T	Solid	6010B	280-113409
280-27068-3	J1NMM2	T	Solid	6010B	280-113409
280-27068-4	J1NMM3	T	Solid	6010B	280-113409
280-27068-5	J1NMM4	T	Solid	6010B	280-113409
280-27068-6	J1NMM5	T	Solid	6010B	280-113409
280-27068-7	J1NMM6	T	Solid	6010B	280-113409
280-27068-8	J1NMM7	T	Solid	6010B	280-113409
280-27068-9	J1NMM8	T	Solid	6010B	280-113409
280-27068-10	J1NMM9	T	Solid	6010B	280-113409
280-27068-10DU	Duplicate	T	Solid	6010B	280-113409
280-27068-10MS	Matrix Spike	T	Solid	6010B	280-113409
Analysis Batch:280-113879					
LCS 280-113397/2-A	Lab Control Sample	T	Solid	7471A	280-113397
MB 280-113397/1-A	Method Blank	T	Solid	7471A	280-113397
280-27068-1	J1NMM0	T	Solid	7471A	280-113397
280-27068-1DU	Duplicate	T	Solid	7471A	280-113397
280-27068-1MS	Matrix Spike	T	Solid	7471A	280-113397
280-27068-2	J1NMM1	T	Solid	7471A	280-113397
280-27068-3	J1NMM2	T	Solid	7471A	280-113397
280-27068-4	J1NMM3	T	Solid	7471A	280-113397
280-27068-5	J1NMM4	T	Solid	7471A	280-113397
280-27068-6	J1NMM5	T	Solid	7471A	280-113397
280-27068-7	J1NMM6	T	Solid	7471A	280-113397
280-27068-8	J1NMM7	T	Solid	7471A	280-113397
280-27068-9	J1NMM8	T	Solid	7471A	280-113397
280-27068-10	J1NMM9	T	Solid	7471A	280-113397
Analysis Batch:280-114157					
280-27068-8	J1NMM7	T	Solid	6010B	280-113409

Report Basis

T = Total

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-113366					
280-27068-1	J1NMM0	T	Solid	D-2216	
280-27068-1DU	Duplicate	T	Solid	D-2216	
280-27068-2	J1NMM1	T	Solid	D-2216	
280-27068-3	J1NMM2	T	Solid	D-2216	
280-27068-4	J1NMM3	T	Solid	D-2216	
280-27068-5	J1NMM4	T	Solid	D-2216	
280-27068-6	J1NMM5	T	Solid	D-2216	
280-27068-7	J1NMM6	T	Solid	D-2216	
280-27068-8	J1NMM7	T	Solid	D-2216	
280-27068-9	J1NMM8	T	Solid	D-2216	
280-27068-10	J1NMM9	T	Solid	D-2216	

Report Basis

T = Total

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

QC Association Summary

Lab Sample ID	Client Sample ID	Report		Method	Prep Batch
		Basis	Client Matrix		
HPLC/IC					
Prep Batch: 280-113522					
LCS 280-113522/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-113522/1-A	Method Blank	T	Solid	3550C	
280-27068-1	J1NMM0	T	Solid	3550C	
280-27068-2	J1NMM1	T	Solid	3550C	
280-27068-3	J1NMM2	T	Solid	3550C	
280-27068-4	J1NMM3	T	Solid	3550C	
280-27068-4MS	Matrix Spike	T	Solid	3550C	
280-27068-4MSD	Matrix Spike Duplicate	T	Solid	3550C	
280-27068-5	J1NMM4	T	Solid	3550C	
280-27068-6	J1NMM5	T	Solid	3550C	
280-27068-7	J1NMM6	T	Solid	3550C	
280-27068-8	J1NMM7	T	Solid	3550C	
280-27068-9	J1NMM8	T	Solid	3550C	
280-27068-10	J1NMM9	T	Solid	3550C	
Analysis Batch:280-113727					
LCS 280-113522/2-A	Lab Control Sample	T	Solid	8310	280-113522
MB 280-113522/1-A	Method Blank	T	Solid	8310	280-113522
280-27068-1	J1NMM0	T	Solid	8310	280-113522
280-27068-2	J1NMM1	T	Solid	8310	280-113522
280-27068-3	J1NMM2	T	Solid	8310	280-113522
280-27068-4	J1NMM3	T	Solid	8310	280-113522
280-27068-4MS	Matrix Spike	T	Solid	8310	280-113522
280-27068-4MSD	Matrix Spike Duplicate	T	Solid	8310	280-113522
280-27068-5	J1NMM4	T	Solid	8310	280-113522
280-27068-6	J1NMM5	T	Solid	8310	280-113522
280-27068-7	J1NMM6	T	Solid	8310	280-113522
280-27068-8	J1NMM7	T	Solid	8310	280-113522
280-27068-9	J1NMM8	T	Solid	8310	280-113522
280-27068-10	J1NMM9	T	Solid	8310	280-113522

Report Basis

T = Total

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Method Blank - Batch: 280-113362

**Method: 8260B
Preparation: 5035**

Lab Sample ID: MB 280-113362/1-A
 Client Matrix: Solid
 Dilution: 1.0
 Analysis Date: 03/28/2012 1827
 Prep Date: 03/28/2012 1136
 Leach Date: N/A

Analysis Batch: 280-113644
 Prep Batch: 280-113362
 Leach Batch: N/A
 Units: ug/Kg

Instrument ID: MSV_G2
 Lab File ID: G2_5045.D
 Initial Weight/Volume: 5.025 g
 Final Weight/Volume: 5 mL

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	0.42	U	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	1.6	U	1.6	5.0
4-Methyl-2-pentanone (MIBK)	4.3	U	4.3	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)	80	58 - 140
Toluene-d8 (Surr)	101	80 - 126
4-Bromofluorobenzene (Surr)	98	76 - 127
Dibromofluoromethane (Surr)	81	75 - 121

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Method Blank TICs- Batch: 280-113362

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

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

**Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-113362**

**Method: 8260B
Preparation: 5035**

LCS Lab Sample ID: LCS 280-113362/3-A	Analysis Batch: 280-113644	Instrument ID: MSV_G2
Client Matrix: Solid	Prep Batch: 280-113362	Lab File ID: G2_5043.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 g
Analysis Date: 03/28/2012 1723	Units: ug/Kg	Final Weight/Volume: 5 mL
Prep Date: 03/28/2012 1136		
Leach Date: N/A		

LCSD Lab Sample ID: LCSD 280-113362/4-A	Analysis Batch: 280-113644	Instrument ID: MSV_G2
Client Matrix: Solid	Prep Batch: 280-113362	Lab File ID: G2_5046.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 5 g
Analysis Date: 03/28/2012 1909	Units: ug/Kg	Final Weight/Volume: 5 mL
Prep Date: 03/28/2012 1136		
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
	LCS	LCSD					
Acetone	89	90	65 - 150	1	28		
Benzene	89	89	75 - 135	0	20		
Bromodichloromethane	100	100	73 - 135	0	20		
Bromoform	99	99	77 - 135	1	20		
Bromomethane	91	90	52 - 135	1	22		
2-Butanone (MEK)	118	117	45 - 177	1	32		
Carbon disulfide	71	69	45 - 150	3	24		
Carbon tetrachloride	88	87	69 - 138	2	20		
Chlorobenzene	107	107	78 - 135	0	20		
Dibromochloromethane	114	116	77 - 135	1	20		
Chloroethane	85	86	51 - 145	1	22		
Chloroform	96	95	73 - 123	1	20		
Chloromethane	89	90	41 - 138	1	25		
1,1-Dichloroethane	90	90	70 - 135	0	20		
1,2-Dichloroethane	109	108	69 - 135	1	20		
1,1-Dichloroethene	91	90	79 - 135	1	20		
1,2-Dichloroethene, Total	91	89	78 - 135	2	20		
1,2-Dichloropropane	89	89	72 - 121	0	20		
cis-1,3-Dichloropropene	96	97	71 - 135	1	20		
trans-1,3-Dichloropropene	100	101	71 - 135	2	20		
Ethylbenzene	104	104	73 - 125	0	20		
2-Hexanone	114	111	67 - 150	2	29		
Methylene Chloride	92	92	76 - 136	1	21		
4-Methyl-2-pentanone (MIBK)	99	98	69 - 150	1	25		
Styrene	107	107	76 - 135	0	20		
1,1,2,2-Tetrachloroethane	111	111	65 - 135	0	21		
Tetrachloroethene	106	106	76 - 135	0	20		
Toluene	90	90	77 - 122	0	20		
1,1,1-Trichloroethane	89	88	70 - 135	1	20		
1,1,2-Trichloroethane	97	98	78 - 135	1	20		
Trichloroethene	93	92	77 - 135	1	20		
Vinyl chloride	81	83	43 - 145	3	24		
Xylenes, Total	102	102	76 - 135	0	20		
Surrogate		LCS % Rec	LCSD % Rec		Acceptance Limits		
1,2-Dichloroethane-d4 (Surr)		85	86		58 - 140		

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
Toluene-d8 (Surr)	100	99	80 - 126
4-Bromofluorobenzene (Surr)	97	101	76 - 127
Dibromofluoromethane (Surr)	84	83	75 - 121

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Method Blank - Batch: 280-113513

**Method: 8270C
Preparation: 3550C**

Lab Sample ID: MB 280-113513/1-A
 Client Matrix: Solid
 Dilution: 1.0
 Analysis Date: 04/05/2012 1956
 Prep Date: 03/29/2012 1555
 Leach Date: N/A

Analysis Batch: 280-114466
 Prep Batch: 280-113513
 Leach Batch: N/A
 Units: ug/Kg

Instrument ID: MSS_Y
 Lab File ID: Y7044.D
 Initial Weight/Volume: 30.1 g
 Final Weight/Volume: 1000 uL
 Injection Volume: 0.5 uL

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	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	72.3	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	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

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Method Blank - Batch: 280-113513

Method: 8270C

Preparation: 3550C

Lab Sample ID: MB 280-113513/1-A
 Client Matrix: Solid
 Dilution: 1.0
 Analysis Date: 04/05/2012 1956
 Prep Date: 03/29/2012 1555
 Leach Date: N/A

Analysis Batch: 280-114466
 Prep Batch: 280-113513
 Leach Batch: N/A
 Units: ug/Kg

Instrument ID: MSS_Y
 Lab File ID: Y7044.D
 Initial Weight/Volume: 30.1 g
 Final Weight/Volume: 1000 uL
 Injection Volume: 0.5 uL

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	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	Acceptance Limits
2-Fluorobiphenyl	83	50 - 120
2-Fluorophenol	82	53 - 120
Nitrobenzene-d5	83	50 - 120
Phenol-d5	83	52 - 120
Terphenyl-d14	90	55 - 120
2,4,6-Tribromophenol	79	51 - 120

Method Blank TICs- Batch: 280-113513

Cas Number	Analyte	RT	Est. Result	Qual
100-51-6	Benzyl alcohol	4.60	22.9	J N
	Unknown	11.16	185	J N
	Unknown	3.00	3080	J N

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Lab Control Sample - Batch: 280-113513

Method: 8270C

Preparation: 3550C

Lab Sample ID: LCS 280-113513/2-A	Analysis Batch: 280-114466	Instrument ID: MSS_Y
Client Matrix: Solid	Prep Batch: 280-113513	Lab File ID: Y7045.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 32.0 g
Analysis Date: 04/05/2012 2015	Units: ug/Kg	Final Weight/Volume: 1000 uL
Prep Date: 03/29/2012 1555		Injection Volume: 0.5 uL
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acenaphthene	2500	1930	77	60 - 120	
Acenaphthylene	2500	2030	81	64 - 120	
Anthracene	2500	2050	82	63 - 120	
Benzo[a]anthracene	2500	2050	82	65 - 120	
Benzo[a]pyrene	2500	1950	78	59 - 120	
Benzo[b]fluoranthene	2500	2070	83	47 - 129	
Benzo[ghi]perylene	2500	2220	89	55 - 126	
Benzo[k]fluoranthene	2500	2220	89	48 - 130	
Bis(2-chloroethoxy)methane	2500	1900	76	56 - 120	
Bis(2-chloroethyl)ether	2500	1860	74	51 - 120	
bis (2-chloroisopropyl) ether	2500	1900	76	49 - 120	
Bis(2-ethylhexyl) phthalate	2500	2030	81	65 - 120	
4-Bromophenyl phenyl ether	2500	2080	83	64 - 120	
Butyl benzyl phthalate	2500	2100	84	65 - 120	
Carbazole	2500	2020	81	64 - 120	
4-Chloroaniline	2500	1020	41	28 - 120	
4-Chloro-3-methylphenol	2500	2030	81	63 - 120	
2-Chloronaphthalene	2500	1960	78	59 - 120	
2-Chlorophenol	2500	1980	79	57 - 120	
4-Chlorophenyl phenyl ether	2500	2090	84	64 - 120	
Chrysene	2500	2030	81	64 - 120	
Dibenz(a,h)anthracene	2500	2110	84	50 - 133	
Dibenzofuran	2500	2030	81	61 - 120	
1,2-Dichlorobenzene	2500	1860	74	53 - 120	
1,3-Dichlorobenzene	2500	1800	72	52 - 120	
1,4-Dichlorobenzene	2500	1870	75	52 - 120	
3,3'-Dichlorobenzidine	2500	798	32	30 - 120	
2,4-Dichlorophenol	2500	2060	82	60 - 120	
Diethyl phthalate	2500	2180	87	66 - 120	
2,4-Dimethylphenol	2500	1900	76	54 - 120	
Dimethyl phthalate	2500	2090	83	65 - 120	
Di-n-butyl phthalate	2500	2150	86	67 - 120	
4,6-Dinitro-2-methylphenol	2500	2040	82	57 - 120	
2,4-Dinitrophenol	2500	1750	70	46 - 120	
2,4-Dinitrotoluene	2500	2190	87	68 - 120	
2,6-Dinitrotoluene	2500	2040	81	64 - 120	
Di-n-octyl phthalate	2500	2070	83	66 - 120	
Fluoranthene	2500	2140	86	66 - 120	
Fluorene	2500	2040	82	64 - 120	
Hexachlorobenzene	2500	2130	85	62 - 120	
Hexachlorobutadiene	2500	2080	83	53 - 120	

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Lab Control Sample - Batch: 280-113513

Method: 8270C

Preparation: 3550C

Lab Sample ID: LCS 280-113513/2-A	Analysis Batch: 280-114466	Instrument ID: MSS_Y
Client Matrix: Solid	Prep Batch: 280-113513	Lab File ID: Y7045.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 32.0 g
Analysis Date: 04/05/2012 2015	Units: ug/Kg	Final Weight/Volume: 1000 uL
Prep Date: 03/29/2012 1555		Injection Volume: 0.5 uL
Leach Date: N/A		

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Hexachlorocyclopentadiene	2500	2040	82	47 - 120	
Hexachloroethane	2500	1920	77	51 - 120	
Indeno[1,2,3-cd]pyrene	2500	2140	86	63 - 120	
Isophorone	2500	1910	76	56 - 120	
2-Methylnaphthalene	2500	1930	77	57 - 120	
2-Methylphenol	2500	1930	77	56 - 120	
3 & 4 Methylphenol	5000	3910	78	53 - 120	
Naphthalene	2500	1920	77	57 - 120	
2-Nitroaniline	2500	2300	92	63 - 120	
3-Nitroaniline	2500	1320	53	47 - 120	
4-Nitroaniline	2500	1840	74	64 - 120	
Nitrobenzene	2500	2020	81	54 - 120	
2-Nitrophenol	2500	2080	83	56 - 120	
4-Nitrophenol	2500	2450	98	63 - 121	
N-Nitrosodi-n-propylamine	2500	1980	79	51 - 120	
N-Nitrosodiphenylamine	2130	1710	80	61 - 120	
Pentachlorophenol	2500	1580	63	56 - 120	
Phenanthrene	2500	2050	82	64 - 120	
Phenol	2500	1920	77	56 - 120	
Pyrene	2500	1960	78	64 - 120	
1,2,4-Trichlorobenzene	2500	1880	75	52 - 120	
2,4,5-Trichlorophenol	2500	2210	88	64 - 120	
2,4,6-Trichlorophenol	2500	2200	88	61 - 120	

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	82	50 - 120
2-Fluorophenol	80	53 - 120
Nitrobenzene-d5	83	50 - 120
Phenol-d5	82	52 - 120
Terphenyl-d14	86	55 - 120
2,4,6-Tribromophenol	94	51 - 120

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-113513**

**Method: 8270C
Preparation: 3550C**

MS Lab Sample ID: 280-27068-3	Analysis Batch: 280-114466	Instrument ID: MSS_Y
Client Matrix: Solid	Prep Batch: 280-113513	Lab File ID: Y7056.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 31.4 g
Analysis Date: 04/05/2012 2349		Final Weight/Volume: 1000 uL
Prep Date: 03/29/2012 1555		Injection Volume: 0.5 uL
Leach Date: N/A		

MSD Lab Sample ID: 280-27068-3	Analysis Batch: 280-114466	Instrument ID: MSS_Y
Client Matrix: Solid	Prep Batch: 280-113513	Lab File ID: Y7057.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 30.2 g
Analysis Date: 04/06/2012 0009		Final Weight/Volume: 1000 uL
Prep Date: 03/29/2012 1555		Injection Volume: 0.5 uL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Acenaphthene	78	78	60 - 120	4	30		
Acenaphthylene	81	81	64 - 120	4	30		
Anthracene	82	85	63 - 120	7	30		
Benzo[a]anthracene	81	82	65 - 120	5	30		
Benzo[a]pyrene	77	80	59 - 120	9	30		
Benzo[b]fluoranthene	89	94	47 - 129	10	44		
Benzo[ghi]perylene	87	89	55 - 126	6	31		
Benzo[k]fluoranthene	77	77	48 - 130	4	30		
Bis(2-chloroethoxy)methane	72	75	56 - 120	8	30		
Bis(2-chloroethyl)ether	72	74	51 - 120	6	30		
bis (2-chloroisopropyl) ether	75	76	49 - 120	5	30		
Bis(2-ethylhexyl) phthalate	81	82	65 - 120	6	30		
4-Bromophenyl phenyl ether	85	87	64 - 120	6	30		
Butyl benzyl phthalate	87	90	65 - 120	7	30		
Carbazole	81	83	64 - 120	7	30		
4-Chloroaniline	45	43	28 - 120	0	30		
4-Chloro-3-methylphenol	84	87	63 - 120	8	30		
2-Chloronaphthalene	79	79	59 - 120	5	30		
2-Chlorophenol	77	77	57 - 120	4	30		
4-Chlorophenyl phenyl ether	85	84	64 - 120	3	30		
Chrysene	80	84	64 - 120	9	35		
Dibenz(a,h)anthracene	81	84	50 - 133	7	30		
Dibenzofuran	82	81	61 - 120	3	30		
1,2-Dichlorobenzene	72	73	53 - 120	5	30		
1,3-Dichlorobenzene	70	71	52 - 120	5	32		
1,4-Dichlorobenzene	71	72	52 - 120	6	30		
3,3'-Dichlorobenzidine	59	56	30 - 120	2	30		
2,4-Dichlorophenol	81	83	60 - 120	7	30		
Diethyl phthalate	87	88	66 - 120	5	30		
2,4-Dimethylphenol	80	81	54 - 120	4	30		
Dimethyl phthalate	85	86	65 - 120	5	30		
Di-n-butyl phthalate	87	91	67 - 120	9	30		

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-113513**

**Method: 8270C
Preparation: 3550C**

MS Lab Sample ID: 280-27068-3	Analysis Batch: 280-114466	Instrument ID: MSS_Y
Client Matrix: Solid	Prep Batch: 280-113513	Lab File ID: Y7056.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 31.4 g
Analysis Date: 04/05/2012 2349		Final Weight/Volume: 1000 uL
Prep Date: 03/29/2012 1555		Injection Volume: 0.5 uL
Leach Date: N/A		

MSD Lab Sample ID: 280-27068-3	Analysis Batch: 280-114466	Instrument ID: MSS_Y
Client Matrix: Solid	Prep Batch: 280-113513	Lab File ID: Y7057.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 30.2 g
Analysis Date: 04/06/2012 0009		Final Weight/Volume: 1000 uL
Prep Date: 03/29/2012 1555		Injection Volume: 0.5 uL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
4,6-Dinitro-2-methylphenol	65	71	57 - 120	13	30		
2,4-Dinitrophenol	47	49	46 - 120	8	34		
2,4-Dinitrotoluene	86	89	68 - 120	8	30		
2,6-Dinitrotoluene	84	84	64 - 120	4	30		
Di-n-octyl phthalate	85	88	66 - 120	8	30		
Fluoranthene	85	88	66 - 120	7	30		
Fluorene	82	83	64 - 120	5	30		
Hexachlorobenzene	84	86	62 - 120	6	30		
Hexachlorobutadiene	79	83	53 - 120	9	30		
Hexachlorocyclopentadiene	67	70	47 - 120	8	30		
Hexachloroethane	74	76	51 - 120	6	30		
Indeno[1,2,3-cd]pyrene	86	87	63 - 120	5	30		
Isophorone	73	76	56 - 120	8	30		
2-Methylnaphthalene	75	77	57 - 120	7	30		
2-Methylphenol	77	77	56 - 120	4	30		
3 & 4 Methylphenol	79	79	53 - 120	3	30		
Naphthalene	73	77	57 - 120	8	30		
2-Nitroaniline	94	95	63 - 120	5	30		
3-Nitroaniline	61	58	47 - 120	1	30		
4-Nitroaniline	84	81	64 - 120	1	30		
Nitrobenzene	75	80	54 - 120	10	30		
2-Nitrophenol	78	84	56 - 120	12	30		
4-Nitrophenol	100	102	63 - 121	6	30		
N-Nitrosodi-n-propylamine	77	77	51 - 120	5	30		
N-Nitrosodiphenylamine	81	83	61 - 120	7	36		
Pentachlorophenol	64	64	56 - 120	4	30		
Phenanthrene	81	84	64 - 120	7	30		
Phenol	76	76	56 - 120	5	30		
Pyrene	78	80	64 - 120	7	38		
1,2,4-Trichlorobenzene	72	75	52 - 120	8	30		
2,4,5-Trichlorophenol	91	91	64 - 120	4	30		
2,4,6-Trichlorophenol	90	89	61 - 120	3	30		

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-113513**

**Method: 8270C
Preparation: 3550C**

MS Lab Sample ID: 280-27068-3	Analysis Batch: 280-114466	Instrument ID: MSS_Y
Client Matrix: Solid	Prep Batch: 280-113513	Lab File ID: Y7056.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 31.4 g
Analysis Date: 04/05/2012 2349		Final Weight/Volume: 1000 uL
Prep Date: 03/29/2012 1555		Injection Volume: 0.5 uL
Leach Date: N/A		

MSD Lab Sample ID: 280-27068-3	Analysis Batch: 280-114466	Instrument ID: MSS_Y
Client Matrix: Solid	Prep Batch: 280-113513	Lab File ID: Y7057.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 30.2 g
Analysis Date: 04/06/2012 0009		Final Weight/Volume: 1000 uL
Prep Date: 03/29/2012 1555		Injection Volume: 0.5 uL
Leach Date: N/A		

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Surrogate		MS % Rec	MSD % Rec			Acceptance Limits	
2-Fluorobiphenyl		83	83			50 - 120	
2-Fluorophenol		78	78			53 - 120	
Nitrobenzene-d5		81	85			50 - 120	
Phenol-d5		81	81			52 - 120	
Terphenyl-d14		87	89			55 - 120	
2,4,6-Tribromophenol		97	96			51 - 120	

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Method Blank - Batch: 280-114269

Method: 8081A

Preparation: 3550C

Lab Sample ID: MB 280-114269/1-A
 Client Matrix: Solid
 Dilution: 1.0
 Analysis Date: 04/05/2012 1916
 Prep Date: 04/04/2012 1628
 Leach Date: N/A

Analysis Batch: 280-114549
 Prep Batch: 280-114269
 Leach Batch: N/A
 Units: ug/Kg

Instrument ID: GCS_P2
 Lab File ID: 04050039.D
 Initial Weight/Volume: 30.5 g
 Final Weight/Volume: 10000 uL
 Injection Volume: 1 uL
 Column ID: PRIMARY

Analyte	Result	Qual	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)	0.46	U	0.46	1.6
Heptachlor	0.21	U	0.21	1.6
Heptachlor epoxide	0.42	U	0.42	1.6
Endosulfan I	0.17	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	16	U	16	160

Surrogate	% Rec	Acceptance Limits
Tetrachloro-m-xylene	100	59 - 115
Decachlorobiphenyl	99	63 - 124

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Lab Control Sample - Batch: 280-114269

Method: 8081A

Preparation: 3550C

Lab Sample ID: LCS 280-114269/2-A	Analysis Batch: 280-114549	Instrument ID: GCS_P2
Client Matrix: Solid	Prep Batch: 280-114269	Lab File ID: 04050040.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 30.8 g
Analysis Date: 04/05/2012 1933	Units: ug/Kg	Final Weight/Volume: 10000 uL
Prep Date: 04/04/2012 1628		Injection Volume: 1 uL
Leach Date: N/A		Column ID: PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
4,4'-DDD	16.2	13.6	84	54 - 130	
4,4'-DDE	16.2	15.5	96	58 - 121	
4,4'-DDT	16.2	15.2	94	57 - 133	
Aldrin	16.2	16.0	98	63 - 115	
alpha-BHC	16.2	15.7	97	64 - 116	
beta-BHC	16.2	16.2	100	67 - 115	
delta-BHC	16.2	15.9	98	67 - 115	
gamma-BHC (Lindane)	16.2	15.8	97	63 - 118	
Heptachlor	16.2	15.4	95	68 - 115	
Heptachlor epoxide	16.2	14.8	91	66 - 117	
Endosulfan I	16.2	14.6	90	65 - 118	
Endosulfan II	16.2	15.3	94	71 - 118	
Endosulfan sulfate	16.2	14.7	91	67 - 123	
Endrin	16.2	17.1	105	77 - 134	
Endrin aldehyde	16.2	8.70	54	47 - 115	
Endrin ketone	16.2	14.2	88	62 - 115	
gamma-Chlordane	16.2	15.9	98	65 - 117	
Methoxychlor	16.2	14.8	91	67 - 130	
alpha-Chlordane	16.2	15.6	96	63 - 120	
Dieldrin	16.2	15.6	96	65 - 127	
Surrogate	% Rec	Acceptance Limits			
Tetrachloro-m-xylene	98	59 - 115			
Decachlorobiphenyl	97	63 - 124			

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-27068-1
Sdg Number: J01458

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-114269**

**Method: 8081A
Preparation: 3550C**

MS Lab Sample ID: 280-27068-9
Client Matrix: Solid
Dilution: 1.0
Analysis Date: 04/05/2012 2307
Prep Date: 04/04/2012 1628
Leach Date: N/A

Analysis Batch: 280-114549
Prep Batch: 280-114269
Leach Batch: N/A

Instrument ID: GCS_P2
Lab File ID: 04050053.D
Initial Weight/Volume: 31.4 g
Final Weight/Volume: 10000 uL
Injection Volume: 1 uL
Column ID: PRIMARY

MSD Lab Sample ID: 280-27068-9
Client Matrix: Solid
Dilution: 1.0
Analysis Date: 04/05/2012 2324
Prep Date: 04/04/2012 1628
Leach Date: N/A

Analysis Batch: 280-114549
Prep Batch: 280-114269
Leach Batch: N/A

Instrument ID: GCS_P2
Lab File ID: 04050054.D
Initial Weight/Volume: 32.1 g
Final Weight/Volume: 10000 uL
Injection Volume: 1 uL
Column ID: PRIMARY

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
4,4'-DDD	90	73	54 - 130	23	20		*
4,4'-DDE	100	97	58 - 121	4	15		
4,4'-DDT	92	65	57 - 133	37	29		*
Aldrin	104	104	63 - 115	2	50		
alpha-BHC	101	104	64 - 116	1	17		
beta-BHC	103	97	67 - 115	9	17		
delta-BHC	101	89	67 - 115	15	19		
gamma-BHC (Lindane)	100	101	63 - 118	1	24		
Heptachlor	100	100	68 - 115	2	18		
Heptachlor epoxide	98	97	66 - 117	3	18		
Endosulfan I	95	92	65 - 118	6	26		
Endosulfan II	97	18	71 - 118	138	20		N *
Endosulfan sulfate	92	7	67 - 123	172	22		J N *
Endrin	114	108	77 - 134	8	30		
Endrin aldehyde	47	29	47 - 115	52	29		N *
Endrin ketone	91	41	62 - 115	76	20		N *
gamma-Chlordane	104	101	65 - 117	5	21		
Methoxychlor	83	0	67 - 130	NC	23		U N
alpha-Chlordane	101	100	63 - 120	3	18		
Dieldrin	103	100	65 - 127	5	25		
Surrogate	MS % Rec		MSD % Rec		Acceptance Limits		
Tetrachloro-m-xylene	105		105		59 - 115		
Decachlorobiphenyl	104		104		63 - 124		

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-27068-1
Sdg Number: J01458

Method Blank - Batch: 280-113534

**Method: 8082
Preparation: 3550C**

Lab Sample ID: MB 280-113534/1-A
Client Matrix: Solid
Dilution: 1.0
Analysis Date: 04/04/2012 1007
Prep Date: 03/29/2012 1416
Leach Date: N/A

Analysis Batch: 280-114315
Prep Batch: 280-113534
Leach Batch: N/A
Units: ug/Kg

Instrument ID: GCS_W
Lab File ID: 004F0401.D
Initial Weight/Volume: 32.6 g
Final Weight/Volume: 5000 uL
Injection Volume: 1 uL
Column ID: PRIMARY

Analyte	Result	Qual	MDL	RL
Aroclor 1016	2.5	U	2.5	9.2
Aroclor 1221	7.4	U	7.4	15
Aroclor 1232	1.8	U	1.8	9.2
Aroclor 1242	4.3	U	4.3	9.2
Aroclor 1248	4.3	U	4.3	9.2
Aroclor 1254	2.4	U	2.4	9.2
Aroclor 1260	2.4	U	2.4	9.2

Surrogate	% Rec	Acceptance Limits
Decachlorobiphenyl	97	59 - 130
Tetrachloro-m-xylene	82	53 - 128

Lab Control Sample - Batch: 280-113534

**Method: 8082
Preparation: 3550C**

Lab Sample ID: LCS 280-113534/2-A
Client Matrix: Solid
Dilution: 1.0
Analysis Date: 04/04/2012 1031
Prep Date: 03/29/2012 1416
Leach Date: N/A

Analysis Batch: 280-114315
Prep Batch: 280-113534
Leach Batch: N/A
Units: ug/Kg

Instrument ID: GCS_W
Lab File ID: 005F0501.D
Initial Weight/Volume: 31.4 g
Final Weight/Volume: 5000 uL
Injection Volume: 1 uL
Column ID: PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aroclor 1016	31.8	24.8	78	54 - 132	
Aroclor 1260	31.8	31.6	99	62 - 129	

Surrogate	% Rec	Acceptance Limits
Decachlorobiphenyl	98	59 - 130
Tetrachloro-m-xylene	91	53 - 128

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-27068-1
Sdg Number: J01458

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-113534**

**Method: 8082
Preparation: 3550C**

MS Lab Sample ID:	280-27068-6	Analysis Batch:	280-114315	Instrument ID:	GCS_W
Client Matrix:	Solid	Prep Batch:	280-113534	Lab File ID:	012F1201.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.2 g
Analysis Date:	04/04/2012 1313			Final Weight/Volume:	5000 uL
Prep Date:	03/29/2012 1416			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-27068-6	Analysis Batch:	280-114315	Instrument ID:	GCS_W
Client Matrix:	Solid	Prep Batch:	280-113534	Lab File ID:	013F1301.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.4 g
Analysis Date:	04/04/2012 1336			Final Weight/Volume:	5000 uL
Prep Date:	03/29/2012 1416			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Aroclor 1016	78	79	54 - 132	1	26		
Aroclor 1260	104	106	62 - 129	1	26		
Surrogate		MS % Rec	MSD % Rec			Acceptance Limits	
Decachlorobiphenyl		101	104			59 - 130	
Tetrachloro-m-xylene		87	92			53 - 128	

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-27068-1
Sdg Number: J01458

Method Blank - Batch: 280-113528

**Method: NWTPH-Dx
Preparation: 3550C**

Lab Sample ID: MB 280-113528/1-A
Client Matrix: Solid
Dilution: 1.0
Analysis Date: 03/30/2012 1329
Prep Date: 03/29/2012 1209
Leach Date: N/A

Analysis Batch: 280-113934
Prep Batch: 280-113528
Leach Batch: N/A
Units: ug/Kg

Instrument ID: GCS_U
Lab File ID: 005B0501.D
Initial Weight/Volume: 32.4 g
Final Weight/Volume: 1000 uL
Injection Volume: 1 uL

Analyte	Result	Qual	MDL	RL
C10-C36	920	U	920	3700
C10-C28	630	U	630	3700

Surrogate	% Rec	Acceptance Limits
o-Terphenyl	113	49 - 115

Lab Control Sample - Batch: 280-113528

**Method: NWTPH-Dx
Preparation: 3550C**

Lab Sample ID: LCS 280-113528/2-A
Client Matrix: Solid
Dilution: 1.0
Analysis Date: 03/30/2012 1357
Prep Date: 03/29/2012 1209
Leach Date: N/A

Analysis Batch: 280-113934
Prep Batch: 280-113528
Leach Batch: N/A
Units: ug/Kg

Instrument ID: GCS_U
Lab File ID: 006B0601.D
Initial Weight/Volume: 32.2 g
Final Weight/Volume: 1000 uL
Injection Volume: 1 uL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
C10-C36	62100	63100	102	57 - 115	
C10-C28	62100	63000	101	53 - 115	

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

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-27068-1
Sdg Number: J01458

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-113528**

**Method: NWTPH-Dx
Preparation: 3550C**

MS Lab Sample ID: 280-27068-5
Client Matrix: Solid
Dilution: 1.0
Analysis Date: 03/30/2012 1648
Prep Date: 03/29/2012 1209
Leach Date: N/A

Analysis Batch: 280-113934
Prep Batch: 280-113528
Leach Batch: N/A

Instrument ID: GCS_U
Lab File ID: 012B1201.D
Initial Weight/Volume: 30.3 g
Final Weight/Volume: 1000 uL
Injection Volume: 1 uL

MSD Lab Sample ID: 280-27068-5
Client Matrix: Solid
Dilution: 1.0
Analysis Date: 03/30/2012 1716
Prep Date: 03/29/2012 1209
Leach Date: N/A

Analysis Batch: 280-113934
Prep Batch: 280-113528
Leach Batch: N/A

Instrument ID: GCS_U
Lab File ID: 013B1301.D
Initial Weight/Volume: 30.6 g
Final Weight/Volume: 1000 uL
Injection Volume: 1 uL

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
C10-C36	91	72	57 - 115	15	23		
C10-C28	95	86	56 - 115	10	23		
Surrogate	MS % Rec		MSD % Rec		Acceptance Limits		
o-Terphenyl	71		77		49 - 115		

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Method Blank - Batch: 280-113522

Method: 8310

Preparation: 3550C

Lab Sample ID: MB 280-113522/1-A
 Client Matrix: Solid
 Dilution: 1.0
 Analysis Date: 03/31/2012 0044
 Prep Date: 03/29/2012 1327
 Leach Date: N/A

Analysis Batch: 280-113727
 Prep Batch: 280-113522
 Leach Batch: N/A
 Units: ug/Kg

Instrument ID: CHHPLC_G
 Lab File ID: G0330027.D
 Initial Weight/Volume: 31.5 g
 Final Weight/Volume: 4000 uL
 Injection Volume: 20 uL
 Column ID: PRIMARY

Analyte	Result	Qual	MDL	RL
Acenaphthene	9.5	U	9.5	95
Acenaphthylene	8.6	U	8.6	95
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	10	U	10	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	95
Phenanthrene	11	U	11	38
Pyrene	11	U	11	38
Surrogate	% Rec		Acceptance Limits	
Terphenyl-d14 (SUR)	86		72 - 115	

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Lab Control Sample - Batch: 280-113522

Method: 8310

Preparation: 3550C

Lab Sample ID: LCS 280-113522/2-A	Analysis Batch: 280-113727	Instrument ID: CHHPLC_G
Client Matrix: Solid	Prep Batch: 280-113522	Lab File ID: G0330028.D
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 31.9 g
Analysis Date: 03/31/2012 0114	Units: ug/Kg	Final Weight/Volume: 4000 uL
Prep Date: 03/29/2012 1327		Injection Volume: 20 uL
Leach Date: N/A		Column ID: PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acenaphthene	1880	1570	84	78 - 116	
Acenaphthylene	1880	1570	83	76 - 115	
Anthracene	1880	1560	83	74 - 115	
Benzo[a]anthracene	1880	1690	90	85 - 120	
Benzo[a]pyrene	1880	1480	79	74 - 121	
Benzo[b]fluoranthene	1880	1670	89	85 - 115	
Benzo[g,h,i]perylene	1880	1650	88	85 - 120	
Benzo[k]fluoranthene	1880	1660	88	85 - 115	
Chrysene	1880	1600	85	83 - 115	
Dibenzo(a,h)anthracene	1880	1700	90	83 - 115	
Fluoranthene	1880	1680	89	83 - 115	
Fluorene	1880	1610	86	80 - 115	
Indeno[1,2,3-cd]pyrene	1880	1680	89	85 - 123	
Naphthalene	1880	1560	83	80 - 121	
Phenanthrene	1880	1610	86	80 - 115	
Pyrene	1880	1570	84	75 - 116	
Surrogate	% Rec	Acceptance Limits			
Terphenyl-d14 (SUR)	84	72 - 115			

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-27068-1
Sdg Number: J01458

**Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-113522**

**Method: 8310
Preparation: 3550C**

MS Lab Sample ID: 280-27068-4
Client Matrix: Solid
Dilution: 1.0
Analysis Date: 03/31/2012 0347
Prep Date: 03/29/2012 1327
Leach Date: N/A

Analysis Batch: 280-113727
Prep Batch: 280-113522
Leach Batch: N/A

Instrument ID: CHHPLC_G
Lab File ID: G0330033.D
Initial Weight/Volume: 30.5 g
Final Weight/Volume: 4000 uL
Injection Volume: 20 uL
Column ID: PRIMARY

MSD Lab Sample ID: 280-27068-4
Client Matrix: Solid
Dilution: 1.0
Analysis Date: 03/31/2012 0417
Prep Date: 03/29/2012 1327
Leach Date: N/A

Analysis Batch: 280-113727
Prep Batch: 280-113522
Leach Batch: N/A

Instrument ID: CHHPLC_G
Lab File ID: G0330034.D
Initial Weight/Volume: 30.6 g
Final Weight/Volume: 4000 uL
Injection Volume: 20 uL
Column ID: PRIMARY

Analyte	% Rec.		Limit	RPD	RPD Limit	MS Qual	MSD Qual
	MS	MSD					
Acenaphthene	95	87	78 - 116	9	20		
Acenaphthylene	93	75	76 - 115	22	21		N *
Anthracene	93	82	74 - 115	12	20		
Benzo[a]anthracene	98	89	85 - 120	10	20		
Benzo[a]pyrene	90	81	74 - 121	10	20		
Benzo[b]fluoranthene	100	81	85 - 115	22	20		N *
Benzo[g,h,i]perylene	95	74	85 - 120	25	20		N *
Benzo[k]fluoranthene	98	77	85 - 115	25	20		N *
Chrysene	94	85	83 - 115	10	20		
Dibenzo(a,h)anthracene	98	78	83 - 115	23	20		N *
Fluoranthene	97	87	83 - 115	12	20		
Fluorene	95	76	80 - 115	22	20		N *
Indeno[1,2,3-cd]pyrene	97	83	85 - 123	16	20		N
Naphthalene	92	79	80 - 121	16	20		N
Phenanthrene	94	81	80 - 115	15	20		
Pyrene	91	85	75 - 116	8	20		
Surrogate	MS % Rec		MSD % Rec	Acceptance Limits			
Terphenyl-d14 (SUR)	82		78	72 - 115			

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Method Blank - Batch: 280-113409

Method: 6010B

Preparation: 3050B

Lab Sample ID: MB 280-113409/1-A
 Client Matrix: Solid
 Dilution: 1.0
 Analysis Date: 03/29/2012 1603
 Prep Date: 03/29/2012 0730
 Leach Date: N/A

Analysis Batch: 280-113660
 Prep Batch: 280-113409
 Leach Batch: N/A
 Units: mg/Kg

Instrument ID: MT_025
 Lab File ID: 25A2032912.asc
 Initial Weight/Volume: 1 g
 Final Weight/Volume: 100 mL

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
Barium	0.076	U	0.076	0.50
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	0.058	U	0.058	0.20
Cobalt	0.10	U	0.10	1.0
Copper	0.22	U	0.22	1.0
Iron	3.8	U	3.8	5.0
Lead	0.27	U	0.27	0.50
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

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Lab Control Sample - Batch: 280-113409

Method: 6010B

Preparation: 3050B

Lab Sample ID: LCS 280-113409/2-A
 Client Matrix: Solid
 Dilution: 1.0
 Analysis Date: 03/29/2012 1605
 Prep Date: 03/29/2012 0730
 Leach Date: N/A

Analysis Batch: 280-113660
 Prep Batch: 280-113409
 Leach Batch: N/A
 Units: mg/Kg

Instrument ID: MT_025
 Lab File ID: 25A2032912.asc
 Initial Weight/Volume: 1 g
 Final Weight/Volume: 100 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	200	190.0	95	82 - 116	
Antimony	50.0	46.06	92	82 - 110	
Arsenic	100	96.24	96	85 - 110	
Barium	200	198.1	99	87 - 112	
Beryllium	5.00	4.85	97	84 - 114	
Boron	100	96.65	97	81 - 110	
Cadmium	10.0	9.93	99	87 - 110	
Calcium	5000	4803	96	82 - 114	
Chromium	20.0	19.80	99	84 - 114	
Cobalt	50.0	49.00	98	87 - 110	
Copper	25.0	26.08	104	88 - 110	
Iron	100	99.88	100	87 - 120	
Lead	50.0	50.16	100	86 - 110	
Magnesium	5000	4874	97	90 - 110	
Manganese	50.0	50.66	101	88 - 110	
Molybdenum	100	100.0	100	86 - 110	
Nickel	50.0	49.71	99	87 - 110	
Potassium	5000	4929	99	89 - 110	
Selenium	200	205.3	103	83 - 110	
Silicon	1000	240.4	24	10 - 70	
Silver	5.00	5.24	105	87 - 114	
Sodium	5000	5078	102	90 - 112	
Vanadium	50.0	50.67	101	88 - 110	
Zinc	50.0	48.23	96	76 - 114	

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Matrix Spike - Batch: 280-113409

Method: 6010B

Preparation: 3050B

Lab Sample ID: 280-27068-10	Analysis Batch: 280-113660	Instrument ID: MT_025
Client Matrix: Solid	Prep Batch: 280-113409	Lab File ID: 25A2032912.asc
Dilution: 1.0	Leach Batch: N/A	Initial Weight/Volume: 1.12 g
Analysis Date: 03/29/2012 1644	Units: mg/Kg	Final Weight/Volume: 100 mL
Prep Date: 03/29/2012 0730		
Leach Date: N/A		

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	6510	185	9196	1449	50 - 200	4
Antimony	0.38 U	46.3	20.95	45	20 - 200	
Arsenic	3.0	92.7	81.66	85	76 - 111	
Barium	43.6	185	223.9	97	52 - 159	
Beryllium	0.41	4.63	4.50	88	72 - 105	
Boron	0.99 U	92.7	76.89	83	75 - 107	
Cadmium	0.065 B	9.27	8.26	88	40 - 130	
Calcium	4640	4630	9893	113	43 - 165	
Chromium	12.1	18.5	31.84	107	70 - 200	
Cobalt	6.3	46.3	46.53	87	72 - 106	
Copper	22.1	23.2	45.77	102	37 - 187	
Iron	17000	92.7	19320	2456	70 - 200	4
Lead	3.1	46.3	43.10	86	70 - 200	
Magnesium	4650	4630	9435	103	64 - 145	
Manganese	232	46.3	326.6	205	40 - 200	4
Molybdenum	0.26 U	92.7	79.97	86	75 - 103	
Nickel	11.2	46.3	52.61	89	61 - 126	
Potassium	831	4630	5213	95	56 - 172	
Selenium	0.87 U	185	166.6	90	76 - 104	
Silicon	302	927	599.9	32	20 - 200	
Silver	0.16 U	4.63	4.51	97	75 - 141	
Sodium	236	4630	4694	96	78 - 111	
Vanadium	36.3	46.3	91.42	119	50 - 169	
Zinc	34.0	46.3	76.30	91	70 - 200	

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Duplicate - Batch: 280-113409

Method: 6010B

Preparation: 3050B

Lab Sample ID: 280-27068-10
 Client Matrix: Solid
 Dilution: 1.0
 Analysis Date: 03/29/2012 1641
 Prep Date: 03/29/2012 0730
 Leach Date: N/A

Analysis Batch: 280-113660
 Prep Batch: 280-113409
 Leach Batch: N/A
 Units: mg/Kg

Instrument ID: MT_025
 Lab File ID: 25A2032912.asc
 Initial Weight/Volume: 1.12 g
 Final Weight/Volume: 100 mL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Aluminum	6510	6477	0.5	40	
Antimony	0.38 U	0.35	NC	40	U
Arsenic	3.0	2.61	15	30	
Barium	43.6	55.49	24	30	
Beryllium	0.41	0.435	6	30	
Boron	0.99 U	0.91	NC	30	U
Cadmium	0.065 B	0.0973	41	30	B M
Calcium	4640	4790	3	30	
Chromium	12.1	11.44	5	40	
Cobalt	6.3	7.05	11	30	
Copper	22.1	21.78	1	30	
Iron	17000	18310	7	40	
Lead	3.1	3.35	7	40	
Magnesium	4650	4593	1	30	
Manganese	232	270.6	15	40	
Molybdenum	0.26 U	0.24	NC	30	U
Nickel	11.2	11.64	4	30	
Potassium	831	781.1	6	40	
Selenium	0.87 U	0.80	NC	30	U
Silicon	302	358.3	17	40	
Silver	0.16 U	0.15	NC	30	U
Sodium	236	288.4	20	30	
Vanadium	36.3	38.42	6	30	
Zinc	34.0	34.05	0.2	40	

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-27068-1

Sdg Number: J01458

Method Blank - Batch: 280-113397

Method: 7471A

Preparation: 7471A

Lab Sample ID: MB 280-113397/1-A
 Client Matrix: Solid
 Dilution: 1.0
 Analysis Date: 03/30/2012 1637
 Prep Date: 03/30/2012 1200
 Leach Date: N/A

Analysis Batch: 280-113879
 Prep Batch: 280-113397
 Leach Batch: N/A
 Units: mg/Kg

Instrument ID: MT_034
 Lab File ID: 120330taa.txt
 Initial Weight/Volume: 0.6 g
 Final Weight/Volume: 50 mL

Analyte	Result	Qual	MDL	RL
Mercury	0.0055	U	0.0055	0.017

Lab Control Sample - Batch: 280-113397

Method: 7471A

Preparation: 7471A

Lab Sample ID: LCS 280-113397/2-A
 Client Matrix: Solid
 Dilution: 1.0
 Analysis Date: 03/30/2012 1644
 Prep Date: 03/30/2012 1200
 Leach Date: N/A

Analysis Batch: 280-113879
 Prep Batch: 280-113397
 Leach Batch: N/A
 Units: mg/Kg

Instrument ID: MT_034
 Lab File ID: 120330taa.txt
 Initial Weight/Volume: 0.6 g
 Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.417	0.392	94	87 - 111	

Matrix Spike - Batch: 280-113397

Method: 7471A

Preparation: 7471A

Lab Sample ID: 280-27068-1
 Client Matrix: Solid
 Dilution: 1.0
 Analysis Date: 03/30/2012 1651
 Prep Date: 03/30/2012 1200
 Leach Date: N/A

Analysis Batch: 280-113879
 Prep Batch: 280-113397
 Leach Batch: N/A
 Units: mg/Kg

Instrument ID: MT_034
 Lab File ID: 120330taa.txt
 Initial Weight/Volume: 0.54 g
 Final Weight/Volume: 50 mL

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.0063 U	0.491	0.475	97	87 - 111	

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-27068-1
Sdg Number: J01458

Duplicate - Batch: 280-113397

Method: 7471A
Preparation: 7471A

Lab Sample ID:	280-27068-1	Analysis Batch:	280-113879	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-113397	Lab File ID:	120330taa.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.49 g
Analysis Date:	03/30/2012 1649	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	03/30/2012 1200				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Mercury	0.0063 U	0.0072	NC	20	U

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-27068-1
Sdg Number: J01458

Duplicate - Batch: 280-113366

Method: D-2216
Preparation: N/A

Lab Sample ID:	280-27068-1	Analysis Batch:	280-113366	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:	03/28/2012 1146	Units:	%	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Moisture	5.8	5.8	0.3	20	

