SAF-RC-148
300 Area D4 Waste Sites – Soil Full Protocol
FINAL DATA PACKAGE

COMPLETE COPY OF DATA PACKAGE TO:

Kathy Wendt H4-21 KW 4/20/15
INITIAL/DATE

COMMENTS:

SDG JP0939 SAF-RC-148

Rad only ☑ Chem only Rad & Chem

☑ Complete Partial

Sample Location: 300-280 excavation, verification

ANALYTICAL REPORT

Job Number: 280-67600-1

SDG Number: JP0939

Job Description: SAF# RC-148

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

Attention: Joan H Kessner

Approved for release.
Kae E Yoder
Senior Project Manager
4/16/2015 2:18 PM

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04/16/2015

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 4025.

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

Job Number: 280-67600-1

SDG #: JP0939
SAF#: RC-148

Date SDG Closed: April 9, 2015
Data Deliverable: 7 Day / Summary

CLIENT ID	LAB ID	ANALYSES REQUESTED	ANALYSES PERFORMED
J1V5M7	280-67600-1	6010/7471/8310/8082/WTPH-D+	6010B/6020/7471A/8310/8082/NWTPH-Dx
J1V5M8	280-67600-2	6010/7471/8310/8082/WTPH-D+	6010B/6020/7471A/8310/8082/NWTPH-Dx
J1V5M9	280-67600-3	6010/7471/8310/8082/WTPH-D+	6010B/6020/7471A/8310/8082/NWTPH-Dx
J1V5N0	280-67600-4	6010/7471/8310/8082/WTPH-D+	6010B/6020/7471A/8310/8082/NWTPH-Dx
J1V5N1	280-67600-5	6010/7471/8310/8082/WTPH-D+	6010B/6020/7471A/8310/8082/NWTPH-Dx
J1V5N2	280-67600-6	6010/7471/8310/8082/WTPH-D+	6010B/6020/7471A/8310/8082/NWTPH-Dx
J1V5N3	280-67600-7	6010/7471/8310/8082/WTPH-D+	6010B/6020/7471A/8310/8082/NWTPH-Dx
J1V5N4	280-67600-8	6010/7471/8310/8082/WTPH-D+	6010B/6020/7471A/8310/8082/NWTPH-Dx
J1V5N5	280-67600-9	6010/7471/8310/8082/WTPH-D+	6010B/6020/7471A/8310/8082/NWTPH-Dx
J1V5N6	280-67600-10	6010/7471/8310/8082/WTPH-D+	6010B/6020/7471A/8310/8082/NWTPH-Dx
J1V5N7	280-67600-11	6010/7471/8310/8082/WTPH-D+	6010B/6020/7471A/8310/8082/NWTPH-Dx
J1V5N8	280-67600-12	6010/7471/8310/8082/WTPH-D+	6010B/6020/7471A/8310/8082/NWTPH-Dx
J1V5N9	280-67600-13	6010/7471/8310/8082/WTPH-D+	6010B/6020/7471A/8310/8082/NWTPH-Dx
J1V5P0	280-67600-14	6010/7471/8310/8082/WTPH-D+	6010B/6020/7471A/8310/8082/NWTPH-Dx
J1V5P1	280-67600-15	6010/7471/8310/8082/WTPH-D+	6010B/6020/7471A/8310/8082/NWTPH-Dx
J1V5P2	280-67600-16	6010/7471	6010B/6020/7471A

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

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

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

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 4/9/2015 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.5º C and 3.1º C.

The samples presented in this report contained large rocks that were not included in the aliquots used for extraction and/or analysis.

GC SEMIVOLATILES - SW846 8082 - PCBs
The laboratory noted that a Sulfuric Acid clean-up was performed on the samples presented in this report to reduce matrix interferences.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to high constituent concentration, sample J1V5N1 had to be analyzed at a dilution, and the associated results have been flagged with a “D”. The reporting limits have been adjusted relative to the dilution required. In addition, the sample surrogate recoveries are not considered reliable, because the extract was diluted beyond the ability to reliably quantitate recoveries.

The RPD between the primary and confirmation columns exceeded 25% for Aroclor 1254 in samples J1V5N6 and J1V5N7. The results have been flagged with a “P”.

No other anomalies were encountered.

GC SEMIVOLATILES - NWTPH-Dx - DRO

Low levels of C10-C36 and C10-C28 are present in the method blank associated with batch 280-272168. Because the concentrations in the method blank are not present at levels greater than half the reporting limit, corrective action is deemed unnecessary. Associated sample results present above the MDL and/or RL have been flagged with a “B”.

No other anomalies were encountered.

HPLC - SW846 8310 - PAHs

Surrogate Terphenyl-d14 was recovered outside the control limits, biased high, in sample J1V5N2. This is an indicator that data may be biased high. As no detectable concentrations are present in the sample, corrective action is deemed unnecessary. The laboratory noted that the sample chromatogram showed evidence of matrix interference.

No other anomalies were encountered.

TOTAL METALS - SW846 6010B/6020/7471A

Serial dilution of a digestate in batch 280-272139 indicates that physical and chemical interferences are present for several elements. Serial dilution of a digestate in batch 280-272797 indicates that physical and chemical interferences are present for Magnesium. Results have been flagged with an “X”.

Low levels of Calcium, Tin, Barium, Chromium, Strontium, Iron and Magnesium are present in the method blanks associated with batches 280-272139 and 280-272797, respectively. Because the concentrations in the method blanks are not present at levels greater than half the reporting limit or the associated sample amounts are greater than twenty times the method blank concentration, corrective action is deemed unnecessary.

Silicon was recovered outside the control limits, biased low, in the LCS associated with batch 280-272139 and in the Matrix Spike performed on sample J1V5M7 in batch 280-272139. The associated sample results have been flagged “N”. Silicon has been identified as a poor performing element when analyzed using this method and has a history of reacting inconsistently; therefore, corrective action is not initiated. Data are reported as is.

It can be noted that the sample amount was greater than four times the spike amount for Aluminum, Iron and Manganese in the Matrix Spike performed on sample J1V5M7; therefore, control limits are not applicable.

The Matrix Spike performed on sample J1V5M7 exhibited percent recoveries outside the control limits for Molybdenum, Sodium and Tin, and the associated sample results have been flagged “N”. There is no indication that the analytical system was operating out of control, and method accuracy has been verified by the acceptable LCS analysis data; therefore, corrective action is deemed unnecessary.

No other anomalies were encountered.

DATA REPORTING QUALIFIERS

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Lab Section	Qualifier	Description
GC Semi VOA		
	B	Analyte was found in the associated method blank as well as in the sample.
	U	Analyzed for but not detected.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	D	The reported value is from a dilution.
	P	This flag is used for an aroclor target analyte where there is greater than 25% difference for detected concentrations between the two GC columns
HPLC/IC		
	U	Analyzed for but not detected.
	*	Surrogate exceeds the control limit
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 greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
	N	Recovery exceeds upper or lower control limits
	X	Serial dilution in the analytical batch indicates that physical and chemical interferences are present.
	C	The analyte was detected in both the sample and the assoicated QC blank, and the sample concentration was </= 5X the blank concentration.
General Chemistry		
	U	Analyzed for but not detected.

SAMPLE SUMMARY

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-67600-1	J1V5M7	Solid	04/07/2015 0826	04/09/2015 0900
280-67600-2	J1V5M8	Solid	04/07/2015 1015	04/09/2015 0900
280-67600-3	J1V5M9	Solid	04/07/2015 0933	04/09/2015 0900
280-67600-4	J1V5N0	Solid	04/07/2015 0903	04/09/2015 0900
280-67600-5	J1V5N1	Solid	04/07/2015 0841	04/09/2015 0900
280-67600-6	J1V5N2	Solid	04/07/2015 0957	04/09/2015 0900
280-67600-7	J1V5N3	Solid	04/07/2015 0924	04/09/2015 0900
280-67600-8	J1V5N4	Solid	04/07/2015 0912	04/09/2015 0900
280-67600-9	J1V5N5	Solid	04/07/2015 0848	04/09/2015 0900
280-67600-10	J1V5N6	Solid	04/07/2015 1005	04/09/2015 0900
280-67600-11	J1V5N7	Solid	04/07/2015 1024	04/09/2015 0900
280-67600-12	J1V5N8	Solid	04/07/2015 1036	04/09/2015 0900
280-67600-13	J1V5N9	Solid	04/07/2015 0826	04/09/2015 0900
280-67600-14	J1V5P0	Solid	04/07/2015 0855	04/09/2015 0900
280-67600-15	J1V5P1	Solid	04/07/2015 0945	04/09/2015 0900
280-67600-16	J1V5P2	Solid	04/07/2015 0813	04/09/2015 0900

METHOD SUMMARY

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
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
Metals (ICP/MS)	TAL DEN	SW846 6020	
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: 280-67600-1
Sdg Number: JP0939

Method	Analyst	Analyst ID
SW846 8082	Jackson, Todd D	TDJ
NWTPH NWTPH-Dx	Moore, Tegan E	TEM
SW846 6010B	Broander, Laura L	LLB
SW846 6010B	Rhoades, Chris R	CRR
SW846 6010B	Scott, Samantha J	SJS
SW846 6020	Trudell, Lynn-Anne M	LMT
SW846 7471A	Whyte, Whitney A	WAW
ASTM D-2216	Shaheen, Scott W	SWS
SW846 8310	Fiedler, Heather K	HKF

SAMPLE RESULTS

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5M7**

Lab Sample ID: 280-67600-1
Client Matrix: Solid
% Moisture: 4.6

Date Sampled: 04/07/2015 0826
Date Received: 04/09/2015 0900

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-272422	Instrument ID:	SGC_P3
Prep Method:	3550C	Prep Batch:	280-272030	Initial Weight/Volume:	30.0 g
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	04/13/2015 1223			Injection Volume:	1 uL
Prep Date:	04/09/2015 2305			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	75		59 - 130
Tetrachloro-m-xylene	84		53 - 128

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5M8**

Lab Sample ID: 280-67600-2
Client Matrix: Solid
% Moisture: 3.8

Date Sampled: 04/07/2015 1015
Date Received: 04/09/2015 0900

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-272422	Instrument ID:	SGC_P3
Prep Method:	3550C	Prep Batch:	280-272030	Initial Weight/Volume:	30.8 g
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	04/13/2015 1245			Injection Volume:	1 uL
Prep Date:	04/09/2015 2305			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	75		59 - 130
Tetrachloro-m-xylene	82		53 - 128

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5M9**

Lab Sample ID: 280-67600-3
Client Matrix: Solid
% Moisture: 4.7

Date Sampled: 04/07/2015 0933
Date Received: 04/09/2015 0900

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-272422	Instrument ID:	SGC_P3
Prep Method:	3550C	Prep Batch:	280-272030	Initial Weight/Volume:	31.9 g
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	04/13/2015 1306			Injection Volume:	1 uL
Prep Date:	04/09/2015 2305			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		2.7	U	2.7	9.9
Aroclor 1221		7.9	U	7.9	16
Aroclor 1232		2.0	U	2.0	9.9
Aroclor 1242		4.6	U	4.6	9.9
Aroclor 1248		4.6	U	4.6	9.9
Aroclor 1254		2.6	U	2.6	9.9
Aroclor 1260		2.6	U	2.6	9.9

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	75		59 - 130
Tetrachloro-m-xylene	80		53 - 128

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N0**

Lab Sample ID: 280-67600-4
Client Matrix: Solid
% Moisture: 5.9

Date Sampled: 04/07/2015 0903
Date Received: 04/09/2015 0900

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-272422	Instrument ID:	SGC_P3
Prep Method:	3550C	Prep Batch:	280-272030	Initial Weight/Volume:	31.7 g
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	04/13/2015 1327			Injection Volume:	1 uL
Prep Date:	04/09/2015 2305			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	78		59 - 130
Tetrachloro-m-xylene	81		53 - 128

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N1**

Lab Sample ID: 280-67600-5
Client Matrix: Solid
% Moisture: 4.7

Date Sampled: 04/07/2015 0841
Date Received: 04/09/2015 0900

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-272422	Instrument ID:	SGC_P3
Prep Method:	3550C	Prep Batch:	280-272030	Initial Weight/Volume:	30.2 g
Dilution:	5.0			Final Weight/Volume:	5 mL
Analysis Date:	04/14/2015 0817			Injection Volume:	1 uL
Prep Date:	04/09/2015 2305			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		14	U D	14	52
Aroclor 1221		42	U D	42	86
Aroclor 1232		10	U D	10	52
Aroclor 1242		24	U D	24	52
Aroclor 1248		24	U D	24	52
Aroclor 1254		160	D	14	52
Aroclor 1260		14	U D	14	52

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	79	D	59 - 130
Tetrachloro-m-xylene	76	D	53 - 128

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N2**

Lab Sample ID: 280-67600-6
Client Matrix: Solid
% Moisture: 4.3

Date Sampled: 04/07/2015 0957
Date Received: 04/09/2015 0900

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-272422	Instrument ID:	SGC_P3
Prep Method:	3550C	Prep Batch:	280-272030	Initial Weight/Volume:	30.7 g
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	04/13/2015 1409			Injection Volume:	1 uL
Prep Date:	04/09/2015 2305			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		48		2.7	10
Aroclor 1260		2.7	U	2.7	10

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	60		59 - 130
Tetrachloro-m-xylene	81		53 - 128

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N3**

Lab Sample ID: 280-67600-7
Client Matrix: Solid
% Moisture: 4.3

Date Sampled: 04/07/2015 0924
Date Received: 04/09/2015 0900

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-272422	Instrument ID:	SGC_P3
Prep Method:	3550C	Prep Batch:	280-272030	Initial Weight/Volume:	31.2 g
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	04/13/2015 1430			Injection Volume:	1 uL
Prep Date:	04/09/2015 2305			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	66		59 - 130
Tetrachloro-m-xylene	84		53 - 128

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N4**

Lab Sample ID: 280-67600-8
Client Matrix: Solid
% Moisture: 4.1

Date Sampled: 04/07/2015 0912
Date Received: 04/09/2015 0900

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-272422	Instrument ID:	SGC_P3
Prep Method:	3550C	Prep Batch:	280-272030	Initial Weight/Volume:	30.0 g
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	04/13/2015 1451			Injection Volume:	1 uL
Prep Date:	04/09/2015 2305			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	69		59 - 130
Tetrachloro-m-xylene	78		53 - 128

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N5**

Lab Sample ID: 280-67600-9
Client Matrix: Solid
% Moisture: 4.2

Date Sampled: 04/07/2015 0848
Date Received: 04/09/2015 0900

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-272422	Instrument ID:	SGC_P3
Prep Method:	3550C	Prep Batch:	280-272030	Initial Weight/Volume:	30.6 g
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	04/13/2015 1512			Injection Volume:	1 uL
Prep Date:	04/09/2015 2305			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	70		59 - 130
Tetrachloro-m-xylene	82		53 - 128

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N6**

Lab Sample ID: 280-67600-10
Client Matrix: Solid
% Moisture: 3.9

Date Sampled: 04/07/2015 1005
Date Received: 04/09/2015 0900

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-272422	Instrument ID:	SGC_P3
Prep Method:	3550C	Prep Batch:	280-272030	Initial Weight/Volume:	30.3 g
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	04/13/2015 1615			Injection Volume:	1 uL
Prep Date:	04/09/2015 2305			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		2.9	U	2.9	10
Aroclor 1221		8.3	U	8.3	17
Aroclor 1232		2.1	U	2.1	10
Aroclor 1242		4.8	U	4.8	10
Aroclor 1248		4.8	U	4.8	10
Aroclor 1254		4.6	J P	2.7	10
Aroclor 1260		2.7	U	2.7	10

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	71		59 - 130
Tetrachloro-m-xylene	84		53 - 128

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N7**

Lab Sample ID: 280-67600-11
Client Matrix: Solid
% Moisture: 3.8

Date Sampled: 04/07/2015 1024
Date Received: 04/09/2015 0900

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-272422	Instrument ID:	SGC_P3
Prep Method:	3550C	Prep Batch:	280-272030	Initial Weight/Volume:	30.5 g
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	04/13/2015 1636			Injection Volume:	1 uL
Prep Date:	04/09/2015 2305			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		5.6	J P	2.7	10
Aroclor 1260		2.7	U	2.7	10

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	75		59 - 130
Tetrachloro-m-xylene	84		53 - 128

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N8**

Lab Sample ID: 280-67600-12
Client Matrix: Solid
% Moisture: 8.9

Date Sampled: 04/07/2015 1036
Date Received: 04/09/2015 0900

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-272422	Instrument ID:	SGC_P3
Prep Method:	3550C	Prep Batch:	280-272030	Initial Weight/Volume:	32.3 g
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	04/13/2015 1658			Injection Volume:	1 uL
Prep Date:	04/09/2015 2305			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	70		59 - 130
Tetrachloro-m-xylene	78		53 - 128

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N9**

Lab Sample ID: 280-67600-13
Client Matrix: Solid
% Moisture: 4.8

Date Sampled: 04/07/2015 0826
Date Received: 04/09/2015 0900

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-272422	Instrument ID:	SGC_P3
Prep Method:	3550C	Prep Batch:	280-272030	Initial Weight/Volume:	30.3 g
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	04/13/2015 1719			Injection Volume:	1 uL
Prep Date:	04/09/2015 2305			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		2.9	U	2.9	10
Aroclor 1221		8.3	U	8.3	17
Aroclor 1232		2.1	U	2.1	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	76		59 - 130
Tetrachloro-m-xylene	85		53 - 128

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5P0**

Lab Sample ID: 280-67600-14
Client Matrix: Solid
% Moisture: 3.8

Date Sampled: 04/07/2015 0855
Date Received: 04/09/2015 0900

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-272422	Instrument ID:	SGC_P3
Prep Method:	3550C	Prep Batch:	280-272030	Initial Weight/Volume:	30.8 g
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	04/13/2015 1740			Injection Volume:	1 uL
Prep Date:	04/09/2015 2305			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	75		59 - 130
Tetrachloro-m-xylene	80		53 - 128

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5P1**

Lab Sample ID: 280-67600-15
Client Matrix: Solid
% Moisture: 4.5

Date Sampled: 04/07/2015 0945
Date Received: 04/09/2015 0900

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-272422	Instrument ID:	SGC_P3
Prep Method:	3550C	Prep Batch:	280-272030	Initial Weight/Volume:	32.1 g
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	04/13/2015 1801			Injection Volume:	1 uL
Prep Date:	04/09/2015 2305			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		2.7	U	2.7	9.8
Aroclor 1221		7.9	U	7.9	16
Aroclor 1232		2.0	U	2.0	9.8
Aroclor 1242		4.6	U	4.6	9.8
Aroclor 1248		4.6	U	4.6	9.8
Aroclor 1254		2.5	U	2.5	9.8
Aroclor 1260		2.5	U	2.5	9.8

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	78		59 - 130
Tetrachloro-m-xylene	81		53 - 128

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5M7**

Lab Sample ID: 280-67600-1
Client Matrix: Solid
% Moisture: 4.6

Date Sampled: 04/07/2015 0826
Date Received: 04/09/2015 0900

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-272444	Instrument ID:	SGC_U
Prep Method:	3550C	Prep Batch:	280-272168	Lab File ID:	04130009.D
Dilution:	1.0			Initial Weight/Volume:	32.0 g
Analysis Date:	04/13/2015 1910			Final Weight/Volume:	1 mL
Prep Date:	04/10/2015 1528			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		3500	J B	980	3900
C10-C28		3200	J B	670	3900

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

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5M8**

Lab Sample ID: 280-67600-2
Client Matrix: Solid
% Moisture: 3.8

Date Sampled: 04/07/2015 1015
Date Received: 04/09/2015 0900

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-272444	Instrument ID:	SGC_U
Prep Method:	3550C	Prep Batch:	280-272168	Lab File ID:	04130010.D
Dilution:	1.0			Initial Weight/Volume:	31.1 g
Analysis Date:	04/13/2015 1938			Final Weight/Volume:	1 mL
Prep Date:	04/10/2015 1528			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		1800	J B	1000	4000
C10-C28		1900	J B	680	4000

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	81		49 - 115

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5M9**

Lab Sample ID: 280-67600-3
Client Matrix: Solid
% Moisture: 4.7

Date Sampled: 04/07/2015 0933
Date Received: 04/09/2015 0900

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-272444	Instrument ID:	SGC_U
Prep Method:	3550C	Prep Batch:	280-272168	Lab File ID:	04130013.D
Dilution:	1.0			Initial Weight/Volume:	30.0 g
Analysis Date:	04/13/2015 2103			Final Weight/Volume:	1 mL
Prep Date:	04/10/2015 1528			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		2800	J B	1000	4200
C10-C28		3000	J B	710	4200

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

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N0**

Lab Sample ID: 280-67600-4
Client Matrix: Solid
% Moisture: 5.9

Date Sampled: 04/07/2015 0903
Date Received: 04/09/2015 0900

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-272444	Instrument ID:	SGC_U
Prep Method:	3550C	Prep Batch:	280-272168	Lab File ID:	04130014.D
Dilution:	1.0			Initial Weight/Volume:	32.2 g
Analysis Date:	04/13/2015 2130			Final Weight/Volume:	1 mL
Prep Date:	04/10/2015 1528			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		2100	J B	990	4000
C10-C28		2400	J B	670	4000

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	82		49 - 115

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N1**

Lab Sample ID: 280-67600-5
Client Matrix: Solid
% Moisture: 4.7

Date Sampled: 04/07/2015 0841
Date Received: 04/09/2015 0900

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-272444	Instrument ID:	SGC_U
Prep Method:	3550C	Prep Batch:	280-272168	Lab File ID:	04130015.D
Dilution:	1.0			Initial Weight/Volume:	30.5 g
Analysis Date:	04/13/2015 2158			Final Weight/Volume:	1 mL
Prep Date:	04/10/2015 1528			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		13000	B	1000	4100
C10-C28		6000	B	700	4100

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

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N2**

Lab Sample ID: 280-67600-6
Client Matrix: Solid
% Moisture: 4.3

Date Sampled: 04/07/2015 0957
Date Received: 04/09/2015 0900

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-272444	Instrument ID:	SGC_U
Prep Method:	3550C	Prep Batch:	280-272168	Lab File ID:	04130017.D
Dilution:	1.0			Initial Weight/Volume:	32.2 g
Analysis Date:	04/13/2015 2254			Final Weight/Volume:	1 mL
Prep Date:	04/10/2015 1528			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		29000	B	970	3900
C10-C28		12000	B	660	3900

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

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N3**

Lab Sample ID: 280-67600-7
Client Matrix: Solid
% Moisture: 4.3

Date Sampled: 04/07/2015 0924
Date Received: 04/09/2015 0900

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-272444	Instrument ID:	SGC_U
Prep Method:	3550C	Prep Batch:	280-272168	Lab File ID:	04130018.D
Dilution:	1.0			Initial Weight/Volume:	30.7 g
Analysis Date:	04/13/2015 2321			Final Weight/Volume:	1 mL
Prep Date:	04/10/2015 1528			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		2900	J B	1000	4100
C10-C28		3100	J B	690	4100

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	85		49 - 115

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N4**

Lab Sample ID: 280-67600-8
Client Matrix: Solid
% Moisture: 4.1

Date Sampled: 04/07/2015 0912
Date Received: 04/09/2015 0900

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-272444	Instrument ID:	SGC_U
Prep Method:	3550C	Prep Batch:	280-272168	Lab File ID:	04130019.D
Dilution:	1.0			Initial Weight/Volume:	30.0 g
Analysis Date:	04/13/2015 2349			Final Weight/Volume:	1 mL
Prep Date:	04/10/2015 1528			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		2400	J B	1000	4200
C10-C28		2600	J B	710	4200

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	85		49 - 115

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N5**

Lab Sample ID: 280-67600-9
Client Matrix: Solid
% Moisture: 4.2

Date Sampled: 04/07/2015 0848
Date Received: 04/09/2015 0900

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-272444	Instrument ID:	SGC_U
Prep Method:	3550C	Prep Batch:	280-272168	Lab File ID:	04130020.D
Dilution:	1.0			Initial Weight/Volume:	30.7 g
Analysis Date:	04/14/2015 0017			Final Weight/Volume:	1 mL
Prep Date:	04/10/2015 1528			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		6200	B	1000	4100
C10-C28		4300	B	690	4100

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

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N6**

Lab Sample ID: 280-67600-10
Client Matrix: Solid
% Moisture: 3.9

Date Sampled: 04/07/2015 1005
Date Received: 04/09/2015 0900

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-272444	Instrument ID:	SGC_U
Prep Method:	3550C	Prep Batch:	280-272168	Lab File ID:	04130021.D
Dilution:	1.0			Initial Weight/Volume:	32.3 g
Analysis Date:	04/14/2015 0045			Final Weight/Volume:	1 mL
Prep Date:	04/10/2015 1528			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		13000	B	960	3900
C10-C28		5800	B	660	3900

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	85		49 - 115

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N7**

Lab Sample ID: 280-67600-11
Client Matrix: Solid
% Moisture: 3.8

Date Sampled: 04/07/2015 1024
Date Received: 04/09/2015 0900

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-272444	Instrument ID:	SGC_U
Prep Method:	3550C	Prep Batch:	280-272168	Lab File ID:	04130022.D
Dilution:	1.0			Initial Weight/Volume:	30.0 g
Analysis Date:	04/14/2015 0113			Final Weight/Volume:	1 mL
Prep Date:	04/10/2015 1528			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		6600	B	1000	4200
C10-C28		4600	B	700	4200

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

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N8**

Lab Sample ID: 280-67600-12
Client Matrix: Solid
% Moisture: 8.9

Date Sampled: 04/07/2015 1036
Date Received: 04/09/2015 0900

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-272444	Instrument ID:	SGC_U
Prep Method:	3550C	Prep Batch:	280-272168	Lab File ID:	04130023.D
Dilution:	1.0			Initial Weight/Volume:	31.2 g
Analysis Date:	04/14/2015 0141			Final Weight/Volume:	1 mL
Prep Date:	04/10/2015 1528			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		3700	J B	1100	4200
C10-C28		3600	J B	720	4200

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

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N9**

Lab Sample ID: 280-67600-13
Client Matrix: Solid
% Moisture: 4.8

Date Sampled: 04/07/2015 0826
Date Received: 04/09/2015 0900

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-272444	Instrument ID:	SGC_U
Prep Method:	3550C	Prep Batch:	280-272168	Lab File ID:	04130024.D
Dilution:	1.0			Initial Weight/Volume:	30.5 g
Analysis Date:	04/14/2015 0210			Final Weight/Volume:	1 mL
Prep Date:	04/10/2015 1528			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		4400	B	1000	4100
C10-C28		4000	J B	700	4100

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	81		49 - 115

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5P0**

Lab Sample ID: 280-67600-14
Client Matrix: Solid
% Moisture: 3.8

Date Sampled: 04/07/2015 0855
Date Received: 04/09/2015 0900

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-272444	Instrument ID:	SGC_U
Prep Method:	3550C	Prep Batch:	280-272168	Lab File ID:	04130025.D
Dilution:	1.0			Initial Weight/Volume:	32.3 g
Analysis Date:	04/14/2015 0237			Final Weight/Volume:	1 mL
Prep Date:	04/10/2015 1528			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		1900	J B	960	3900
C10-C28		2200	J B	650	3900

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

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5P1**

Lab Sample ID: 280-67600-15
Client Matrix: Solid
% Moisture: 4.5

Date Sampled: 04/07/2015 0945
Date Received: 04/09/2015 0900

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-272444	Instrument ID:	SGC_U
Prep Method:	3550C	Prep Batch:	280-272168	Lab File ID:	04130026.D
Dilution:	1.0			Initial Weight/Volume:	31.0 g
Analysis Date:	04/14/2015 0306			Final Weight/Volume:	1 mL
Prep Date:	04/10/2015 1528			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		3100	J B	1000	4100
C10-C28		3100	J B	690	4100

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	81		49 - 115

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5M7**

Lab Sample ID: 280-67600-1
Client Matrix: Solid
% Moisture: 4.6

Date Sampled: 04/07/2015 0826
Date Received: 04/09/2015 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-272421	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-272004	Initial Weight/Volume:	32.0 g
Dilution:	1.0			Final Weight/Volume:	4 mL
Analysis Date:	04/13/2015 1342			Injection Volume:	20 uL
Prep Date:	04/09/2015 2212			Result Type:	PRIMARY

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

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	83		72 - 115

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5M8**

Lab Sample ID: 280-67600-2
Client Matrix: Solid
% Moisture: 3.8

Date Sampled: 04/07/2015 1015
Date Received: 04/09/2015 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-272421	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-272004	Initial Weight/Volume:	31.6 g
Dilution:	1.0			Final Weight/Volume:	4 mL
Analysis Date:	04/13/2015 1413			Injection Volume:	20 uL
Prep Date:	04/09/2015 2212			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		9.9	U	9.9	99
Acenaphthylene		8.9	U	8.9	99
Anthracene		3.0	U	3.0	20
Benzo[a]anthracene		3.1	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	30
Benzo[k]fluoranthene		3.9	U	3.9	15
Chrysene		4.8	U	4.8	39
Dibenzo(a,h)anthracene		11	U	11	30
Fluoranthene		13	U	13	39
Fluorene		5.2	U	5.2	30
Indeno[1,2,3-cd]pyrene		12	U	12	30
Naphthalene		12	U	12	99
Phenanthrene		12	U	12	39
Pyrene		12	U	12	39

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

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5M9**

Lab Sample ID: 280-67600-3
Client Matrix: Solid
% Moisture: 4.7

Date Sampled: 04/07/2015 0933
Date Received: 04/09/2015 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-272421	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-272004	Initial Weight/Volume:	30.6 g
Dilution:	1.0			Final Weight/Volume:	4 mL
Analysis Date:	04/13/2015 1544			Injection Volume:	20 uL
Prep Date:	04/09/2015 2212			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)	87		72 - 115

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N0**

Lab Sample ID: 280-67600-4
Client Matrix: Solid
% Moisture: 5.9

Date Sampled: 04/07/2015 0903
Date Received: 04/09/2015 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-272421	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-272004	Initial Weight/Volume:	30.2 g
Dilution:	1.0			Final Weight/Volume:	4 mL
Analysis Date:	04/13/2015 1615			Injection Volume:	20 uL
Prep Date:	04/09/2015 2212			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		11	U	11	110
Acenaphthylene		9.5	U	9.5	110
Anthracene		3.2	U	3.2	21
Benzo[a]anthracene		3.4	U	3.4	16
Benzo[a]pyrene		6.8	U	6.8	16
Benzo[b]fluoranthene		4.4	U	4.4	16
Benzo[g,h,i]perylene		7.6	U	7.6	32
Benzo[k]fluoranthene		4.2	U	4.2	16
Chrysene		5.1	U	5.1	42
Dibenzo(a,h)anthracene		12	U	12	32
Fluoranthene		14	U	14	42
Fluorene		5.6	U	5.6	32
Indeno[1,2,3-cd]pyrene		13	U	13	32
Naphthalene		13	U	13	110
Phenanthrene		13	U	13	42
Pyrene		13	U	13	42

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

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N1**

Lab Sample ID: 280-67600-5
Client Matrix: Solid
% Moisture: 4.7

Date Sampled: 04/07/2015 0841
Date Received: 04/09/2015 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-272421	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-272004	Initial Weight/Volume:	30.6 g
Dilution:	1.0			Final Weight/Volume:	4 mL
Analysis Date:	04/13/2015 1645			Injection Volume:	20 uL
Prep Date:	04/09/2015 2212			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)	87		72 - 115

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N2**

Lab Sample ID: 280-67600-6
Client Matrix: Solid
% Moisture: 4.3

Date Sampled: 04/07/2015 0957
Date Received: 04/09/2015 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-272421	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-272004	Initial Weight/Volume:	32.8 g
Dilution:	1.0			Final Weight/Volume:	4 mL
Analysis Date:	04/13/2015 1716			Injection Volume:	20 uL
Prep Date:	04/09/2015 2212			Result Type:	PRIMARY

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

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	214	*	72 - 115

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N3**

Lab Sample ID: 280-67600-7
Client Matrix: Solid
% Moisture: 4.3

Date Sampled: 04/07/2015 0924
Date Received: 04/09/2015 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-272421	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-272004	Initial Weight/Volume:	32.7 g
Dilution:	1.0			Final Weight/Volume:	4 mL
Analysis Date:	04/13/2015 1817			Injection Volume:	20 uL
Prep Date:	04/09/2015 2212			Result Type:	PRIMARY

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

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	85		72 - 115

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N4**

Lab Sample ID: 280-67600-8
Client Matrix: Solid
% Moisture: 4.1

Date Sampled: 04/07/2015 0912
Date Received: 04/09/2015 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-272421	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-272004	Initial Weight/Volume:	31.1 g
Dilution:	1.0			Final Weight/Volume:	4 mL
Analysis Date:	04/13/2015 1847			Injection Volume:	20 uL
Prep Date:	04/09/2015 2212			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		6.4	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)	83		72 - 115

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N5**

Lab Sample ID: 280-67600-9
Client Matrix: Solid
% Moisture: 4.2

Date Sampled: 04/07/2015 0848
Date Received: 04/09/2015 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-272421	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-272004	Initial Weight/Volume:	30.6 g
Dilution:	1.0			Final Weight/Volume:	4 mL
Analysis Date:	04/13/2015 1918			Injection Volume:	20 uL
Prep Date:	04/09/2015 2212			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)	89		72 - 115

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N6**

Lab Sample ID: 280-67600-10
Client Matrix: Solid
% Moisture: 3.9

Date Sampled: 04/07/2015 1005
Date Received: 04/09/2015 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-272421	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-272004	Initial Weight/Volume:	31.8 g
Dilution:	1.0			Final Weight/Volume:	4 mL
Analysis Date:	04/13/2015 1949			Injection Volume:	20 uL
Prep Date:	04/09/2015 2212			Result Type:	PRIMARY

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

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	84		72 - 115

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N7**

Lab Sample ID: 280-67600-11
Client Matrix: Solid
% Moisture: 3.8

Date Sampled: 04/07/2015 1024
Date Received: 04/09/2015 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-272421	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-272004	Initial Weight/Volume:	31.4 g
Dilution:	1.0			Final Weight/Volume:	4 mL
Analysis Date:	04/13/2015 2019			Injection Volume:	20 uL
Prep Date:	04/09/2015 2212			Result Type:	PRIMARY

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

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	88		72 - 115

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N8**

Lab Sample ID: 280-67600-12
Client Matrix: Solid
% Moisture: 8.9

Date Sampled: 04/07/2015 1036
Date Received: 04/09/2015 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-272421	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-272004	Initial Weight/Volume:	31.4 g
Dilution:	1.0			Final Weight/Volume:	4 mL
Analysis Date:	04/13/2015 2050			Injection Volume:	20 uL
Prep Date:	04/09/2015 2212			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		7.6	U	7.6	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)	90		72 - 115

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N9**

Lab Sample ID: 280-67600-13
Client Matrix: Solid
% Moisture: 4.8

Date Sampled: 04/07/2015 0826
Date Received: 04/09/2015 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-272421	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-272004	Initial Weight/Volume:	30.6 g
Dilution:	1.0			Final Weight/Volume:	4 mL
Analysis Date:	04/13/2015 2120			Injection Volume:	20 uL
Prep Date:	04/09/2015 2212			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)	90		72 - 115

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5P0**

Lab Sample ID: 280-67600-14
Client Matrix: Solid
% Moisture: 3.8

Date Sampled: 04/07/2015 0855
Date Received: 04/09/2015 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-272421	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-272004	Initial Weight/Volume:	30.3 g
Dilution:	1.0			Final Weight/Volume:	4 mL
Analysis Date:	04/13/2015 2151			Injection Volume:	20 uL
Prep Date:	04/09/2015 2212			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)	93		72 - 115

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5P1**

Lab Sample ID: 280-67600-15
Client Matrix: Solid
% Moisture: 4.5

Date Sampled: 04/07/2015 0945
Date Received: 04/09/2015 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-272421	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-272004	Initial Weight/Volume:	30.2 g
Dilution:	1.0			Final Weight/Volume:	4 mL
Analysis Date:	04/13/2015 2221			Injection Volume:	20 uL
Prep Date:	04/09/2015 2212			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		5.0	U	5.0	42
Dibenzo(a,h)anthracene		11	U	11	31
Fluoranthene		14	U	14	42
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	42
Pyrene		12	U	12	42

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

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5M7**

Lab Sample ID: 280-67600-1
Client Matrix: Solid
% Moisture: 4.6

Date Sampled: 04/07/2015 0826
Date Received: 04/09/2015 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-272432	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-272139	Lab File ID:	26c041115.asc
Dilution:	1.0			Initial Weight/Volume:	1.03 g
Analysis Date:	04/11/2015 2013			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		3.0		0.67	1.0
Boron		1.5	B	1.0	2.0
Calcium		5530	X	14.3	50.9
Iron		24800	X	3.9	5.1
Molybdenum		0.28	B N	0.26	2.0
Selenium		0.87	U	0.87	1.0
Silver		0.16	U	0.16	0.20
Sodium		256	N	60.0	122
Zinc		46.9	X	0.40	1.0
Zirconium		27.4	X	0.36	2.5

Analysis Method:	6010B	Analysis Batch:	280-272564	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-272139	Lab File ID:	26a041315.asc
Dilution:	1.0			Initial Weight/Volume:	1.03 g
Analysis Date:	04/13/2015 1615			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		7270	X	1.6	5.1
Antimony		1.3		0.39	0.61
Barium		68.8	X	0.077	0.51
Beryllium		0.067	B	0.034	0.20
Cadmium		0.042	U	0.042	0.20
Chromium		8.0	X	0.059	0.20
Cobalt		7.5	X	0.10	1.0
Copper		14.3		0.22	1.0
Lead		3.7		0.27	0.51
Lithium		6.1		0.31	2.5
Manganese		310	X	0.10	1.0
Nickel		11.1	X	0.13	4.1
Potassium		1260		41.7	305
Silicon		305	N X	5.8	10.2
Strontium		22.3	X	0.037	1.0
Tin		1.6	B N C	0.93	10.2
Vanadium		53.0	X	0.096	2.0

Analysis Method:	6010B	Analysis Batch:	280-272917	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-272797	Lab File ID:	25B041515.asc
Dilution:	1.0			Initial Weight/Volume:	1.01 g
Analysis Date:	04/15/2015 2139			Final Weight/Volume:	100 mL
Prep Date:	04/15/2015 1440				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Magnesium		4520	X	3.8	20.7

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5M7**

Lab Sample ID: 280-67600-1
Client Matrix: Solid
% Moisture: 4.6

Date Sampled: 04/07/2015 0826
Date Received: 04/09/2015 0900

6010B Metals (ICP)

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	280-272415	Instrument ID:	MT_077
Prep Method:	3050B	Prep Batch:	280-272134	Lab File ID:	230SMPL.d
Dilution:	1.0			Initial Weight/Volume:	1.02 g
Analysis Date:	04/11/2015 0559			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Uranium		0.52		0.0016	0.10

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-272427	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-272066	Lab File ID:	150410ba.txt
Dilution:	1.0			Initial Weight/Volume:	0.58 g
Analysis Date:	04/10/2015 1824			Final Weight/Volume:	50 mL
Prep Date:	04/10/2015 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0090	B	0.0060	0.018

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5M8**

Lab Sample ID: 280-67600-2
Client Matrix: Solid
% Moisture: 3.8

Date Sampled: 04/07/2015 1015
Date Received: 04/09/2015 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-272432	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-272139	Lab File ID:	26c041115.asc
Dilution:	1.0			Initial Weight/Volume:	1.08 g
Analysis Date:	04/11/2015 2023			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		5.5		0.64	0.96
Beryllium		0.30		0.032	0.19
Boron		2.9		0.94	1.9
Calcium		17100	X	13.6	48.1
Iron		21900	X	3.7	4.8
Molybdenum		0.29	B	0.25	1.9
Selenium		0.83	U	0.83	0.96
Silver		0.15	U	0.15	0.19
Sodium		238		56.8	116
Tin		1.4	B C	0.88	9.6
Zinc		42.5	X	0.38	0.96
Zirconium		16.6	X	0.34	2.4

Analysis Method:	6010B	Analysis Batch:	280-272564	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-272139	Lab File ID:	26a041315.asc
Dilution:	1.0			Initial Weight/Volume:	1.08 g
Analysis Date:	04/13/2015 1646			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		7030	X	1.5	4.8
Antimony		1.0		0.37	0.58
Barium		67.0	X	0.073	0.48
Cadmium		0.039	U	0.039	0.19
Chromium		14.0	X	0.056	0.19
Cobalt		7.6	X	0.096	0.96
Copper		16.5		0.21	0.96
Lead		3.4		0.26	0.48
Lithium		6.8		0.29	2.4
Manganese		290	X	0.096	0.96
Nickel		30.6	X	0.12	3.9
Potassium		1070		39.5	289
Silicon		240	N X	5.4	9.6
Strontium		36.0	X	0.035	0.96
Vanadium		47.1	X	0.090	1.9

Analysis Method:	6010B	Analysis Batch:	280-272917	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-272797	Lab File ID:	25B041515.asc
Dilution:	1.0			Initial Weight/Volume:	1.04 g
Analysis Date:	04/15/2015 2149			Final Weight/Volume:	100 mL
Prep Date:	04/15/2015 1440				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Magnesium		4570	X	3.7	20.0

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5M8**

Lab Sample ID: 280-67600-2
Client Matrix: Solid
% Moisture: 3.8

Date Sampled: 04/07/2015 1015
Date Received: 04/09/2015 0900

6010B Metals (ICP)

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	280-272415	Instrument ID:	MT_077
Prep Method:	3050B	Prep Batch:	280-272134	Lab File ID:	235SMPL.d
Dilution:	1.0			Initial Weight/Volume:	1.04 g
Analysis Date:	04/11/2015 0617			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Uranium		0.44		0.0016	0.10

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-272427	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-272066	Lab File ID:	150410ba.txt
Dilution:	1.0			Initial Weight/Volume:	0.55 g
Analysis Date:	04/10/2015 1830			Final Weight/Volume:	50 mL
Prep Date:	04/10/2015 1500				

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

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5M9**

Lab Sample ID: 280-67600-3
Client Matrix: Solid
% Moisture: 4.7

Date Sampled: 04/07/2015 0933
Date Received: 04/09/2015 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-272432	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-272139	Lab File ID:	26c041115.asc
Dilution:	1.0			Initial Weight/Volume:	1.00 g
Analysis Date:	04/11/2015 2026			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		2.7		0.69	1.0
Beryllium		0.23		0.035	0.21
Boron		1.0	U	1.0	2.1
Calcium		6370	X	14.8	52.5
Iron		23400	X	4.0	5.2
Molybdenum		0.27	U	0.27	2.1
Selenium		0.90	U	0.90	1.0
Silver		0.17	U	0.17	0.21
Sodium		395		61.9	126
Tin		1.5	B C	0.96	10.5
Zinc		39.6	X	0.42	1.0
Zirconium		22.5	X	0.37	2.6

Analysis Method:	6010B	Analysis Batch:	280-272564	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-272139	Lab File ID:	26a041315.asc
Dilution:	1.0			Initial Weight/Volume:	1.00 g
Analysis Date:	04/13/2015 1649			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		4870	X	1.6	5.2
Antimony		0.96		0.40	0.63
Barium		65.0	X	0.080	0.52
Cadmium		0.043	U	0.043	0.21
Chromium		4.4	X	0.061	0.21
Cobalt		7.5	X	0.10	1.0
Copper		14.9		0.23	1.0
Lead		2.8		0.28	0.52
Lithium		4.3		0.31	2.6
Manganese		252	X	0.10	1.0
Nickel		8.1	X	0.13	4.2
Potassium		671		43.0	315
Silicon		163	N X	5.9	10.5
Strontium		20.8	X	0.038	1.0
Vanadium		46.2	X	0.099	2.1

Analysis Method:	6010B	Analysis Batch:	280-272917	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-272797	Lab File ID:	25B041515.asc
Dilution:	1.0			Initial Weight/Volume:	1.10 g
Analysis Date:	04/15/2015 2201			Final Weight/Volume:	100 mL
Prep Date:	04/15/2015 1440				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Magnesium		4360	X	3.5	19.1

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5M9**

Lab Sample ID: 280-67600-3
Client Matrix: Solid
% Moisture: 4.7

Date Sampled: 04/07/2015 0933
Date Received: 04/09/2015 0900

6010B Metals (ICP)

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	280-272415	Instrument ID:	MT_077
Prep Method:	3050B	Prep Batch:	280-272134	Lab File ID:	238SMPL.d
Dilution:	1.0			Initial Weight/Volume:	1.07 g
Analysis Date:	04/11/2015 0628			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Uranium		0.49		0.0015	0.098

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-272427	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-272066	Lab File ID:	150410ba.txt
Dilution:	1.0			Initial Weight/Volume:	0.50 g
Analysis Date:	04/10/2015 1833			Final Weight/Volume:	50 mL
Prep Date:	04/10/2015 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0070	U	0.0070	0.021

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N0**

Lab Sample ID: 280-67600-4
Client Matrix: Solid
% Moisture: 5.9

Date Sampled: 04/07/2015 0903
Date Received: 04/09/2015 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-272432	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-272139	Lab File ID:	26c041115.asc
Dilution:	1.0			Initial Weight/Volume:	1.09 g
Analysis Date:	04/11/2015 2028			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		1.6		0.64	0.97
Beryllium		0.21		0.032	0.19
Boron		0.96	U	0.96	1.9
Calcium		5110	X	13.7	48.7
Iron		18000	X	3.7	4.9
Molybdenum		0.25	U	0.25	1.9
Selenium		0.84	U	0.84	0.97
Silver		0.16	U	0.16	0.19
Sodium		320		57.5	117
Tin		1.3	B C	0.89	9.7
Zinc		31.3	X	0.39	0.97
Zirconium		18.3	X	0.35	2.4

Analysis Method:	6010B	Analysis Batch:	280-272564	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-272139	Lab File ID:	26a041315.asc
Dilution:	1.0			Initial Weight/Volume:	1.09 g
Analysis Date:	04/13/2015 1651			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		4280	X	1.5	4.9
Antimony		0.78		0.37	0.58
Barium		50.8	X	0.074	0.49
Cadmium		0.040	U	0.040	0.19
Chromium		3.6	X	0.057	0.19
Cobalt		5.4	X	0.097	0.97
Copper		12.4		0.21	0.97
Lead		2.7		0.26	0.49
Lithium		3.6		0.29	2.4
Manganese		181	X	0.097	0.97
Nickel		6.0	X	0.12	3.9
Potassium		666		40.0	292
Silicon		147	N X	5.5	9.7
Strontium		17.1	X	0.035	0.97
Vanadium		34.3	X	0.092	1.9

Analysis Method:	6010B	Analysis Batch:	280-272917	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-272797	Lab File ID:	25B041515.asc
Dilution:	1.0			Initial Weight/Volume:	1.16 g
Analysis Date:	04/15/2015 2204			Final Weight/Volume:	100 mL
Prep Date:	04/15/2015 1440				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Magnesium		3580	X	3.4	18.3

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N0**

Lab Sample ID: 280-67600-4
Client Matrix: Solid
% Moisture: 5.9

Date Sampled: 04/07/2015 0903
Date Received: 04/09/2015 0900

6010B Metals (ICP)

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	280-272415	Instrument ID:	MT_077
Prep Method:	3050B	Prep Batch:	280-272134	Lab File ID:	239SMPL.d
Dilution:	1.0			Initial Weight/Volume:	1.07 g
Analysis Date:	04/11/2015 0632			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Uranium		0.39		0.0016	0.099

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-272427	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-272066	Lab File ID:	150410ba.txt
Dilution:	1.0			Initial Weight/Volume:	0.56 g
Analysis Date:	04/10/2015 1835			Final Weight/Volume:	50 mL
Prep Date:	04/10/2015 1500				

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

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N1**

Lab Sample ID: 280-67600-5
Client Matrix: Solid
% Moisture: 4.7

Date Sampled: 04/07/2015 0841
Date Received: 04/09/2015 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-272432	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-272139	Lab File ID:	26c041115.asc
Dilution:	1.0			Initial Weight/Volume:	1.05 g
Analysis Date:	04/11/2015 2031			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		3.6		0.66	1.0
Beryllium		0.22		0.033	0.20
Boron		0.98	U	0.98	2.0
Calcium		5880	X	14.1	50.0
Iron		20000	X	3.8	5.0
Molybdenum		0.26	U	0.26	2.0
Selenium		0.86	U	0.86	1.0
Silver		0.16	U	0.16	0.20
Sodium		331		58.9	120
Tin		1.3	B C	0.91	10
Zinc		42.5	X	0.40	1.0
Zirconium		17.6	X	0.35	2.5

Analysis Method:	6010B	Analysis Batch:	280-272564	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-272139	Lab File ID:	26a041315.asc
Dilution:	1.0			Initial Weight/Volume:	1.05 g
Analysis Date:	04/13/2015 1654			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		5800	X	1.5	5.0
Antimony		1.2		0.38	0.60
Barium		60.8	X	0.076	0.50
Cadmium		0.041	U	0.041	0.20
Chromium		8.3	X	0.058	0.20
Cobalt		7.1	X	0.10	1.0
Copper		17.6		0.22	1.0
Lead		7.3		0.27	0.50
Lithium		6.5		0.30	2.5
Manganese		291	X	0.10	1.0
Nickel		10.4	X	0.12	4.0
Potassium		900		41.0	300
Silicon		189	N X	5.7	10
Strontium		23.9	X	0.036	1.0
Vanadium		50.2	X	0.094	2.0

Analysis Method:	6010B	Analysis Batch:	280-272917	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-272797	Lab File ID:	25B041515.asc
Dilution:	1.0			Initial Weight/Volume:	1.04 g
Analysis Date:	04/15/2015 2207			Final Weight/Volume:	100 mL
Prep Date:	04/15/2015 1440				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Magnesium		4140	X	3.7	20.2

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N1**

Lab Sample ID: 280-67600-5
Client Matrix: Solid
% Moisture: 4.7

Date Sampled: 04/07/2015 0841
Date Received: 04/09/2015 0900

6010B Metals (ICP)

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	280-272415	Instrument ID:	MT_077
Prep Method:	3050B	Prep Batch:	280-272134	Lab File ID:	240SMPL.d
Dilution:	1.0			Initial Weight/Volume:	1.10 g
Analysis Date:	04/11/2015 0636			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Uranium		0.43		0.0015	0.095

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-272427	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-272066	Lab File ID:	150410ba.txt
Dilution:	1.0			Initial Weight/Volume:	0.53 g
Analysis Date:	04/10/2015 1837			Final Weight/Volume:	50 mL
Prep Date:	04/10/2015 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0066	U	0.0066	0.020

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N2**

Lab Sample ID: 280-67600-6
Client Matrix: Solid
% Moisture: 4.3

Date Sampled: 04/07/2015 0957
Date Received: 04/09/2015 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-272432	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-272139	Lab File ID:	26c041115.asc
Dilution:	1.0			Initial Weight/Volume:	1.14 g
Analysis Date:	04/11/2015 2044			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		1.2		0.35	0.55
Arsenic		3.3		0.60	0.92
Beryllium		0.28		0.030	0.18
Boron		0.98	B	0.90	1.8
Calcium		9340	X	12.9	45.8
Iron		22600	X	3.5	4.6
Molybdenum		0.24	U	0.24	1.8
Selenium		0.79	U	0.79	0.92
Silver		0.15	U	0.15	0.18
Sodium		230		54.1	110
Tin		1.3	B C	0.84	9.2
Zinc		51.9	X	0.36	0.92
Zirconium		20.4	X	0.32	2.3

Analysis Method:	6010B	Analysis Batch:	280-272564	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-272139	Lab File ID:	26a041315.asc
Dilution:	1.0			Initial Weight/Volume:	1.14 g
Analysis Date:	04/13/2015 1657			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		6690	X	1.4	4.6
Barium		65.8	X	0.070	0.46
Cadmium		0.038	U	0.038	0.18
Chromium		10.6	X	0.053	0.18
Cobalt		7.0	X	0.092	0.92
Copper		17.1		0.20	0.92
Lead		7.3		0.25	0.46
Lithium		6.4		0.27	2.3
Manganese		292	X	0.092	0.92
Nickel		11.5	X	0.11	3.7
Potassium		984		37.6	275
Silicon		271	N X	5.2	9.2
Strontium		30.6	X	0.033	0.92
Vanadium		48.0	X	0.086	1.8

Analysis Method:	6010B	Analysis Batch:	280-272917	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-272797	Lab File ID:	25B041515.asc
Dilution:	1.0			Initial Weight/Volume:	1.18 g
Analysis Date:	04/15/2015 2209			Final Weight/Volume:	100 mL
Prep Date:	04/15/2015 1440				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Magnesium		4090	X	3.3	17.7

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N2**

Lab Sample ID: 280-67600-6
Client Matrix: Solid
% Moisture: 4.3

Date Sampled: 04/07/2015 0957
Date Received: 04/09/2015 0900

6010B Metals (ICP)

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	280-272415	Instrument ID:	MT_077
Prep Method:	3050B	Prep Batch:	280-272134	Lab File ID:	241SMPL.d
Dilution:	1.0			Initial Weight/Volume:	1.14 g
Analysis Date:	04/11/2015 0639			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Uranium		0.42		0.0014	0.092

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-272427	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-272066	Lab File ID:	150410ba.txt
Dilution:	1.0			Initial Weight/Volume:	0.57 g
Analysis Date:	04/10/2015 1840			Final Weight/Volume:	50 mL
Prep Date:	04/10/2015 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0061	U	0.0061	0.019

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N3**

Lab Sample ID: 280-67600-7
Client Matrix: Solid
% Moisture: 4.3

Date Sampled: 04/07/2015 0924
Date Received: 04/09/2015 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-272432	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-272139	Lab File ID:	26c041115.asc
Dilution:	1.0			Initial Weight/Volume:	1.01 g
Analysis Date:	04/11/2015 2047			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.93		0.39	0.62
Arsenic		3.2		0.68	1.0
Beryllium		0.30		0.034	0.21
Boron		1.0	U	1.0	2.1
Calcium		7110	X	14.6	51.7
Iron		22400	X	3.9	5.2
Molybdenum		0.27	U	0.27	2.1
Selenium		0.89	U	0.89	1.0
Silver		0.17	U	0.17	0.21
Sodium		330		61.0	124
Tin		1.5	B C	0.94	10.3
Zinc		40.8	X	0.41	1.0
Zirconium		22.2	X	0.37	2.6

Analysis Method:	6010B	Analysis Batch:	280-272564	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-272139	Lab File ID:	26a041315.asc
Dilution:	1.0			Initial Weight/Volume:	1.01 g
Analysis Date:	04/13/2015 1659			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		5650	X	1.6	5.2
Barium		64.8	X	0.079	0.52
Cadmium		0.042	U	0.042	0.21
Chromium		5.4	X	0.060	0.21
Cobalt		7.1	X	0.10	1.0
Copper		14.8		0.22	1.0
Lead		4.2		0.28	0.52
Lithium		5.4		0.31	2.6
Manganese		261	X	0.10	1.0
Nickel		8.5	X	0.13	4.1
Potassium		864		42.4	310
Silicon		173	N X	5.9	10.3
Strontium		23.3	X	0.037	1.0
Vanadium		40.7	X	0.097	2.1

Analysis Method:	6010B	Analysis Batch:	280-272917	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-272797	Lab File ID:	25B041515.asc
Dilution:	1.0			Initial Weight/Volume:	1.06 g
Analysis Date:	04/15/2015 2212			Final Weight/Volume:	100 mL
Prep Date:	04/15/2015 1440				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Magnesium		4160	X	3.6	19.7

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N3**

Lab Sample ID: 280-67600-7
Client Matrix: Solid
% Moisture: 4.3

Date Sampled: 04/07/2015 0924
Date Received: 04/09/2015 0900

6010B Metals (ICP)

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	280-272415	Instrument ID:	MT_077
Prep Method:	3050B	Prep Batch:	280-272134	Lab File ID:	242SMPL.d
Dilution:	1.0			Initial Weight/Volume:	1.01 g
Analysis Date:	04/11/2015 0643			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Uranium		0.44		0.0016	0.10

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-272427	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-272066	Lab File ID:	150410ba.txt
Dilution:	1.0			Initial Weight/Volume:	0.55 g
Analysis Date:	04/10/2015 1847			Final Weight/Volume:	50 mL
Prep Date:	04/10/2015 1500				

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

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N4**

Lab Sample ID: 280-67600-8
Client Matrix: Solid
% Moisture: 4.1

Date Sampled: 04/07/2015 0912
Date Received: 04/09/2015 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-272432	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-272139	Lab File ID:	26c041115.asc
Dilution:	1.0			Initial Weight/Volume:	1.14 g
Analysis Date:	04/11/2015 2049			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.61		0.35	0.55
Arsenic		1.3		0.60	0.91
Beryllium		0.14	B	0.030	0.18
Boron		0.90	U	0.90	1.8
Calcium		3990	X	12.9	45.7
Iron		15100	X	3.5	4.6
Molybdenum		0.24	U	0.24	1.8
Selenium		0.79	U	0.79	0.91
Silver		0.15	U	0.15	0.18
Sodium		265		54.0	110
Tin		1.0	B C	0.83	9.1
Zinc		24.7	X	0.36	0.91
Zirconium		14.1	X	0.32	2.3

Analysis Method:	6010B	Analysis Batch:	280-272564	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-272139	Lab File ID:	26a041315.asc
Dilution:	1.0			Initial Weight/Volume:	1.14 g
Analysis Date:	04/13/2015 1702			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		3890	X	1.4	4.6
Barium		38.0	X	0.069	0.46
Cadmium		0.037	U	0.037	0.18
Chromium		2.8	X	0.053	0.18
Cobalt		6.8	X	0.091	0.91
Copper		14.5		0.20	0.91
Lead		2.1		0.25	0.46
Lithium		2.9		0.27	2.3
Manganese		221	X	0.091	0.91
Nickel		5.7	X	0.11	3.7
Potassium		519		37.5	274
Silicon		182	N X	5.2	9.1
Strontium		17.2	X	0.033	0.91
Vanadium		39.9	X	0.086	1.8

Analysis Method:	6010B	Analysis Batch:	280-272917	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-272797	Lab File ID:	25B041515.asc
Dilution:	1.0			Initial Weight/Volume:	1.06 g
Analysis Date:	04/15/2015 2214			Final Weight/Volume:	100 mL
Prep Date:	04/15/2015 1440				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Magnesium		2840	X	3.6	19.7

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N4**

Lab Sample ID: 280-67600-8
Client Matrix: Solid
% Moisture: 4.1

Date Sampled: 04/07/2015 0912
Date Received: 04/09/2015 0900

6010B Metals (ICP)

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	280-272415	Instrument ID:	MT_077
Prep Method:	3050B	Prep Batch:	280-272134	Lab File ID:	243SMPL.d
Dilution:	1.0			Initial Weight/Volume:	1.18 g
Analysis Date:	04/11/2015 0646			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Uranium		0.47		0.0014	0.088

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-272427	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-272066	Lab File ID:	150410ba.txt
Dilution:	1.0			Initial Weight/Volume:	0.52 g
Analysis Date:	04/10/2015 1849			Final Weight/Volume:	50 mL
Prep Date:	04/10/2015 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0067	U	0.0067	0.020

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N5**

Lab Sample ID: 280-67600-9
Client Matrix: Solid
% Moisture: 4.2

Date Sampled: 04/07/2015 0848
Date Received: 04/09/2015 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-272432	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-272139	Lab File ID:	26c041115.asc
Dilution:	1.0			Initial Weight/Volume:	1.08 g
Analysis Date:	04/11/2015 2052			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.90		0.37	0.58
Arsenic		2.5		0.64	0.97
Beryllium		0.33		0.032	0.19
Boron		1.3	B	0.95	1.9
Calcium		3940	X	13.6	48.3
Iron		19700	X	3.7	4.8
Molybdenum		0.25	U	0.25	1.9
Selenium		0.83	U	0.83	0.97
Silver		0.15	U	0.15	0.19
Sodium		336		57.0	116
Tin		1.4	B C	0.88	9.7
Zinc		41.8	X	0.38	0.97
Zirconium		18.6	X	0.34	2.4

Analysis Method:	6010B	Analysis Batch:	280-272564	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-272139	Lab File ID:	26a041315.asc
Dilution:	1.0			Initial Weight/Volume:	1.08 g
Analysis Date:	04/13/2015 1704			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8070	X	1.5	4.8
Barium		74.0	X	0.073	0.48
Cadmium		0.040	U	0.040	0.19
Chromium		9.3	X	0.056	0.19
Cobalt		6.7	X	0.097	0.97
Copper		12.9		0.21	0.97
Lead		3.7		0.26	0.48
Lithium		7.0		0.29	2.4
Manganese		317	X	0.097	0.97
Nickel		9.9	X	0.12	3.9
Potassium		1510		39.6	290
Silicon		408	N X	5.5	9.7
Strontium		22.5	X	0.035	0.97
Vanadium		44.5	X	0.091	1.9

Analysis Method:	6010B	Analysis Batch:	280-272917	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-272797	Lab File ID:	25B041515.asc
Dilution:	1.0			Initial Weight/Volume:	1.01 g
Analysis Date:	04/15/2015 2217			Final Weight/Volume:	100 mL
Prep Date:	04/15/2015 1440				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Magnesium		4030	X	3.8	20.7

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N5**

Lab Sample ID: 280-67600-9
Client Matrix: Solid
% Moisture: 4.2

Date Sampled: 04/07/2015 0848
Date Received: 04/09/2015 0900

6010B Metals (ICP)

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	280-272415	Instrument ID:	MT_077
Prep Method:	3050B	Prep Batch:	280-272134	Lab File ID:	244SMPL.d
Dilution:	1.0			Initial Weight/Volume:	1.02 g
Analysis Date:	04/11/2015 0650			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Uranium		0.49		0.0016	0.10

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-272427	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-272066	Lab File ID:	150410ba.txt
Dilution:	1.0			Initial Weight/Volume:	0.50 g
Analysis Date:	04/10/2015 1851			Final Weight/Volume:	50 mL
Prep Date:	04/10/2015 1500				

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

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N6**

Lab Sample ID: 280-67600-10
Client Matrix: Solid
% Moisture: 3.9

Date Sampled: 04/07/2015 1005
Date Received: 04/09/2015 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-272432	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-272139	Lab File ID:	26c041115.asc
Dilution:	1.0			Initial Weight/Volume:	1.05 g
Analysis Date:	04/11/2015 2054			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.74		0.38	0.59
Arsenic		3.3		0.65	0.99
Beryllium		0.29		0.033	0.20
Boron		0.98	B	0.97	2.0
Calcium		6840	X	14.0	49.6
Iron		21000	X	3.8	5.0
Molybdenum		0.26	U	0.26	2.0
Selenium		0.85	U	0.85	0.99
Silver		0.16	U	0.16	0.20
Sodium		274		58.5	119
Tin		1.6	B C	0.90	9.9
Zinc		41.8	X	0.39	0.99
Zirconium		22.1	X	0.35	2.5

Analysis Method:	6010B	Analysis Batch:	280-272564	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-272139	Lab File ID:	26a041315.asc
Dilution:	1.0			Initial Weight/Volume:	1.05 g
Analysis Date:	04/13/2015 1707			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		7980	X	1.5	5.0
Barium		78.7	X	0.075	0.50
Cadmium		0.041	U	0.041	0.20
Chromium		9.5	X	0.057	0.20
Cobalt		7.8	X	0.099	0.99
Copper		16.8		0.22	0.99
Lead		5.6		0.27	0.50
Lithium		7.7		0.30	2.5
Manganese		350	X	0.099	0.99
Nickel		11.0	X	0.12	4.0
Potassium		1220		40.6	297
Silicon		387	N X	5.6	9.9
Strontium		25.7	X	0.036	0.99
Vanadium		52.4	X	0.093	2.0

Analysis Method:	6010B	Analysis Batch:	280-272917	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-272797	Lab File ID:	25B041515.asc
Dilution:	1.0			Initial Weight/Volume:	1.12 g
Analysis Date:	04/15/2015 2229			Final Weight/Volume:	100 mL
Prep Date:	04/15/2015 1440				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Magnesium		4410	X	3.4	18.6

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N6**

Lab Sample ID: 280-67600-10
Client Matrix: Solid
% Moisture: 3.9

Date Sampled: 04/07/2015 1005
Date Received: 04/09/2015 0900

6010B Metals (ICP)

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	280-272415	Instrument ID:	MT_077
Prep Method:	3050B	Prep Batch:	280-272134	Lab File ID:	247SMPL.d
Dilution:	1.0			Initial Weight/Volume:	1.06 g
Analysis Date:	04/11/2015 0701			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Uranium		0.46		0.0015	0.098

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-272427	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-272066	Lab File ID:	150410ba.txt
Dilution:	1.0			Initial Weight/Volume:	0.53 g
Analysis Date:	04/10/2015 1853			Final Weight/Volume:	50 mL
Prep Date:	04/10/2015 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0065	U	0.0065	0.020

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N7**

Lab Sample ID: 280-67600-11
Client Matrix: Solid
% Moisture: 3.8

Date Sampled: 04/07/2015 1024
Date Received: 04/09/2015 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-272432	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-272139	Lab File ID:	26c041115.asc
Dilution:	1.0			Initial Weight/Volume:	1.16 g
Analysis Date:	04/11/2015 2057			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.84		0.34	0.54
Arsenic		2.9		0.59	0.90
Beryllium		0.24		0.030	0.18
Boron		0.88	U	0.88	1.8
Calcium		5160	X	12.6	44.8
Iron		18800	X	3.4	4.5
Molybdenum		0.23	U	0.23	1.8
Selenium		0.77	U	0.77	0.90
Silver		0.14	U	0.14	0.18
Sodium		239		52.9	108
Tin		1.2	B C	0.82	9.0
Zinc		37.0	X	0.36	0.90
Zirconium		16.4	X	0.32	2.2

Analysis Method:	6010B	Analysis Batch:	280-272564	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-272139	Lab File ID:	26a041315.asc
Dilution:	1.0			Initial Weight/Volume:	1.16 g
Analysis Date:	04/13/2015 1710			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		6660	X	1.4	4.5
Barium		59.7	X	0.068	0.45
Cadmium		0.037	U	0.037	0.18
Chromium		8.8	X	0.052	0.18
Cobalt		5.7	X	0.090	0.90
Copper		10.5		0.19	0.90
Lead		3.5		0.24	0.45
Lithium		6.3		0.27	2.2
Manganese		277	X	0.090	0.90
Nickel		9.0	X	0.11	3.6
Potassium		1050		36.7	269
Silicon		355	N X	5.1	9.0
Strontium		27.2	X	0.032	0.90
Vanadium		44.8	X	0.084	1.8

Analysis Method:	6010B	Analysis Batch:	280-272917	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-272797	Lab File ID:	25B041515.asc
Dilution:	1.0			Initial Weight/Volume:	1.09 g
Analysis Date:	04/15/2015 2232			Final Weight/Volume:	100 mL
Prep Date:	04/15/2015 1440				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Magnesium		3760	X	3.5	19.1

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N7**

Lab Sample ID: 280-67600-11
Client Matrix: Solid
% Moisture: 3.8

Date Sampled: 04/07/2015 1024
Date Received: 04/09/2015 0900

6010B Metals (ICP)

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	280-272415	Instrument ID:	MT_077
Prep Method:	3050B	Prep Batch:	280-272134	Lab File ID:	248SMPL.d
Dilution:	1.0			Initial Weight/Volume:	1.08 g
Analysis Date:	04/11/2015 0705			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Uranium		0.37		0.0015	0.096

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-272427	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-272066	Lab File ID:	150410ba.txt
Dilution:	1.0			Initial Weight/Volume:	0.59 g
Analysis Date:	04/10/2015 1856			Final Weight/Volume:	50 mL
Prep Date:	04/10/2015 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0058	U	0.0058	0.018

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N8**

Lab Sample ID: 280-67600-12
Client Matrix: Solid
% Moisture: 8.9

Date Sampled: 04/07/2015 1036
Date Received: 04/09/2015 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-272432	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-272139	Lab File ID:	26c041115.asc
Dilution:	1.0			Initial Weight/Volume:	1.04 g
Analysis Date:	04/11/2015 2110			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		3.0		0.70	1.1
Beryllium		0.35		0.035	0.21
Calcium		3670	X	14.9	52.8
Chromium		10.0	X	0.061	0.21
Iron		22100	X	4.0	5.3
Molybdenum		0.27	U	0.27	2.1
Nickel		11.6	X	0.13	4.2
Silver		0.17	U	0.17	0.21
Sodium		444		62.3	127
Tin		1.3	B C	0.96	10.6
Zinc		42.1	X	0.42	1.1
Zirconium		23.3	X	0.37	2.6

Analysis Method:	6010B	Analysis Batch:	280-272564	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-272139	Lab File ID:	26a041315.asc
Dilution:	1.0			Initial Weight/Volume:	1.04 g
Analysis Date:	04/13/2015 1723			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		9560	X	1.6	5.3
Antimony		1.2		0.40	0.63
Barium		83.8	X	0.080	0.53
Boron		1.2	B	1.0	2.1
Cadmium		0.043	U	0.043	0.21
Cobalt		7.8	X	0.11	1.1
Copper		13.6		0.23	1.1
Lead		4.8		0.29	0.53
Lithium		8.2		0.32	2.6
Manganese		374	X	0.11	1.1
Potassium		1870		43.3	317
Selenium		0.91	U	0.91	1.1
Silicon		384	N X	6.0	10.6
Strontium		22.0	X	0.038	1.1
Vanadium		50.8	X	0.099	2.1

Analysis Method:	6010B	Analysis Batch:	280-272917	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-272797	Lab File ID:	25B041515.asc
Dilution:	1.0			Initial Weight/Volume:	1.07 g
Analysis Date:	04/15/2015 2234			Final Weight/Volume:	100 mL
Prep Date:	04/15/2015 1440				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Magnesium		4800	X	3.8	20.5

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N8**

Lab Sample ID: 280-67600-12
Client Matrix: Solid
% Moisture: 8.9

Date Sampled: 04/07/2015 1036
Date Received: 04/09/2015 0900

6010B Metals (ICP)

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	280-272415	Instrument ID:	MT_077
Prep Method:	3050B	Prep Batch:	280-272134	Lab File ID:	249SMPL.d
Dilution:	1.0			Initial Weight/Volume:	1.08 g
Analysis Date:	04/11/2015 0708			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Uranium		0.55		0.0016	0.10

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-272427	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-272066	Lab File ID:	150410ba.txt
Dilution:	1.0			Initial Weight/Volume:	0.60 g
Analysis Date:	04/10/2015 1858			Final Weight/Volume:	50 mL
Prep Date:	04/10/2015 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0061	U	0.0061	0.019

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N9**

Lab Sample ID: 280-67600-13
Client Matrix: Solid
% Moisture: 4.8

Date Sampled: 04/07/2015 0826
Date Received: 04/09/2015 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-272432	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-272139	Lab File ID:	26c041115.asc
Dilution:	1.0			Initial Weight/Volume:	1.03 g
Analysis Date:	04/11/2015 2113			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		2.7		0.67	1.0
Beryllium		0.31		0.034	0.20
Calcium		5350	X	14.4	51.0
Chromium		8.3	X	0.059	0.20
Iron		23500	X	3.9	5.1
Molybdenum		0.27	U	0.27	2.0
Nickel		11.1	X	0.13	4.1
Silver		0.16	U	0.16	0.20
Sodium		276		60.1	122
Tin		1.6	B C	0.93	10.2
Zinc		43.8	X	0.41	1.0
Zirconium		25.5	X	0.36	2.5

Analysis Method:	6010B	Analysis Batch:	280-272564	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-272139	Lab File ID:	26a041315.asc
Dilution:	1.0			Initial Weight/Volume:	1.03 g
Analysis Date:	04/13/2015 1725			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8220	X	1.6	5.1
Antimony		1.1		0.39	0.61
Barium		76.5	X	0.077	0.51
Boron		1.1	B	1.0	2.0
Cadmium		0.042	U	0.042	0.20
Cobalt		7.8	X	0.10	1.0
Copper		14.7		0.22	1.0
Lead		4.1		0.28	0.51
Lithium		7.2		0.31	2.5
Manganese		339	X	0.10	1.0
Potassium		1420		41.8	306
Selenium		0.88	U	0.88	1.0
Silicon		478	N X	5.8	10.2
Strontium		24.6	X	0.037	1.0
Vanadium		57.7	X	0.096	2.0

Analysis Method:	6010B	Analysis Batch:	280-272917	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-272797	Lab File ID:	25B041515.asc
Dilution:	1.0			Initial Weight/Volume:	1.14 g
Analysis Date:	04/15/2015 2237			Final Weight/Volume:	100 mL
Prep Date:	04/15/2015 1440				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Magnesium		4760	X	3.4	18.4

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5N9**

Lab Sample ID: 280-67600-13
Client Matrix: Solid
% Moisture: 4.8

Date Sampled: 04/07/2015 0826
Date Received: 04/09/2015 0900

6010B Metals (ICP)

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	280-272415	Instrument ID:	MT_077
Prep Method:	3050B	Prep Batch:	280-272134	Lab File ID:	250SMPL.d
Dilution:	1.0			Initial Weight/Volume:	1.06 g
Analysis Date:	04/11/2015 0712			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Uranium		0.50		0.0016	0.099

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-272427	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-272066	Lab File ID:	150410ba.txt
Dilution:	1.0			Initial Weight/Volume:	0.50 g
Analysis Date:	04/10/2015 1900			Final Weight/Volume:	50 mL
Prep Date:	04/10/2015 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0070	U	0.0070	0.021

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5P0**

Lab Sample ID: 280-67600-14
Client Matrix: Solid
% Moisture: 3.8

Date Sampled: 04/07/2015 0855
Date Received: 04/09/2015 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-272432	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-272139	Lab File ID:	26c041115.asc
Dilution:	1.0			Initial Weight/Volume:	1.14 g
Analysis Date:	04/11/2015 2115			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		1.3		0.60	0.91
Beryllium		0.17	B	0.030	0.18
Calcium		4720	X	12.9	45.6
Chromium		3.8	X	0.053	0.18
Iron		16900	X	3.5	4.6
Molybdenum		0.24	U	0.24	1.8
Nickel		5.5	X	0.11	3.6
Silver		0.15	U	0.15	0.18
Sodium		338		53.8	109
Tin		1.2	B C	0.83	9.1
Zinc		31.0	X	0.36	0.91
Zirconium		17.5	X	0.32	2.3

Analysis Method:	6010B	Analysis Batch:	280-272564	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-272139	Lab File ID:	26a041315.asc
Dilution:	1.0			Initial Weight/Volume:	1.14 g
Analysis Date:	04/13/2015 1728			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		4210	X	1.4	4.6
Antimony		1.1		0.35	0.55
Barium		46.1	X	0.069	0.46
Boron		0.89	U	0.89	1.8
Cadmium		0.037	U	0.037	0.18
Cobalt		6.7	X	0.091	0.91
Copper		13.3		0.20	0.91
Lead		2.0		0.25	0.46
Lithium		3.0		0.27	2.3
Manganese		202	X	0.091	0.91
Potassium		492		37.4	274
Selenium		0.78	U	0.78	0.91
Silicon		162	N X	5.2	9.1
Strontium		19.8	X	0.033	0.91
Vanadium		44.7	X	0.086	1.8

Analysis Method:	6010B	Analysis Batch:	280-272917	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-272797	Lab File ID:	25B041515.asc
Dilution:	1.0			Initial Weight/Volume:	1.13 g
Analysis Date:	04/15/2015 2240			Final Weight/Volume:	100 mL
Prep Date:	04/15/2015 1440				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Magnesium		3720	X	3.4	18.4

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5P0**

Lab Sample ID: 280-67600-14
Client Matrix: Solid
% Moisture: 3.8

Date Sampled: 04/07/2015 0855
Date Received: 04/09/2015 0900

6010B Metals (ICP)

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	280-272415	Instrument ID:	MT_077
Prep Method:	3050B	Prep Batch:	280-272134	Lab File ID:	251SMPL.d
Dilution:	1.0			Initial Weight/Volume:	1.02 g
Analysis Date:	04/11/2015 0715			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Uranium		0.34		0.0016	0.10

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-272427	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-272066	Lab File ID:	150410ba.txt
Dilution:	1.0			Initial Weight/Volume:	0.50 g
Analysis Date:	04/10/2015 1903			Final Weight/Volume:	50 mL
Prep Date:	04/10/2015 1500				

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

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5P1**

Lab Sample ID: 280-67600-15
Client Matrix: Solid
% Moisture: 4.5

Date Sampled: 04/07/2015 0945
Date Received: 04/09/2015 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-272432	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-272139	Lab File ID:	26c041115.asc
Dilution:	1.0			Initial Weight/Volume:	1.10 g
Analysis Date:	04/11/2015 2118			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		2.4		0.63	0.95
Beryllium		0.28		0.031	0.19
Calcium		7270	X	13.4	47.6
Chromium		5.5	X	0.055	0.19
Iron		22800	X	3.6	4.8
Molybdenum		0.25	U	0.25	1.9
Nickel		8.2	X	0.12	3.8
Silver		0.15	U	0.15	0.19
Sodium		345		56.2	114
Tin		1.7	B C	0.87	9.5
Zinc		41.3	X	0.38	0.95
Zirconium		24.0	X	0.34	2.4

Analysis Method:	6010B	Analysis Batch:	280-272564	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-272139	Lab File ID:	26a041315.asc
Dilution:	1.0			Initial Weight/Volume:	1.10 g
Analysis Date:	04/13/2015 1731			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		6350	X	1.5	4.8
Antimony		1.0		0.36	0.57
Barium		62.4	X	0.072	0.48
Boron		0.93	U	0.93	1.9
Cadmium		0.039	U	0.039	0.19
Cobalt		6.9	X	0.095	0.95
Copper		14.0		0.21	0.95
Lead		3.7		0.26	0.48
Lithium		5.6		0.29	2.4
Manganese		273	X	0.095	0.95
Potassium		1020		39.0	286
Selenium		0.82	U	0.82	0.95
Silicon		221	N X	5.4	9.5
Strontium		22.8	X	0.034	0.95
Vanadium		51.1	X	0.090	1.9

Analysis Method:	6010B	Analysis Batch:	280-272917	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-272797	Lab File ID:	25B041515.asc
Dilution:	1.0			Initial Weight/Volume:	1.14 g
Analysis Date:	04/15/2015 2242			Final Weight/Volume:	100 mL
Prep Date:	04/15/2015 1440				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Magnesium		4380	X	3.4	18.4

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5P1**

Lab Sample ID: 280-67600-15
Client Matrix: Solid
% Moisture: 4.5

Date Sampled: 04/07/2015 0945
Date Received: 04/09/2015 0900

6010B Metals (ICP)

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	280-272415	Instrument ID:	MT_077
Prep Method:	3050B	Prep Batch:	280-272134	Lab File ID:	252SMPL.d
Dilution:	1.0			Initial Weight/Volume:	1.10 g
Analysis Date:	04/11/2015 0719			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Uranium		0.45		0.0015	0.095

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-272427	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-272066	Lab File ID:	150410ba.txt
Dilution:	1.0			Initial Weight/Volume:	0.50 g
Analysis Date:	04/10/2015 1905			Final Weight/Volume:	50 mL
Prep Date:	04/10/2015 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0070	U	0.0070	0.021

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5P2**

Lab Sample ID: 280-67600-16
Client Matrix: Solid
% Moisture: 0.0

Date Sampled: 04/07/2015 0813
Date Received: 04/09/2015 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-272432	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-272139	Lab File ID:	26c041115.asc
Dilution:	1.0			Initial Weight/Volume:	1.02 g
Analysis Date:	04/11/2015 2121			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		0.65	U	0.65	0.98
Beryllium		0.032	U	0.032	0.20
Calcium		34.8	B C X	13.8	49.0
Chromium		0.13	B C X	0.057	0.20
Iron		113	X	3.7	4.9
Molybdenum		0.25	U	0.25	2.0
Nickel		0.12	U X	0.12	3.9
Silver		0.16	U	0.16	0.20
Sodium		57.8	U	57.8	118
Tin		0.89	U	0.89	9.8
Zinc		0.48	B X	0.39	0.98
Zirconium		0.35	U X	0.35	2.5

Analysis Method:	6010B	Analysis Batch:	280-272564	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-272139	Lab File ID:	26a041315.asc
Dilution:	1.0			Initial Weight/Volume:	1.02 g
Analysis Date:	04/13/2015 1733			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.37	U	0.37	0.59
Barium		1.1	X	0.075	0.49
Boron		0.96	U	0.96	2.0
Cadmium		0.040	U	0.040	0.20
Cobalt		0.098	U X	0.098	0.98
Copper		0.21	U	0.21	0.98
Lead		0.46	B	0.26	0.49
Lithium		0.29	U	0.29	2.5
Manganese		2.0	X	0.098	0.98
Potassium		40.2	U	40.2	294
Selenium		0.84	U	0.84	0.98
Silicon		93.8	N X	5.5	9.8
Strontium		0.55	B X	0.035	0.98
Vanadium		0.12	B X	0.092	2.0

Analysis Method:	6010B	Analysis Batch:	280-272757	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-272139	Lab File ID:	26a041515c.asc
Dilution:	1.0			Initial Weight/Volume:	1.02 g
Analysis Date:	04/14/2015 2241			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		91.8	X	1.5	4.9

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Client Sample ID: **J1V5P2**

Lab Sample ID: 280-67600-16
Client Matrix: Solid
% Moisture: 0.0

Date Sampled: 04/07/2015 0813
Date Received: 04/09/2015 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-272917	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-272797	Lab File ID:	25B041515.asc
Dilution:	1.0			Initial Weight/Volume:	1.14 g
Analysis Date:	04/15/2015 2245			Final Weight/Volume:	100 mL
Prep Date:	04/15/2015 1440				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Magnesium		15.5	B C X	3.2	17.5

6020 Metals (ICP/MS)

Analysis Method:	6020	Analysis Batch:	280-272415	Instrument ID:	MT_077
Prep Method:	3050B	Prep Batch:	280-272134	Lab File ID:	253SMPL.d
Dilution:	1.0			Initial Weight/Volume:	1.06 g
Analysis Date:	04/11/2015 0723			Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Uranium		0.10		0.0015	0.094

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-272427	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-272066	Lab File ID:	150410ba.txt
Dilution:	1.0			Initial Weight/Volume:	0.54 g
Analysis Date:	04/10/2015 1907			Final Weight/Volume:	50 mL
Prep Date:	04/10/2015 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0061	U	0.0061	0.019

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

General Chemistry

Client Sample ID: **J1V5M7**

Lab Sample ID: 280-67600-1
Client Matrix: Solid

Date Sampled: 04/07/2015 0826
Date Received: 04/09/2015 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	4.6		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-272228 Analysis Date: 04/10/2015 1753 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

General Chemistry

Client Sample ID: **J1V5M8**

Lab Sample ID: 280-67600-2
Client Matrix: Solid

Date Sampled: 04/07/2015 1015
Date Received: 04/09/2015 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	3.8		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-272228 Analysis Date: 04/10/2015 1753 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

General Chemistry

Client Sample ID: **J1V5M9**

Lab Sample ID: 280-67600-3
Client Matrix: Solid

Date Sampled: 04/07/2015 0933
Date Received: 04/09/2015 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	4.7		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-272228 Analysis Date: 04/10/2015 1753 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

General Chemistry

Client Sample ID: **J1V5N0**

Lab Sample ID: 280-67600-4
Client Matrix: Solid

Date Sampled: 04/07/2015 0903
Date Received: 04/09/2015 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	5.9		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-272228 Analysis Date: 04/10/2015 1753 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

General Chemistry

Client Sample ID: **J1V5N1**

Lab Sample ID: 280-67600-5
Client Matrix: Solid

Date Sampled: 04/07/2015 0841
Date Received: 04/09/2015 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	4.7		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-272228 Analysis Date: 04/10/2015 1753 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

General Chemistry

Client Sample ID: **J1V5N2**

Lab Sample ID: 280-67600-6
Client Matrix: Solid

Date Sampled: 04/07/2015 0957
Date Received: 04/09/2015 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	4.3		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-272228 Analysis Date: 04/10/2015 1753 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

General Chemistry

Client Sample ID: **J1V5N3**

Lab Sample ID: 280-67600-7
Client Matrix: Solid

Date Sampled: 04/07/2015 0924
Date Received: 04/09/2015 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	4.3		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-272228 Analysis Date: 04/10/2015 1753 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

General Chemistry

Client Sample ID: **J1V5N4**

Lab Sample ID: 280-67600-8
Client Matrix: Solid

Date Sampled: 04/07/2015 0912
Date Received: 04/09/2015 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	4.1		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-272228 Analysis Date: 04/10/2015 1753 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

General Chemistry

Client Sample ID: **J1V5N5**

Lab Sample ID: 280-67600-9
Client Matrix: Solid

Date Sampled: 04/07/2015 0848
Date Received: 04/09/2015 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	4.2		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-272228 Analysis Date: 04/10/2015 1753 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

General Chemistry

Client Sample ID: **J1V5N6**

Lab Sample ID: 280-67600-10
Client Matrix: Solid

Date Sampled: 04/07/2015 1005
Date Received: 04/09/2015 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	3.9		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-272228 Analysis Date: 04/10/2015 1753 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

General Chemistry

Client Sample ID: **J1V5N7**

Lab Sample ID: 280-67600-11
Client Matrix: Solid

Date Sampled: 04/07/2015 1024
Date Received: 04/09/2015 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	3.8		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-272228 Analysis Date: 04/10/2015 1753 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

General Chemistry

Client Sample ID: **J1V5N8**

Lab Sample ID: 280-67600-12
Client Matrix: Solid

Date Sampled: 04/07/2015 1036
Date Received: 04/09/2015 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	8.9		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-272228 Analysis Date: 04/10/2015 1753 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

General Chemistry

Client Sample ID: **J1V5N9**

Lab Sample ID: 280-67600-13
Client Matrix: Solid

Date Sampled: 04/07/2015 0826
Date Received: 04/09/2015 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	4.8		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-272228 Analysis Date: 04/10/2015 1753 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

General Chemistry

Client Sample ID: **J1V5P0**

Lab Sample ID: 280-67600-14
Client Matrix: Solid

Date Sampled: 04/07/2015 0855
Date Received: 04/09/2015 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	3.8		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-272228 Analysis Date: 04/10/2015 1753 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

General Chemistry

Client Sample ID: **J1V5P1**

Lab Sample ID: 280-67600-15
Client Matrix: Solid

Date Sampled: 04/07/2015 0945
Date Received: 04/09/2015 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	4.5		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-272228 Analysis Date: 04/10/2015 1753 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

General Chemistry

Client Sample ID: **J1V5P2**

Lab Sample ID: 280-67600-16
Client Matrix: Solid

Date Sampled: 04/07/2015 0813
Date Received: 04/09/2015 0900

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

Analysis Batch: 280-272228 Analysis Date: 04/10/2015 1753 DryWt Corrected: N

QUALITY CONTROL RESULTS

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Surrogate Recovery Report

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Matrix: Solid

Lab Sample ID	Client Sample ID	DCB1 %Rec	TCX1 %Rec
280-67600-1	J1V5M7	75	84
280-67600-2	J1V5M8	75	82
280-67600-3	J1V5M9	75	80
280-67600-4	J1V5N0	78	81
280-67600-5	J1V5N1	79D	76D
280-67600-6	J1V5N2	60	81
280-67600-7	J1V5N3	66	84
280-67600-8	J1V5N4	69	78
280-67600-9	J1V5N5	70	82
280-67600-10	J1V5N6	71	84
280-67600-11	J1V5N7	75	84
280-67600-12	J1V5N8	70	78
280-67600-13	J1V5N9	76	85
280-67600-14	J1V5P0	75	80
280-67600-15	J1V5P1	78	81
MB 280-272030/1-A		84	91
LCS 280-272030/2-A		84	89
280-67600-9 MS	J1V5N5 MS	67	82
280-67600-9 MSD	J1V5N5 MSD	71	84

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

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Surrogate Recovery Report

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

Client Matrix: Solid

Lab Sample ID	Client Sample ID	OTPH %Rec
280-67600-1	J1V5M7	83
280-67600-2	J1V5M8	81
280-67600-3	J1V5M9	87
280-67600-4	J1V5N0	82
280-67600-5	J1V5N1	86
280-67600-6	J1V5N2	86
280-67600-7	J1V5N3	85
280-67600-8	J1V5N4	85
280-67600-9	J1V5N5	90
280-67600-10	J1V5N6	85
280-67600-11	J1V5N7	86
280-67600-12	J1V5N8	83
280-67600-13	J1V5N9	81
280-67600-14	J1V5P0	87
280-67600-15	J1V5P1	81
MB 280-272168/1-A		83
LCS 280-272168/2-A		81
LCSD 280-272168/3-A		80
280-67600-2 MS	J1V5M8 MS	86
280-67600-2 MSD	J1V5M8 MSD	84

Surrogate	Acceptance Limits
OTPH = o-Terphenyl	49-115

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Surrogate Recovery Report

8310 PAHs (HPLC)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	TPH1 %Rec
280-67600-1	J1V5M7	83
280-67600-2	J1V5M8	90
280-67600-3	J1V5M9	87
280-67600-4	J1V5N0	89
280-67600-5	J1V5N1	87
280-67600-6	J1V5N2	214*
280-67600-7	J1V5N3	85
280-67600-8	J1V5N4	83
280-67600-9	J1V5N5	89
280-67600-10	J1V5N6	84
280-67600-11	J1V5N7	88
280-67600-12	J1V5N8	90
280-67600-13	J1V5N9	90
280-67600-14	J1V5P0	93
280-67600-15	J1V5P1	89
MB 280-272004/1-A		89
LCS 280-272004/2-A		92
280-67600-2 MS	J1V5M8 MS	90
280-67600-2 MSD	J1V5M8 MSD	89

Surrogate	Acceptance Limits
TPH = Terphenyl-d14 (SUR)	72-115

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Method Blank - Batch: 280-272030

Method: 8082
Preparation: 3550C

Lab Sample ID:	MB 280-272030/1-A	Analysis Batch:	280-272422	Instrument ID:	SGC_P3
Client Matrix:	Solid	Prep Batch:	280-272030	Lab File ID:	04131504.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.9 g
Analysis Date:	04/13/2015 1141	Units:	ug/Kg	Final Weight/Volume:	5 mL
Prep Date:	04/09/2015 2305			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Aroclor 1016	2.7	U	2.7	9.7
Aroclor 1221	7.8	U	7.8	16
Aroclor 1232	1.9	U	1.9	9.7
Aroclor 1242	4.5	U	4.5	9.7
Aroclor 1248	4.5	U	4.5	9.7
Aroclor 1254	2.5	U	2.5	9.7
Aroclor 1260	2.5	U	2.5	9.7

Surrogate	% Rec	Acceptance Limits
Decachlorobiphenyl	84	59 - 130
Tetrachloro-m-xylene	91	53 - 128

Lab Control Sample - Batch: 280-272030

Method: 8082
Preparation: 3550C

Lab Sample ID:	LCS 280-272030/2-A	Analysis Batch:	280-272422	Instrument ID:	SGC_P3
Client Matrix:	Solid	Prep Batch:	280-272030	Lab File ID:	04131505.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.5 g
Analysis Date:	04/13/2015 1202	Units:	ug/Kg	Final Weight/Volume:	5 mL
Prep Date:	04/09/2015 2305			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aroclor 1016	31.7	24.7	78	54 - 132	
Aroclor 1260	31.7	24.9	79	62 - 129	

Surrogate	% Rec	Acceptance Limits
Decachlorobiphenyl	84	59 - 130
Tetrachloro-m-xylene	89	53 - 128

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-272030

Method: 8082
Preparation: 3550C

MS Lab Sample ID:	280-67600-9	Analysis Batch:	280-272422	Instrument ID:	SGC_P3
Client Matrix:	Solid	Prep Batch:	280-272030	Lab File ID:	04131515.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.4 g
Analysis Date:	04/13/2015 1533			Final Weight/Volume:	5 mL
Prep Date:	04/09/2015 2305			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-67600-9	Analysis Batch:	280-272422	Instrument ID:	SGC_P3
Client Matrix:	Solid	Prep Batch:	280-272030	Lab File ID:	04131516.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.0 g
Analysis Date:	04/13/2015 1554			Final Weight/Volume:	5 mL
Prep Date:	04/09/2015 2305			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Aroclor 1016	75	76	54 - 132	0	26		
Aroclor 1260	73	80	62 - 129	7	26		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Decachlorobiphenyl	67	71	59 - 130
Tetrachloro-m-xylene	82	84	53 - 128

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-272030

Method: 8082
Preparation: 3550C

MS Lab Sample ID:	280-67600-9	Units:	ug/Kg	MSD Lab Sample ID:	280-67600-9
Client Matrix:	Solid			Client Matrix:	Solid
Dilution:	1.0			Dilution:	1.0
Analysis Date:	04/13/2015 1533			Analysis Date:	04/13/2015 1554
Prep Date:	04/09/2015 2305			Prep Date:	04/09/2015 2305
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Aroclor 1016	2.8	U	34.3	33.7	25.6	25.6
Aroclor 1260	2.7	U	34.3	33.7	25.0	27.0

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Method Blank - Batch: 280-272168

Method: NWTPH-Dx
Preparation: 3550C

Lab Sample ID:	MB 280-272168/1-A	Analysis Batch:	280-272444	Instrument ID:	SGC_U
Client Matrix:	Solid	Prep Batch:	280-272168	Lab File ID:	04130006.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.1 g
Analysis Date:	04/13/2015 1745	Units:	ug/Kg	Final Weight/Volume:	1 mL
Prep Date:	04/10/2015 1528			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
C10-C36	975	J	960	3900
C10-C28	1500	J	650	3900

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

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-272168

Method: NWTPH-Dx
Preparation: 3550C

LCS Lab Sample ID:	LCS 280-272168/2-A	Analysis Batch:	280-272444	Instrument ID:	SGC_U
Client Matrix:	Solid	Prep Batch:	280-272168	Lab File ID:	04130007.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.2 g
Analysis Date:	04/13/2015 1813	Units:	ug/Kg	Final Weight/Volume:	1 mL
Prep Date:	04/10/2015 1528			Injection Volume:	1 uL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-272168/3-A	Analysis Batch:	280-272444	Instrument ID:	SGC_U
Client Matrix:	Solid	Prep Batch:	280-272168	Lab File ID:	04130008.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	32.0 g
Analysis Date:	04/13/2015 1842	Units:	ug/Kg	Final Weight/Volume:	1 mL
Prep Date:	04/10/2015 1528			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
C10-C36	88	88	57 - 115	6	23		
C10-C28	86	86	53 - 115	6	23		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
o-Terphenyl	81	80	49 - 115

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-272168

Method: NWTPH-Dx
Preparation: 3550C

LCS Lab Sample ID:	LCS 280-272168/2-A	Units:	ug/Kg	LCSD Lab Sample ID:	LCSD 280-272168/3-A
Client Matrix:	Solid			Client Matrix:	Solid
Dilution:	1.0			Dilution:	1.0
Analysis Date:	04/13/2015 1813			Analysis Date:	04/13/2015 1842
Prep Date:	04/10/2015 1528			Prep Date:	04/10/2015 1528
Leach Date:	N/A			Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
C10-C36	66200	62500	58400	55000
C10-C28	66200	62500	56700	53500

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-272168

Method: NWTPH-Dx
Preparation: 3550C

MS Lab Sample ID:	280-67600-2	Analysis Batch:	280-272444	Instrument ID:	SGC_U
Client Matrix:	Solid	Prep Batch:	280-272168	Lab File ID:	04130011.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.6 g
Analysis Date:	04/13/2015 2007			Final Weight/Volume:	1 mL
Prep Date:	04/10/2015 1528			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-67600-2	Analysis Batch:	280-272444	Instrument ID:	SGC_U
Client Matrix:	Solid	Prep Batch:	280-272168	Lab File ID:	04130012.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.0 g
Analysis Date:	04/13/2015 2035			Final Weight/Volume:	1 mL
Prep Date:	04/10/2015 1528			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
C10-C36	93	90	57 - 115	4	23		
C10-C28	89	87	56 - 115	4	23		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
o-Terphenyl	86	84	49 - 115

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-272168

Method: NWTPH-Dx
Preparation: 3550C

MS Lab Sample ID:	280-67600-2	Units:	ug/Kg	MSD Lab Sample ID:	280-67600-2
Client Matrix:	Solid			Client Matrix:	Solid
Dilution:	1.0			Dilution:	1.0
Analysis Date:	04/13/2015 2007			Analysis Date:	04/13/2015 2035
Prep Date:	04/10/2015 1528			Prep Date:	04/10/2015 1528
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
C10-C36	1800	J	68000	67100	65000	62300
C10-C28	1900	J	68000	67100	62500	59900

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Method Blank - Batch: 280-272004

Method: 8310
Preparation: 3550C

Lab Sample ID:	MB 280-272004/1-A	Analysis Batch:	280-272421	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-272004	Lab File ID:	G0413006.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	32.0 g
Analysis Date:	04/13/2015 1241	Units:	ug/Kg	Final Weight/Volume:	4 mL
Prep Date:	04/09/2015 2212			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Acenaphthene	9.4	U	9.4	94
Acenaphthylene	8.4	U	8.4	94
Anthracene	2.9	U	2.9	19
Benzo[a]anthracene	3.0	U	3.0	14
Benzo[a]pyrene	6.0	U	6.0	14
Benzo[b]fluoranthene	3.9	U	3.9	14
Benzo[g,h,i]perylene	6.8	U	6.8	28
Benzo[k]fluoranthene	3.7	U	3.7	14
Chrysene	4.5	U	4.5	38
Dibenzo(a,h)anthracene	10	U	10	28
Fluoranthene	12	U	12	38
Fluorene	5.0	U	5.0	28
Indeno[1,2,3-cd]pyrene	11	U	11	28
Naphthalene	11	U	11	94
Phenanthrene	11	U	11	38
Pyrene	11	U	11	38

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

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Lab Control Sample - Batch: 280-272004

Method: 8310
Preparation: 3550C

Lab Sample ID:	LCS 280-272004/2-A	Analysis Batch:	280-272421	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-272004	Lab File ID:	G0413007.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.8 g
Analysis Date:	04/13/2015 1312	Units:	ug/Kg	Final Weight/Volume:	4 mL
Prep Date:	04/09/2015 2212			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acenaphthene	1950	1730	89	75 - 116	
Acenaphthylene	1950	1730	89	66 - 115	
Anthracene	1950	1660	85	71 - 115	
Benzo[a]anthracene	1950	1810	93	77 - 120	
Benzo[a]pyrene	1950	1820	94	69 - 115	
Benzo[b]fluoranthene	1950	1770	91	56 - 115	
Benzo[g,h,i]perylene	1950	2020	104	72 - 120	
Benzo[k]fluoranthene	1950	1830	94	76 - 115	
Chrysene	1950	1780	91	79 - 115	
Dibenzo(a,h)anthracene	1950	1740	89	72 - 115	
Fluoranthene	1950	1820	93	77 - 115	
Fluorene	1950	1820	94	77 - 115	
Indeno[1,2,3-cd]pyrene	1950	1760	90	78 - 115	
Naphthalene	1950	1690	87	68 - 120	
Phenanthrene	1950	1730	89	75 - 115	
Pyrene	1950	1910	98	72 - 115	

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

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-272004

Method: 8310
Preparation: 3550C

MS Lab Sample ID:	280-67600-2	Analysis Batch:	280-272421	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-272004	Lab File ID:	G0413010.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.9 g
Analysis Date:	04/13/2015 1443			Final Weight/Volume:	4 mL
Prep Date:	04/09/2015 2212			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-67600-2	Analysis Batch:	280-272421	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-272004	Lab File ID:	G0413011.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.0 g
Analysis Date:	04/13/2015 1514			Final Weight/Volume:	4 mL
Prep Date:	04/09/2015 2212			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acenaphthene	88	85	75 - 116	5	20		
Acenaphthylene	86	83	66 - 115	4	20		
Anthracene	84	80	71 - 115	9	20		
Benzo[a]anthracene	91	90	77 - 120	2	20		
Benzo[a]pyrene	92	91	69 - 115	2	20		
Benzo[b]fluoranthene	89	88	56 - 115	1	20		
Benzo[g,h,i]perylene	102	100	72 - 120	2	20		
Benzo[k]fluoranthene	92	91	76 - 115	2	20		
Chrysene	90	88	79 - 115	2	20		
Dibenzo(a,h)anthracene	88	87	72 - 115	2	20		
Fluoranthene	92	90	77 - 115	2	20		
Fluorene	93	89	77 - 115	4	20		
Indeno[1,2,3-cd]pyrene	89	88	78 - 115	2	20		
Naphthalene	85	82	68 - 120	4	20		
Phenanthrene	87	84	75 - 115	4	20		
Pyrene	96	95	72 - 115	2	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Terphenyl-d14 (SUR)	90	89	72 - 115

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-272004

Method: 8310
Preparation: 3550C

MS Lab Sample ID:	280-67600-2	Units:	ug/Kg	MSD Lab Sample ID:	280-67600-2
Client Matrix:	Solid			Client Matrix:	Solid
Dilution:	1.0			Dilution:	1.0
Analysis Date:	04/13/2015 1443			Analysis Date:	04/13/2015 1514
Prep Date:	04/09/2015 2212			Prep Date:	04/09/2015 2212
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Acenaphthene	9.9	U	2020	2010	1780	1710
Acenaphthylene	8.9	U	2020	2010	1740	1680
Anthracene	3.0	U	2020	2010	1700	1620
Benzo[a]anthracene	3.1	U	2020	2010	1840	1810
Benzo[a]pyrene	6.3	U	2020	2010	1850	1820
Benzo[b]fluoranthene	4.1	U	2020	2010	1800	1770
Benzo[g,h,i]perylene	7.1	U	2020	2010	2050	2020
Benzo[k]fluoranthene	3.9	U	2020	2010	1860	1830
Chrysene	4.8	U	2020	2010	1810	1780
Dibenzo(a,h)anthracene	11	U	2020	2010	1770	1740
Fluoranthene	13	U	2020	2010	1850	1810
Fluorene	5.2	U	2020	2010	1870	1800
Indeno[1,2,3-cd]pyrene	12	U	2020	2010	1800	1770
Naphthalene	12	U	2020	2010	1710	1650
Phenanthrene	12	U	2020	2010	1760	1680
Pyrene	12	U	2020	2010	1940	1910

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Method Blank - Batch: 280-272139

Method: 6010B
Preparation: 3050B

Lab Sample ID:	MB 280-272139/1-A	Analysis Batch:	280-272432	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-272139	Lab File ID:	26c041115.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.00 g
Analysis Date:	04/11/2015 2007	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Arsenic	0.66	U	0.66	1.0
Beryllium	0.033	U	0.033	0.20
Boron	0.98	U	0.98	2.0
Calcium	23.37	B	14.1	50.0
Iron	4.30	B	3.8	5.0
Molybdenum	0.26	U	0.26	2.0
Selenium	0.86	U	0.86	1.0
Silver	0.16	U	0.16	0.20
Sodium	59.0	U	59.0	120
Tin	0.963	B	0.91	10.0
Zinc	0.40	U	0.40	1.0
Zirconium	0.35	U	0.35	2.5

Method Blank - Batch: 280-272139

Method: 6010B
Preparation: 3050B

Lab Sample ID:	MB 280-272139/1-A	Analysis Batch:	280-272564	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-272139	Lab File ID:	26a041315.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.00 g
Analysis Date:	04/13/2015 1609	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Aluminum	1.6	U	1.6	5.0
Antimony	0.38	U	0.38	0.60
Barium	0.160	B	0.076	0.50
Cadmium	0.041	U	0.041	0.20
Chromium	0.0720	B	0.058	0.20
Cobalt	0.10	U	0.10	1.0
Copper	0.22	U	0.22	1.0
Lead	0.27	U	0.27	0.50
Lithium	0.30	U	0.30	2.5
Manganese	0.10	U	0.10	1.0
Nickel	0.12	U	0.12	4.0
Potassium	41.0	U	41.0	300
Silicon	5.7	U	5.7	10.0
Strontium	0.0820	B	0.036	1.0
Vanadium	0.094	U	0.094	2.0

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Lab Control Sample - Batch: 280-272139

Method: 6010B
Preparation: 3050B

Lab Sample ID:	LCS 280-272139/2-A	Analysis Batch:	280-272432	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-272139	Lab File ID:	26c041115.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.00 g
Analysis Date:	04/11/2015 2010	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Arsenic	100	85.39	85	85 - 110	
Beryllium	5.00	4.21	84	84 - 114	
Boron	100	84.04	84	80 - 120	
Calcium	5000	4226	85	82 - 114	
Iron	100	86.78	87	87 - 120	
Molybdenum	100	93.34	93	86 - 110	
Selenium	200	169.7	85	83 - 110	
Silver	5.00	4.40	88	87 - 114	
Sodium	5000	4820	96	90 - 112	
Tin	200	174.8	87	84 - 110	
Zinc	50.0	42.21	84	76 - 114	
Zirconium	50.0	46.32	93	90 - 110	

Lab Control Sample - Batch: 280-272139

Method: 6010B
Preparation: 3050B

Lab Sample ID:	LCS 280-272139/2-A	Analysis Batch:	280-272564	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-272139	Lab File ID:	26a041315.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.00 g
Analysis Date:	04/13/2015 1612	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	200	185.6	93	82 - 116	
Antimony	50.0	47.72	95	82 - 110	
Barium	200	184.2	92	87 - 112	
Cadmium	10.0	9.75	97	87 - 110	
Chromium	20.0	19.35	97	84 - 114	
Cobalt	50.0	45.39	91	87 - 110	
Copper	25.0	24.30	97	88 - 110	
Lead	50.0	46.65	93	86 - 110	
Lithium	100	96.68	97	90 - 110	
Manganese	50.0	45.50	91	88 - 110	
Nickel	50.0	47.87	96	87 - 110	
Potassium	5000	4662	93	89 - 110	
Silicon	1000	65.03	7	10 - 70	N
Strontium	100	97.68	98	89 - 110	
Vanadium	50.0	46.38	93	88 - 110	

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Matrix Spike - Batch: 280-272139

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-67600-1	Analysis Batch:	280-272432	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-272139	Lab File ID:	26c041115.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.14 g
Analysis Date:	04/11/2015 2020	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Arsenic	3.0		91.9	85.89	90	76 - 111	
Boron	1.5	B	91.9	86.48	92	80 - 120	
Calcium	5530		4600	11500	130	43 - 165	
Iron	24800		91.9	27940	3456	70 - 200	4
Molybdenum	0.28	B	91.9	96.32	104	75 - 103	N
Selenium	0.87	U	184	165.5	90	76 - 104	
Silver	0.16	U	4.60	4.46	97	75 - 141	
Sodium	256		4600	5557	115	78 - 111	N
Zinc	46.9		46.0	93.58	102	70 - 200	
Zirconium	27.4		46.0	82.56	120	75 - 125	

Matrix Spike - Batch: 280-272139

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-67600-1	Analysis Batch:	280-272564	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-272139	Lab File ID:	26a041315.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.14 g
Analysis Date:	04/13/2015 1622	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	7270		184	9983	1474	50 - 200	4
Antimony	1.3		46.0	22.30	46	20 - 200	
Barium	68.8		184	228.5	87	52 - 159	
Beryllium	0.067	B	4.60	3.86	82	72 - 105	
Cadmium	0.042	U	9.19	8.11	88	40 - 130	
Chromium	8.0		18.4	25.76	97	70 - 200	
Cobalt	7.5		46.0	44.89	81	72 - 106	
Copper	14.3		23.0	35.05	90	37 - 187	
Lead	3.7		46.0	41.04	81	70 - 200	
Lithium	6.1		91.9	87.77	89	84 - 109	
Manganese	310		46.0	397.2	189	40 - 200	4
Nickel	11.1		46.0	49.78	84	61 - 126	
Potassium	1260		4600	5322	88	56 - 172	
Silicon	305		919	401.7	11	20 - 200	N
Strontium	22.3		91.9	108.0	93	81 - 125	
Tin	1.6	B	184	138.6	75	77 - 126	N
Vanadium	53.0		46.0	101.3	105	50 - 169	

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Duplicate - Batch: 280-272139

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-67600-1	Analysis Batch:	280-272432	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-272139	Lab File ID:	26c041115.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.07 g
Analysis Date:	04/11/2015 2018	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Arsenic	3.0		3.45	14	30	
Boron	1.5	B	1.39	6	30	B
Calcium	5530		5662	2	30	
Iron	24800		26530	7	40	
Molybdenum	0.28	B	0.25	NC	30	U
Selenium	0.87	U	0.84	NC	30	U
Silver	0.16	U	0.16	NC	30	U
Sodium	256		284.9	11	30	
Zinc	46.9		49.88	6	40	
Zirconium	27.4		29.66	8	30	

Duplicate - Batch: 280-272139

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-67600-1	Analysis Batch:	280-272564	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-272139	Lab File ID:	26a041315.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.07 g
Analysis Date:	04/13/2015 1620	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Aluminum	7270		7850	8	40	
Antimony	1.3		1.33	0.6	40	
Barium	68.8		73.58	7	30	
Beryllium	0.067	B	0.0813	19	30	B
Cadmium	0.042	U	0.040	NC	30	U
Chromium	8.0		8.04	0.5	40	
Cobalt	7.5		7.78	4	30	
Copper	14.3		14.77	3	30	
Lead	3.7		3.83	4	40	
Lithium	6.1		6.63	8	30	
Manganese	310		328.8	6	40	
Nickel	11.1		10.40	7	30	
Potassium	1260		1300	3	40	
Silicon	305		296.8	3	40	N
Strontium	22.3		22.71	2	30	
Tin	1.6	B	1.49	5	30	B
Vanadium	53.0		55.02	4	30	

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Method Blank - Batch: 280-272797

Method: 6010B
Preparation: 3050B

Lab Sample ID:	MB 280-272797/1-A	Analysis Batch:	280-272917	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-272797	Lab File ID:	25B041515.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	04/15/2015 2134	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/15/2015 1440				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Magnesium	7.79	B	3.7	20.0

Lab Control Sample - Batch: 280-272797

Method: 6010B
Preparation: 3050B

Lab Sample ID:	LCS 280-272797/2-A	Analysis Batch:	280-272917	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-272797	Lab File ID:	25B041515.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	04/15/2015 2136	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/15/2015 1440				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Magnesium	5000	4686	94	90 - 110	

Matrix Spike - Batch: 280-272797

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-67600-1	Analysis Batch:	280-272917	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-272797	Lab File ID:	25B041515.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.01 g
Analysis Date:	04/15/2015 2146	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/15/2015 1440				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Magnesium	4520	5190	9613	98	64 - 145	

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Duplicate - Batch: 280-272797

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-67600-1	Analysis Batch:	280-272917	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-272797	Lab File ID:	25B041515.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.11 g
Analysis Date:	04/15/2015 2144	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/15/2015 1440				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Magnesium	4520	4305	5	30	

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Method Blank - Batch: 280-272134

Method: 6020
Preparation: 3050B

Lab Sample ID:	MB 280-272134/1-A	Analysis Batch:	280-272415	Instrument ID:	MT_077
Client Matrix:	Solid	Prep Batch:	280-272134	Lab File ID:	228_BLK.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.00 g
Analysis Date:	04/11/2015 0552	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Uranium	0.0016	U	0.0016	0.10

Lab Control Sample - Batch: 280-272134

Method: 6020
Preparation: 3050B

Lab Sample ID:	LCS 280-272134/2-A	Analysis Batch:	280-272415	Instrument ID:	MT_077
Client Matrix:	Solid	Prep Batch:	280-272134	Lab File ID:	229_LCS.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.00 g
Analysis Date:	04/11/2015 0556	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Uranium	20.0	19.11	96	85 - 123	

Matrix Spike - Batch: 280-272134

Method: 6020
Preparation: 3050B

Lab Sample ID:	280-67600-1	Analysis Batch:	280-272415	Instrument ID:	MT_077
Client Matrix:	Solid	Prep Batch:	280-272134	Lab File ID:	233SMPL.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.10 g
Analysis Date:	04/11/2015 0610	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Uranium	0.52	19.1	18.81	96	85 - 123	

Client: Washington Closure Hanford

Job Number: 280-67600-1
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Duplicate - Batch: 280-272134

Method: 6020
Preparation: 3050B

Lab Sample ID:	280-67600-1	Analysis Batch:	280-272415	Instrument ID:	MT_077
Client Matrix:	Solid	Prep Batch:	280-272134	Lab File ID:	232SMPL.d
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.07 g
Analysis Date:	04/11/2015 0606	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/10/2015 1445				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Uranium	0.52	0.445	16	20	

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Method Blank - Batch: 280-272066

Method: 7471A
Preparation: 7471A

Lab Sample ID:	MB 280-272066/1-A	Analysis Batch:	280-272427	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-272066	Lab File ID:	150410ba.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	.6 g
Analysis Date:	04/10/2015 1819	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	04/10/2015 1500				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	0.0055	U	0.0055	0.017

Lab Control Sample - Batch: 280-272066

Method: 7471A
Preparation: 7471A

Lab Sample ID:	LCS 280-272066/2-A	Analysis Batch:	280-272427	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-272066	Lab File ID:	150410ba.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	.6 g
Analysis Date:	04/10/2015 1821	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	04/10/2015 1500				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.417	0.401	96	87 - 111	

Matrix Spike - Batch: 280-272066

Method: 7471A
Preparation: 7471A

Lab Sample ID:	280-67600-1	Analysis Batch:	280-272427	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-272066	Lab File ID:	150410ba.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.56 g
Analysis Date:	04/10/2015 1828	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	04/10/2015 1500				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.0090	B	0.468	0.455	95	87 - 111	

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Duplicate - Batch: 280-272066

Method: 7471A
Preparation: 7471A

Lab Sample ID:	280-67600-1	Analysis Batch:	280-272427	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-272066	Lab File ID:	150410ba.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.56 g
Analysis Date:	04/10/2015 1826	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	04/10/2015 1500				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Mercury	0.0090	B	0.0062	NC	20	U

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

Duplicate - Batch: 280-272228

Method: D-2216
Preparation: N/A

Lab Sample ID:	280-67600-1	Analysis Batch:	280-272228	Instrument ID:	No Equipment Assigned
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	04/10/2015 1753	Units:	%	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Moisture	4.6	4.8	5	20	

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 280-272030					
LCS 280-272030/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-272030/1-A	Method Blank	T	Solid	3550C	
280-67600-1	J1V5M7	T	Solid	3550C	
280-67600-2	J1V5M8	T	Solid	3550C	
280-67600-3	J1V5M9	T	Solid	3550C	
280-67600-4	J1V5N0	T	Solid	3550C	
280-67600-5	J1V5N1	T	Solid	3550C	
280-67600-6	J1V5N2	T	Solid	3550C	
280-67600-7	J1V5N3	T	Solid	3550C	
280-67600-8	J1V5N4	T	Solid	3550C	
280-67600-9	J1V5N5	T	Solid	3550C	
280-67600-9MS	Matrix Spike	T	Solid	3550C	
280-67600-9MSD	Matrix Spike Duplicate	T	Solid	3550C	
280-67600-10	J1V5N6	T	Solid	3550C	
280-67600-11	J1V5N7	T	Solid	3550C	
280-67600-12	J1V5N8	T	Solid	3550C	
280-67600-13	J1V5N9	T	Solid	3550C	
280-67600-14	J1V5P0	T	Solid	3550C	
280-67600-15	J1V5P1	T	Solid	3550C	
Prep Batch: 280-272168					
LCS 280-272168/2-A	Lab Control Sample	T	Solid	3550C	
LCSD 280-272168/3-A	Lab Control Sample Duplicate	T	Solid	3550C	
MB 280-272168/1-A	Method Blank	T	Solid	3550C	
280-67600-1	J1V5M7	T	Solid	3550C	
280-67600-2	J1V5M8	T	Solid	3550C	
280-67600-2MS	Matrix Spike	T	Solid	3550C	
280-67600-2MSD	Matrix Spike Duplicate	T	Solid	3550C	
280-67600-3	J1V5M9	T	Solid	3550C	
280-67600-4	J1V5N0	T	Solid	3550C	
280-67600-5	J1V5N1	T	Solid	3550C	
280-67600-6	J1V5N2	T	Solid	3550C	
280-67600-7	J1V5N3	T	Solid	3550C	
280-67600-8	J1V5N4	T	Solid	3550C	
280-67600-9	J1V5N5	T	Solid	3550C	
280-67600-10	J1V5N6	T	Solid	3550C	
280-67600-11	J1V5N7	T	Solid	3550C	
280-67600-12	J1V5N8	T	Solid	3550C	
280-67600-13	J1V5N9	T	Solid	3550C	
280-67600-14	J1V5P0	T	Solid	3550C	
280-67600-15	J1V5P1	T	Solid	3550C	

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Analysis Batch:280-272422					
LCS 280-272030/2-A	Lab Control Sample	T	Solid	8082	280-272030
MB 280-272030/1-A	Method Blank	T	Solid	8082	280-272030
280-67600-1	J1V5M7	T	Solid	8082	280-272030
280-67600-2	J1V5M8	T	Solid	8082	280-272030
280-67600-3	J1V5M9	T	Solid	8082	280-272030
280-67600-4	J1V5N0	T	Solid	8082	280-272030
280-67600-5	J1V5N1	T	Solid	8082	280-272030
280-67600-6	J1V5N2	T	Solid	8082	280-272030
280-67600-7	J1V5N3	T	Solid	8082	280-272030
280-67600-8	J1V5N4	T	Solid	8082	280-272030
280-67600-9	J1V5N5	T	Solid	8082	280-272030
280-67600-9MS	Matrix Spike	T	Solid	8082	280-272030
280-67600-9MSD	Matrix Spike Duplicate	T	Solid	8082	280-272030
280-67600-10	J1V5N6	T	Solid	8082	280-272030
280-67600-11	J1V5N7	T	Solid	8082	280-272030
280-67600-12	J1V5N8	T	Solid	8082	280-272030
280-67600-13	J1V5N9	T	Solid	8082	280-272030
280-67600-14	J1V5P0	T	Solid	8082	280-272030
280-67600-15	J1V5P1	T	Solid	8082	280-272030
Analysis Batch:280-272444					
LCS 280-272168/2-A	Lab Control Sample	T	Solid	NWTPH-Dx	280-272168
LCSD 280-272168/3-A	Lab Control Sample Duplicate	T	Solid	NWTPH-Dx	280-272168
MB 280-272168/1-A	Method Blank	T	Solid	NWTPH-Dx	280-272168
280-67600-1	J1V5M7	T	Solid	NWTPH-Dx	280-272168
280-67600-2	J1V5M8	T	Solid	NWTPH-Dx	280-272168
280-67600-2MS	Matrix Spike	T	Solid	NWTPH-Dx	280-272168
280-67600-2MSD	Matrix Spike Duplicate	T	Solid	NWTPH-Dx	280-272168
280-67600-3	J1V5M9	T	Solid	NWTPH-Dx	280-272168
280-67600-4	J1V5N0	T	Solid	NWTPH-Dx	280-272168
280-67600-5	J1V5N1	T	Solid	NWTPH-Dx	280-272168
280-67600-6	J1V5N2	T	Solid	NWTPH-Dx	280-272168
280-67600-7	J1V5N3	T	Solid	NWTPH-Dx	280-272168
280-67600-8	J1V5N4	T	Solid	NWTPH-Dx	280-272168
280-67600-9	J1V5N5	T	Solid	NWTPH-Dx	280-272168
280-67600-10	J1V5N6	T	Solid	NWTPH-Dx	280-272168
280-67600-11	J1V5N7	T	Solid	NWTPH-Dx	280-272168
280-67600-12	J1V5N8	T	Solid	NWTPH-Dx	280-272168
280-67600-13	J1V5N9	T	Solid	NWTPH-Dx	280-272168
280-67600-14	J1V5P0	T	Solid	NWTPH-Dx	280-272168
280-67600-15	J1V5P1	T	Solid	NWTPH-Dx	280-272168

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-272066					
LCS 280-272066/2-A	Lab Control Sample	T	Solid	7471A	
MB 280-272066/1-A	Method Blank	T	Solid	7471A	
280-67600-1	J1V5M7	T	Solid	7471A	
280-67600-1DU	Duplicate	T	Solid	7471A	
280-67600-1MS	Matrix Spike	T	Solid	7471A	
280-67600-2	J1V5M8	T	Solid	7471A	
280-67600-3	J1V5M9	T	Solid	7471A	
280-67600-4	J1V5N0	T	Solid	7471A	
280-67600-5	J1V5N1	T	Solid	7471A	
280-67600-6	J1V5N2	T	Solid	7471A	
280-67600-7	J1V5N3	T	Solid	7471A	
280-67600-8	J1V5N4	T	Solid	7471A	
280-67600-9	J1V5N5	T	Solid	7471A	
280-67600-10	J1V5N6	T	Solid	7471A	
280-67600-11	J1V5N7	T	Solid	7471A	
280-67600-12	J1V5N8	T	Solid	7471A	
280-67600-13	J1V5N9	T	Solid	7471A	
280-67600-14	J1V5P0	T	Solid	7471A	
280-67600-15	J1V5P1	T	Solid	7471A	
280-67600-16	J1V5P2	T	Solid	7471A	
Prep Batch: 280-272134					
LCS 280-272134/2-A	Lab Control Sample	T	Solid	3050B	
MB 280-272134/1-A	Method Blank	T	Solid	3050B	
280-67600-1	J1V5M7	T	Solid	3050B	
280-67600-1DU	Duplicate	T	Solid	3050B	
280-67600-1MS	Matrix Spike	T	Solid	3050B	
280-67600-2	J1V5M8	T	Solid	3050B	
280-67600-3	J1V5M9	T	Solid	3050B	
280-67600-4	J1V5N0	T	Solid	3050B	
280-67600-5	J1V5N1	T	Solid	3050B	
280-67600-6	J1V5N2	T	Solid	3050B	
280-67600-7	J1V5N3	T	Solid	3050B	
280-67600-8	J1V5N4	T	Solid	3050B	
280-67600-9	J1V5N5	T	Solid	3050B	
280-67600-10	J1V5N6	T	Solid	3050B	
280-67600-11	J1V5N7	T	Solid	3050B	
280-67600-12	J1V5N8	T	Solid	3050B	
280-67600-13	J1V5N9	T	Solid	3050B	
280-67600-14	J1V5P0	T	Solid	3050B	
280-67600-15	J1V5P1	T	Solid	3050B	
280-67600-16	J1V5P2	T	Solid	3050B	

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-272139					
LCS 280-272139/2-A	Lab Control Sample	T	Solid	3050B	
MB 280-272139/1-A	Method Blank	T	Solid	3050B	
280-67600-1	J1V5M7	T	Solid	3050B	
280-67600-1DU	Duplicate	T	Solid	3050B	
280-67600-1MS	Matrix Spike	T	Solid	3050B	
280-67600-2	J1V5M8	T	Solid	3050B	
280-67600-3	J1V5M9	T	Solid	3050B	
280-67600-4	J1V5N0	T	Solid	3050B	
280-67600-5	J1V5N1	T	Solid	3050B	
280-67600-6	J1V5N2	T	Solid	3050B	
280-67600-7	J1V5N3	T	Solid	3050B	
280-67600-8	J1V5N4	T	Solid	3050B	
280-67600-9	J1V5N5	T	Solid	3050B	
280-67600-10	J1V5N6	T	Solid	3050B	
280-67600-11	J1V5N7	T	Solid	3050B	
280-67600-12	J1V5N8	T	Solid	3050B	
280-67600-13	J1V5N9	T	Solid	3050B	
280-67600-14	J1V5P0	T	Solid	3050B	
280-67600-15	J1V5P1	T	Solid	3050B	
280-67600-16	J1V5P2	T	Solid	3050B	
Analysis Batch:280-272415					
LCS 280-272134/2-A	Lab Control Sample	T	Solid	6020	280-272134
MB 280-272134/1-A	Method Blank	T	Solid	6020	280-272134
280-67600-1	J1V5M7	T	Solid	6020	280-272134
280-67600-1DU	Duplicate	T	Solid	6020	280-272134
280-67600-1MS	Matrix Spike	T	Solid	6020	280-272134
280-67600-2	J1V5M8	T	Solid	6020	280-272134
280-67600-3	J1V5M9	T	Solid	6020	280-272134
280-67600-4	J1V5N0	T	Solid	6020	280-272134
280-67600-5	J1V5N1	T	Solid	6020	280-272134
280-67600-6	J1V5N2	T	Solid	6020	280-272134
280-67600-7	J1V5N3	T	Solid	6020	280-272134
280-67600-8	J1V5N4	T	Solid	6020	280-272134
280-67600-9	J1V5N5	T	Solid	6020	280-272134
280-67600-10	J1V5N6	T	Solid	6020	280-272134
280-67600-11	J1V5N7	T	Solid	6020	280-272134
280-67600-12	J1V5N8	T	Solid	6020	280-272134
280-67600-13	J1V5N9	T	Solid	6020	280-272134
280-67600-14	J1V5P0	T	Solid	6020	280-272134
280-67600-15	J1V5P1	T	Solid	6020	280-272134
280-67600-16	J1V5P2	T	Solid	6020	280-272134

Client: Washington Closure Hanford

Job Number: 280-67600-1
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QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:280-272427					
LCS 280-272066/2-A	Lab Control Sample	T	Solid	7471A	280-272066
MB 280-272066/1-A	Method Blank	T	Solid	7471A	280-272066
280-67600-1	J1V5M7	T	Solid	7471A	280-272066
280-67600-1DU	Duplicate	T	Solid	7471A	280-272066
280-67600-1MS	Matrix Spike	T	Solid	7471A	280-272066
280-67600-2	J1V5M8	T	Solid	7471A	280-272066
280-67600-3	J1V5M9	T	Solid	7471A	280-272066
280-67600-4	J1V5N0	T	Solid	7471A	280-272066
280-67600-5	J1V5N1	T	Solid	7471A	280-272066
280-67600-6	J1V5N2	T	Solid	7471A	280-272066
280-67600-7	J1V5N3	T	Solid	7471A	280-272066
280-67600-8	J1V5N4	T	Solid	7471A	280-272066
280-67600-9	J1V5N5	T	Solid	7471A	280-272066
280-67600-10	J1V5N6	T	Solid	7471A	280-272066
280-67600-11	J1V5N7	T	Solid	7471A	280-272066
280-67600-12	J1V5N8	T	Solid	7471A	280-272066
280-67600-13	J1V5N9	T	Solid	7471A	280-272066
280-67600-14	J1V5P0	T	Solid	7471A	280-272066
280-67600-15	J1V5P1	T	Solid	7471A	280-272066
280-67600-16	J1V5P2	T	Solid	7471A	280-272066
Analysis Batch:280-272432					
LCS 280-272139/2-A	Lab Control Sample	T	Solid	6010B	280-272139
MB 280-272139/1-A	Method Blank	T	Solid	6010B	280-272139
280-67600-1	J1V5M7	T	Solid	6010B	280-272139
280-67600-1DU	Duplicate	T	Solid	6010B	280-272139
280-67600-1MS	Matrix Spike	T	Solid	6010B	280-272139
280-67600-2	J1V5M8	T	Solid	6010B	280-272139
280-67600-3	J1V5M9	T	Solid	6010B	280-272139
280-67600-4	J1V5N0	T	Solid	6010B	280-272139
280-67600-5	J1V5N1	T	Solid	6010B	280-272139
280-67600-6	J1V5N2	T	Solid	6010B	280-272139
280-67600-7	J1V5N3	T	Solid	6010B	280-272139
280-67600-8	J1V5N4	T	Solid	6010B	280-272139
280-67600-9	J1V5N5	T	Solid	6010B	280-272139
280-67600-10	J1V5N6	T	Solid	6010B	280-272139
280-67600-11	J1V5N7	T	Solid	6010B	280-272139
280-67600-12	J1V5N8	T	Solid	6010B	280-272139
280-67600-13	J1V5N9	T	Solid	6010B	280-272139
280-67600-14	J1V5P0	T	Solid	6010B	280-272139
280-67600-15	J1V5P1	T	Solid	6010B	280-272139
280-67600-16	J1V5P2	T	Solid	6010B	280-272139

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:280-272564					
LCS 280-272139/2-A	Lab Control Sample	T	Solid	6010B	280-272139
MB 280-272139/1-A	Method Blank	T	Solid	6010B	280-272139
280-67600-1	J1V5M7	T	Solid	6010B	280-272139
280-67600-1DU	Duplicate	T	Solid	6010B	280-272139
280-67600-1MS	Matrix Spike	T	Solid	6010B	280-272139
280-67600-2	J1V5M8	T	Solid	6010B	280-272139
280-67600-3	J1V5M9	T	Solid	6010B	280-272139
280-67600-4	J1V5N0	T	Solid	6010B	280-272139
280-67600-5	J1V5N1	T	Solid	6010B	280-272139
280-67600-6	J1V5N2	T	Solid	6010B	280-272139
280-67600-7	J1V5N3	T	Solid	6010B	280-272139
280-67600-8	J1V5N4	T	Solid	6010B	280-272139
280-67600-9	J1V5N5	T	Solid	6010B	280-272139
280-67600-10	J1V5N6	T	Solid	6010B	280-272139
280-67600-11	J1V5N7	T	Solid	6010B	280-272139
280-67600-12	J1V5N8	T	Solid	6010B	280-272139
280-67600-13	J1V5N9	T	Solid	6010B	280-272139
280-67600-14	J1V5P0	T	Solid	6010B	280-272139
280-67600-15	J1V5P1	T	Solid	6010B	280-272139
280-67600-16	J1V5P2	T	Solid	6010B	280-272139
Analysis Batch:280-272757					
280-67600-2	J1V5M8	T	Solid	6010B	280-272139
280-67600-3	J1V5M9	T	Solid	6010B	280-272139
280-67600-4	J1V5N0	T	Solid	6010B	280-272139
280-67600-5	J1V5N1	T	Solid	6010B	280-272139
280-67600-6	J1V5N2	T	Solid	6010B	280-272139
280-67600-7	J1V5N3	T	Solid	6010B	280-272139
280-67600-8	J1V5N4	T	Solid	6010B	280-272139
280-67600-9	J1V5N5	T	Solid	6010B	280-272139
280-67600-10	J1V5N6	T	Solid	6010B	280-272139
280-67600-11	J1V5N7	T	Solid	6010B	280-272139
280-67600-12	J1V5N8	T	Solid	6010B	280-272139
280-67600-13	J1V5N9	T	Solid	6010B	280-272139
280-67600-14	J1V5P0	T	Solid	6010B	280-272139
280-67600-15	J1V5P1	T	Solid	6010B	280-272139
280-67600-16	J1V5P2	T	Solid	6010B	280-272139

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-272797					
LCS 280-272797/2-A	Lab Control Sample	T	Solid	3050B	
MB 280-272797/1-A	Method Blank	T	Solid	3050B	
280-67600-1	J1V5M7	T	Solid	3050B	
280-67600-1DU	Duplicate	T	Solid	3050B	
280-67600-1MS	Matrix Spike	T	Solid	3050B	
280-67600-2	J1V5M8	T	Solid	3050B	
280-67600-3	J1V5M9	T	Solid	3050B	
280-67600-4	J1V5N0	T	Solid	3050B	
280-67600-5	J1V5N1	T	Solid	3050B	
280-67600-6	J1V5N2	T	Solid	3050B	
280-67600-7	J1V5N3	T	Solid	3050B	
280-67600-8	J1V5N4	T	Solid	3050B	
280-67600-9	J1V5N5	T	Solid	3050B	
280-67600-10	J1V5N6	T	Solid	3050B	
280-67600-11	J1V5N7	T	Solid	3050B	
280-67600-12	J1V5N8	T	Solid	3050B	
280-67600-13	J1V5N9	T	Solid	3050B	
280-67600-14	J1V5P0	T	Solid	3050B	
280-67600-15	J1V5P1	T	Solid	3050B	
280-67600-16	J1V5P2	T	Solid	3050B	
Analysis Batch:280-272917					
LCS 280-272797/2-A	Lab Control Sample	T	Solid	6010B	280-272797
MB 280-272797/1-A	Method Blank	T	Solid	6010B	280-272797
280-67600-1	J1V5M7	T	Solid	6010B	280-272797
280-67600-1DU	Duplicate	T	Solid	6010B	280-272797
280-67600-1MS	Matrix Spike	T	Solid	6010B	280-272797
280-67600-2	J1V5M8	T	Solid	6010B	280-272797
280-67600-3	J1V5M9	T	Solid	6010B	280-272797
280-67600-4	J1V5N0	T	Solid	6010B	280-272797
280-67600-5	J1V5N1	T	Solid	6010B	280-272797
280-67600-6	J1V5N2	T	Solid	6010B	280-272797
280-67600-7	J1V5N3	T	Solid	6010B	280-272797
280-67600-8	J1V5N4	T	Solid	6010B	280-272797
280-67600-9	J1V5N5	T	Solid	6010B	280-272797
280-67600-10	J1V5N6	T	Solid	6010B	280-272797
280-67600-11	J1V5N7	T	Solid	6010B	280-272797
280-67600-12	J1V5N8	T	Solid	6010B	280-272797
280-67600-13	J1V5N9	T	Solid	6010B	280-272797
280-67600-14	J1V5P0	T	Solid	6010B	280-272797
280-67600-15	J1V5P1	T	Solid	6010B	280-272797
280-67600-16	J1V5P2	T	Solid	6010B	280-272797

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Report Basis					
T = Total					
General Chemistry					
Analysis Batch:280-272228					
280-67600-1	J1V5M7	T	Solid	D-2216	
280-67600-1DU	Duplicate	T	Solid	D-2216	
280-67600-2	J1V5M8	T	Solid	D-2216	
280-67600-3	J1V5M9	T	Solid	D-2216	
280-67600-4	J1V5N0	T	Solid	D-2216	
280-67600-5	J1V5N1	T	Solid	D-2216	
280-67600-6	J1V5N2	T	Solid	D-2216	
280-67600-7	J1V5N3	T	Solid	D-2216	
280-67600-8	J1V5N4	T	Solid	D-2216	
280-67600-9	J1V5N5	T	Solid	D-2216	
280-67600-10	J1V5N6	T	Solid	D-2216	
280-67600-11	J1V5N7	T	Solid	D-2216	
280-67600-12	J1V5N8	T	Solid	D-2216	
280-67600-13	J1V5N9	T	Solid	D-2216	
280-67600-14	J1V5P0	T	Solid	D-2216	
280-67600-15	J1V5P1	T	Solid	D-2216	
280-67600-16	J1V5P2	T	Solid	D-2216	

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-67600-1
Sdg Number: JP0939

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
HPLC/IC					
Prep Batch: 280-272004					
LCS 280-272004/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-272004/1-A	Method Blank	T	Solid	3550C	
280-67600-1	J1V5M7	T	Solid	3550C	
280-67600-2	J1V5M8	T	Solid	3550C	
280-67600-2MS	Matrix Spike	T	Solid	3550C	
280-67600-2MSD	Matrix Spike Duplicate	T	Solid	3550C	
280-67600-3	J1V5M9	T	Solid	3550C	
280-67600-4	J1V5N0	T	Solid	3550C	
280-67600-5	J1V5N1	T	Solid	3550C	
280-67600-6	J1V5N2	T	Solid	3550C	
280-67600-7	J1V5N3	T	Solid	3550C	
280-67600-8	J1V5N4	T	Solid	3550C	
280-67600-9	J1V5N5	T	Solid	3550C	
280-67600-10	J1V5N6	T	Solid	3550C	
280-67600-11	J1V5N7	T	Solid	3550C	
280-67600-12	J1V5N8	T	Solid	3550C	
280-67600-13	J1V5N9	T	Solid	3550C	
280-67600-14	J1V5P0	T	Solid	3550C	
280-67600-15	J1V5P1	T	Solid	3550C	
Analysis Batch:280-272421					
LCS 280-272004/2-A	Lab Control Sample	T	Solid	8310	280-272004
MB 280-272004/1-A	Method Blank	T	Solid	8310	280-272004
280-67600-1	J1V5M7	T	Solid	8310	280-272004
280-67600-2	J1V5M8	T	Solid	8310	280-272004
280-67600-2MS	Matrix Spike	T	Solid	8310	280-272004
280-67600-2MSD	Matrix Spike Duplicate	T	Solid	8310	280-272004
280-67600-3	J1V5M9	T	Solid	8310	280-272004
280-67600-4	J1V5N0	T	Solid	8310	280-272004
280-67600-5	J1V5N1	T	Solid	8310	280-272004
280-67600-6	J1V5N2	T	Solid	8310	280-272004
280-67600-7	J1V5N3	T	Solid	8310	280-272004
280-67600-8	J1V5N4	T	Solid	8310	280-272004
280-67600-9	J1V5N5	T	Solid	8310	280-272004
280-67600-10	J1V5N6	T	Solid	8310	280-272004
280-67600-11	J1V5N7	T	Solid	8310	280-272004
280-67600-12	J1V5N8	T	Solid	8310	280-272004
280-67600-13	J1V5N9	T	Solid	8310	280-272004
280-67600-14	J1V5P0	T	Solid	8310	280-272004
280-67600-15	J1V5P1	T	Solid	8310	280-272004

Report Basis
T = Total

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-148-192

Collector: T. Etherington	Company Contact: Joan Kessner	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Price Code: 8B	Data Turnaround: 7 Day		
Project Designation: 300 Area D4 Waste Sites	Sampling Location: 300-280, excavation, Verification		SAF No.: RC-148
Ice Chest No.: RCC-07-008	Field Logbook No.: EL-1667-03	COA: 0302802000	Method of Shipment: Commercial Carrier
Shipped To: TestAmerica Denver	Offsite Property No.: A131400		Bill of Lading/Air Bill No.: SEE OSPC

Other Labs Shipped To: ~~GEL~~ 4-8-15 CMB; NA

POSSIBLE SAMPLE HAZARDS/REMARKS

None

Special Handling and/or Storage

cooling as required

Preservation	Cool 4C	Cool 4C	Cool 4C									
Type of Container	G/P	aG	aG									
No. of Container(s)	1	1	1									
Volume	250mL	500mL	500mL									
Sample Analysis	See item (1) in Special Instructions	PAHs - 8310; PCBs - 8082	TPH-Diesel Range - WTPH-D +									

280-67600 Chain of Custody

Sample No.	Matrix	Sample Date	Sample Time										
J1V5M7	SOIL	4-7-15	0826	✓	✓	✓							
J1V5M8	SOIL	4-7-15	1015	✓	✓	✓							
J1V5M9	SOIL	4-7-15	0933	✓	✓	✓							
J1V5N0	SOIL	4-7-15	0903	✓	✓	✓							
J1V5N1	SOIL	4-7-15	0841	✓	✓	✓							

Page 135 of 142

CHAIN OF POSSESSION — **Sign/Print Names**

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Tony ETHERINGTON	4-7-15 1042	WCH DWSHEA	4/7/15 1042
DWSHEA DWSHEA	4/7/15 1147	C. Bingham	4-7-15 1147
C. Bingham	4-7-15 1415	1060 Battelle, fridge #3A	1415 4-7-15
1060 Battelle, fridge #3A	4-8-15 0710	C. Bingham	4-8-15 0710
C. Bingham WCH	4-8-15 0715	fed Ex	4-8-15
			900 8Apr15

FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

SPECIAL INSTRUCTIONS

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

2.9, 2.3 IRSTO.2 8Apr15
Transferred by

REVIEWED BY K. Wendremmel DATE 4-8-15

JP0939

WCH-EE-011

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-148-192

Collector: T. Etherington	Company Contact: Joan Kessner	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Price Code: 8B	Data Turnaround: 7 day		
Project Designation: 300 Area D4 Waste Sites	Sampling Location: 300-280, excavation, Verification		SAF No.: RC-148
Ice Chest No.: RCC-07-008	Field Logbook No.: EL-1667-03	COA: 0302802000	Method of Shipment: Commercial Carrier
Shipped To: TestAmerica Denver	Offsite Property No.: A131400		Bill of Lading/Air Bill No.: SEE OSPC

Other Labs Shipped To: ~~GEL~~ 4-8-15 cmB NA

POSSIBLE SAMPLE HAZARDS/REMARKS: None

Special Handling and/or Storage: cooling as required

Preservation	Cool 4C	Cool 4C	Cool 4C									
Type of Container	G/P	aG	aG									
No. of Container(s)	1	1	1									
Volume	250mL	500mL	500mL									
Sample Analysis	See item (1) in Special Instructions	PAHs - 8310; PCBs - 8082	TPH-Diesel Range - WTPH-D +									

Sample No.	Matrix	Sample Date	Sample Time										
J1V5N2	SOIL	4-7-15	0957	✓	✓	✓							
J1V5N3	SOIL	4-7-15	0924	✓	✓	✓							
J1V5N4	SOIL	4-7-15	0912	✓	✓	✓							
J1V5N5	SOIL	4-7-15	0848	✓	✓	✓							
J1V5N6	SOIL	4-7-15	1005	✓	✓	✓							

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CHAIN OF POSSESSION

Sign/Print Names

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Tony Etherington	4-7-15 1042	WCH DWSHEA	4/7/15 1042
DWSHEA DWSHEA	4/7/15 1147	C. Bingham	4-7-15 1147
C. Bingham	4-7-15 1415	1060 Battelle, fridge #3A	4-7-15 1415
1060 Battelle, fridge #3A	4-8-15 0710	C. Bingham	4-8-15 0710
C. Bingham WCH	4-8-15 0715	fed Ex	4-8-15
			0910

FINAL SAMPLE DISPOSITION: Disposal Method | Disposed By | Date/Time

SPECIAL INSTRUCTIONS

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

REVIEWED BY K. Woodward DATE 4-8-15

JP0939

WCH-EE-011

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-148-192

Collector: T. Etherington	Company Contact: Joan Kessner	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Price Code: 8B	Data Turnaround: 7day		
Project Designation: 300 Area D4 Waste Sites	Sampling Location: 300-280, excavation, Verification		SAF No.: RC-148
Ice Chest No.: RCC-07-008	Field Logbook No.: EL-1667-03	COA: 0302802000	Method of Shipment: Commercial Carrier
Shipped To: TestAmerica Denver	Offsite Property No.: A131400		Bill of Lading/Air Bill No.: SEE OSPC

Other Labs Shipped To: ~~GEL~~ 4-8-15 cmB; NA

POSSIBLE SAMPLE HAZARDS/REMARKS

None

Special Handling and/or Storage

cooling as required

Preservation	Cool 4C	Cool 4C	Cool 4C								
Type of Container	G/P	aG	aG								
No. of Container(s)	1	1	1								
Volume	250mL	500mL	500mL								
Sample Analysis	See item (1) in Special Instructions	PAHs - 8310; PCBs - 8082	TPH-Diesel Range - WTPH-D +								

Sample No.	Matrix	Sample Date	Sample Time										
J1V5N7	SOIL	4-7-15	1024	✓	✓	✓							
J1V5N8	SOIL	4-7-15	1036	✓	✓	✓							
J1V5N9	SOIL	4-7-15	0826	✓	✓	✓							
J1V5P0	SOIL	4-7-15	0855	✓	✓	✓							
J1V5P1	SOIL	4-7-15	0945	✓	✓	✓							

Page 138 of 142

CHAIN OF POSSESSION — **Sign/Print Names**

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Tony Etherington	4-7-15 1042	DWSH&A (WXH)	4/7/15 1042
DWSH&A	4/7/15 1147	C. Bingham	4-7-15 1147
C. Bingham	4-7-15 1415	1060 Battelle, fridge #3A	4-7-15 1415
1060 Battelle, fridge #3A	4-8-15 0710	C. Bingham	4-8-15 0710
C. Bingham (WCH)	4-8-15 0715	fed Ex	4-8-15
			900 7Apr15

FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

SPECIAL INSTRUCTIONS

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

REVIEWED BY K. Woodworth DATE 4-5-15

JP0939

WCH-EE-011

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-148-192

Collector: T. Etherington	Company Contact: Joan Kessner	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Price Code: 8B	Data Turnaround: 7 day		
Project Designation: 300 Area D4 Waste Sites	Sampling Location: 300-280, excavation, Verification		SAF No.: RC-148
Ice Chest No.: RCC-07-008	Field Logbook No.: EL-1667-03	COA: 0302802000	Method of Shipment: Commercial Carrier
Shipped To: TestAmerica Denver	Offsite Property No.: A131400		Bill of Lading/Air Bill No.: SEE OSPC

Other Labs Shipped To: ~~CTEL~~ 4-8-15 CMB NA

POSSIBLE SAMPLE HAZARDS/REMARKS: None

Special Handling and/or Storage: cooling as required

Preservation	Cool 4C	Cool 4C	Cool 4C									
Type of Container	G/P	aG	aG									
No. of Container(s)	1	1	1									
Volume	250mL	500mL	500mL									
Sample Analysis	See item (1) in Special Instructions	PAHs - 8310; PCBs - 8082	TPH-Diesel Range - WTPH-D +									

Sample No.	Matrix	Sample Date	Sample Time										
J1V5P2	SOIL	4-7-15	0813	✓			4-7-15 CMB						

CHAIN OF POSSESSION

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Tony Etherington	4-7-15 1042	WCH Nushea Dubitgit	4/7/15 1042
Nushea Dubitgit	4/7/15 1147	C. Bingham	4-7-15 1147
C. Bingham	4-7-15 1415	1060 Battelle, fridge #3A	4-7-15 1415
1060 Battelle, fridge #3A	4-8-15 0710	C. Bingham	4-8-15 0710
C. Bingham WCH	4-8-15 0715	fed Ex	4-8-15
		900 Apple	

Sign/Print Names

FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

SPECIAL INSTRUCTIONS

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

RECEIVED BY K. Kindel DATE 4-8-15

JP0939

WCH-EE-011

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

*90% permission on (AW)

Project 28002142
Report Due: 4/16/2015
TALs TAT: 5-Day-Rush

D.B. 4-10-15

Sample Check-in List

Date/Time Received: 0900 GM Screen Result 15 microR/hr

Client: Washington Closure Hanford SDG #: JP0939 NA[ ] SAF #: RC-148 NA [ ]

Job Number: 607600 Chain of Custody # RC-148-192

Shipping Container ID: RCC-07-018, RCC-08-016 Air Bill #1733 1813 8722, 7733, 1813 8847

1. Custody Seals on shipping container intact? NA [ ] Yes [X] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [X] No [ ]
3. Chain of Custody record present? NA [ ] Yes [X] No [ ]
4. Cooler Temperature °C: 3.1, 2.5 corr'd NA [ ] 5. Vermiculite/packing materials is NA [ ] Wet [X] Dry [ ]
6. Number of samples in shipping container: 9, 7
7. Sample holding times exceeded? NA [ ] Yes [ ] No [X]
8. Samples have:
   - X Tape
   - X Custody Seals
   - X Hazard Labels
   - X Appropriate Sample Labels
9. Samples are:
   - X In Good Condition
   - ___ Broken
   - ___ Leaking
   - ___ Have Air Bubbles (Only for samples requiring no head space.)
10. Sample pH taken? NA [X] pH<2 [ ] pH>2 [ ] pH>9 [ ] Amount HNO_3 Added ___
11. Sample Location, Sample Collector Listed? * Y
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [X]
13. Description of anomalies (include sample numbers): ___

Sample Custodian: Ashley Murin Date: 9 Apr 15

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on ___ by ___ Person Contacted ___

[ ] No action necessary; process as is.

Project Manager Darlene Bandy Date 4-10-15

LS-023, Rev. 7, 1/08

From: (509) 376-7492
1162 Shipping
US DOE c/o WCH
2355 Stevens Dr

Richland, WA 99354

Origin ID: PSCA

FedEx Express

J15121602230 3uv

Ship Date: 08APR15
ActWgt: 85.0 LB
CAD: 105266502/INET3610

Delivery Address Bar Code

Ref # 0302802000
Invoice #
PO #
Dept #

SHIP TO: (303) 736-0190
BILL THIRD PARTY

Kae Yoder
TestAmerica
4955 Yarrow St.
A131400
ARVADA, CO 80002

2 of 2

THU - 09 APR 10:30A
PRIORITY OVERNIGHT

MPS# 7733 1813 8847
0263
Mstr# 7733 1813 8722 0201

80002
CO-US
DEN

XH WHHA

637J2/8FQ5/EE4B

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

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From: (509) 376-7492
1162 Shipping
US DOE c/o WCH
2355 Stevens Dr

Richland, WA 99354

Origin ID: PSCA

FedEx. Express

J151216022303uv

Ship Date: 08APR15
ActWgt: 88.0 LB
CAD: 105266502/NET3610

Delivery Address Bar Code

Ref # 0302802000
Invoice #
PO #
Dept #

SHIP TO: (303) 736-0190
BILL THIRD PARTY

Kae Yoder
TestAmerica
4955 Yarrow St.
A131400
ARVADA, CO 80002

1 of 2

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PRIORITY OVERNIGHT

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After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
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