SAF-RC-233
100-IU-2 & 100-IU-6 Remaining Waste Sites – Soil In-Process
FINAL DATA PACKAGE

COMPLETE COPY OF DATA PACKAGE TO:

Kathy Wendt H4-21 KW 3/30/15
INITIAL/DATE

COMMENTS:

SDG JP0929 SAF-RC-233

Rad only ☑ Chem only Rad & Chem

☑ Complete Partial

Sample Location: 600-358 (excavation & SPA)

ANALYTICAL REPORT

Job Number: 280-66773-1

SDG Number: JP0929

Job Description: SAF# RC-233

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

Attention: Joan H Kessner

Approved for release.
Kae E Yoder
Senior Project Manager
3/30/2015 1:52 PM

Kae E Yoder, Senior Project Manager
4955 Yarrow Street, Arvada, CO, 80002
(303)736-0190
kae.yoder@testamericainc.com
03/30/2015

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: 280-66773-1

SDG #: JP0929
SAF#: RC-233

Date SDG Closed: March 20, 2015
Data Deliverable: 7 Day / Summary

CLIENT ID	LAB ID	ANALYSES REQUESTED	ANALYSES PERFORMED
J1V4H0	280-66773-1	6010/7471/8310/8082/WTPH-D+/8270/ 8081/8151	6010B/7471A/8310/8082/NWTPH-Dx/8270C/ 8081A/8151A
J1V4H1	280-66773-2	6010/7471/8310/8082/WTPH-D+/8270/ 8081/8151	6010B/7471A/8310/8082/NWTPH-Dx/8270C/ 8081A/8151A
J1V4H2	280-66773-3	6010/7471/8310/8082/WTPH-D+/8270/ 8081/8151	6010B/7471A/8310/8082/NWTPH-Dx/8270C/ 8081A/8151A
J1V4H3	280-66773-4	6010/7471/8310/8082/WTPH-D+/8270/ 8081/8151	6010B/7471A/8310/8082/NWTPH-Dx/8270C/ 8081A/8151A
J1V586	280-66773-5	6010/7471/8310/8082/WTPH-D+/8270/ 8081/8151	6010B/7471A/8310/8082/NWTPH-Dx/8270C/ 8081A/8151A
J1V587	280-66773-6	6010/7471/8310/8082/WTPH-D+/8270/ 8081/8151	6010B/7471A/8310/8082/NWTPH-Dx/8270C/ 8081A/8151A
J1V588	280-66773-7	6010/7471/8310/8082/WTPH-D+/8270/ 8081/8151	6010B/7471A/8310/8082/NWTPH-Dx/8270C/ 8081A/8151A
J1V589	280-66773-8	6010/7471/8310/8082/WTPH-D+/8270/ 8081/8151	6010B/7471A/8310/8082/NWTPH-Dx/8270C/ 8081A/8151A

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

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

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

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT
The samples were received on 3/20/2015 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 2.3º C, 3.0º C, 3.6º C and 4.3º C.

GC/MS SEMIVOLATILES - SW846 8270C
The LCS associated with batch 280-269063 exhibited percent recoveries outside the control limits, biased low, for 4-Nitroaniline at 63% (lower limit 64%) and Pentachlorophenol at 49% (lower limit 56%), and associated sample results have been flagged "T". A full list spike was utilized, and although these compounds were recovered outside current historical control limits, the recoveries were within the allowed marginal exceedance control limits (4-Nitroaniline lower limit 56%, Pentachlorophenol lower limit 47%). This marginal exceedance has been determined to be sporadic, not systematic; therefore, corrective action is deemed unnecessary.

The MS/MSD performed on sample J1V4H2 exhibited spike compound recoveries outside the control limits, and the associated sample results have been flagged “T”. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary.

No other anomalies were encountered.

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

GC SEMIVOLATILES - SW846 8082 - PCBs
No anomalies were encountered.

GC SEMIVOLATILES - SW846 8151A - Herbicides
Dinoseb results in soil are reported for this project at the request of the client with the qualifier that the laboratory is not certified for this analyte and the reported results are considered biased low. The laboratory consistently obtains very low recoveries, typically ≤ 10%.

The laboratory noted that samples J1V4H0, J1V4H1, J1V4H2, J1V586 and J1V588 contained numerous non-target peaks and significant baseline rise that could be interfering with the identification and quantitation of Dinoseb. This inference could cause false positive and/or negative results.

The RPD between the primary and confirmation columns exceeded 40% for Dinoseb in samples J1V4H0, J1V4H1, J1V4H2, J1V586 and J1V588. The lower of the two values have been reported, as matrix interference is evident. The results have been flagged with an “X”.

Dinoseb was not recovered in the MSD aliquot of the MS/MSD performed on sample J1V589, and the associated sample result has been flagged “N”. In addition, the RPD limit could not be calculated. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary.

No other anomalies were encountered.

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

HPLC - SW846 8310 - PAHs
No anomalies were encountered.

TOTAL METALS - SW846 6010B/7471A
Serial dilution of a digestate in batch 280-269035 indicates that physical and chemical interferences are present for Chromium, Magnesium, Manganese, Nickel and Zinc. Results have been flagged with an “X”.

Due to the sample matrix affecting the internal standard, the samples presented in this report required 5X dilutions prior to the analysis of several 6010B elements. The reporting limits have been elevated accordingly. The laboratory noted that analysis at less diluted concentrations could not be performed while maintaining the integrity of the analytical system.

Low levels of Barium, Magnesium, Copper and Calcium are present in the method blank associated with batch 280-269035. Because the concentrations in the method blank 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 280-269035 and in the Matrix Spike performed on sample J1V4H0 in batch 280-269035. 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 J1V4H0; therefore, control limits are not applicable.

Boron was recovered outside the control limits in the Matrix Spike performed on sample J1V4H0, and the associated sample result has been flagged “N”. There is no indication that the analytical system was operating out of control, and method accuracy has been verified by the acceptable LCS analysis data; therefore, corrective action is deemed unnecessary.

The duplicate analysis of sample J1V4H0 exhibited RPD data outside the control limits for Arsenic, and the associated sample result has been flagged “M”. There is no indication that the analytical system was operating out of control, and method accuracy has been verified by the acceptable LCS analysis data; therefore, corrective action is deemed unnecessary.

No other anomalies were encountered.

DATA REPORTING QUALIFIERS

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Lab Section	Qualifier	Description
GC/MS Semi VOA		
	U	Analyzed for but not detected.
	J	Indicates an Estimated Value for TICs
	T	LCS, LCSD: Recovery exceeds upper or lower control limits.
	T	MS, MSD: Recovery exceeds upper or lower control limits.
	N	Presumptive evidence of material.
GC Semi VOA		
	U	Analyzed for but not detected.
	X	More than 40% difference between columns, lower result reported.
	N	MS, MSD: Spike recovery exceeds upper or lower control limits.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
HPLC/IC		
	U	Analyzed for but not detected.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
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
	M	Sample duplicate precision not met.
	X	Serial dilution in the analytical batch indicates that physical and chemical interferences are present.

SAMPLE SUMMARY

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-66773-1	J1V4H0	Solid	03/18/2015 1143	03/20/2015 0930
280-66773-2	J1V4H1	Solid	03/18/2015 1147	03/20/2015 0930
280-66773-3	J1V4H2	Solid	03/18/2015 1152	03/20/2015 0930
280-66773-4	J1V4H3	Solid	03/18/2015 1156	03/20/2015 0930
280-66773-5	J1V586	Solid	03/18/2015 1209	03/20/2015 0930
280-66773-6	J1V587	Solid	03/18/2015 1206	03/20/2015 0930
280-66773-7	J1V588	Solid	03/18/2015 1203	03/20/2015 0930
280-66773-8	J1V589	Solid	03/18/2015 1200	03/20/2015 0930

METHOD SUMMARY

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Semivolatile Organic Compounds (GC/MS)	TAL DEN	SW846 8270C	
Ultrasonic Extraction	TAL DEN		SW846 3550C
Organochlorine Pesticides (GC)	TAL DEN	SW846 8081A	
Ultrasonic Extraction	TAL DEN		SW846 3550C
Polychlorinated Biphenyls (PCBs) by Gas Chromatography	TAL DEN	SW846 8082	
Ultrasonic Extraction	TAL DEN		SW846 3550C
Herbicides (GC)	TAL DEN	SW846 8151A	
Extraction (Herbicides)	TAL DEN		SW846 8151A
Northwest - Semi-Volatile Petroleum Products (GC)	TAL DEN	NWTPH NWTPH-Dx	
Ultrasonic Extraction	TAL DEN		SW846 3550C
PAHs (HPLC)	TAL DEN	SW846 8310	
Ultrasonic Extraction	TAL DEN		SW846 3550C
Metals (ICP)	TAL DEN	SW846 6010B	
Preparation, Metals	TAL DEN		SW846 3050B
Mercury (CVAA)	TAL DEN	SW846 7471A	
Preparation, Mercury	TAL DEN		SW846 7471A
ASTM D-2216	TAL DEN	ASTM D-2216	

Lab References:

TAL DEN = TestAmerica Denver

Method References:

ASTM = ASTM International

NWTPH = Northwest Total Petroleum Hydrocarbon

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Method	Analyst	Analyst ID
SW846 8270C	Hoefler, Alexandra F	AFH
SW846 8081A	Pavlakovich, Adam M	AMP
SW846 8082	Jackson, Todd D	TDJ
SW846 8151A	Smith, Matthew P	MPS
NWTPH NWTPH-Dx	Moore, Tegan E	TEM
SW846 6010B	Scott, Samantha J	SJS
SW846 7471A	Johnson, Sarah E	SEJ
ASTM D-2216	Shaheen, Scott W	SWS
SW846 8310	Fiedler, Heather K	HKF

SAMPLE RESULTS

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V4H0**

Lab Sample ID: 280-66773-1
Client Matrix: Solid
% Moisture: 4.8

Date Sampled: 03/18/2015 1143
Date Received: 03/20/2015 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-269324	Instrument ID:	SMS_D
Prep Method:	3550C	Prep Batch:	280-269063	Lab File ID:	D9458.D
Dilution:	1.0			Initial Weight/Volume:	32.5 g
Analysis Date:	03/23/2015 1725			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 1959			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	320
Acenaphthylene		16	U	16	320
Anthracene		16	U	16	320
Benzo[a]anthracene		19	U	19	320
Benzo[a]pyrene		19	U	19	320
Benzo[b]fluoranthene		25	U	25	320
Benzo[ghi]perylene		16	U	16	320
Benzo[k]fluoranthene		39	U	39	320
Bis(2-chloroethoxy)methane		22	U	22	320
Bis(2-chloroethyl)ether		16	U	16	320
bis (2-chloroisopropyl) ether		22	U	22	320
Bis(2-ethylhexyl) phthalate		45	U	45	320
4-Bromophenyl phenyl ether		18	U	18	320
Butyl benzyl phthalate		42	U	42	320
Carbazole		35	U	35	320
4-Chloroaniline		79	U	79	320
4-Chloro-3-methylphenol		64	U	64	320
2-Chloronaphthalene		9.7	U	9.7	320
2-Chlorophenol		20	U	20	320
4-Chlorophenyl phenyl ether		20	U	20	320
Chrysene		26	U	26	320
Dibenz(a,h)anthracene		18	U	18	320
Dibenzofuran		19	U	19	320
1,2-Dichlorobenzene		21	U	21	320
1,3-Dichlorobenzene		12	U	12	320
1,4-Dichlorobenzene		13	U	13	320
3,3'-Dichlorobenzidine		87	U	87	640
2,4-Dichlorophenol		9.7	U	9.7	320
Diethyl phthalate		25	U	25	320
2,4-Dimethylphenol		64	U	64	320
Dimethyl phthalate		22	U	22	320
Di-n-butyl phthalate		28	U	28	320
4,6-Dinitro-2-methylphenol		320	U	320	640
2,4-Dinitrophenol		320	U	320	800
2,4-Dinitrotoluene		64	U	64	320
2,6-Dinitrotoluene		27	U	27	320
Di-n-octyl phthalate		14	U	14	320
Fluoranthene		35	U	35	320
Fluorene		17	U	17	320
Hexachlorobenzene		28	U	28	320
Hexachlorobutadiene		9.7	U	9.7	320
Hexachlorocyclopentadiene		48	U	48	320
Hexachloroethane		21	U	21	320
Indeno[1,2,3-cd]pyrene		21	U	21	320
Isophorone		16	U	16	320
2-Methylnaphthalene		18	U	18	320

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V4H0**

Lab Sample ID: 280-66773-1
Client Matrix: Solid
% Moisture: 4.8

Date Sampled: 03/18/2015 1143
Date Received: 03/20/2015 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-269324	Instrument ID:	SMS_D
Prep Method:	3550C	Prep Batch:	280-269063	Lab File ID:	D9458.D
Dilution:	1.0			Initial Weight/Volume:	32.5 g
Analysis Date:	03/23/2015 1725			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 1959			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2-Methylphenol		13	U	13	320
3 & 4 Methylphenol		32	U	32	320
Naphthalene		30	U	30	320
2-Nitroaniline		48	U	48	320
3-Nitroaniline		71	U	71	320
4-Nitroaniline		70	U T	70	320
Nitrobenzene		21	U	21	320
2-Nitrophenol		9.7	U	9.7	320
4-Nitrophenol		94	U	94	640
N-Nitrosodi-n-propylamine		30	U	30	320
N-Nitrosodiphenylamine		20	U	20	320
Pentachlorophenol		320	U T	320	640
Phenanthrene		16	U	16	320
Phenol		17	U	17	320
Pyrene		12	U	12	320
1,2,4-Trichlorobenzene		27	U	27	320
2,4,5-Trichlorophenol		9.7	U	9.7	320
2,4,6-Trichlorophenol		9.7	U	9.7	320

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	61		50 - 120
2-Fluorophenol	61		53 - 120
Nitrobenzene-d5	64		50 - 120
Phenol-d5	63		52 - 120
Terphenyl-d14	58		55 - 120
2,4,6-Tribromophenol	56		51 - 120

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V4H0**

Lab Sample ID: 280-66773-1
Client Matrix: Solid
% Moisture: 4.8

Date Sampled: 03/18/2015 1143
Date Received: 03/20/2015 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-269324	Instrument ID:	SMS_D
Prep Method:	3550C	Prep Batch:	280-269063	Lab File ID:	D9458.D
Dilution:	1.0			Initial Weight/Volume:	32.5 g
Analysis Date:	03/23/2015 1725			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 1959			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	3.33	3100	N J

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V4H1**

Lab Sample ID: 280-66773-2
Client Matrix: Solid
% Moisture: 3.4

Date Sampled: 03/18/2015 1147
Date Received: 03/20/2015 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-269324	Instrument ID:	SMS_D
Prep Method:	3550C	Prep Batch:	280-269063	Lab File ID:	D9459.D
Dilution:	1.0			Initial Weight/Volume:	31.9 g
Analysis Date:	03/23/2015 1754			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 1959			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	320
Acenaphthylene		17	U	17	320
Anthracene		17	U	17	320
Benzo[a]anthracene		19	U	19	320
Benzo[a]pyrene		19	U	19	320
Benzo[b]fluoranthene		26	U	26	320
Benzo[ghi]perylene		16	U	16	320
Benzo[k]fluoranthene		39	U	39	320
Bis(2-chloroethoxy)methane		22	U	22	320
Bis(2-chloroethyl)ether		16	U	16	320
bis (2-chloroisopropyl) ether		22	U	22	320
Bis(2-ethylhexyl) phthalate		45	U	45	320
4-Bromophenyl phenyl ether		18	U	18	320
Butyl benzyl phthalate		42	U	42	320
Carbazole		35	U	35	320
4-Chloroaniline		80	U	80	320
4-Chloro-3-methylphenol		64	U	64	320
2-Chloronaphthalene		9.7	U	9.7	320
2-Chlorophenol		20	U	20	320
4-Chlorophenyl phenyl ether		20	U	20	320
Chrysene		26	U	26	320
Dibenz(a,h)anthracene		18	U	18	320
Dibenzofuran		19	U	19	320
1,2-Dichlorobenzene		21	U	21	320
1,3-Dichlorobenzene		12	U	12	320
1,4-Dichlorobenzene		13	U	13	320
3,3'-Dichlorobenzidine		88	U	88	640
2,4-Dichlorophenol		9.7	U	9.7	320
Diethyl phthalate		25	U	25	320
2,4-Dimethylphenol		64	U	64	320
Dimethyl phthalate		22	U	22	320
Di-n-butyl phthalate		28	U	28	320
4,6-Dinitro-2-methylphenol		320	U	320	640
2,4-Dinitrophenol		320	U	320	800
2,4-Dinitrotoluene		64	U	64	320
2,6-Dinitrotoluene		27	U	27	320
Di-n-octyl phthalate		14	U	14	320
Fluoranthene		35	U	35	320
Fluorene		18	U	18	320
Hexachlorobenzene		28	U	28	320
Hexachlorobutadiene		9.7	U	9.7	320
Hexachlorocyclopentadiene		49	U	49	320
Hexachloroethane		21	U	21	320
Indeno[1,2,3-cd]pyrene		21	U	21	320
Isophorone		17	U	17	320
2-Methylnaphthalene		18	U	18	320

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V4H1**

Lab Sample ID: 280-66773-2
Client Matrix: Solid
% Moisture: 3.4

Date Sampled: 03/18/2015 1147
Date Received: 03/20/2015 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-269324	Instrument ID:	SMS_D
Prep Method:	3550C	Prep Batch:	280-269063	Lab File ID:	D9459.D
Dilution:	1.0			Initial Weight/Volume:	31.9 g
Analysis Date:	03/23/2015 1754			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 1959			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2-Methylphenol		13	U	13	320
3 & 4 Methylphenol		32	U	32	320
Naphthalene		30	U	30	320
2-Nitroaniline		49	U	49	320
3-Nitroaniline		71	U	71	320
4-Nitroaniline		71	U T	71	320
Nitrobenzene		21	U	21	320
2-Nitrophenol		9.7	U	9.7	320
4-Nitrophenol		94	U	94	640
N-Nitrosodi-n-propylamine		30	U	30	320
N-Nitrosodiphenylamine		20	U	20	320
Pentachlorophenol		320	U T	320	640
Phenanthrene		17	U	17	320
Phenol		18	U	18	320
Pyrene		12	U	12	320
1,2,4-Trichlorobenzene		27	U	27	320
2,4,5-Trichlorophenol		9.7	U	9.7	320
2,4,6-Trichlorophenol		9.7	U	9.7	320

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	69		50 - 120
2-Fluorophenol	73		53 - 120
Nitrobenzene-d5	73		50 - 120
Phenol-d5	74		52 - 120
Terphenyl-d14	65		55 - 120
2,4,6-Tribromophenol	68		51 - 120

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V4H1**

Lab Sample ID: 280-66773-2
Client Matrix: Solid
% Moisture: 3.4

Date Sampled: 03/18/2015 1147
Date Received: 03/20/2015 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-269324	Instrument ID:	SMS_D
Prep Method:	3550C	Prep Batch:	280-269063	Lab File ID:	D9459.D
Dilution:	1.0			Initial Weight/Volume:	31.9 g
Analysis Date:	03/23/2015 1754			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 1959			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	3.33	3400	N J

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V4H2**

Lab Sample ID: 280-66773-3
Client Matrix: Solid
% Moisture: 1.5

Date Sampled: 03/18/2015 1152
Date Received: 03/20/2015 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-269324	Instrument ID:	SMS_D
Prep Method:	3550C	Prep Batch:	280-269063	Lab File ID:	D9460.D
Dilution:	1.0			Initial Weight/Volume:	30.4 g
Analysis Date:	03/23/2015 1822			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 1959			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	330
Acenaphthylene		17	U	17	330
Anthracene		17	U T	17	330
Benzo[a]anthracene		20	U T	20	330
Benzo[a]pyrene		20	U	20	330
Benzo[b]fluoranthene		26	U	26	330
Benzo[ghi]perylene		16	U	16	330
Benzo[k]fluoranthene		40	U	40	330
Bis(2-chloroethoxy)methane		23	U	23	330
Bis(2-chloroethyl)ether		17	U	17	330
bis (2-chloroisopropyl) ether		23	U	23	330
Bis(2-ethylhexyl) phthalate		46	U T	46	330
4-Bromophenyl phenyl ether		19	U T	19	330
Butyl benzyl phthalate		43	U T	43	330
Carbazole		36	U T	36	330
4-Chloroaniline		82	U	82	330
4-Chloro-3-methylphenol		66	U	66	330
2-Chloronaphthalene		10	U	10	330
2-Chlorophenol		21	U	21	330
4-Chlorophenyl phenyl ether		21	U T	21	330
Chrysene		27	U T	27	330
Dibenz(a,h)anthracene		19	U	19	330
Dibenzofuran		20	U	20	330
1,2-Dichlorobenzene		22	U	22	330
1,3-Dichlorobenzene		12	U	12	330
1,4-Dichlorobenzene		14	U	14	330
3,3'-Dichlorobenzidine		90	U	90	660
2,4-Dichlorophenol		10	U	10	330
Diethyl phthalate		26	U T	26	330
2,4-Dimethylphenol		66	U	66	330
Dimethyl phthalate		23	U T	23	330
Di-n-butyl phthalate		29	U T	29	330
4,6-Dinitro-2-methylphenol		330	U T	330	660
2,4-Dinitrophenol		330	U T	330	830
2,4-Dinitrotoluene		66	U T	66	330
2,6-Dinitrotoluene		28	U T	28	330
Di-n-octyl phthalate		14	U T	14	330
Fluoranthene		36	U T	36	330
Fluorene		18	U T	18	330
Hexachlorobenzene		29	U	29	330
Hexachlorobutadiene		10	U	10	330
Hexachlorocyclopentadiene		50	U	50	330
Hexachloroethane		21	U	21	330
Indeno[1,2,3-cd]pyrene		22	U T	22	330
Isophorone		17	U	17	330
2-Methylnaphthalene		19	U	19	330

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V4H2**

Lab Sample ID: 280-66773-3
Client Matrix: Solid
% Moisture: 1.5

Date Sampled: 03/18/2015 1152
Date Received: 03/20/2015 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-269324	Instrument ID:	SMS_D
Prep Method:	3550C	Prep Batch:	280-269063	Lab File ID:	D9460.D
Dilution:	1.0			Initial Weight/Volume:	30.4 g
Analysis Date:	03/23/2015 1822			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 1959			Injection Volume:	0.5 uL

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

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	72		50 - 120
2-Fluorophenol	75		53 - 120
Nitrobenzene-d5	77		50 - 120
Phenol-d5	78		52 - 120
Terphenyl-d14	72		55 - 120
2,4,6-Tribromophenol	67		51 - 120

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V4H2**

Lab Sample ID: 280-66773-3
Client Matrix: Solid
% Moisture: 1.5

Date Sampled: 03/18/2015 1152
Date Received: 03/20/2015 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-269324	Instrument ID:	SMS_D
Prep Method:	3550C	Prep Batch:	280-269063	Lab File ID:	D9460.D
Dilution:	1.0			Initial Weight/Volume:	30.4 g
Analysis Date:	03/23/2015 1822			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 1959			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	3.33	4200	N J

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V4H3**

Lab Sample ID: 280-66773-4
Client Matrix: Solid
% Moisture: 1.9

Date Sampled: 03/18/2015 1156
Date Received: 03/20/2015 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-269324	Instrument ID:	SMS_D
Prep Method:	3550C	Prep Batch:	280-269063	Lab File ID:	D9463.D
Dilution:	1.0			Initial Weight/Volume:	32.1 g
Analysis Date:	03/23/2015 1946			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 1959			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		9.8	U	9.8	310
Acenaphthylene		16	U	16	310
Anthracene		16	U	16	310
Benzo[a]anthracene		19	U	19	310
Benzo[a]pyrene		19	U	19	310
Benzo[b]fluoranthene		25	U	25	310
Benzo[ghi]perylene		15	U	15	310
Benzo[k]fluoranthene		38	U	38	310
Bis(2-chloroethoxy)methane		22	U	22	310
Bis(2-chloroethyl)ether		16	U	16	310
bis (2-chloroisopropyl) ether		22	U	22	310
Bis(2-ethylhexyl) phthalate		44	U	44	310
4-Bromophenyl phenyl ether		18	U	18	310
Butyl benzyl phthalate		41	U	41	310
Carbazole		34	U	34	310
4-Chloroaniline		78	U	78	310
4-Chloro-3-methylphenol		63	U	63	310
2-Chloronaphthalene		9.5	U	9.5	310
2-Chlorophenol		20	U	20	310
4-Chlorophenyl phenyl ether		20	U	20	310
Chrysene		26	U	26	310
Dibenz(a,h)anthracene		18	U	18	310
Dibenzofuran		19	U	19	310
1,2-Dichlorobenzene		21	U	21	310
1,3-Dichlorobenzene		11	U	11	310
1,4-Dichlorobenzene		13	U	13	310
3,3'-Dichlorobenzidine		86	U	86	630
2,4-Dichlorophenol		9.5	U	9.5	310
Diethyl phthalate		25	U	25	310
2,4-Dimethylphenol		63	U	63	310
Dimethyl phthalate		22	U	22	310
Di-n-butyl phthalate		28	U	28	310
4,6-Dinitro-2-methylphenol		310	U	310	630
2,4-Dinitrophenol		320	U	320	790
2,4-Dinitrotoluene		63	U	63	310
2,6-Dinitrotoluene		27	U	27	310
Di-n-octyl phthalate		14	U	14	310
Fluoranthene		34	U	34	310
Fluorene		17	U	17	310
Hexachlorobenzene		28	U	28	310
Hexachlorobutadiene		9.5	U	9.5	310
Hexachlorocyclopentadiene		48	U	48	310
Hexachloroethane		20	U	20	310
Indeno[1,2,3-cd]pyrene		21	U	21	310
Isophorone		16	U	16	310
2-Methylnaphthalene		18	U	18	310

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V4H3**

Lab Sample ID: 280-66773-4
Client Matrix: Solid
% Moisture: 1.9

Date Sampled: 03/18/2015 1156
Date Received: 03/20/2015 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-269324	Instrument ID:	SMS_D
Prep Method:	3550C	Prep Batch:	280-269063	Lab File ID:	D9463.D
Dilution:	1.0			Initial Weight/Volume:	32.1 g
Analysis Date:	03/23/2015 1946			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 1959			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2-Methylphenol		12	U	12	310
3 & 4 Methylphenol		31	U	31	310
Naphthalene		30	U	30	310
2-Nitroaniline		48	U	48	310
3-Nitroaniline		70	U	70	310
4-Nitroaniline		69	U T	69	310
Nitrobenzene		21	U	21	310
2-Nitrophenol		9.5	U	9.5	310
4-Nitrophenol		92	U	92	630
N-Nitrosodi-n-propylamine		30	U	30	310
N-Nitrosodiphenylamine		20	U	20	310
Pentachlorophenol		310	U T	310	630
Phenanthrene		16	U	16	310
Phenol		17	U	17	310
Pyrene		12	U	12	310
1,2,4-Trichlorobenzene		27	U	27	310
2,4,5-Trichlorophenol		9.5	U	9.5	310
2,4,6-Trichlorophenol		9.5	U	9.5	310

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	71		50 - 120
2-Fluorophenol	75		53 - 120
Nitrobenzene-d5	75		50 - 120
Phenol-d5	78		52 - 120
Terphenyl-d14	69		55 - 120
2,4,6-Tribromophenol	69		51 - 120

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V4H3**

Lab Sample ID: 280-66773-4
Client Matrix: Solid
% Moisture: 1.9

Date Sampled: 03/18/2015 1156
Date Received: 03/20/2015 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-269324	Instrument ID:	SMS_D
Prep Method:	3550C	Prep Batch:	280-269063	Lab File ID:	D9463.D
Dilution:	1.0			Initial Weight/Volume:	32.1 g
Analysis Date:	03/23/2015 1946			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 1959			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	3.33	3700	N J

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V586**

Lab Sample ID: 280-66773-5
Client Matrix: Solid
% Moisture: 1.9

Date Sampled: 03/18/2015 1209
Date Received: 03/20/2015 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-269324	Instrument ID:	SMS_D
Prep Method:	3550C	Prep Batch:	280-269063	Lab File ID:	D9464.D
Dilution:	1.0			Initial Weight/Volume:	32.4 g
Analysis Date:	03/23/2015 2014			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 1959			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		9.7	U	9.7	310
Acenaphthylene		16	U	16	310
Anthracene		16	U	16	310
Benzo[a]anthracene		19	U	19	310
Benzo[a]pyrene		19	U	19	310
Benzo[b]fluoranthene		25	U	25	310
Benzo[ghi]perylene		15	U	15	310
Benzo[k]fluoranthene		38	U	38	310
Bis(2-chloroethoxy)methane		22	U	22	310
Bis(2-chloroethyl)ether		16	U	16	310
bis (2-chloroisopropyl) ether		22	U	22	310
Bis(2-ethylhexyl) phthalate		43	U	43	310
4-Bromophenyl phenyl ether		18	U	18	310
Butyl benzyl phthalate		41	U	41	310
Carbazole		34	U	34	310
4-Chloroaniline		77	U	77	310
4-Chloro-3-methylphenol		62	U	62	310
2-Chloronaphthalene		9.4	U	9.4	310
2-Chlorophenol		20	U	20	310
4-Chlorophenyl phenyl ether		20	U	20	310
Chrysene		25	U	25	310
Dibenz(a,h)anthracene		18	U	18	310
Dibenzofuran		19	U	19	310
1,2-Dichlorobenzene		21	U	21	310
1,3-Dichlorobenzene		11	U	11	310
1,4-Dichlorobenzene		13	U	13	310
3,3'-Dichlorobenzidine		85	U	85	620
2,4-Dichlorophenol		9.4	U	9.4	310
Diethyl phthalate		25	U	25	310
2,4-Dimethylphenol		62	U	62	310
Dimethyl phthalate		22	U	22	310
Di-n-butyl phthalate		27	U	27	310
4,6-Dinitro-2-methylphenol		310	U	310	620
2,4-Dinitrophenol		310	U	310	780
2,4-Dinitrotoluene		62	U	62	310
2,6-Dinitrotoluene		26	U	26	310
Di-n-octyl phthalate		14	U	14	310
Fluoranthene		34	U	34	310
Fluorene		17	U	17	310
Hexachlorobenzene		27	U	27	310
Hexachlorobutadiene		9.4	U	9.4	310
Hexachlorocyclopentadiene		47	U	47	310
Hexachloroethane		20	U	20	310
Indeno[1,2,3-cd]pyrene		21	U	21	310
Isophorone		16	U	16	310
2-Methylnaphthalene		18	U	18	310

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V586**

Lab Sample ID: 280-66773-5
Client Matrix: Solid
% Moisture: 1.9

Date Sampled: 03/18/2015 1209
Date Received: 03/20/2015 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-269324	Instrument ID:	SMS_D
Prep Method:	3550C	Prep Batch:	280-269063	Lab File ID:	D9464.D
Dilution:	1.0			Initial Weight/Volume:	32.4 g
Analysis Date:	03/23/2015 2014			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 1959			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2-Methylphenol		12	U	12	310
3 & 4 Methylphenol		31	U	31	310
Naphthalene		29	U	29	310
2-Nitroaniline		47	U	47	310
3-Nitroaniline		69	U	69	310
4-Nitroaniline		68	U T	68	310
Nitrobenzene		21	U	21	310
2-Nitrophenol		9.4	U	9.4	310
4-Nitrophenol		92	U	92	620
N-Nitrosodi-n-propylamine		29	U	29	310
N-Nitrosodiphenylamine		20	U	20	310
Pentachlorophenol		310	U T	310	620
Phenanthrene		16	U	16	310
Phenol		17	U	17	310
Pyrene		11	U	11	310
1,2,4-Trichlorobenzene		26	U	26	310
2,4,5-Trichlorophenol		9.4	U	9.4	310
2,4,6-Trichlorophenol		9.4	U	9.4	310

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	71		50 - 120
2-Fluorophenol	77		53 - 120
Nitrobenzene-d5	78		50 - 120
Phenol-d5	78		52 - 120
Terphenyl-d14	71		55 - 120
2,4,6-Tribromophenol	69		51 - 120

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V586**

Lab Sample ID: 280-66773-5
Client Matrix: Solid
% Moisture: 1.9

Date Sampled: 03/18/2015 1209
Date Received: 03/20/2015 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-269324	Instrument ID:	SMS_D
Prep Method:	3550C	Prep Batch:	280-269063	Lab File ID:	D9464.D
Dilution:	1.0			Initial Weight/Volume:	32.4 g
Analysis Date:	03/23/2015 2014			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 1959			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	3.33	3700	N J

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V587**

Lab Sample ID: 280-66773-6
Client Matrix: Solid
% Moisture: 1.6

Date Sampled: 03/18/2015 1206
Date Received: 03/20/2015 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-269324	Instrument ID:	SMS_D
Prep Method:	3550C	Prep Batch:	280-269063	Lab File ID:	D9465.D
Dilution:	1.0			Initial Weight/Volume:	31.7 g
Analysis Date:	03/23/2015 2042			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 1959			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		9.9	U	9.9	320
Acenaphthylene		16	U	16	320
Anthracene		16	U	16	320
Benzo[a]anthracene		19	U	19	320
Benzo[a]pyrene		19	U	19	320
Benzo[b]fluoranthene		25	U	25	320
Benzo[ghi]perylene		15	U	15	320
Benzo[k]fluoranthene		38	U	38	320
Bis(2-chloroethoxy)methane		22	U	22	320
Bis(2-chloroethyl)ether		16	U	16	320
bis (2-chloroisopropyl) ether		22	U	22	320
Bis(2-ethylhexyl) phthalate		44	U	44	320
4-Bromophenyl phenyl ether		18	U	18	320
Butyl benzyl phthalate		41	U	41	320
Carbazole		35	U	35	320
4-Chloroaniline		79	U	79	320
4-Chloro-3-methylphenol		63	U	63	320
2-Chloronaphthalene		9.6	U	9.6	320
2-Chlorophenol		20	U	20	320
4-Chlorophenyl phenyl ether		20	U	20	320
Chrysene		26	U	26	320
Dibenz(a,h)anthracene		18	U	18	320
Dibenzofuran		19	U	19	320
1,2-Dichlorobenzene		21	U	21	320
1,3-Dichlorobenzene		12	U	12	320
1,4-Dichlorobenzene		13	U	13	320
3,3'-Dichlorobenzidine		87	U	87	630
2,4-Dichlorophenol		9.6	U	9.6	320
Diethyl phthalate		25	U	25	320
2,4-Dimethylphenol		63	U	63	320
Dimethyl phthalate		22	U	22	320
Di-n-butyl phthalate		28	U	28	320
4,6-Dinitro-2-methylphenol		320	U	320	630
2,4-Dinitrophenol		320	U	320	790
2,4-Dinitrotoluene		63	U	63	320
2,6-Dinitrotoluene		27	U	27	320
Di-n-octyl phthalate		14	U	14	320
Fluoranthene		35	U	35	320
Fluorene		17	U	17	320
Hexachlorobenzene		28	U	28	320
Hexachlorobutadiene		9.6	U	9.6	320
Hexachlorocyclopentadiene		48	U	48	320
Hexachloroethane		20	U	20	320
Indeno[1,2,3-cd]pyrene		21	U	21	320
Isophorone		16	U	16	320
2-Methylnaphthalene		18	U	18	320

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V587**

Lab Sample ID: 280-66773-6
Client Matrix: Solid
% Moisture: 1.6

Date Sampled: 03/18/2015 1206
Date Received: 03/20/2015 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-269324	Instrument ID:	SMS_D
Prep Method:	3550C	Prep Batch:	280-269063	Lab File ID:	D9465.D
Dilution:	1.0			Initial Weight/Volume:	31.7 g
Analysis Date:	03/23/2015 2042			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 1959			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2-Methylphenol		12	U	12	320
3 & 4 Methylphenol		32	U	32	320
Naphthalene		30	U	30	320
2-Nitroaniline		48	U	48	320
3-Nitroaniline		70	U	70	320
4-Nitroaniline		70	U T	70	320
Nitrobenzene		21	U	21	320
2-Nitrophenol		9.6	U	9.6	320
4-Nitrophenol		93	U	93	630
N-Nitrosodi-n-propylamine		30	U	30	320
N-Nitrosodiphenylamine		20	U	20	320
Pentachlorophenol		320	U T	320	630
Phenanthrene		16	U	16	320
Phenol		17	U	17	320
Pyrene		12	U	12	320
1,2,4-Trichlorobenzene		27	U	27	320
2,4,5-Trichlorophenol		9.6	U	9.6	320
2,4,6-Trichlorophenol		9.6	U	9.6	320

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	69		50 - 120
2-Fluorophenol	72		53 - 120
Nitrobenzene-d5	74		50 - 120
Phenol-d5	75		52 - 120
Terphenyl-d14	68		55 - 120
2,4,6-Tribromophenol	62		51 - 120

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V587**

Lab Sample ID: 280-66773-6
Client Matrix: Solid
% Moisture: 1.6

Date Sampled: 03/18/2015 1206
Date Received: 03/20/2015 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-269324	Instrument ID:	SMS_D
Prep Method:	3550C	Prep Batch:	280-269063	Lab File ID:	D9465.D
Dilution:	1.0			Initial Weight/Volume:	31.7 g
Analysis Date:	03/23/2015 2042			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 1959			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	3.33	3300	N J

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V588**

Lab Sample ID: 280-66773-7
Client Matrix: Solid
% Moisture: 2.9

Date Sampled: 03/18/2015 1203
Date Received: 03/20/2015 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-269324	Instrument ID:	SMS_D
Prep Method:	3550C	Prep Batch:	280-269063	Lab File ID:	D9466.D
Dilution:	1.0			Initial Weight/Volume:	30.9 g
Analysis Date:	03/23/2015 2110			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 1959			Injection Volume:	0.5 uL

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

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V588**

Lab Sample ID: 280-66773-7
Client Matrix: Solid
% Moisture: 2.9

Date Sampled: 03/18/2015 1203
Date Received: 03/20/2015 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-269324	Instrument ID:	SMS_D
Prep Method:	3550C	Prep Batch:	280-269063	Lab File ID:	D9466.D
Dilution:	1.0			Initial Weight/Volume:	30.9 g
Analysis Date:	03/23/2015 2110			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 1959			Injection Volume:	0.5 uL

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

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	69		50 - 120
2-Fluorophenol	71		53 - 120
Nitrobenzene-d5	75		50 - 120
Phenol-d5	74		52 - 120
Terphenyl-d14	64		55 - 120
2,4,6-Tribromophenol	63		51 - 120

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V588**

Lab Sample ID: 280-66773-7
Client Matrix: Solid
% Moisture: 2.9

Date Sampled: 03/18/2015 1203
Date Received: 03/20/2015 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-269324	Instrument ID:	SMS_D
Prep Method:	3550C	Prep Batch:	280-269063	Lab File ID:	D9466.D
Dilution:	1.0			Initial Weight/Volume:	30.9 g
Analysis Date:	03/23/2015 2110			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 1959			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	3.33	3600	N J

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V589**

Lab Sample ID: 280-66773-8
Client Matrix: Solid
% Moisture: 1.1

Date Sampled: 03/18/2015 1200
Date Received: 03/20/2015 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-269324	Instrument ID:	SMS_D
Prep Method:	3550C	Prep Batch:	280-269063	Lab File ID:	D9467.D
Dilution:	1.0			Initial Weight/Volume:	31.5 g
Analysis Date:	03/23/2015 2138			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 1959			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		9.9	U	9.9	320
Acenaphthylene		16	U	16	320
Anthracene		16	U	16	320
Benzo[a]anthracene		19	U	19	320
Benzo[a]pyrene		19	U	19	320
Benzo[b]fluoranthene		25	U	25	320
Benzo[ghi]perylene		15	U	15	320
Benzo[k]fluoranthene		39	U	39	320
Bis(2-chloroethoxy)methane		22	U	22	320
Bis(2-chloroethyl)ether		16	U	16	320
bis (2-chloroisopropyl) ether		22	U	22	320
Bis(2-ethylhexyl) phthalate		44	U	44	320
4-Bromophenyl phenyl ether		18	U	18	320
Butyl benzyl phthalate		41	U	41	320
Carbazole		35	U	35	320
4-Chloroaniline		79	U	79	320
4-Chloro-3-methylphenol		64	U	64	320
2-Chloronaphthalene		9.6	U	9.6	320
2-Chlorophenol		20	U	20	320
4-Chlorophenyl phenyl ether		20	U	20	320
Chrysene		26	U	26	320
Dibenz(a,h)anthracene		18	U	18	320
Dibenzofuran		19	U	19	320
1,2-Dichlorobenzene		21	U	21	320
1,3-Dichlorobenzene		12	U	12	320
1,4-Dichlorobenzene		13	U	13	320
3,3'-Dichlorobenzidine		87	U	87	640
2,4-Dichlorophenol		9.6	U	9.6	320
Diethyl phthalate		25	U	25	320
2,4-Dimethylphenol		64	U	64	320
Dimethyl phthalate		22	U	22	320
Di-n-butyl phthalate		28	U	28	320
4,6-Dinitro-2-methylphenol		320	U	320	640
2,4-Dinitrophenol		320	U	320	790
2,4-Dinitrotoluene		64	U	64	320
2,6-Dinitrotoluene		27	U	27	320
Di-n-octyl phthalate		14	U	14	320
Fluoranthene		35	U	35	320
Fluorene		17	U	17	320
Hexachlorobenzene		28	U	28	320
Hexachlorobutadiene		9.6	U	9.6	320
Hexachlorocyclopentadiene		48	U	48	320
Hexachloroethane		21	U	21	320
Indeno[1,2,3-cd]pyrene		21	U	21	320
Isophorone		16	U	16	320
2-Methylnaphthalene		18	U	18	320

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V589**

Lab Sample ID: 280-66773-8
Client Matrix: Solid
% Moisture: 1.1

Date Sampled: 03/18/2015 1200
Date Received: 03/20/2015 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-269324	Instrument ID:	SMS_D
Prep Method:	3550C	Prep Batch:	280-269063	Lab File ID:	D9467.D
Dilution:	1.0			Initial Weight/Volume:	31.5 g
Analysis Date:	03/23/2015 2138			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 1959			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2-Methylphenol		13	U	13	320
3 & 4 Methylphenol		32	U	32	320
Naphthalene		30	U	30	320
2-Nitroaniline		48	U	48	320
3-Nitroaniline		70	U	70	320
4-Nitroaniline		70	U T	70	320
Nitrobenzene		21	U	21	320
2-Nitrophenol		9.6	U	9.6	320
4-Nitrophenol		93	U	93	640
N-Nitrosodi-n-propylamine		30	U	30	320
N-Nitrosodiphenylamine		20	U	20	320
Pentachlorophenol		320	U T	320	640
Phenanthrene		16	U	16	320
Phenol		17	U	17	320
Pyrene		12	U	12	320
1,2,4-Trichlorobenzene		27	U	27	320
2,4,5-Trichlorophenol		9.6	U	9.6	320
2,4,6-Trichlorophenol		9.6	U	9.6	320

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	68		50 - 120
2-Fluorophenol	72		53 - 120
Nitrobenzene-d5	73		50 - 120
Phenol-d5	74		52 - 120
Terphenyl-d14	66		55 - 120
2,4,6-Tribromophenol	64		51 - 120

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V589**

Lab Sample ID: 280-66773-8
Client Matrix: Solid
% Moisture: 1.1

Date Sampled: 03/18/2015 1200
Date Received: 03/20/2015 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-269324	Instrument ID:	SMS_D
Prep Method:	3550C	Prep Batch:	280-269063	Lab File ID:	D9467.D
Dilution:	1.0			Initial Weight/Volume:	31.5 g
Analysis Date:	03/23/2015 2138			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 1959			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	3.33	3600	N J

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V4H0**

Lab Sample ID: 280-66773-1
Client Matrix: Solid
% Moisture: 4.8

Date Sampled: 03/18/2015 1143
Date Received: 03/20/2015 0930

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-269309	Instrument ID:	SGC_P2
Prep Method:	3550C	Prep Batch:	280-269017	Initial Weight/Volume:	32.5 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	03/23/2015 1817			Injection Volume:	1 uL
Prep Date:	03/20/2015 1806			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.53	U	0.53	1.6
4,4'-DDE		0.23	U	0.23	1.6
4,4'-DDT		0.57	U	0.57	1.6
Aldrin		0.24	U	0.24	1.6
alpha-BHC		0.21	U	0.21	1.6
beta-BHC		0.64	U	0.64	1.6
delta-BHC		0.39	U	0.39	1.6
gamma-BHC (Lindane)		0.45	U	0.45	1.6
Heptachlor		0.21	U	0.21	1.6
Heptachlor epoxide		0.41	U	0.41	1.6
Endosulfan I		0.17	U	0.17	1.6
Endosulfan II		0.28	U	0.28	1.6
Endosulfan sulfate		0.27	U	0.27	1.6
Endrin		0.30	U	0.30	1.6
Endrin aldehyde		0.17	U	0.17	1.6
Endrin ketone		0.47	U	0.47	1.6
gamma-Chlordane		0.26	U	0.26	1.6
Methoxychlor		0.44	U	0.44	3.2
alpha-Chlordane		0.31	U	0.31	1.6
Dieldrin		0.20	U	0.20	1.6
Toxaphene		15	U	15	160

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	84		59 - 115
Decachlorobiphenyl	83		63 - 124

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V4H1**

Lab Sample ID: 280-66773-2
Client Matrix: Solid
% Moisture: 3.4

Date Sampled: 03/18/2015 1147
Date Received: 03/20/2015 0930

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-269309	Instrument ID:	SGC_P2
Prep Method:	3550C	Prep Batch:	280-269017	Initial Weight/Volume:	30.5 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	03/23/2015 1834			Injection Volume:	1 uL
Prep Date:	03/20/2015 1806			Result Type:	PRIMARY

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

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	93		59 - 115
Decachlorobiphenyl	94		63 - 124

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V4H2**

Lab Sample ID: 280-66773-3
Client Matrix: Solid
% Moisture: 1.5

Date Sampled: 03/18/2015 1152
Date Received: 03/20/2015 0930

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-269309	Instrument ID:	SGC_P2
Prep Method:	3550C	Prep Batch:	280-269017	Initial Weight/Volume:	30.7 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	03/23/2015 1850			Injection Volume:	1 uL
Prep Date:	03/20/2015 1806			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.54	U	0.54	1.7
4,4'-DDE		0.24	U	0.24	1.7
4,4'-DDT		0.59	U	0.59	1.7
Aldrin		0.25	U	0.25	1.6
alpha-BHC		0.21	U	0.21	1.6
beta-BHC		0.66	U	0.66	1.6
delta-BHC		0.40	U	0.40	1.6
gamma-BHC (Lindane)		0.46	U	0.46	1.6
Heptachlor		0.21	U	0.21	1.6
Heptachlor epoxide		0.42	U	0.42	1.6
Endosulfan I		0.17	U	0.17	1.6
Endosulfan II		0.28	U	0.28	1.7
Endosulfan sulfate		0.27	U	0.27	1.7
Endrin		0.30	U	0.30	1.7
Endrin aldehyde		0.17	U	0.17	1.7
Endrin ketone		0.49	U	0.49	1.7
gamma-Chlordane		0.26	U	0.26	1.7
Methoxychlor		0.45	U	0.45	3.3
alpha-Chlordane		0.32	U	0.32	1.7
Dieldrin		0.21	U	0.21	1.7
Toxaphene		16	U	16	160

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	89		59 - 115
Decachlorobiphenyl	85		63 - 124

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V4H3**

Lab Sample ID: 280-66773-4
Client Matrix: Solid
% Moisture: 1.9

Date Sampled: 03/18/2015 1156
Date Received: 03/20/2015 0930

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-269309	Instrument ID:	SGC_P2
Prep Method:	3550C	Prep Batch:	280-269017	Initial Weight/Volume:	30.8 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	03/23/2015 1907			Injection Volume:	1 uL
Prep Date:	03/20/2015 1806			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.54	U	0.54	1.7
4,4'-DDE		0.24	U	0.24	1.7
4,4'-DDT		0.59	U	0.59	1.7
Aldrin		0.25	U	0.25	1.6
alpha-BHC		0.21	U	0.21	1.6
beta-BHC		0.66	U	0.66	1.6
delta-BHC		0.40	U	0.40	1.6
gamma-BHC (Lindane)		0.46	U	0.46	1.6
Heptachlor		0.21	U	0.21	1.6
Heptachlor epoxide		0.42	U	0.42	1.6
Endosulfan I		0.17	U	0.17	1.6
Endosulfan II		0.28	U	0.28	1.7
Endosulfan sulfate		0.27	U	0.27	1.7
Endrin		0.30	U	0.30	1.7
Endrin aldehyde		0.17	U	0.17	1.7
Endrin ketone		0.49	U	0.49	1.7
gamma-Chlordane		0.26	U	0.26	1.7
Methoxychlor		0.45	U	0.45	3.3
alpha-Chlordane		0.32	U	0.32	1.7
Dieldrin		0.21	U	0.21	1.7
Toxaphene		16	U	16	160

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	92		59 - 115
Decachlorobiphenyl	95		63 - 124

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V586**

Lab Sample ID: 280-66773-5
Client Matrix: Solid
% Moisture: 1.9

Date Sampled: 03/18/2015 1209
Date Received: 03/20/2015 0930

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-269309	Instrument ID:	SGC_P2
Prep Method:	3550C	Prep Batch:	280-269017	Initial Weight/Volume:	32.7 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	03/23/2015 1924			Injection Volume:	1 uL
Prep Date:	03/20/2015 1806			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.51	U	0.51	1.6
4,4'-DDE		0.22	U	0.22	1.6
4,4'-DDT		0.55	U	0.55	1.6
Aldrin		0.23	U	0.23	1.5
alpha-BHC		0.20	U	0.20	1.5
beta-BHC		0.62	U	0.62	1.5
delta-BHC		0.37	U	0.37	1.5
gamma-BHC (Lindane)		0.43	U	0.43	1.5
Heptachlor		0.20	U	0.20	1.5
Heptachlor epoxide		0.40	U	0.40	1.5
Endosulfan I		0.16	U	0.16	1.5
Endosulfan II		0.27	U	0.27	1.6
Endosulfan sulfate		0.26	U	0.26	1.6
Endrin		0.29	U	0.29	1.6
Endrin aldehyde		0.16	U	0.16	1.6
Endrin ketone		0.46	U	0.46	1.6
gamma-Chlordane		0.25	U	0.25	1.6
Methoxychlor		0.42	U	0.42	3.1
alpha-Chlordane		0.30	U	0.30	1.6
Dieldrin		0.20	U	0.20	1.6
Toxaphene		15	U	15	150

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	90		59 - 115
Decachlorobiphenyl	83		63 - 124

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V587**

Lab Sample ID: 280-66773-6
Client Matrix: Solid
% Moisture: 1.6

Date Sampled: 03/18/2015 1206
Date Received: 03/20/2015 0930

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-269309	Instrument ID:	SGC_P2
Prep Method:	3550C	Prep Batch:	280-269017	Initial Weight/Volume:	32.1 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	03/23/2015 1941			Injection Volume:	1 uL
Prep Date:	03/20/2015 1806			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.52	U	0.52	1.6
4,4'-DDE		0.23	U	0.23	1.6
4,4'-DDT		0.56	U	0.56	1.6
Aldrin		0.24	U	0.24	1.6
alpha-BHC		0.20	U	0.20	1.6
beta-BHC		0.63	U	0.63	1.6
delta-BHC		0.38	U	0.38	1.6
gamma-BHC (Lindane)		0.44	U	0.44	1.6
Heptachlor		0.20	U	0.20	1.6
Heptachlor epoxide		0.40	U	0.40	1.6
Endosulfan I		0.17	U	0.17	1.6
Endosulfan II		0.27	U	0.27	1.6
Endosulfan sulfate		0.26	U	0.26	1.6
Endrin		0.29	U	0.29	1.6
Endrin aldehyde		0.16	U	0.16	1.6
Endrin ketone		0.46	U	0.46	1.6
gamma-Chlordane		0.25	U	0.25	1.6
Methoxychlor		0.43	U	0.43	3.1
alpha-Chlordane		0.31	U	0.31	1.6
Dieldrin		0.20	U	0.20	1.6
Toxaphene		15	U	15	160

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	88		59 - 115
Decachlorobiphenyl	107		63 - 124

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V588**

Lab Sample ID: 280-66773-7
Client Matrix: Solid
% Moisture: 2.9

Date Sampled: 03/18/2015 1203
Date Received: 03/20/2015 0930

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-269309	Instrument ID:	SGC_P2
Prep Method:	3550C	Prep Batch:	280-269017	Initial Weight/Volume:	32.0 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	03/23/2015 1957			Injection Volume:	1 uL
Prep Date:	03/20/2015 1806			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.53	U	0.53	1.6
4,4'-DDE		0.23	U	0.23	1.6
4,4'-DDT		0.57	U	0.57	1.6
Aldrin		0.24	U	0.24	1.6
alpha-BHC		0.21	U	0.21	1.6
beta-BHC		0.64	U	0.64	1.6
delta-BHC		0.39	U	0.39	1.6
gamma-BHC (Lindane)		0.45	U	0.45	1.6
Heptachlor		0.21	U	0.21	1.6
Heptachlor epoxide		0.41	U	0.41	1.6
Endosulfan I		0.17	U	0.17	1.6
Endosulfan II		0.28	U	0.28	1.6
Endosulfan sulfate		0.27	U	0.27	1.6
Endrin		0.30	U	0.30	1.6
Endrin aldehyde		0.17	U	0.17	1.6
Endrin ketone		0.47	U	0.47	1.6
gamma-Chlordane		0.26	U	0.26	1.6
Methoxychlor		0.43	U	0.43	3.2
alpha-Chlordane		0.31	U	0.31	1.6
Dieldrin		0.20	U	0.20	1.6
Toxaphene		15	U	15	160

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	76		59 - 115
Decachlorobiphenyl	89		63 - 124

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V589**

Lab Sample ID: 280-66773-8
Client Matrix: Solid
% Moisture: 1.1

Date Sampled: 03/18/2015 1200
Date Received: 03/20/2015 0930

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-269309	Instrument ID:	SGC_P2
Prep Method:	3550C	Prep Batch:	280-269017	Initial Weight/Volume:	30.2 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	03/23/2015 2014			Injection Volume:	1 uL
Prep Date:	03/20/2015 1806			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.55	U	0.55	1.7
4,4'-DDE		0.24	U	0.24	1.7
4,4'-DDT		0.59	U	0.59	1.7
Aldrin		0.25	U	0.25	1.7
alpha-BHC		0.22	U	0.22	1.7
beta-BHC		0.67	U	0.67	1.7
delta-BHC		0.40	U	0.40	1.7
gamma-BHC (Lindane)		0.47	U	0.47	1.7
Heptachlor		0.22	U	0.22	1.7
Heptachlor epoxide		0.43	U	0.43	1.7
Endosulfan I		0.18	U	0.18	1.7
Endosulfan II		0.29	U	0.29	1.7
Endosulfan sulfate		0.28	U	0.28	1.7
Endrin		0.31	U	0.31	1.7
Endrin aldehyde		0.17	U	0.17	1.7
Endrin ketone		0.49	U	0.49	1.7
gamma-Chlordane		0.27	U	0.27	1.7
Methoxychlor		0.45	U	0.45	3.3
alpha-Chlordane		0.32	U	0.32	1.7
Dieldrin		0.21	U	0.21	1.7
Toxaphene		16	U	16	170

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	93		59 - 115
Decachlorobiphenyl	95		63 - 124

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V4H0**

Lab Sample ID: 280-66773-1
Client Matrix: Solid
% Moisture: 4.8

Date Sampled: 03/18/2015 1143
Date Received: 03/20/2015 0930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-269304	Instrument ID:	SGC_P3b
Prep Method:	3550C	Prep Batch:	280-269098	Initial Weight/Volume:	30.3 g
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	03/24/2015 0401			Injection Volume:	1 uL
Prep Date:	03/20/2015 2141			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	75		59 - 130
Tetrachloro-m-xylene	73		53 - 128

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V4H1**

Lab Sample ID: 280-66773-2
Client Matrix: Solid
% Moisture: 3.4

Date Sampled: 03/18/2015 1147
Date Received: 03/20/2015 0930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-269304	Instrument ID:	SGC_P3b
Prep Method:	3550C	Prep Batch:	280-269098	Initial Weight/Volume:	30.2 g
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	03/24/2015 0423			Injection Volume:	1 uL
Prep Date:	03/20/2015 2141			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		2.1	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	75		59 - 130
Tetrachloro-m-xylene	74		53 - 128

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V4H2**

Lab Sample ID: 280-66773-3
Client Matrix: Solid
% Moisture: 1.5

Date Sampled: 03/18/2015 1152
Date Received: 03/20/2015 0930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-269304	Instrument ID:	SGC_P3b
Prep Method:	3550C	Prep Batch:	280-269098	Initial Weight/Volume:	31.4 g
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	03/24/2015 0444			Injection Volume:	1 uL
Prep Date:	03/20/2015 2141			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	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	Qualifier	Acceptance Limits
Decachlorobiphenyl	77		59 - 130
Tetrachloro-m-xylene	75		53 - 128

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V4H3**

Lab Sample ID: 280-66773-4
Client Matrix: Solid
% Moisture: 1.9

Date Sampled: 03/18/2015 1156
Date Received: 03/20/2015 0930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-269304	Instrument ID:	SGC_P3b
Prep Method:	3550C	Prep Batch:	280-269098	Initial Weight/Volume:	30.6 g
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	03/24/2015 0506			Injection Volume:	1 uL
Prep Date:	03/20/2015 2141			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		2.8	U	2.8	10
Aroclor 1221		8.0	U	8.0	16
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	81		59 - 130
Tetrachloro-m-xylene	82		53 - 128

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V586**

Lab Sample ID: 280-66773-5
Client Matrix: Solid
% Moisture: 1.9

Date Sampled: 03/18/2015 1209
Date Received: 03/20/2015 0930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-269304	Instrument ID:	SGC_P3b
Prep Method:	3550C	Prep Batch:	280-269098	Initial Weight/Volume:	30.4 g
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	03/24/2015 0527			Injection Volume:	1 uL
Prep Date:	03/20/2015 2141			Result Type:	PRIMARY

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

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	80		59 - 130
Tetrachloro-m-xylene	77		53 - 128

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V587**

Lab Sample ID: 280-66773-6
Client Matrix: Solid
% Moisture: 1.6

Date Sampled: 03/18/2015 1206
Date Received: 03/20/2015 0930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-269304	Instrument ID:	SGC_P3b
Prep Method:	3550C	Prep Batch:	280-269098	Initial Weight/Volume:	31.1 g
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	03/24/2015 0548			Injection Volume:	1 uL
Prep Date:	03/20/2015 2141			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	74		59 - 130
Tetrachloro-m-xylene	70		53 - 128

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V588**

Lab Sample ID: 280-66773-7
Client Matrix: Solid
% Moisture: 2.9

Date Sampled: 03/18/2015 1203
Date Received: 03/20/2015 0930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-269304	Instrument ID:	SGC_P3b
Prep Method:	3550C	Prep Batch:	280-269098	Initial Weight/Volume:	31.2 g
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	03/24/2015 0610			Injection Volume:	1 uL
Prep Date:	03/20/2015 2141			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	77		59 - 130
Tetrachloro-m-xylene	79		53 - 128

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V589**

Lab Sample ID: 280-66773-8
Client Matrix: Solid
% Moisture: 1.1

Date Sampled: 03/18/2015 1200
Date Received: 03/20/2015 0930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-269304	Instrument ID:	SGC_P3b
Prep Method:	3550C	Prep Batch:	280-269098	Initial Weight/Volume:	30.2 g
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	03/24/2015 0631			Injection Volume:	1 uL
Prep Date:	03/20/2015 2141			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	72		59 - 130
Tetrachloro-m-xylene	70		53 - 128

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V4H0**

Lab Sample ID: 280-66773-1
Client Matrix: Solid
% Moisture: 4.8

Date Sampled: 03/18/2015 1143
Date Received: 03/20/2015 0930

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	280-270092	Instrument ID:	SGC_M
Prep Method:	8151A	Prep Batch:	280-269257	Initial Weight/Volume:	52.9 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	03/28/2015 0130			Injection Volume:	1 uL
Prep Date:	03/23/2015 0925			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2,4,5-T		2.3	U	2.3	20
2,4-Dichlorophenoxyacetic acid		14	U	14	79
2,4-DB		7.4	U	7.4	79
Dalapon		1.4	U	1.4	40
Dicamba		1.4	U	1.4	40
Dichlorprop		3.2	U	3.2	79
Dinoseb		2.0	J X	1.4	12
MCPA		2000	U	2000	7900
2,4,5-TP (Silvex)		1.4	U	1.4	20
MCPP		2000	U	2000	7900

Surrogate	%Rec	Qualifier	Acceptance Limits
DCAA	48		31 - 105

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V4H1**

Lab Sample ID: 280-66773-2
Client Matrix: Solid
% Moisture: 3.4

Date Sampled: 03/18/2015 1147
Date Received: 03/20/2015 0930

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	280-270092	Instrument ID:	SGC_M
Prep Method:	8151A	Prep Batch:	280-269257	Initial Weight/Volume:	50.8 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	03/28/2015 0152			Injection Volume:	1 uL
Prep Date:	03/23/2015 0925			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2,4,5-T		2.3	U	2.3	20
2,4-Dichlorophenoxyacetic acid		14	U	14	81
2,4-DB		7.6	U	7.6	81
Dalapon		1.4	U	1.4	41
Dicamba		1.4	U	1.4	41
Dichlorprop		3.3	U	3.3	81
Dinoseb		4.1	J X	1.4	12
MCPA		2000	U	2000	8100
2,4,5-TP (Silvex)		1.4	U	1.4	20
MCPP		2000	U	2000	8100

Surrogate	%Rec	Qualifier	Acceptance Limits
DCAA	45		31 - 105

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V4H2**

Lab Sample ID: 280-66773-3
Client Matrix: Solid
% Moisture: 1.5

Date Sampled: 03/18/2015 1152
Date Received: 03/20/2015 0930

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	280-270092	Instrument ID:	SGC_M
Prep Method:	8151A	Prep Batch:	280-269257	Initial Weight/Volume:	52.1 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	03/28/2015 0215			Injection Volume:	1 uL
Prep Date:	03/23/2015 0925			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2,4,5-T		2.2	U	2.2	19
2,4-Dichlorophenoxyacetic acid		14	U	14	78
2,4-DB		7.3	U	7.3	78
Dalapon		1.4	U	1.4	39
Dicamba		1.4	U	1.4	39
Dichlorprop		3.1	U	3.1	78
Dinoseb		2.2	J X	1.4	12
MCPA		1900	U	1900	7800
2,4,5-TP (Silvex)		1.4	U	1.4	19
MCPP		1900	U	1900	7800

Surrogate	%Rec	Qualifier	Acceptance Limits
DCAA	56		31 - 105

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V4H3**

Lab Sample ID: 280-66773-4
Client Matrix: Solid
% Moisture: 1.9

Date Sampled: 03/18/2015 1156
Date Received: 03/20/2015 0930

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	280-270092	Instrument ID:	SGC_M
Prep Method:	8151A	Prep Batch:	280-269257	Initial Weight/Volume:	51.0 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	03/28/2015 0237			Injection Volume:	1 uL
Prep Date:	03/23/2015 0925			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2,4,5-T		2.3	U	2.3	20
2,4-Dichlorophenoxyacetic acid		14	U	14	80
2,4-DB		7.5	U	7.5	80
Dalapon		1.4	U	1.4	40
Dicamba		1.4	U	1.4	40
Dichlorprop		3.2	U	3.2	80
Dinoseb		1.4	U	1.4	12
MCPA		2000	U	2000	8000
2,4,5-TP (Silvex)		1.4	U	1.4	20
MCPP		2000	U	2000	8000

Surrogate	%Rec	Qualifier	Acceptance Limits
DCAA	61		31 - 105

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V586**

Lab Sample ID: 280-66773-5
Client Matrix: Solid
% Moisture: 1.9

Date Sampled: 03/18/2015 1209
Date Received: 03/20/2015 0930

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	280-270092	Instrument ID:	SGC_M
Prep Method:	8151A	Prep Batch:	280-269257	Initial Weight/Volume:	52.5 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	03/28/2015 0259			Injection Volume:	1 uL
Prep Date:	03/23/2015 0925			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2,4,5-T		2.2	U	2.2	19
2,4-Dichlorophenoxyacetic acid		14	U	14	78
2,4-DB		7.2	U	7.2	78
Dalapon		1.4	U	1.4	39
Dicamba		1.4	U	1.4	39
Dichlorprop		3.1	U	3.1	78
Dinoseb		5.3	J X	1.4	12
MCPA		1900	U	1900	7800
2,4,5-TP (Silvex)		1.4	U	1.4	19
MCPP		1900	U	1900	7800

Surrogate	%Rec	Qualifier	Acceptance Limits
DCAA	58		31 - 105

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V587**

Lab Sample ID: 280-66773-6
Client Matrix: Solid
% Moisture: 1.6

Date Sampled: 03/18/2015 1206
Date Received: 03/20/2015 0930

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	280-270092	Instrument ID:	SGC_M
Prep Method:	8151A	Prep Batch:	280-269257	Initial Weight/Volume:	52.5 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	03/28/2015 0322			Injection Volume:	1 uL
Prep Date:	03/23/2015 0925			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2,4,5-T		2.2	U	2.2	19
2,4-Dichlorophenoxyacetic acid		14	U	14	77
2,4-DB		7.2	U	7.2	77
Dalapon		1.4	U	1.4	39
Dicamba		1.4	U	1.4	39
Dichlorprop		3.1	U	3.1	77
Dinoseb		1.4	U	1.4	12
MCPA		1900	U	1900	7700
2,4,5-TP (Silvex)		1.4	U	1.4	19
MCPP		1900	U	1900	7700

Surrogate	%Rec	Qualifier	Acceptance Limits
DCAA	55		31 - 105

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V588**

Lab Sample ID: 280-66773-7
Client Matrix: Solid
% Moisture: 2.9

Date Sampled: 03/18/2015 1203
Date Received: 03/20/2015 0930

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	280-270092	Instrument ID:	SGC_M
Prep Method:	8151A	Prep Batch:	280-269257	Initial Weight/Volume:	50.9 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	03/28/2015 0344			Injection Volume:	1 uL
Prep Date:	03/23/2015 0925			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2,4,5-T		2.3	U	2.3	20
2,4-Dichlorophenoxyacetic acid		14	U	14	81
2,4-DB		7.5	U	7.5	81
Dalapon		1.4	U	1.4	40
Dicamba		1.4	U	1.4	40
Dichlorprop		3.2	U	3.2	81
Dinoseb		2.7	J X	1.4	12
MCPA		2000	U	2000	8100
2,4,5-TP (Silvex)		1.4	U	1.4	20
MCPP		2000	U	2000	8100

Surrogate	%Rec	Qualifier	Acceptance Limits
DCAA	57		31 - 105

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V589**

Lab Sample ID: 280-66773-8
Client Matrix: Solid
% Moisture: 1.1

Date Sampled: 03/18/2015 1200
Date Received: 03/20/2015 0930

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	280-270092	Instrument ID:	SGC_M
Prep Method:	8151A	Prep Batch:	280-269257	Initial Weight/Volume:	52.3 g
Dilution:	1.0			Final Weight/Volume:	10 mL
Analysis Date:	03/28/2015 0407			Injection Volume:	1 uL
Prep Date:	03/23/2015 0925			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2,4,5-T		2.2	U	2.2	19
2,4-Dichlorophenoxyacetic acid		14	U	14	77
2,4-DB		7.2	U	7.2	77
Dalapon		1.4	U	1.4	39
Dicamba		1.4	U	1.4	39
Dichlorprop		3.1	U	3.1	77
Dinoseb		1.4	U N	1.4	12
MCPA		1900	U	1900	7700
2,4,5-TP (Silvex)		1.4	U	1.4	19
MCPP		1900	U	1900	7700

Surrogate	%Rec	Qualifier	Acceptance Limits
DCAA	61		31 - 105

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V4H0**

Lab Sample ID: 280-66773-1
Client Matrix: Solid
% Moisture: 4.8

Date Sampled: 03/18/2015 1143
Date Received: 03/20/2015 0930

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-269265	Instrument ID:	SGC_U2a
Prep Method:	3550C	Prep Batch:	280-269067	Lab File ID:	03230023.D
Dilution:	1.0			Initial Weight/Volume:	32.5 g
Analysis Date:	03/23/2015 2340			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 2044			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		12000		970	3900
C10-C28		6800		660	3900

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

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V4H1**

Lab Sample ID: 280-66773-2
Client Matrix: Solid
% Moisture: 3.4

Date Sampled: 03/18/2015 1147
Date Received: 03/20/2015 0930

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-269265	Instrument ID:	SGC_U2a
Prep Method:	3550C	Prep Batch:	280-269067	Lab File ID:	03230024.D
Dilution:	1.0			Initial Weight/Volume:	32.9 g
Analysis Date:	03/24/2015 0004			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 2044			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		7000		940	3800
C10-C28		3700	J	640	3800

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	74		49 - 115

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V4H2**

Lab Sample ID: 280-66773-3
Client Matrix: Solid
% Moisture: 1.5

Date Sampled: 03/18/2015 1152
Date Received: 03/20/2015 0930

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-269265	Instrument ID:	SGC_U2a
Prep Method:	3550C	Prep Batch:	280-269067	Lab File ID:	03230025.D
Dilution:	1.0			Initial Weight/Volume:	31.7 g
Analysis Date:	03/24/2015 0029			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 2044			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		4500		960	3800
C10-C28		3300	J	650	3800

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	79		49 - 115

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V4H3**

Lab Sample ID: 280-66773-4
Client Matrix: Solid
% Moisture: 1.9

Date Sampled: 03/18/2015 1156
Date Received: 03/20/2015 0930

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-269265	Instrument ID:	SGC_U2a
Prep Method:	3550C	Prep Batch:	280-269067	Lab File ID:	03230026.D
Dilution:	1.0			Initial Weight/Volume:	31.6 g
Analysis Date:	03/24/2015 0053			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 2044			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		4100		960	3900
C10-C28		3100	J	660	3900

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

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V586**

Lab Sample ID: 280-66773-5
Client Matrix: Solid
% Moisture: 1.9

Date Sampled: 03/18/2015 1209
Date Received: 03/20/2015 0930

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-269265	Instrument ID:	SGC_U2a
Prep Method:	3550C	Prep Batch:	280-269067	Lab File ID:	03230027.D
Dilution:	1.0			Initial Weight/Volume:	32.7 g
Analysis Date:	03/24/2015 0118			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 2044			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		4900		930	3700
C10-C28		3000	J	630	3700

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

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V587**

Lab Sample ID: 280-66773-6
Client Matrix: Solid
% Moisture: 1.6

Date Sampled: 03/18/2015 1206
Date Received: 03/20/2015 0930

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-269265	Instrument ID:	SGC_U2a
Prep Method:	3550C	Prep Batch:	280-269067	Lab File ID:	03230028.D
Dilution:	1.0			Initial Weight/Volume:	31.9 g
Analysis Date:	03/24/2015 0142			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 2044			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		4800		950	3800
C10-C28		3500	J	650	3800

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	76		49 - 115

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V588**

Lab Sample ID: 280-66773-7
Client Matrix: Solid
% Moisture: 2.9

Date Sampled: 03/18/2015 1203
Date Received: 03/20/2015 0930

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-269265	Instrument ID:	SGC_U2a
Prep Method:	3550C	Prep Batch:	280-269067	Lab File ID:	03230029.D
Dilution:	1.0			Initial Weight/Volume:	31.8 g
Analysis Date:	03/24/2015 0207			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 2044			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		3200	J	970	3900
C10-C28		1800	J	660	3900

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	69		49 - 115

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V589**

Lab Sample ID: 280-66773-8
Client Matrix: Solid
% Moisture: 1.1

Date Sampled: 03/18/2015 1200
Date Received: 03/20/2015 0930

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-269265	Instrument ID:	SGC_U2a
Prep Method:	3550C	Prep Batch:	280-269067	Lab File ID:	03230032.D
Dilution:	1.0			Initial Weight/Volume:	30.3 g
Analysis Date:	03/24/2015 0320			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 2044			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		3600	J	1000	4000
C10-C28		2600	J	680	4000

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	71		49 - 115

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V4H0**

Lab Sample ID: 280-66773-1
Client Matrix: Solid
% Moisture: 4.8

Date Sampled: 03/18/2015 1143
Date Received: 03/20/2015 0930

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-269253	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-269044	Initial Weight/Volume:	30.6 g
Dilution:	1.0			Final Weight/Volume:	4 mL
Analysis Date:	03/23/2015 1210			Injection Volume:	20 uL
Prep Date:	03/20/2015 1848			Result Type:	PRIMARY

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

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

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V4H1**

Lab Sample ID: 280-66773-2
Client Matrix: Solid
% Moisture: 3.4

Date Sampled: 03/18/2015 1147
Date Received: 03/20/2015 0930

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-269253	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-269044	Initial Weight/Volume:	33.0 g
Dilution:	1.0			Final Weight/Volume:	4 mL
Analysis Date:	03/23/2015 1241			Injection Volume:	20 uL
Prep Date:	03/20/2015 1848			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		9.4	U	9.4	94
Acenaphthylene		8.5	U	8.5	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		4.0	U	4.0	14
Benzo[g,h,i]perylene		6.8	U	6.8	28
Benzo[k]fluoranthene		3.7	U	3.7	14
Chrysene		4.6	U	4.6	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	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	86		72 - 115

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V4H2**

Lab Sample ID: 280-66773-3
Client Matrix: Solid
% Moisture: 1.5

Date Sampled: 03/18/2015 1152
Date Received: 03/20/2015 0930

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-269253	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-269044	Initial Weight/Volume:	32.4 g
Dilution:	1.0			Final Weight/Volume:	4 mL
Analysis Date:	03/23/2015 1311			Injection Volume:	20 uL
Prep Date:	03/20/2015 1848			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		9.4	U	9.4	94
Acenaphthylene		8.5	U	8.5	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		4.6	U	4.6	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	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	86		72 - 115

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V4H3**

Lab Sample ID: 280-66773-4
Client Matrix: Solid
% Moisture: 1.9

Date Sampled: 03/18/2015 1156
Date Received: 03/20/2015 0930

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-269253	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-269044	Initial Weight/Volume:	31.5 g
Dilution:	1.0			Final Weight/Volume:	4 mL
Analysis Date:	03/23/2015 1342			Injection Volume:	20 uL
Prep Date:	03/20/2015 1848			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		9.7	U	9.7	97
Acenaphthylene		8.7	U	8.7	97
Anthracene		3.0	U	3.0	19
Benzo[a]anthracene		3.1	U	3.1	15
Benzo[a]pyrene		6.2	U	6.2	15
Benzo[b]fluoranthene		4.1	U	4.1	15
Benzo[g,h,i]perylene		7.0	U	7.0	29
Benzo[k]fluoranthene		3.8	U	3.8	15
Chrysene		4.7	U	4.7	39
Dibenzo(a,h)anthracene		11	U	11	29
Fluoranthene		13	U	13	39
Fluorene		5.1	U	5.1	29
Indeno[1,2,3-cd]pyrene		12	U	12	29
Naphthalene		12	U	12	97
Phenanthrene		12	U	12	39
Pyrene		12	U	12	39

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

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V586**

Lab Sample ID: 280-66773-5
Client Matrix: Solid
% Moisture: 1.9

Date Sampled: 03/18/2015 1209
Date Received: 03/20/2015 0930

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-269253	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-269044	Initial Weight/Volume:	30.8 g
Dilution:	1.0			Final Weight/Volume:	4 mL
Analysis Date:	03/23/2015 1412			Injection Volume:	20 uL
Prep Date:	03/20/2015 1848			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		7.1	U	7.1	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)	87		72 - 115

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V587**

Lab Sample ID: 280-66773-6
Client Matrix: Solid
% Moisture: 1.6

Date Sampled: 03/18/2015 1206
Date Received: 03/20/2015 0930

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-269253	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-269044	Initial Weight/Volume:	31.4 g
Dilution:	1.0			Final Weight/Volume:	4 mL
Analysis Date:	03/23/2015 1443			Injection Volume:	20 uL
Prep Date:	03/20/2015 1848			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		35	J	9.7	97
Acenaphthylene		8.7	U	8.7	97
Anthracene		3.0	U	3.0	19
Benzo[a]anthracene		3.1	U	3.1	15
Benzo[a]pyrene		6.2	U	6.2	15
Benzo[b]fluoranthene		4.1	U	4.1	15
Benzo[g,h,i]perylene		7.0	U	7.0	29
Benzo[k]fluoranthene		3.8	U	3.8	15
Chrysene		4.7	U	4.7	39
Dibenzo(a,h)anthracene		11	U	11	29
Fluoranthene		13	U	13	39
Fluorene		5.1	U	5.1	29
Indeno[1,2,3-cd]pyrene		12	U	12	29
Naphthalene		12	U	12	97
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: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V588**

Lab Sample ID: 280-66773-7
Client Matrix: Solid
% Moisture: 2.9

Date Sampled: 03/18/2015 1203
Date Received: 03/20/2015 0930

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-269253	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-269044	Initial Weight/Volume:	30.5 g
Dilution:	1.0			Final Weight/Volume:	4 mL
Analysis Date:	03/23/2015 1544			Injection Volume:	20 uL
Prep Date:	03/20/2015 1848			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	100
Acenaphthylene		9.1	U	9.1	100
Anthracene		3.1	U	3.1	20
Benzo[a]anthracene		3.2	U	3.2	15
Benzo[a]pyrene		6.5	U	6.5	15
Benzo[b]fluoranthene		4.3	U	4.3	15
Benzo[g,h,i]perylene		7.3	U	7.3	30
Benzo[k]fluoranthene		4.0	U	4.0	15
Chrysene		4.9	U	4.9	41
Dibenzo(a,h)anthracene		11	U	11	30
Fluoranthene		13	U	13	41
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	41
Pyrene		12	U	12	41

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	98		72 - 115

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V589**

Lab Sample ID: 280-66773-8
Client Matrix: Solid
% Moisture: 1.1

Date Sampled: 03/18/2015 1200
Date Received: 03/20/2015 0930

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-269253	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-269044	Initial Weight/Volume:	31.1 g
Dilution:	1.0			Final Weight/Volume:	4 mL
Analysis Date:	03/23/2015 1715			Injection Volume:	20 uL
Prep Date:	03/20/2015 1848			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		7.0	U	7.0	29
Benzo[k]fluoranthene		3.8	U	3.8	15
Chrysene		4.7	U	4.7	39
Dibenzo(a,h)anthracene		11	U	11	29
Fluoranthene		13	U	13	39
Fluorene		5.2	U	5.2	29
Indeno[1,2,3-cd]pyrene		12	U	12	29
Naphthalene		12	U	12	98
Phenanthrene		12	U	12	39
Pyrene		12	U	12	39

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

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V4H0**

Lab Sample ID: 280-66773-1
Client Matrix: Solid
% Moisture: 4.8

Date Sampled: 03/18/2015 1143
Date Received: 03/20/2015 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-269627	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-269035	Lab File ID:	26A032415.asc
Dilution:	1.0			Initial Weight/Volume:	1.17 g
Analysis Date:	03/24/2015 1355			Final Weight/Volume:	100 mL
Prep Date:	03/23/2015 0900				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		1.0	M	0.59	0.90
Boron		1.1	B N	0.88	1.8
Cadmium		0.18		0.037	0.18
Chromium		6.1	X	0.052	0.18
Magnesium		3870	X	3.3	17.9
Manganese		320	X	0.090	0.90
Molybdenum		0.23	U	0.23	1.8
Nickel		9.8	X	0.11	3.6
Selenium		0.77	U	0.77	0.90
Silver		0.14	U	0.14	0.18
Zinc		48.9	X	0.36	0.90

Analysis Method:	6010B	Analysis Batch:	280-269801	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-269035	Lab File ID:	26A032515.asc
Dilution:	5.0			Initial Weight/Volume:	1.17 g
Analysis Date:	03/25/2015 1735			Final Weight/Volume:	100 mL
Prep Date:	03/23/2015 0900				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		6290		7.0	22.4
Antimony		1.7	U	1.7	2.7
Barium		80.8		0.34	2.2
Beryllium		0.15	U	0.15	0.90
Calcium		5340		63.3	224
Cobalt		10.5		0.45	4.5
Copper		17.6		0.97	4.5
Iron		28900		17.1	22.4
Lead		3.2		1.2	2.2
Potassium		1110	B	184	1350
Silicon		220	N	25.4	44.9
Sodium		266	B	265	538
Vanadium		82.7		0.42	9.0

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-269458	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-269200	Lab File ID:	150323ab.txt
Dilution:	1.0			Initial Weight/Volume:	0.54 g
Analysis Date:	03/23/2015 1845			Final Weight/Volume:	50 mL
Prep Date:	03/23/2015 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0087	B	0.0065	0.020

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V4H1**

Lab Sample ID: 280-66773-2
Client Matrix: Solid
% Moisture: 3.4

Date Sampled: 03/18/2015 1147
Date Received: 03/20/2015 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-269627	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-269035	Lab File ID:	26A032415.asc
Dilution:	1.0			Initial Weight/Volume:	1.06 g
Analysis Date:	03/24/2015 1416			Final Weight/Volume:	100 mL
Prep Date:	03/23/2015 0900				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		1.4		0.64	0.98
Boron		1.1	B	0.96	2.0
Cadmium		0.15	B	0.040	0.20
Chromium		6.8	X	0.057	0.20
Magnesium		4160	X	3.6	19.5
Manganese		335	X	0.098	0.98
Molybdenum		0.25	U	0.25	2.0
Nickel		11.2	X	0.12	3.9
Selenium		0.84	U	0.84	0.98
Silver		0.16	U	0.16	0.20
Zinc		49.3	X	0.39	0.98

Analysis Method:	6010B	Analysis Batch:	280-269801	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-269035	Lab File ID:	26A032515.asc
Dilution:	5.0			Initial Weight/Volume:	1.06 g
Analysis Date:	03/25/2015 1755			Final Weight/Volume:	100 mL
Prep Date:	03/23/2015 0900				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		6730		7.6	24.4
Antimony		2.2	B	1.9	2.9
Barium		89.9		0.37	2.4
Beryllium		0.16	U	0.16	0.98
Calcium		5810		68.8	244
Cobalt		10.9		0.49	4.9
Copper		19.1		1.1	4.9
Iron		30600		18.6	24.4
Lead		4.4		1.3	2.4
Potassium		1160	B	200	1460
Silicon		246	N	27.6	48.8
Sodium		288	U	288	586
Vanadium		84.9		0.46	9.8

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-269458	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-269200	Lab File ID:	150323ab.txt
Dilution:	1.0			Initial Weight/Volume:	0.56 g
Analysis Date:	03/23/2015 1851			Final Weight/Volume:	50 mL
Prep Date:	03/23/2015 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0074	B	0.0061	0.019

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V4H2**

Lab Sample ID: 280-66773-3
Client Matrix: Solid
% Moisture: 1.5

Date Sampled: 03/18/2015 1152
Date Received: 03/20/2015 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-269627	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-269035	Lab File ID:	26A032415.asc
Dilution:	1.0			Initial Weight/Volume:	1.14 g
Analysis Date:	03/24/2015 1418			Final Weight/Volume:	100 mL
Prep Date:	03/23/2015 0900				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		1.5		0.59	0.89
Boron		0.87	U	0.87	1.8
Cadmium		0.10	B	0.037	0.18
Chromium		4.0	X	0.052	0.18
Magnesium		4020	X	3.3	17.8
Manganese		299	X	0.089	0.89
Molybdenum		0.23	U	0.23	1.8
Nickel		9.4	X	0.11	3.6
Selenium		0.77	U	0.77	0.89
Silver		0.14	U	0.14	0.18
Zinc		43.4	X	0.35	0.89

Analysis Method:	6010B	Analysis Batch:	280-269801	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-269035	Lab File ID:	26A032515.asc
Dilution:	5.0			Initial Weight/Volume:	1.14 g
Analysis Date:	03/25/2015 1757			Final Weight/Volume:	100 mL
Prep Date:	03/23/2015 0900				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		4680		6.9	22.3
Antimony		1.7	U	1.7	2.7
Barium		70.7		0.34	2.2
Beryllium		0.15	U	0.15	0.89
Calcium		6610		62.8	223
Cobalt		10.8		0.45	4.5
Copper		17.6		0.97	4.5
Iron		30700		16.9	22.3
Lead		1.2	U	1.2	2.2
Potassium		549	B	183	1340
Silicon		186	N	25.2	44.5
Sodium		328	B	263	535
Vanadium		88.2		0.42	8.9

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-269458	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-269200	Lab File ID:	150323ab.txt
Dilution:	1.0			Initial Weight/Volume:	0.51 g
Analysis Date:	03/23/2015 1854			Final Weight/Volume:	50 mL
Prep Date:	03/23/2015 1200				

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

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V4H3**

Lab Sample ID: 280-66773-4
Client Matrix: Solid
% Moisture: 1.9

Date Sampled: 03/18/2015 1156
Date Received: 03/20/2015 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-269627	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-269035	Lab File ID:	26A032415.asc
Dilution:	1.0			Initial Weight/Volume:	1.18 g
Analysis Date:	03/24/2015 1421			Final Weight/Volume:	100 mL
Prep Date:	03/23/2015 0900				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		1.5		0.57	0.86
Boron		0.85	U	0.85	1.7
Cadmium		0.11	B	0.035	0.17
Chromium		4.7	X	0.050	0.17
Magnesium		4280	X	3.2	17.3
Manganese		301	X	0.086	0.86
Molybdenum		0.22	U	0.22	1.7
Nickel		11.1	X	0.11	3.5
Selenium		0.74	U	0.74	0.86
Silver		0.14	U	0.14	0.17
Zinc		44.0	X	0.34	0.86

Analysis Method:	6010B	Analysis Batch:	280-269801	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-269035	Lab File ID:	26A032515.asc
Dilution:	5.0			Initial Weight/Volume:	1.18 g
Analysis Date:	03/25/2015 1800			Final Weight/Volume:	100 mL
Prep Date:	03/23/2015 0900				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		4620		6.7	21.6
Antimony		1.6	B	1.6	2.6
Barium		71.2		0.33	2.2
Beryllium		0.14	U	0.14	0.86
Calcium		7010		60.9	216
Cobalt		10.9		0.43	4.3
Copper		18.0		0.94	4.3
Iron		31200		16.4	21.6
Lead		1.2	U	1.2	2.2
Potassium		517	B	177	1300
Silicon		171	N	24.4	43.2
Sodium		414	B	255	518
Vanadium		89.8		0.41	8.6

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-269458	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-269200	Lab File ID:	150323ab.txt
Dilution:	1.0			Initial Weight/Volume:	0.59 g
Analysis Date:	03/23/2015 1901			Final Weight/Volume:	50 mL
Prep Date:	03/23/2015 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0060	B	0.0057	0.018

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V586**

Lab Sample ID: 280-66773-5
Client Matrix: Solid
% Moisture: 1.9

Date Sampled: 03/18/2015 1209
Date Received: 03/20/2015 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-269627	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-269035	Lab File ID:	26A032415.asc
Dilution:	1.0			Initial Weight/Volume:	1.01 g
Analysis Date:	03/24/2015 1424			Final Weight/Volume:	100 mL
Prep Date:	03/23/2015 0900				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		1.5		0.67	1.0
Boron		0.99	U	0.99	2.0
Cadmium		0.22		0.041	0.20
Chromium		6.6	X	0.059	0.20
Magnesium		4340	X	3.7	20.2
Manganese		324	X	0.10	1.0
Molybdenum		0.26	U	0.26	2.0
Nickel		11.4	X	0.12	4.0
Selenium		0.87	U	0.87	1.0
Silver		0.16	U	0.16	0.20
Zinc		43.1	X	0.40	1.0

Analysis Method:	6010B	Analysis Batch:	280-269801	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-269035	Lab File ID:	26A032515.asc
Dilution:	5.0			Initial Weight/Volume:	1.01 g
Analysis Date:	03/25/2015 1802			Final Weight/Volume:	100 mL
Prep Date:	03/23/2015 0900				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		6290		7.8	25.2
Antimony		1.9	U	1.9	3.0
Barium		80.2		0.38	2.5
Beryllium		0.17	U	0.17	1.0
Calcium		5910		71.1	252
Cobalt		10.9		0.50	5.0
Copper		18.3		1.1	5.0
Iron		29300		19.2	25.2
Lead		1.9	B	1.4	2.5
Potassium		891	B	207	1510
Silicon		280	N	28.5	50.4
Sodium		298	U	298	605
Vanadium		80.9		0.47	10.1

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-269458	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-269200	Lab File ID:	150323ab.txt
Dilution:	1.0			Initial Weight/Volume:	0.57 g
Analysis Date:	03/23/2015 1903			Final Weight/Volume:	50 mL
Prep Date:	03/23/2015 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0074	B	0.0059	0.018

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V587**

Lab Sample ID: 280-66773-6
Client Matrix: Solid
% Moisture: 1.6

Date Sampled: 03/18/2015 1206
Date Received: 03/20/2015 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-269627	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-269035	Lab File ID:	26A032415.asc
Dilution:	1.0			Initial Weight/Volume:	1.12 g
Analysis Date:	03/24/2015 1426			Final Weight/Volume:	100 mL
Prep Date:	03/23/2015 0900				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		1.3		0.60	0.91
Boron		0.89	U	0.89	1.8
Cadmium		0.12	B	0.037	0.18
Chromium		6.8	X	0.053	0.18
Magnesium		4440	X	3.4	18.1
Manganese		316	X	0.091	0.91
Molybdenum		0.24	U	0.24	1.8
Nickel		12.7	X	0.11	3.6
Selenium		0.78	U	0.78	0.91
Silver		0.15	U	0.15	0.18
Zinc		43.8	X	0.36	0.91

Analysis Method:	6010B	Analysis Batch:	280-269801	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-269035	Lab File ID:	26A032515.asc
Dilution:	5.0			Initial Weight/Volume:	1.12 g
Analysis Date:	03/25/2015 1805			Final Weight/Volume:	100 mL
Prep Date:	03/23/2015 0900				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		6120		7.0	22.7
Antimony		1.7	U	1.7	2.7
Barium		78.3		0.34	2.3
Beryllium		0.15	U	0.15	0.91
Calcium		6030		63.9	227
Cobalt		10.7		0.45	4.5
Copper		19.3		0.98	4.5
Iron		29100		17.2	22.7
Lead		1.2	U	1.2	2.3
Potassium		804	B	186	1360
Silicon		240	N	25.7	45.4
Sodium		299	B	268	544
Vanadium		83.1		0.43	9.1

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-269458	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-269200	Lab File ID:	150323ab.txt
Dilution:	1.0			Initial Weight/Volume:	0.59 g
Analysis Date:	03/23/2015 1905			Final Weight/Volume:	50 mL
Prep Date:	03/23/2015 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0065	B	0.0057	0.018

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V588**

Lab Sample ID: 280-66773-7
Client Matrix: Solid
% Moisture: 2.9

Date Sampled: 03/18/2015 1203
Date Received: 03/20/2015 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-269627	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-269035	Lab File ID:	26A032415.asc
Dilution:	1.0			Initial Weight/Volume:	1.00 g
Analysis Date:	03/24/2015 1429			Final Weight/Volume:	100 mL
Prep Date:	03/23/2015 0900				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		1.3		0.68	1.0
Boron		1.0	U	1.0	2.1
Cadmium		0.12	B	0.042	0.21
Chromium		5.1	X	0.060	0.21
Molybdenum		0.27	U	0.27	2.1
Nickel		10.6	X	0.13	4.1
Selenium		0.89	U	0.89	1.0

Analysis Method:	6010B	Analysis Batch:	280-269801	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-269035	Lab File ID:	26A032515.asc
Dilution:	5.0			Initial Weight/Volume:	1.00 g
Analysis Date:	03/25/2015 1807			Final Weight/Volume:	100 mL
Prep Date:	03/23/2015 0900				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		4940		8.0	25.7
Antimony		2.1	B	2.0	3.1
Barium		70.3		0.39	2.6
Beryllium		0.17	U	0.17	1.0
Calcium		6590		72.6	257
Cobalt		10.6		0.51	5.1
Copper		17.8		1.1	5.1
Iron		28700		19.6	25.7
Lead		1.5	B	1.4	2.6
Magnesium		4910	X	19.1	103
Manganese		342	X	0.51	5.1
Potassium		605	B	211	1540
Silicon		216	N	29.1	51.5
Silver		0.82	U	0.82	1.0
Sodium		326	B	304	618
Vanadium		83.1		0.48	10.3
Zinc		52.9	X	2.0	5.1

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-269458	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-269200	Lab File ID:	150323ab.txt
Dilution:	1.0			Initial Weight/Volume:	0.58 g
Analysis Date:	03/23/2015 1908			Final Weight/Volume:	50 mL
Prep Date:	03/23/2015 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0076	B	0.0059	0.018

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Client Sample ID: **J1V589**

Lab Sample ID: 280-66773-8
Client Matrix: Solid
% Moisture: 1.1

Date Sampled: 03/18/2015 1200
Date Received: 03/20/2015 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-269627	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-269035	Lab File ID:	26A032415.asc
Dilution:	1.0			Initial Weight/Volume:	1.19 g
Analysis Date:	03/24/2015 1431			Final Weight/Volume:	100 mL
Prep Date:	03/23/2015 0900				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Arsenic		1.1		0.56	0.85
Boron		0.83	U	0.83	1.7
Cadmium		0.10	B	0.035	0.17
Chromium		7.1	X	0.049	0.17
Molybdenum		0.22	U	0.22	1.7
Nickel		11.5	X	0.10	3.4
Selenium		0.73	U	0.73	0.85

Analysis Method:	6010B	Analysis Batch:	280-269801	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-269035	Lab File ID:	26A032515.asc
Dilution:	5.0			Initial Weight/Volume:	1.19 g
Analysis Date:	03/25/2015 1810			Final Weight/Volume:	100 mL
Prep Date:	03/23/2015 0900				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		5290		6.6	21.2
Antimony		1.6	U	1.6	2.5
Barium		67.7		0.32	2.1
Beryllium		0.14	U	0.14	0.85
Calcium		6250		59.9	212
Cobalt		9.9		0.42	4.2
Copper		16.8		0.92	4.2
Iron		28000		16.1	21.2
Lead		1.1	B	1.1	2.1
Magnesium		5320	X	15.7	85.0
Manganese		346	X	0.42	4.2
Potassium		632	B	174	1270
Silicon		216	N	24.1	42.5
Silver		0.68	U	0.68	0.85
Sodium		263	B	251	510
Vanadium		81.6		0.40	8.5
Zinc		48.4	X	1.7	4.2

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-269458	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-269200	Lab File ID:	150323ab.txt
Dilution:	1.0			Initial Weight/Volume:	0.54 g
Analysis Date:	03/23/2015 1910			Final Weight/Volume:	50 mL
Prep Date:	03/23/2015 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0077	B	0.0062	0.019

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

General Chemistry

Client Sample ID: **J1V4H0**

Lab Sample ID: 280-66773-1
Client Matrix: Solid

Date Sampled: 03/18/2015 1143
Date Received: 03/20/2015 0930

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

Analysis Batch: 280-269519 Analysis Date: 03/24/2015 1544 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

General Chemistry

Client Sample ID: **J1V4H1**

Lab Sample ID: 280-66773-2
Client Matrix: Solid

Date Sampled: 03/18/2015 1147
Date Received: 03/20/2015 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	3.4		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-269519 Analysis Date: 03/24/2015 1544 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

General Chemistry

Client Sample ID: **J1V4H2**

Lab Sample ID: 280-66773-3
Client Matrix: Solid

Date Sampled: 03/18/2015 1152
Date Received: 03/20/2015 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	1.5		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-269519 Analysis Date: 03/24/2015 1544 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

General Chemistry

Client Sample ID: **J1V4H3**

Lab Sample ID: 280-66773-4
Client Matrix: Solid

Date Sampled: 03/18/2015 1156
Date Received: 03/20/2015 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	1.9		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-269519 Analysis Date: 03/24/2015 1544 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

General Chemistry

Client Sample ID: **J1V586**

Lab Sample ID: 280-66773-5
Client Matrix: Solid

Date Sampled: 03/18/2015 1209
Date Received: 03/20/2015 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	1.9		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-269519 Analysis Date: 03/24/2015 1544 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

General Chemistry

Client Sample ID: **J1V587**

Lab Sample ID: 280-66773-6
Client Matrix: Solid

Date Sampled: 03/18/2015 1206
Date Received: 03/20/2015 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	1.6		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-269519 Analysis Date: 03/24/2015 1544 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

General Chemistry

Client Sample ID: **J1V588**

Lab Sample ID: 280-66773-7
Client Matrix: Solid

Date Sampled: 03/18/2015 1203
Date Received: 03/20/2015 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	2.9		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-269519 Analysis Date: 03/24/2015 1544 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

General Chemistry

Client Sample ID: **J1V589**

Lab Sample ID: 280-66773-8
Client Matrix: Solid

Date Sampled: 03/18/2015 1200
Date Received: 03/20/2015 0930

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

Analysis Batch: 280-269519 Analysis Date: 03/24/2015 1544 DryWt Corrected: N

QUALITY CONTROL RESULTS

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Surrogate Recovery Report

8270C Semivolatile Organic Compounds (GC/MS)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	FBP %Rec	2FP %Rec	NBZ %Rec	PHL %Rec	TPH %Rec	TBP %Rec
280-66773-1	J1V4H0	61	61	64	63	58	56
280-66773-2	J1V4H1	69	73	73	74	65	68
280-66773-3	J1V4H2	72	75	77	78	72	67
280-66773-4	J1V4H3	71	75	75	78	69	69
280-66773-5	J1V586	71	77	78	78	71	69
280-66773-6	J1V587	69	72	74	75	68	62
280-66773-7	J1V588	69	71	75	74	64	63
280-66773-8	J1V589	68	72	73	74	66	64
MB 280-269063/1-A		66	62	68	66	63	62
LCS 280-269063/2-A		65	63	67	67	62	67
280-66773-3 MS	J1V4H2 MS	69	69	72	74	68	74
280-66773-3 MSD	J1V4H2 MSD	60	63	66	65	56	61

Surrogate	Acceptance Limits
FBP = 2-Fluorobiphenyl	50-120
2FP = 2-Fluorophenol	53-120
NBZ = Nitrobenzene-d5	50-120
PHL = Phenol-d5	52-120
TPH = Terphenyl-d14	55-120
TBP = 2,4,6-Tribromophenol	51-120

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Surrogate Recovery Report

8081A Organochlorine Pesticides (GC)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	TCX1 %Rec	DCB1 %Rec
280-66773-1	J1V4H0	84	83
280-66773-2	J1V4H1	93	94
280-66773-3	J1V4H2	89	85
280-66773-4	J1V4H3	92	95
280-66773-5	J1V586	90	83
280-66773-6	J1V587	88	107
280-66773-7	J1V588	76	89
280-66773-8	J1V589	93	95
MB 280-269017/1-A		78	84
LCS 280-269017/2-A		86	89
280-66773-8 MS	J1V589 MS	90	102
280-66773-8 MSD	J1V589 MSD	80	100

Surrogate	Acceptance Limits
TCX = Tetrachloro-m-xylene	59-115
DCB = Decachlorobiphenyl	63-124

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Surrogate Recovery Report

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Matrix: Solid

Lab Sample ID	Client Sample ID	DCB1 %Rec	TCX1 %Rec
280-66773-1	J1V4H0	75	73
280-66773-2	J1V4H1	75	74
280-66773-3	J1V4H2	77	75
280-66773-4	J1V4H3	81	82
280-66773-5	J1V586	80	77
280-66773-6	J1V587	74	70
280-66773-7	J1V588	77	79
280-66773-8	J1V589	72	70
MB 280-269098/1-A		80	80
LCS 280-269098/2-A		80	81
280-66773-8 MS	J1V589 MS	81	79
280-66773-8 MSD	J1V589 MSD	77	73

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

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Surrogate Recovery Report

8151A Herbicides (GC)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	DCPA1 %Rec
280-66773-1	J1V4H0	48
280-66773-2	J1V4H1	45
280-66773-3	J1V4H2	56
280-66773-4	J1V4H3	61
280-66773-5	J1V586	58
280-66773-6	J1V587	55
280-66773-7	J1V588	57
280-66773-8	J1V589	61
MB 280-269257/1-A		60
LCS 280-269257/2-A		58
280-66773-8 MS	J1V589 MS	60
280-66773-8 MSD	J1V589 MSD	66

Surrogate	Acceptance Limits
DCPA = DCAA	31-105

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Surrogate Recovery Report

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

Client Matrix: Solid

Lab Sample ID	Client Sample ID	OTPH %Rec
280-66773-1	J1V4H0	82
280-66773-2	J1V4H1	74
280-66773-3	J1V4H2	79
280-66773-4	J1V4H3	72
280-66773-5	J1V586	72
280-66773-6	J1V587	76
280-66773-7	J1V588	69
280-66773-8	J1V589	71
MB 280-269067/1-A		77
LCS 280-269067/2-A		75
280-66773-7 MS	J1V588 MS	72
280-66773-7 MSD	J1V588 MSD	69

Surrogate	Acceptance Limits
OTPH = o-Terphenyl	49-115

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Surrogate Recovery Report

8310 PAHs (HPLC)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	TPH1 %Rec
280-66773-1	J1V4H0	85
280-66773-2	J1V4H1	86
280-66773-3	J1V4H2	86
280-66773-4	J1V4H3	88
280-66773-5	J1V586	87
280-66773-6	J1V587	84
280-66773-7	J1V588	98
280-66773-8	J1V589	92
MB 280-269044/1-A		91
LCS 280-269044/2-A		90
280-66773-7 MS	J1V588 MS	93
280-66773-7 MSD	J1V588 MSD	89

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

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Method Blank - Batch: 280-269063

Method: 8270C
Preparation: 3550C

Lab Sample ID:	MB 280-269063/1-A	Analysis Batch:	280-269324	Instrument ID:	SMS_D
Client Matrix:	Solid	Prep Batch:	280-269063	Lab File ID:	D9453.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 g
Analysis Date:	03/23/2015 1504	Units:	ug/Kg	Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 1959			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acenaphthene	10	U	10	330
Acenaphthylene	17	U	17	330
Anthracene	17	U	17	330
Benzo[a]anthracene	20	U	20	330
Benzo[a]pyrene	20	U	20	330
Benzo[b]fluoranthene	26	U	26	330
Benzo[ghi]perylene	16	U	16	330
Benzo[k]fluoranthene	40	U	40	330
Bis(2-chloroethoxy)methane	23	U	23	330
Bis(2-chloroethyl)ether	17	U	17	330
bis (2-chloroisopropyl) ether	23	U	23	330
Bis(2-ethylhexyl) phthalate	46	U	46	330
4-Bromophenyl phenyl ether	19	U	19	330
Butyl benzyl phthalate	43	U	43	330
Carbazole	36	U	36	330
4-Chloroaniline	82	U	82	330
4-Chloro-3-methylphenol	66	U	66	330
2-Chloronaphthalene	10	U	10	330
2-Chlorophenol	21	U	21	330
4-Chlorophenyl phenyl ether	21	U	21	330
Chrysene	27	U	27	330
Dibenz(a,h)anthracene	19	U	19	330
Dibenzofuran	20	U	20	330
1,2-Dichlorobenzene	22	U	22	330
1,3-Dichlorobenzene	12	U	12	330
1,4-Dichlorobenzene	14	U	14	330
3,3'-Dichlorobenzidine	90	U	90	660
2,4-Dichlorophenol	10	U	10	330
Diethyl phthalate	26	U	26	330
2,4-Dimethylphenol	66	U	66	330
Dimethyl phthalate	23	U	23	330
Di-n-butyl phthalate	29	U	29	330
4,6-Dinitro-2-methylphenol	330	U	330	660
2,4-Dinitrophenol	330	U	330	830
2,4-Dinitrotoluene	66	U	66	330
2,6-Dinitrotoluene	28	U	28	330
Di-n-octyl phthalate	14	U	14	330
Fluoranthene	36	U	36	330
Fluorene	18	U	18	330
Hexachlorobenzene	29	U	29	330
Hexachlorobutadiene	10	U	10	330
Hexachlorocyclopentadiene	50	U	50	330
Hexachloroethane	21	U	21	330
Indeno[1,2,3-cd]pyrene	22	U	22	330
Isophorone	17	U	17	330

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Method Blank - Batch: 280-269063

Method: 8270C
Preparation: 3550C

Lab Sample ID:	MB 280-269063/1-A	Analysis Batch:	280-269324	Instrument ID:	SMS_D
Client Matrix:	Solid	Prep Batch:	280-269063	Lab File ID:	D9453.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 g
Analysis Date:	03/23/2015 1504	Units:	ug/Kg	Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 1959			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
2-Methylnaphthalene	19	U	19	330
2-Methylphenol	13	U	13	330
3 & 4 Methylphenol	33	U	33	330
Naphthalene	31	U	31	330
2-Nitroaniline	50	U	50	330
3-Nitroaniline	73	U	73	330
4-Nitroaniline	73	U	73	330
Nitrobenzene	22	U	22	330
2-Nitrophenol	10	U	10	330
4-Nitrophenol	97	U	97	660
N-Nitrosodi-n-propylamine	31	U	31	330
N-Nitrosodiphenylamine	21	U	21	330
Pentachlorophenol	330	U	330	660
Phenanthrene	17	U	17	330
Phenol	18	U	18	330
Pyrene	12	U	12	330
1,2,4-Trichlorobenzene	28	U	28	330
2,4,5-Trichlorophenol	10	U	10	330
2,4,6-Trichlorophenol	10	U	10	330

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	66	50 - 120
2-Fluorophenol	62	53 - 120
Nitrobenzene-d5	68	50 - 120
Phenol-d5	66	52 - 120
Terphenyl-d14	63	55 - 120
2,4,6-Tribromophenol	62	51 - 120

Method Blank TICs- Batch: 280-269063

Cas Number	Analyte	RT	Est. Result (ug/K	Qual
	Tentatively Identified Compound		None	

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Lab Control Sample - Batch: 280-269063

Method: 8270C
Preparation: 3550C

Lab Sample ID:	LCS 280-269063/2-A	Analysis Batch:	280-269324	Instrument ID:	SMS_D
Client Matrix:	Solid	Prep Batch:	280-269063	Lab File ID:	D9454.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 g
Analysis Date:	03/23/2015 1533	Units:	ug/Kg	Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 1959			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acenaphthene	2670	1750	65	60 - 120	
Acenaphthylene	2670	1870	70	64 - 120	
Anthracene	2670	1870	70	63 - 120	
Benzo[a]anthracene	2670	1830	69	65 - 120	
Benzo[a]pyrene	2670	1840	69	59 - 120	
Benzo[b]fluoranthene	2670	1830	69	47 - 129	
Benzo[ghi]perylene	2670	1850	69	55 - 126	
Benzo[k]fluoranthene	2670	1820	68	48 - 130	
Bis(2-chloroethoxy)methane	2670	1740	65	56 - 120	
Bis(2-chloroethyl)ether	2670	1670	63	51 - 120	
bis (2-chloroisopropyl) ether	2670	1700	64	49 - 120	
Bis(2-ethylhexyl) phthalate	2670	1880	71	65 - 120	
4-Bromophenyl phenyl ether	2670	1820	68	64 - 120	
Butyl benzyl phthalate	2670	1830	69	65 - 120	
Carbazole	2670	1810	68	64 - 120	
4-Chloroaniline	2670	1260	47	28 - 120	
4-Chloro-3-methylphenol	2670	1930	72	63 - 120	
2-Chloronaphthalene	2670	1720	65	59 - 120	
2-Chlorophenol	2670	1770	66	57 - 120	
4-Chlorophenyl phenyl ether	2670	1790	67	64 - 120	
Chrysene	2680	1830	69	64 - 120	
Dibenz(a,h)anthracene	2670	1850	69	50 - 133	
Dibenzofuran	2670	1800	67	61 - 120	
1,2-Dichlorobenzene	2680	1650	62	53 - 120	
1,3-Dichlorobenzene	2670	1620	61	52 - 120	
1,4-Dichlorobenzene	2670	1670	62	52 - 120	
3,3'-Dichlorobenzidine	2670	1460	55	30 - 120	
2,4-Dichlorophenol	2670	1800	68	60 - 120	
Diethyl phthalate	2670	1880	70	66 - 120	
2,4-Dimethylphenol	2670	1890	71	54 - 120	
Dimethyl phthalate	2670	1820	68	65 - 120	
Di-n-butyl phthalate	2670	1870	70	67 - 120	
4,6-Dinitro-2-methylphenol	5340	3190	60	57 - 120	
2,4-Dinitrophenol	5340	3030	57	46 - 120	
2,4-Dinitrotoluene	2670	1880	70	68 - 120	
2,6-Dinitrotoluene	2670	1830	69	64 - 120	
Di-n-octyl phthalate	2670	1810	68	66 - 120	
Fluoranthene	2670	1880	71	66 - 120	
Fluorene	2670	1860	70	64 - 120	
Hexachlorobenzene	2670	1910	72	62 - 120	
Hexachlorobutadiene	2670	1720	64	53 - 120	
Hexachlorocyclopentadiene	2670	1740	65	47 - 120	
Hexachloroethane	2670	1750	65	51 - 120	
Indeno[1,2,3-cd]pyrene	2670	1840	69	63 - 120	
Isophorone	2670	1820	68	56 - 120	
2-Methylnaphthalene	2660	1760	66	57 - 120	

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Lab Control Sample - Batch: 280-269063

Method: 8270C
Preparation: 3550C

Lab Sample ID:	LCS 280-269063/2-A	Analysis Batch:	280-269324	Instrument ID:	SMS_D
Client Matrix:	Solid	Prep Batch:	280-269063	Lab File ID:	D9454.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 g
Analysis Date:	03/23/2015 1533	Units:	ug/Kg	Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 1959			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
2-Methylphenol	2670	1780	67	56 - 120	
3 & 4 Methylphenol	2670	1830	69	53 - 120	
Naphthalene	2670	1700	64	57 - 120	
2-Nitroaniline	2670	2010	75	63 - 120	
3-Nitroaniline	2670	1430	54	47 - 120	
4-Nitroaniline	2670	1690	63	64 - 120	T
Nitrobenzene	2670	1830	69	54 - 120	
2-Nitrophenol	2670	1710	64	56 - 120	
4-Nitrophenol	5330	4260	80	63 - 121	
N-Nitrosodi-n-propylamine	2670	1860	70	51 - 120	
N-Nitrosodiphenylamine	5330	3710	70	61 - 120	
Pentachlorophenol	5330	2620	49	56 - 120	T
Phenanthrene	2670	1880	71	64 - 120	
Phenol	2680	1800	67	56 - 120	
Pyrene	2670	1870	70	64 - 120	
1,2,4-Trichlorobenzene	2670	1640	61	52 - 120	
2,4,5-Trichlorophenol	2670	1820	68	64 - 120	
2,4,6-Trichlorophenol	2670	1840	69	61 - 120	

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	65	50 - 120
2-Fluorophenol	63	53 - 120
Nitrobenzene-d5	67	50 - 120
Phenol-d5	67	52 - 120
Terphenyl-d14	62	55 - 120
2,4,6-Tribromophenol	67	51 - 120

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-269063

Method: 8270C
Preparation: 3550C

MS Lab Sample ID:	280-66773-3	Analysis Batch:	280-269324	Instrument ID:	SMS_D
Client Matrix:	Solid	Prep Batch:	280-269063	Lab File ID:	D9461.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.3 g
Analysis Date:	03/23/2015 1850			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 1959			Injection Volume:	0.5 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-66773-3	Analysis Batch:	280-269324	Instrument ID:	SMS_D
Client Matrix:	Solid	Prep Batch:	280-269063	Lab File ID:	D9462.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.0 g
Analysis Date:	03/23/2015 1918			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 1959			Injection Volume:	0.5 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acenaphthene	70	61	60 - 120	13	30		
Acenaphthylene	74	65	64 - 120	13	30		
Anthracene	75	62	63 - 120	18	30		T
Benzo[a]anthracene	74	61	65 - 120	18	30		T
Benzo[a]pyrene	75	62	59 - 120	18	30		
Benzo[b]fluoranthene	73	62	47 - 129	15	44		
Benzo[ghi]perylene	74	61	55 - 126	19	31		
Benzo[k]fluoranthene	74	60	48 - 130	19	30		
Bis(2-chloroethoxy)methane	71	63	56 - 120	11	30		
Bis(2-chloroethyl)ether	68	63	51 - 120	7	30		
bis (2-chloroisopropyl) ether	70	65	49 - 120	6	30		
Bis(2-ethylhexyl) phthalate	77	63	65 - 120	19	30		T
4-Bromophenyl phenyl ether	73	62	64 - 120	16	30		T
Butyl benzyl phthalate	74	61	65 - 120	19	30		T
Carbazole	73	61	64 - 120	16	30		T
4-Chloroaniline	58	54	28 - 120	6	30		
4-Chloro-3-methylphenol	78	68	63 - 120	13	30		
2-Chloronaphthalene	68	60	59 - 120	12	30		
2-Chlorophenol	71	65	57 - 120	7	30		
4-Chlorophenyl phenyl ether	72	62	64 - 120	15	30		T
Chrysene	73	61	64 - 120	17	35		T
Dibenz(a,h)anthracene	73	61	50 - 133	17	30		
Dibenzofuran	72	62	61 - 120	15	30		
1,2-Dichlorobenzene	68	63	53 - 120	7	30		
1,3-Dichlorobenzene	67	61	52 - 120	8	32		
1,4-Dichlorobenzene	67	63	52 - 120	6	30		
3,3'-Dichlorobenzidine	59	50	30 - 120	15	30		
2,4-Dichlorophenol	73	65	60 - 120	11	30		
Diethyl phthalate	76	64	66 - 120	15	30		T
2,4-Dimethylphenol	77	68	54 - 120	12	30		
Dimethyl phthalate	73	62	65 - 120	15	30		T
Di-n-butyl phthalate	76	63	67 - 120	17	30		T
4,6-Dinitro-2-methylphenol	57	48	57 - 120	16	30		T

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-269063

Method: 8270C
Preparation: 3550C

MS Lab Sample ID:	280-66773-3	Analysis Batch:	280-269324	Instrument ID:	SMS_D
Client Matrix:	Solid	Prep Batch:	280-269063	Lab File ID:	D9461.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.3 g
Analysis Date:	03/23/2015 1850			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 1959			Injection Volume:	0.5 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-66773-3	Analysis Batch:	280-269324	Instrument ID:	SMS_D
Client Matrix:	Solid	Prep Batch:	280-269063	Lab File ID:	D9462.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.0 g
Analysis Date:	03/23/2015 1918			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 1959			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
2,4-Dinitrophenol	41	34	46 - 120	18	34	T	T
2,4-Dinitrotoluene	75	63	68 - 120	16	30		T
2,6-Dinitrotoluene	74	63	64 - 120	14	30		T
Di-n-octyl phthalate	75	60	66 - 120	20	30		T
Fluoranthene	75	62	66 - 120	18	30		T
Fluorene	74	63	64 - 120	16	30		T
Hexachlorobenzene	75	64	62 - 120	16	30		
Hexachlorobutadiene	69	62	53 - 120	9	30		
Hexachlorocyclopentadiene	69	60	47 - 120	12	30		
Hexachloroethane	71	65	51 - 120	8	30		
Indeno[1,2,3-cd]pyrene	74	62	63 - 120	17	30		T
Isophorone	77	68	56 - 120	11	30		
2-Methylnaphthalene	74	66	57 - 120	11	30		
2-Methylphenol	73	66	56 - 120	9	30		
3 & 4 Methylphenol	74	67	53 - 120	9	30		
Naphthalene	71	63	57 - 120	11	30		
2-Nitroaniline	79	68	63 - 120	14	30		
3-Nitroaniline	62	54	47 - 120	13	30		
4-Nitroaniline	73	59	64 - 120	19	30		T
Nitrobenzene	74	66	54 - 120	10	30		
2-Nitrophenol	70	63	56 - 120	10	30		
4-Nitrophenol	84	70	63 - 121	18	30		
N-Nitrosodi-n-propylamine	75	70	51 - 120	7	30		
N-Nitrosodiphenylamine	75	63	61 - 120	17	36		
Pentachlorophenol	52	42	56 - 120	22	30	T	T
Phenanthrene	75	62	64 - 120	17	30		T
Phenol	73	67	56 - 120	8	30		
Pyrene	76	62	64 - 120	18	38		T
1,2,4-Trichlorobenzene	67	61	52 - 120	9	30		
2,4,5-Trichlorophenol	71	61	64 - 120	14	30		T
2,4,6-Trichlorophenol	71	62	61 - 120	12	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
2-Fluorobiphenyl	69	60	50 - 120

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
2-Fluorophenol	69	63	53 - 120
Nitrobenzene-d5	72	66	50 - 120
Phenol-d5	74	65	52 - 120
Terphenyl-d14	68	56	55 - 120
2,4,6-Tribromophenol	74	61	51 - 120

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-269063

Method: 8270C
Preparation: 3550C

MS Lab Sample ID:	280-66773-3	Units:	ug/Kg	MSD Lab Sample ID:	280-66773-3
Client Matrix:	Solid			Client Matrix:	Solid
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/23/2015 1850			Analysis Date:	03/23/2015 1918
Prep Date:	03/20/2015 1959			Prep Date:	03/20/2015 1959
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	10	U	2600	2620	1830		1600	
Acenaphthylene	17	U	2600	2620	1930		1690	
Anthracene	17	U	2600	2620	1940		1630	T
Benzo[a]anthracene	20	U	2600	2620	1920		1600	T
Benzo[a]pyrene	20	U	2600	2620	1950		1630	
Benzo[b]fluoranthene	26	U	2600	2620	1890		1620	
Benzo[ghi]perylene	16	U	2600	2620	1920		1590	
Benzo[k]fluoranthene	40	U	2600	2630	1910		1580	
Bis(2-chloroethoxy)methane	23	U	2600	2630	1840		1660	
Bis(2-chloroethyl)ether	17	U	2600	2620	1760		1650	
bis (2-chloroisopropyl) ether	23	U	2600	2620	1810		1700	
Bis(2-ethylhexyl) phthalate	46	U	2600	2620	1990		1640	T
4-Bromophenyl phenyl ether	19	U	2600	2620	1900		1620	T
Butyl benzyl phthalate	43	U	2600	2620	1930		1600	T
Carbazole	36	U	2600	2620	1890		1610	T
4-Chloroaniline	82	U	2600	2620	1510		1420	
4-Chloro-3-methylphenol	66	U	2600	2620	2040		1780	
2-Chloronaphthalene	10	U	2600	2620	1760		1560	
2-Chlorophenol	21	U	2600	2620	1840		1710	
4-Chlorophenyl phenyl ether	21	U	2600	2620	1870		1620	T
Chrysene	27	U	2600	2630	1910		1610	T
Dibenz(a,h)anthracene	19	U	2600	2630	1910		1620	
Dibenzofuran	20	U	2600	2620	1880		1620	
1,2-Dichlorobenzene	22	U	2600	2630	1770		1650	
1,3-Dichlorobenzene	12	U	2600	2620	1750		1610	
1,4-Dichlorobenzene	14	U	2600	2630	1740		1650	
3,3'-Dichlorobenzidine	90	U	2600	2620	1540		1320	
2,4-Dichlorophenol	10	U	2600	2620	1900		1710	
Diethyl phthalate	26	U	2600	2620	1970		1690	T
2,4-Dimethylphenol	66	U	2600	2630	2010		1780	
Dimethyl phthalate	23	U	2600	2620	1910		1640	T
Di-n-butyl phthalate	29	U	2600	2620	1970		1650	T
4,6-Dinitro-2-methylphenol	330	U	5190	5240	2980		2540	T
2,4-Dinitrophenol	330	U	5200	5250	2120	T	1770	T
2,4-Dinitrotoluene	66	U	2600	2620	1960		1670	T
2,6-Dinitrotoluene	28	U	2600	2620	1920		1660	T
Di-n-octyl phthalate	14	U	2600	2620	1940		1580	T
Fluoranthene	36	U	2600	2620	1950		1630	T
Fluorene	18	U	2600	2620	1930		1650	T
Hexachlorobenzene	29	U	2600	2620	1950		1670	
Hexachlorobutadiene	10	U	2600	2620	1780		1630	
Hexachlorocyclopentadiene	50	U	2600	2620	1780		1570	
Hexachloroethane	21	U	2600	2630	1860		1720	

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-269063

Method: 8270C
Preparation: 3550C

MS Lab Sample ID:	280-66773-3	Units:	ug/Kg	MSD Lab Sample ID:	280-66773-3
Client Matrix:	Solid			Client Matrix:	Solid
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/23/2015 1850			Analysis Date:	03/23/2015 1918
Prep Date:	03/20/2015 1959			Prep Date:	03/20/2015 1959
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual		MSD Result/Qual	
Indeno[1,2,3-cd]pyrene	22	U	2600	2620	1930		1620	T
Isophorone	17	U	2590	2620	1990		1790	
2-Methylnaphthalene	19	U	2590	2620	1910		1720	
2-Methylphenol	13	U	2600	2630	1900		1730	
3 & 4 Methylphenol	33	U	2600	2620	1930		1760	
Naphthalene	31	U	2600	2620	1830		1640	
2-Nitroaniline	50	U	2600	2630	2070		1790	
3-Nitroaniline	73	U	2600	2620	1620		1420	
4-Nitroaniline	73	U	2600	2620	1890		1560	T
Nitrobenzene	22	U	2600	2620	1920		1740	
2-Nitrophenol	10	U	2600	2620	1820		1640	
4-Nitrophenol	97	U	5190	5240	4360		3640	
N-Nitrosodi-n-propylamine	31	U	2600	2630	1960		1830	
N-Nitrosodiphenylamine	21	U	5190	5240	3900		3300	
Pentachlorophenol	330	U	5190	5240	2710	T	2180	T
Phenanthrene	17	U	2590	2620	1940		1630	T
Phenol	18	U	2600	2630	1900		1760	
Pyrene	12	U	2590	2620	1960		1630	T
1,2,4-Trichlorobenzene	28	U	2600	2620	1750		1610	
2,4,5-Trichlorophenol	10	U	2600	2620	1840		1600	T
2,4,6-Trichlorophenol	10	U	2600	2620	1840		1630	

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Method Blank - Batch: 280-269017

Method: 8081A
Preparation: 3550C

Lab Sample ID:	MB 280-269017/1-A	Analysis Batch:	280-269309	Instrument ID:	SGC_P2
Client Matrix:	Solid	Prep Batch:	280-269017	Lab File ID:	03230024.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 g
Analysis Date:	03/23/2015 2104	Units:	ug/Kg	Final Weight/Volume:	10 mL
Prep Date:	03/20/2015 1806			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
4,4'-DDD	0.55	U	0.55	1.7
4,4'-DDE	0.24	U	0.24	1.7
4,4'-DDT	0.59	U	0.59	1.7
Aldrin	0.25	U	0.25	1.7
alpha-BHC	0.21	U	0.21	1.7
beta-BHC	0.66	U	0.66	1.7
delta-BHC	0.40	U	0.40	1.7
gamma-BHC (Lindane)	0.46	U	0.46	1.7
Heptachlor	0.21	U	0.21	1.7
Heptachlor epoxide	0.43	U	0.43	1.7
Endosulfan I	0.18	U	0.18	1.7
Endosulfan II	0.29	U	0.29	1.7
Endosulfan sulfate	0.28	U	0.28	1.7
Endrin	0.31	U	0.31	1.7
Endrin aldehyde	0.17	U	0.17	1.7
Endrin ketone	0.49	U	0.49	1.7
gamma-Chlordane	0.27	U	0.27	1.7
Methoxychlor	0.45	U	0.45	3.3
alpha-Chlordane	0.32	U	0.32	1.7
Dieldrin	0.21	U	0.21	1.7
Toxaphene	16	U	16	170

Surrogate	% Rec	Acceptance Limits
Tetrachloro-m-xylene	78	59 - 115
Decachlorobiphenyl	84	63 - 124

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Lab Control Sample - Batch: 280-269017

Method: 8081A
Preparation: 3550C

Lab Sample ID:	LCS 280-269017/2-A	Analysis Batch:	280-269309	Instrument ID:	SGC_P2
Client Matrix:	Solid	Prep Batch:	280-269017	Lab File ID:	03230013.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 g
Analysis Date:	03/23/2015 1800	Units:	ug/Kg	Final Weight/Volume:	10 mL
Prep Date:	03/20/2015 1806			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
4,4'-DDD	16.7	13.6	82	69 - 126	
4,4'-DDE	16.7	13.4	80	71 - 116	
4,4'-DDT	16.7	14.4	87	67 - 132	
Aldrin	16.7	14.3	86	69 - 116	
alpha-BHC	16.7	14.1	85	65 - 122	
beta-BHC	16.7	13.6	82	62 - 121	
delta-BHC	16.7	14.0	84	67 - 122	
gamma-BHC (Lindane)	16.7	13.9	83	66 - 120	
Heptachlor	16.7	14.5	87	61 - 126	
Heptachlor epoxide	16.7	14.3	86	71 - 119	
Endosulfan I	16.7	12.5	75	67 - 115	
Endosulfan II	16.7	13.0	78	69 - 120	
Endosulfan sulfate	16.7	15.2	91	69 - 126	
Endrin	16.7	14.9	89	69 - 129	
Endrin aldehyde	16.7	13.0	78	41 - 128	
Endrin ketone	16.7	13.3	80	70 - 125	
gamma-Chlordane	16.7	14.0	84	69 - 122	
Methoxychlor	16.7	14.5	87	65 - 139	
alpha-Chlordane	16.7	14.1	85	71 - 118	
Dieldrin	16.7	14.5	87	71 - 120	

Surrogate	% Rec	Acceptance Limits
Tetrachloro-m-xylene	86	59 - 115
Decachlorobiphenyl	89	63 - 124

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-269017

Method: 8081A
Preparation: 3550C

MS Lab Sample ID:	280-66773-8	Analysis Batch:	280-269309	Instrument ID:	SGC_P2
Client Matrix:	Solid	Prep Batch:	280-269017	Lab File ID:	03230022.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.1 g
Analysis Date:	03/23/2015 2031			Final Weight/Volume:	10 mL
Prep Date:	03/20/2015 1806			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-66773-8	Analysis Batch:	280-269309	Instrument ID:	SGC_P2
Client Matrix:	Solid	Prep Batch:	280-269017	Lab File ID:	03230023.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.6 g
Analysis Date:	03/23/2015 2047			Final Weight/Volume:	10 mL
Prep Date:	03/20/2015 1806			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
4,4'-DDD	87	87	69 - 126	2	20		
4,4'-DDE	85	85	71 - 116	2	15		
4,4'-DDT	91	91	67 - 132	2	29		
Aldrin	89	88	69 - 116	2	50		
alpha-BHC	89	90	65 - 122	1	17		
beta-BHC	88	88	62 - 121	2	17		
delta-BHC	89	90	67 - 122	1	19		
gamma-BHC (Lindane)	88	89	66 - 120	1	24		
Heptachlor	91	93	61 - 126	0	18		
Heptachlor epoxide	91	90	71 - 119	2	18		
Endosulfan I	79	78	67 - 115	3	26		
Endosulfan II	81	80	69 - 120	3	20		
Endosulfan sulfate	100	103	69 - 126	1	22		
Endrin	95	95	69 - 129	2	30		
Endrin aldehyde	74	74	41 - 128	1	29		
Endrin ketone	83	82	70 - 125	3	20		
gamma-Chlordane	87	86	69 - 122	3	21		
Methoxychlor	91	91	65 - 139	2	23		
alpha-Chlordane	89	88	71 - 118	3	18		
Dieldrin	91	90	71 - 120	3	25		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Tetrachloro-m-xylene	90	80	59 - 115
Decachlorobiphenyl	102	100	63 - 124

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-269017

Method: 8081A
Preparation: 3550C

MS Lab Sample ID:	280-66773-8	Units:	ug/Kg	MSD Lab Sample ID:	280-66773-8
Client Matrix:	Solid			Client Matrix:	Solid
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/23/2015 2031			Analysis Date:	03/23/2015 2047
Prep Date:	03/20/2015 1806			Prep Date:	03/20/2015 1806
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
4,4'-DDD	0.55	U	16.3	16.0	14.1	13.9
4,4'-DDE	0.24	U	16.3	16.0	13.8	13.6
4,4'-DDT	0.59	U	16.3	16.0	14.8	14.6
Aldrin	0.25	U	16.3	16.0	14.4	14.1
alpha-BHC	0.22	U	16.3	16.0	14.5	14.4
beta-BHC	0.67	U	16.3	16.0	14.4	14.1
delta-BHC	0.40	U	16.3	16.0	14.5	14.4
gamma-BHC (Lindane)	0.47	U	16.3	16.0	14.3	14.2
Heptachlor	0.22	U	16.3	16.0	14.9	14.8
Heptachlor epoxide	0.43	U	16.3	16.0	14.7	14.4
Endosulfan I	0.18	U	16.3	16.0	12.8	12.4
Endosulfan II	0.29	U	16.3	16.0	13.2	12.9
Endosulfan sulfate	0.28	U	16.3	16.0	16.3	16.5
Endrin	0.31	U	16.3	16.0	15.5	15.1
Endrin aldehyde	0.17	U	16.3	16.0	12.0	11.9
Endrin ketone	0.49	U	16.3	16.0	13.5	13.1
gamma-Chlordane	0.27	U	16.3	16.0	14.1	13.7
Methoxychlor	0.45	U	16.3	16.0	14.9	14.5
alpha-Chlordane	0.32	U	16.3	16.0	14.5	14.1
Dieldrin	0.21	U	16.3	16.0	14.8	14.4

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Method Blank - Batch: 280-269098

Method: 8082
Preparation: 3550C

Lab Sample ID:	MB 280-269098/1-A	Analysis Batch:	280-269304	Instrument ID:	SGC_P3b
Client Matrix:	Solid	Prep Batch:	280-269098	Lab File ID:	0323B039.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.2 g
Analysis Date:	03/24/2015 0319	Units:	ug/Kg	Final Weight/Volume:	5 mL
Prep Date:	03/20/2015 2141			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Aroclor 1016	2.8	U	2.8	9.9
Aroclor 1221	8.0	U	8.0	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	Acceptance Limits
Decachlorobiphenyl	80	59 - 130
Tetrachloro-m-xylene	80	53 - 128

Lab Control Sample - Batch: 280-269098

Method: 8082
Preparation: 3550C

Lab Sample ID:	LCS 280-269098/2-A	Analysis Batch:	280-269304	Instrument ID:	SGC_P3b
Client Matrix:	Solid	Prep Batch:	280-269098	Lab File ID:	0323B040.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.3 g
Analysis Date:	03/24/2015 0340	Units:	ug/Kg	Final Weight/Volume:	5 mL
Prep Date:	03/20/2015 2141			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aroclor 1016	31.9	23.0	72	54 - 132	
Aroclor 1260	31.9	22.6	71	62 - 129	

Surrogate	% Rec	Acceptance Limits
Decachlorobiphenyl	80	59 - 130
Tetrachloro-m-xylene	81	53 - 128

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-269098

Method: 8082
Preparation: 3550C

MS Lab Sample ID:	280-66773-8	Analysis Batch:	280-269304	Instrument ID:	SGC_P3b
Client Matrix:	Solid	Prep Batch:	280-269098	Lab File ID:	0323B049.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.2 g
Analysis Date:	03/24/2015 0652			Final Weight/Volume:	5 mL
Prep Date:	03/20/2015 2141			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-66773-8	Analysis Batch:	280-269304	Instrument ID:	SGC_P3b
Client Matrix:	Solid	Prep Batch:	280-269098	Lab File ID:	0323B050.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.2 g
Analysis Date:	03/24/2015 0714			Final Weight/Volume:	5 mL
Prep Date:	03/20/2015 2141			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	71	70	54 - 132	2	26		
Aroclor 1260	76	72	62 - 129	5	26		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Decachlorobiphenyl	81	77	59 - 130
Tetrachloro-m-xylene	79	73	53 - 128

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-269098

Method: 8082
Preparation: 3550C

MS Lab Sample ID:	280-66773-8	Units:	ug/Kg	MSD Lab Sample ID:	280-66773-8
Client Matrix:	Solid			Client Matrix:	Solid
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/24/2015 0652			Analysis Date:	03/24/2015 0714
Prep Date:	03/20/2015 2141			Prep Date:	03/20/2015 2141
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	33.5	33.5	23.9	23.4
Aroclor 1260	2.6	U	33.5	33.5	25.3	24.1

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Method Blank - Batch: 280-269257

Method: 8151A
Preparation: 8151A

Lab Sample ID:	MB 280-269257/1-A	Analysis Batch:	280-270092	Instrument ID:	SGC_M
Client Matrix:	Solid	Prep Batch:	280-269257	Lab File ID:	0327C033.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50.8 g
Analysis Date:	03/28/2015 0514	Units:	ug/Kg	Final Weight/Volume:	10 mL
Prep Date:	03/23/2015 0925			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
2,4,5-T	2.3	U	2.3	20
2,4-Dichlorophenoxyacetic acid	14	U	14	79
2,4-DB	7.3	U	7.3	79
Dalapon	1.4	U	1.4	39
Dicamba	1.4	U	1.4	39
Dichlorprop	3.1	U	3.1	79
Dinoseb	1.4	U	1.4	12
MCPA	2000	U	2000	7900
2,4,5-TP (Silvex)	1.4	U	1.4	20
MCPP	2000	U	2000	7900

Surrogate	% Rec	Acceptance Limits
DCAA	60	31 - 105

Lab Control Sample - Batch: 280-269257

Method: 8151A
Preparation: 8151A

Lab Sample ID:	LCS 280-269257/2-A	Analysis Batch:	280-270092	Instrument ID:	SGC_M
Client Matrix:	Solid	Prep Batch:	280-269257	Lab File ID:	0327C022.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	52.2 g
Analysis Date:	03/28/2015 0107	Units:	ug/Kg	Final Weight/Volume:	10 mL
Prep Date:	03/23/2015 0925			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
2,4,5-T	95.8	55.1	58	53 - 129	
2,4-Dichlorophenoxyacetic acid	95.8	55.2	58	50 - 136	J
2,4-DB	95.8	57.3	60	29 - 134	J
Dalapon	95.8	67.1	70	35 - 105	
Dicamba	95.8	63.3	66	45 - 120	
Dichlorprop	95.8	55.5	58	50 - 118	J
Dinoseb	95.8	6.55	7	5 - 166	J
MCPA	9580	5070	53	42 - 123	J
2,4,5-TP (Silvex)	95.8	58.7	61	52 - 130	
MCPP	9580	6340	66	40 - 127	J

Surrogate	% Rec	Acceptance Limits
DCAA	58	31 - 105

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-269257

Method: 8151A
Preparation: 8151A

MS Lab Sample ID:	280-66773-8	Analysis Batch:	280-270092	Instrument ID:	SGC_M
Client Matrix:	Solid	Prep Batch:	280-269257	Lab File ID:	0327C031.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	53.0 g
Analysis Date:	03/28/2015 0429			Final Weight/Volume:	10 mL
Prep Date:	03/23/2015 0925			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-66773-8	Analysis Batch:	280-270092	Instrument ID:	SGC_M
Client Matrix:	Solid	Prep Batch:	280-269257	Lab File ID:	0327C032.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50.8 g
Analysis Date:	03/28/2015 0451			Final Weight/Volume:	10 mL
Prep Date:	03/23/2015 0925			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
2,4,5-T	58	65	24 - 115	15	40		
2,4-Dichlorophenoxyacetic acid	60	68	32 - 115	17	40	J	J
2,4-DB	64	77	37 - 119	23	50	J	J
Dalapon	65	71	11 - 115	14	50		
Dicamba	64	70	11 - 115	14	50		
Dichlorprop	59	69	35 - 115	20	50	J	J
Dinoseb	5	0	5 - 166	NC	50	J X	U N
MCPA	50	63	37 - 115	28	50	J	J
2,4,5-TP (Silvex)	60	70	53 - 134	19	40		
MCPP	62	69	48 - 132	15	50	J	J

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
DCAA	60	66	31 - 105

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-269257

Method: 8151A
Preparation: 8151A

MS Lab Sample ID:	280-66773-8	Units:	ug/Kg	MSD Lab Sample ID:	280-66773-8
Client Matrix:	Solid			Client Matrix:	Solid
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/28/2015 0429			Analysis Date:	03/28/2015 0451
Prep Date:	03/23/2015 0925			Prep Date:	03/23/2015 0925
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual		MSD Result/Qual	
2,4,5-T	2.2	U	95.4	99.5	55.6		64.9	
2,4-Dichlorophenoxyacetic acid	14	U	95.4	99.5	57.1	J	67.6	J
2,4-DB	7.2	U	95.4	99.5	60.7	J	76.6	J
Dalapon	1.4	U	95.4	99.5	61.8		71.1	
Dicamba	1.4	U	95.4	99.5	60.9		69.8	
Dichlorprop	3.1	U	95.4	99.5	56.1	J	68.7	J
Dinoseb	1.4	U	95.4	99.5	4.55	J X	1.4	U N
MCPA	1900	U	9540	9950	4750	J	6300	J
2,4,5-TP (Silvex)	1.4	U	95.4	99.5	57.7		70.0	
MCPP	1900	U	9540	9950	5940	J	6900	J

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Method Blank - Batch: 280-269067

Method: NWTPH-Dx
Preparation: 3550C

Lab Sample ID:	MB 280-269067/1-A	Analysis Batch:	280-269265	Instrument ID:	SGC_U2a
Client Matrix:	Solid	Prep Batch:	280-269067	Lab File ID:	03230021.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 g
Analysis Date:	03/23/2015 2251	Units:	ug/Kg	Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 2044			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
C10-C36	1000	U	1000	4000
C10-C28	680	U	680	4000

Surrogate	% Rec	Acceptance Limits
o-Terphenyl	77	49 - 115

Lab Control Sample - Batch: 280-269067

Method: NWTPH-Dx
Preparation: 3550C

Lab Sample ID:	LCS 280-269067/2-A	Analysis Batch:	280-269265	Instrument ID:	SGC_U2a
Client Matrix:	Solid	Prep Batch:	280-269067	Lab File ID:	03230022.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 g
Analysis Date:	03/23/2015 2315	Units:	ug/Kg	Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 2044			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
C10-C36	66700	57100	86	57 - 115	
C10-C28	66700	56500	85	53 - 115	

Surrogate	% Rec	Acceptance Limits
o-Terphenyl	75	49 - 115

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-269067

Method: NWTPH-Dx
Preparation: 3550C

MS Lab Sample ID:	280-66773-7	Analysis Batch:	280-269265	Instrument ID:	SGC_U2a
Client Matrix:	Solid	Prep Batch:	280-269067	Lab File ID:	03230030.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.6 g
Analysis Date:	03/24/2015 0231			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 2044			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-66773-7	Analysis Batch:	280-269265	Instrument ID:	SGC_U2a
Client Matrix:	Solid	Prep Batch:	280-269067	Lab File ID:	03230031.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	32.3 g
Analysis Date:	03/24/2015 0255			Final Weight/Volume:	1 mL
Prep Date:	03/20/2015 2044			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
C10-C36	77	73	57 - 115	7	23		
C10-C28	77	73	56 - 115	7	23		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
o-Terphenyl	72	69	49 - 115

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-269067

Method: NWTPH-Dx
Preparation: 3550C

MS Lab Sample ID:	280-66773-7	Units:	ug/Kg	MSD Lab Sample ID:	280-66773-7
Client Matrix:	Solid			Client Matrix:	Solid
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/24/2015 0231			Analysis Date:	03/24/2015 0255
Prep Date:	03/20/2015 2044			Prep Date:	03/20/2015 2044
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	3200	J	65200	63800	53400	49600
C10-C28	1800	J	65200	63800	52100	48400

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Method Blank - Batch: 280-269044

Method: 8310
Preparation: 3550C

Lab Sample ID:	MB 280-269044/1-A	Analysis Batch:	280-269253	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-269044	Lab File ID:	G0323006.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 g
Analysis Date:	03/23/2015 1109	Units:	ug/Kg	Final Weight/Volume:	4 mL
Prep Date:	03/20/2015 1848			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Acenaphthene	10	U	10	100
Acenaphthylene	9.0	U	9.0	100
Anthracene	3.1	U	3.1	20
Benzo[a]anthracene	3.2	U	3.2	15
Benzo[a]pyrene	6.4	U	6.4	15
Benzo[b]fluoranthene	4.2	U	4.2	15
Benzo[g,h,i]perylene	7.2	U	7.2	30
Benzo[k]fluoranthene	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	5.3	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	Acceptance Limits
Terphenyl-d14 (SUR)	91	72 - 115

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Lab Control Sample - Batch: 280-269044

Method: 8310
Preparation: 3550C

Lab Sample ID:	LCS 280-269044/2-A	Analysis Batch:	280-269253	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-269044	Lab File ID:	G0323007.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 g
Analysis Date:	03/23/2015 1140	Units:	ug/Kg	Final Weight/Volume:	4 mL
Prep Date:	03/20/2015 1848			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acenaphthene	2000	1700	85	75 - 116	
Acenaphthylene	2000	1680	84	66 - 115	
Anthracene	2000	1640	82	71 - 115	
Benzo[a]anthracene	2000	1780	89	77 - 120	
Benzo[a]pyrene	2000	1670	83	69 - 115	
Benzo[b]fluoranthene	2000	1740	87	56 - 115	
Benzo[g,h,i]perylene	2000	1910	95	72 - 120	
Benzo[k]fluoranthene	2000	1750	88	76 - 115	
Chrysene	2000	1750	87	79 - 115	
Dibenzo(a,h)anthracene	2000	1670	84	72 - 115	
Fluoranthene	2000	1770	88	77 - 115	
Fluorene	2000	1790	90	77 - 115	
Indeno[1,2,3-cd]pyrene	2000	1760	88	78 - 115	
Naphthalene	2000	1640	82	68 - 120	
Phenanthrene	2000	1680	84	75 - 115	
Pyrene	2000	1840	92	72 - 115	

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

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-269044

Method: 8310
Preparation: 3550C

MS Lab Sample ID:	280-66773-7	Analysis Batch:	280-269253	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-269044	Lab File ID:	G0323016.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.2 g
Analysis Date:	03/23/2015 1614			Final Weight/Volume:	4 mL
Prep Date:	03/20/2015 1848			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-66773-7	Analysis Batch:	280-269253	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-269044	Lab File ID:	G0323017.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	32.5 g
Analysis Date:	03/23/2015 1645			Final Weight/Volume:	4 mL
Prep Date:	03/20/2015 1848			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acenaphthene	86	85	75 - 116	6	20		
Acenaphthylene	85	84	66 - 115	5	20		
Anthracene	84	81	71 - 115	7	20		
Benzo[a]anthracene	91	88	77 - 120	8	20		
Benzo[a]pyrene	92	88	69 - 115	8	20		
Benzo[b]fluoranthene	90	86	56 - 115	8	20		
Benzo[g,h,i]perylene	100	97	72 - 120	7	20		
Benzo[k]fluoranthene	93	89	76 - 115	8	20		
Chrysene	90	87	79 - 115	8	20		
Dibenzo(a,h)anthracene	89	85	72 - 115	8	20		
Fluoranthene	91	88	77 - 115	7	20		
Fluorene	90	89	77 - 115	6	20		
Indeno[1,2,3-cd]pyrene	91	87	78 - 115	8	20		
Naphthalene	82	81	68 - 120	5	20		
Phenanthrene	86	84	75 - 115	7	20		
Pyrene	95	93	72 - 115	6	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Terphenyl-d14 (SUR)	93	89	72 - 115

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-269044

Method: 8310
Preparation: 3550C

MS Lab Sample ID:	280-66773-7	Units:	ug/Kg	MSD Lab Sample ID:	280-66773-7
Client Matrix:	Solid			Client Matrix:	Solid
Dilution:	1.0			Dilution:	1.0
Analysis Date:	03/23/2015 1614			Analysis Date:	03/23/2015 1645
Prep Date:	03/20/2015 1848			Prep Date:	03/20/2015 1848
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	10	U	1980	1900	1710	1610
Acenaphthylene	9.1	U	1980	1900	1670	1600
Anthracene	3.1	U	1980	1900	1660	1540
Benzo[a]anthracene	3.2	U	1980	1900	1800	1670
Benzo[a]pyrene	6.5	U	1980	1900	1820	1670
Benzo[b]fluoranthene	4.3	U	1980	1900	1780	1630
Benzo[g,h,i]perylene	7.3	U	1980	1900	1990	1850
Benzo[k]fluoranthene	4.0	U	1980	1900	1840	1700
Chrysene	4.9	U	1980	1900	1790	1650
Dibenzo(a,h)anthracene	11	U	1980	1900	1750	1620
Fluoranthene	13	U	1980	1900	1800	1680
Fluorene	5.3	U	1980	1900	1790	1690
Indeno[1,2,3-cd]pyrene	12	U	1980	1900	1790	1660
Naphthalene	12	U	1980	1900	1620	1540
Phenanthrene	12	U	1980	1900	1710	1600
Pyrene	12	U	1980	1900	1890	1770

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Method Blank - Batch: 280-269035

Method: 6010B
Preparation: 3050B

Lab Sample ID:	MB 280-269035/1-A	Analysis Batch:	280-269627	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-269035	Lab File ID:	26A032415.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	03/24/2015 1351	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	03/23/2015 0900				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Aluminum	1.6	U	1.6	5.0
Antimony	0.38	U	0.38	0.60
Arsenic	0.66	U	0.66	1.0
Barium	0.145	B	0.076	0.50
Beryllium	0.033	U	0.033	0.20
Boron	0.98	U	0.98	2.0
Cadmium	0.041	U	0.041	0.20
Chromium	0.058	U	0.058	0.20
Cobalt	0.10	U	0.10	1.0
Copper	0.990	B	0.22	1.0
Iron	3.8	U	3.8	5.0
Lead	0.27	U	0.27	0.50
Magnesium	9.57	B	3.7	20.0
Manganese	0.10	U	0.10	1.0
Molybdenum	0.26	U	0.26	2.0
Nickel	0.12	U	0.12	4.0
Potassium	41.0	U	41.0	300
Selenium	0.86	U	0.86	1.0
Silicon	5.7	U	5.7	10.0
Silver	0.16	U	0.16	0.20
Sodium	59.0	U	59.0	120
Vanadium	0.094	U	0.094	2.0
Zinc	0.40	U	0.40	1.0

Method Blank - Batch: 280-269035

Method: 6010B
Preparation: 3050B

Lab Sample ID:	MB 280-269035/1-A	Analysis Batch:	280-269801	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-269035	Lab File ID:	26A032515.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	03/25/2015 1730	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	03/23/2015 0900				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Calcium	39.52	B	14.1	50.0

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Lab Control Sample - Batch: 280-269035

Method: 6010B
Preparation: 3050B

Lab Sample ID:	LCS 280-269035/2-A	Analysis Batch:	280-269627	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-269035	Lab File ID:	26A032415.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	03/24/2015 1353	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	03/23/2015 0900				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	200	193.7	97	82 - 116	
Antimony	50.0	50.13	100	82 - 110	
Arsenic	100	93.52	94	85 - 110	
Barium	200	185.1	93	87 - 112	
Beryllium	5.00	4.68	94	84 - 114	
Boron	100	95.53	96	80 - 120	
Cadmium	10.0	9.43	94	87 - 110	
Chromium	20.0	18.53	93	84 - 114	
Cobalt	50.0	47.04	94	87 - 110	
Copper	25.0	24.76	99	88 - 110	
Iron	100	100.4	100	87 - 120	
Lead	50.0	47.92	96	86 - 110	
Magnesium	5000	4586	92	90 - 110	
Manganese	50.0	46.42	93	88 - 110	
Molybdenum	100	103.6	104	86 - 110	
Nickel	50.0	45.95	92	87 - 110	
Potassium	5000	4723	94	89 - 110	
Selenium	200	199.0	99	83 - 110	
Silicon	1000	67.85	7	10 - 70	N
Silver	5.00	5.27	105	87 - 114	
Sodium	5000	5097	102	90 - 112	
Vanadium	50.0	46.74	93	88 - 110	
Zinc	50.0	45.53	91	76 - 114	

Lab Control Sample - Batch: 280-269035

Method: 6010B
Preparation: 3050B

Lab Sample ID:	LCS 280-269035/2-A	Analysis Batch:	280-269801	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-269035	Lab File ID:	26A032515.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	03/25/2015 1732	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	03/23/2015 0900				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Calcium	5000	4755	95	82 - 114	

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Matrix Spike - Batch: 280-269035

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-66773-1	Analysis Batch:	280-269627	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-269035	Lab File ID:	26A032415.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.02 g
Analysis Date:	03/24/2015 1403	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	03/23/2015 0900				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Arsenic	1.0		103	79.80	77	76 - 111	
Boron	1.1	B	103	82.04	79	80 - 120	N
Cadmium	0.18		10.3	8.50	81	40 - 130	
Chromium	6.1		20.6	23.89	86	70 - 200	
Magnesium	3870		5150	9224	104	64 - 145	
Manganese	320		51.5	443.8	240	40 - 200	4
Molybdenum	0.23	U	103	90.04	87	75 - 103	
Nickel	9.8		51.5	50.92	80	61 - 126	
Selenium	0.77	U	206	167.7	81	76 - 104	
Silver	0.14	U	5.15	4.72	92	75 - 141	
Zinc	48.9		51.5	92.32	84	70 - 200	

Matrix Spike - Batch: 280-269035

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-66773-1	Analysis Batch:	280-269801	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-269035	Lab File ID:	26A032515.asc
Dilution:	5.0	Leach Batch:	N/A	Initial Weight/Volume:	1.02 g
Analysis Date:	03/25/2015 1742	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	03/23/2015 0900				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	6290		206	8378	1013	50 - 200	4
Antimony	1.7	U	51.5	34.15	66	20 - 200	
Barium	80.8		206	267.7	91	52 - 159	
Beryllium	0.15	U	5.15	4.47	87	72 - 105	
Calcium	5340		5150	12890	147	43 - 165	
Cobalt	10.5		51.5	58.51	93	72 - 106	
Copper	17.6		25.7	42.19	96	37 - 187	
Iron	28900		103	32470	3498	70 - 200	4
Lead	3.2		51.5	50.86	93	70 - 200	
Potassium	1110	B	5150	5980	95	56 - 172	
Silicon	220		1030	388.8	16	20 - 200	N
Sodium	266	B	5150	5186	96	78 - 111	
Vanadium	82.7		51.5	140.7	113	50 - 169	

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Duplicate - Batch: 280-269035

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-66773-1	Analysis Batch:	280-269627	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-269035	Lab File ID:	26A032415.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.08 g
Analysis Date:	03/24/2015 1401	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	03/23/2015 0900				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Arsenic	1.0		1.64	45	30	M
Boron	1.1	B	1.13	2	30	B
Cadmium	0.18		0.175	2	30	B
Chromium	6.1		6.64	9	40	
Magnesium	3870		4140	7	30	
Manganese	320		322.5	0.7	40	
Molybdenum	0.23	U	0.25	NC	30	U
Nickel	9.8		11.50	16	30	
Selenium	0.77	U	0.84	NC	30	U
Silver	0.14	U	0.16	NC	30	U
Zinc	48.9		49.45	1	40	

Duplicate - Batch: 280-269035

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-66773-1	Analysis Batch:	280-269801	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-269035	Lab File ID:	26A032515.asc
Dilution:	5.0	Leach Batch:	N/A	Initial Weight/Volume:	1.08 g
Analysis Date:	03/25/2015 1740	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	03/23/2015 0900				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Aluminum	6290		6517	4	40	
Antimony	1.7	U	2.14	NC	40	B
Barium	80.8		83.70	3	30	
Beryllium	0.15	U	0.16	NC	30	U
Calcium	5340		6367	17	30	
Cobalt	10.5		10.43	0.4	30	
Copper	17.6		18.64	6	30	
Iron	28900		30870	7	40	
Lead	3.2		3.02	7	40	
Potassium	1110	B	1161	4	40	B
Silicon	220		227.6	3	40	N
Sodium	266	B	317.6	18	30	B
Vanadium	82.7		87.61	6	30	

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Method Blank - Batch: 280-269200

Method: 7471A
Preparation: 7471A

Lab Sample ID:	MB 280-269200/1-A	Analysis Batch:	280-269458	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-269200	Lab File ID:	150323ab.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	03/23/2015 1840	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	03/23/2015 1200				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	0.0055	U	0.0055	0.017

Lab Control Sample - Batch: 280-269200

Method: 7471A
Preparation: 7471A

Lab Sample ID:	LCS 280-269200/2-A	Analysis Batch:	280-269458	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-269200	Lab File ID:	150323ab.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	03/23/2015 1842	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	03/23/2015 1200				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.417	0.453	109	87 - 111	

Matrix Spike - Batch: 280-269200

Method: 7471A
Preparation: 7471A

Lab Sample ID:	280-66773-1	Analysis Batch:	280-269458	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-269200	Lab File ID:	150323ab.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.50 g
Analysis Date:	03/23/2015 1849	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	03/23/2015 1200				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.0087	B	0.525	0.577	108	87 - 111	

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Duplicate - Batch: 280-269200

Method: 7471A
Preparation: 7471A

Lab Sample ID:	280-66773-1	Analysis Batch:	280-269458	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-269200	Lab File ID:	150323ab.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.56 g
Analysis Date:	03/23/2015 1847	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	03/23/2015 1200				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Mercury	0.0087	B	0.00759	14	20	B

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

Duplicate - Batch: 280-269519

Method: D-2216
Preparation: N/A

Lab Sample ID:	280-66773-1	Analysis Batch:	280-269519	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:	03/24/2015 1544	Units:	%	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Moisture	4.8	4.7	2	20	

Duplicate - Batch: 280-269519

Method: D-2216
Preparation: N/A

Lab Sample ID:	280-66773-8	Analysis Batch:	280-269519	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:	03/24/2015 1544	Units:	%	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Moisture	1.1	0.94	18	20	

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 280-269063					
LCS 280-269063/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-269063/1-A	Method Blank	T	Solid	3550C	
280-66773-1	J1V4H0	T	Solid	3550C	
280-66773-2	J1V4H1	T	Solid	3550C	
280-66773-3	J1V4H2	T	Solid	3550C	
280-66773-3MS	Matrix Spike	T	Solid	3550C	
280-66773-3MSD	Matrix Spike Duplicate	T	Solid	3550C	
280-66773-4	J1V4H3	T	Solid	3550C	
280-66773-5	J1V586	T	Solid	3550C	
280-66773-6	J1V587	T	Solid	3550C	
280-66773-7	J1V588	T	Solid	3550C	
280-66773-8	J1V589	T	Solid	3550C	
Analysis Batch:280-269324					
LCS 280-269063/2-A	Lab Control Sample	T	Solid	8270C	280-269063
MB 280-269063/1-A	Method Blank	T	Solid	8270C	280-269063
280-66773-1	J1V4H0	T	Solid	8270C	280-269063
280-66773-2	J1V4H1	T	Solid	8270C	280-269063
280-66773-3	J1V4H2	T	Solid	8270C	280-269063
280-66773-3MS	Matrix Spike	T	Solid	8270C	280-269063
280-66773-3MSD	Matrix Spike Duplicate	T	Solid	8270C	280-269063
280-66773-4	J1V4H3	T	Solid	8270C	280-269063
280-66773-5	J1V586	T	Solid	8270C	280-269063
280-66773-6	J1V587	T	Solid	8270C	280-269063
280-66773-7	J1V588	T	Solid	8270C	280-269063
280-66773-8	J1V589	T	Solid	8270C	280-269063

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 280-269017					
LCS 280-269017/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-269017/1-A	Method Blank	T	Solid	3550C	
280-66773-1	J1V4H0	T	Solid	3550C	
280-66773-2	J1V4H1	T	Solid	3550C	
280-66773-3	J1V4H2	T	Solid	3550C	
280-66773-4	J1V4H3	T	Solid	3550C	
280-66773-5	J1V586	T	Solid	3550C	
280-66773-6	J1V587	T	Solid	3550C	
280-66773-7	J1V588	T	Solid	3550C	
280-66773-8	J1V589	T	Solid	3550C	
280-66773-8MS	Matrix Spike	T	Solid	3550C	
280-66773-8MSD	Matrix Spike Duplicate	T	Solid	3550C	
Prep Batch: 280-269067					
LCS 280-269067/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-269067/1-A	Method Blank	T	Solid	3550C	
280-66773-1	J1V4H0	T	Solid	3550C	
280-66773-2	J1V4H1	T	Solid	3550C	
280-66773-3	J1V4H2	T	Solid	3550C	
280-66773-4	J1V4H3	T	Solid	3550C	
280-66773-5	J1V586	T	Solid	3550C	
280-66773-6	J1V587	T	Solid	3550C	
280-66773-7	J1V588	T	Solid	3550C	
280-66773-7MS	Matrix Spike	T	Solid	3550C	
280-66773-7MSD	Matrix Spike Duplicate	T	Solid	3550C	
280-66773-8	J1V589	T	Solid	3550C	
Prep Batch: 280-269098					
LCS 280-269098/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-269098/1-A	Method Blank	T	Solid	3550C	
280-66773-1	J1V4H0	T	Solid	3550C	
280-66773-2	J1V4H1	T	Solid	3550C	
280-66773-3	J1V4H2	T	Solid	3550C	
280-66773-4	J1V4H3	T	Solid	3550C	
280-66773-5	J1V586	T	Solid	3550C	
280-66773-6	J1V587	T	Solid	3550C	
280-66773-7	J1V588	T	Solid	3550C	
280-66773-8	J1V589	T	Solid	3550C	
280-66773-8MS	Matrix Spike	T	Solid	3550C	
280-66773-8MSD	Matrix Spike Duplicate	T	Solid	3550C	

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 280-269257					
LCS 280-269257/2-A	Lab Control Sample	T	Solid	8151A	
MB 280-269257/1-A	Method Blank	T	Solid	8151A	
280-66773-1	J1V4H0	T	Solid	8151A	
280-66773-2	J1V4H1	T	Solid	8151A	
280-66773-3	J1V4H2	T	Solid	8151A	
280-66773-4	J1V4H3	T	Solid	8151A	
280-66773-5	J1V586	T	Solid	8151A	
280-66773-6	J1V587	T	Solid	8151A	
280-66773-7	J1V588	T	Solid	8151A	
280-66773-8	J1V589	T	Solid	8151A	
280-66773-8MS	Matrix Spike	T	Solid	8151A	
280-66773-8MSD	Matrix Spike Duplicate	T	Solid	8151A	
Analysis Batch:280-269265					
LCS 280-269067/2-A	Lab Control Sample	T	Solid	NWTPH-Dx	280-269067
MB 280-269067/1-A	Method Blank	T	Solid	NWTPH-Dx	280-269067
280-66773-1	J1V4H0	T	Solid	NWTPH-Dx	280-269067
280-66773-2	J1V4H1	T	Solid	NWTPH-Dx	280-269067
280-66773-3	J1V4H2	T	Solid	NWTPH-Dx	280-269067
280-66773-4	J1V4H3	T	Solid	NWTPH-Dx	280-269067
280-66773-5	J1V586	T	Solid	NWTPH-Dx	280-269067
280-66773-6	J1V587	T	Solid	NWTPH-Dx	280-269067
280-66773-7	J1V588	T	Solid	NWTPH-Dx	280-269067
280-66773-7MS	Matrix Spike	T	Solid	NWTPH-Dx	280-269067
280-66773-7MSD	Matrix Spike Duplicate	T	Solid	NWTPH-Dx	280-269067
280-66773-8	J1V589	T	Solid	NWTPH-Dx	280-269067
Analysis Batch:280-269304					
LCS 280-269098/2-A	Lab Control Sample	T	Solid	8082	280-269098
MB 280-269098/1-A	Method Blank	T	Solid	8082	280-269098
280-66773-1	J1V4H0	T	Solid	8082	280-269098
280-66773-2	J1V4H1	T	Solid	8082	280-269098
280-66773-3	J1V4H2	T	Solid	8082	280-269098
280-66773-4	J1V4H3	T	Solid	8082	280-269098
280-66773-5	J1V586	T	Solid	8082	280-269098
280-66773-6	J1V587	T	Solid	8082	280-269098
280-66773-7	J1V588	T	Solid	8082	280-269098
280-66773-8	J1V589	T	Solid	8082	280-269098
280-66773-8MS	Matrix Spike	T	Solid	8082	280-269098
280-66773-8MSD	Matrix Spike Duplicate	T	Solid	8082	280-269098

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Analysis Batch:280-269309					
LCS 280-269017/2-A	Lab Control Sample	T	Solid	8081A	280-269017
MB 280-269017/1-A	Method Blank	T	Solid	8081A	280-269017
280-66773-1	J1V4H0	T	Solid	8081A	280-269017
280-66773-2	J1V4H1	T	Solid	8081A	280-269017
280-66773-3	J1V4H2	T	Solid	8081A	280-269017
280-66773-4	J1V4H3	T	Solid	8081A	280-269017
280-66773-5	J1V586	T	Solid	8081A	280-269017
280-66773-6	J1V587	T	Solid	8081A	280-269017
280-66773-7	J1V588	T	Solid	8081A	280-269017
280-66773-8	J1V589	T	Solid	8081A	280-269017
280-66773-8MS	Matrix Spike	T	Solid	8081A	280-269017
280-66773-8MSD	Matrix Spike Duplicate	T	Solid	8081A	280-269017
Analysis Batch:280-270092					
LCS 280-269257/2-A	Lab Control Sample	T	Solid	8151A	280-269257
MB 280-269257/1-A	Method Blank	T	Solid	8151A	280-269257
280-66773-1	J1V4H0	T	Solid	8151A	280-269257
280-66773-2	J1V4H1	T	Solid	8151A	280-269257
280-66773-3	J1V4H2	T	Solid	8151A	280-269257
280-66773-4	J1V4H3	T	Solid	8151A	280-269257
280-66773-5	J1V586	T	Solid	8151A	280-269257
280-66773-6	J1V587	T	Solid	8151A	280-269257
280-66773-7	J1V588	T	Solid	8151A	280-269257
280-66773-8	J1V589	T	Solid	8151A	280-269257
280-66773-8MS	Matrix Spike	T	Solid	8151A	280-269257
280-66773-8MSD	Matrix Spike Duplicate	T	Solid	8151A	280-269257

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-269035					
LCS 280-269035/2-A	Lab Control Sample	T	Solid	3050B	
MB 280-269035/1-A	Method Blank	T	Solid	3050B	
280-66773-1	J1V4H0	T	Solid	3050B	
280-66773-1DU	Duplicate	T	Solid	3050B	
280-66773-1MS	Matrix Spike	T	Solid	3050B	
280-66773-2	J1V4H1	T	Solid	3050B	
280-66773-3	J1V4H2	T	Solid	3050B	
280-66773-4	J1V4H3	T	Solid	3050B	
280-66773-5	J1V586	T	Solid	3050B	
280-66773-6	J1V587	T	Solid	3050B	
280-66773-7	J1V588	T	Solid	3050B	
280-66773-8	J1V589	T	Solid	3050B	
Prep Batch: 280-269200					
LCS 280-269200/2-A	Lab Control Sample	T	Solid	7471A	
MB 280-269200/1-A	Method Blank	T	Solid	7471A	
280-66773-1	J1V4H0	T	Solid	7471A	
280-66773-1DU	Duplicate	T	Solid	7471A	
280-66773-1MS	Matrix Spike	T	Solid	7471A	
280-66773-2	J1V4H1	T	Solid	7471A	
280-66773-3	J1V4H2	T	Solid	7471A	
280-66773-4	J1V4H3	T	Solid	7471A	
280-66773-5	J1V586	T	Solid	7471A	
280-66773-6	J1V587	T	Solid	7471A	
280-66773-7	J1V588	T	Solid	7471A	
280-66773-8	J1V589	T	Solid	7471A	
Analysis Batch:280-269458					
LCS 280-269200/2-A	Lab Control Sample	T	Solid	7471A	280-269200
MB 280-269200/1-A	Method Blank	T	Solid	7471A	280-269200
280-66773-1	J1V4H0	T	Solid	7471A	280-269200
280-66773-1DU	Duplicate	T	Solid	7471A	280-269200
280-66773-1MS	Matrix Spike	T	Solid	7471A	280-269200
280-66773-2	J1V4H1	T	Solid	7471A	280-269200
280-66773-3	J1V4H2	T	Solid	7471A	280-269200
280-66773-4	J1V4H3	T	Solid	7471A	280-269200
280-66773-5	J1V586	T	Solid	7471A	280-269200
280-66773-6	J1V587	T	Solid	7471A	280-269200
280-66773-7	J1V588	T	Solid	7471A	280-269200
280-66773-8	J1V589	T	Solid	7471A	280-269200

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:280-269627					
LCS 280-269035/2-A	Lab Control Sample	T	Solid	6010B	280-269035
MB 280-269035/1-A	Method Blank	T	Solid	6010B	280-269035
280-66773-1	J1V4H0	T	Solid	6010B	280-269035
280-66773-1DU	Duplicate	T	Solid	6010B	280-269035
280-66773-1MS	Matrix Spike	T	Solid	6010B	280-269035
280-66773-2	J1V4H1	T	Solid	6010B	280-269035
280-66773-3	J1V4H2	T	Solid	6010B	280-269035
280-66773-4	J1V4H3	T	Solid	6010B	280-269035
280-66773-5	J1V586	T	Solid	6010B	280-269035
280-66773-6	J1V587	T	Solid	6010B	280-269035
280-66773-7	J1V588	T	Solid	6010B	280-269035
280-66773-8	J1V589	T	Solid	6010B	280-269035
Analysis Batch:280-269801					
LCS 280-269035/2-A	Lab Control Sample	T	Solid	6010B	280-269035
MB 280-269035/1-A	Method Blank	T	Solid	6010B	280-269035
280-66773-1	J1V4H0	T	Solid	6010B	280-269035
280-66773-1DU	Duplicate	T	Solid	6010B	280-269035
280-66773-1MS	Matrix Spike	T	Solid	6010B	280-269035
280-66773-2	J1V4H1	T	Solid	6010B	280-269035
280-66773-3	J1V4H2	T	Solid	6010B	280-269035
280-66773-4	J1V4H3	T	Solid	6010B	280-269035
280-66773-5	J1V586	T	Solid	6010B	280-269035
280-66773-6	J1V587	T	Solid	6010B	280-269035
280-66773-7	J1V588	T	Solid	6010B	280-269035
280-66773-8	J1V589	T	Solid	6010B	280-269035

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-269519					
280-66773-1	J1V4H0	T	Solid	D-2216	
280-66773-1DU	Duplicate	T	Solid	D-2216	
280-66773-2	J1V4H1	T	Solid	D-2216	
280-66773-3	J1V4H2	T	Solid	D-2216	
280-66773-4	J1V4H3	T	Solid	D-2216	
280-66773-5	J1V586	T	Solid	D-2216	
280-66773-6	J1V587	T	Solid	D-2216	
280-66773-7	J1V588	T	Solid	D-2216	
280-66773-8	J1V589	T	Solid	D-2216	
280-66773-8DU	Duplicate	T	Solid	D-2216	

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-66773-1
Sdg Number: JP0929

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
HPLC/IC					
Prep Batch: 280-269044					
LCS 280-269044/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-269044/1-A	Method Blank	T	Solid	3550C	
280-66773-1	J1V4H0	T	Solid	3550C	
280-66773-2	J1V4H1	T	Solid	3550C	
280-66773-3	J1V4H2	T	Solid	3550C	
280-66773-4	J1V4H3	T	Solid	3550C	
280-66773-5	J1V586	T	Solid	3550C	
280-66773-6	J1V587	T	Solid	3550C	
280-66773-7	J1V588	T	Solid	3550C	
280-66773-7MS	Matrix Spike	T	Solid	3550C	
280-66773-7MSD	Matrix Spike Duplicate	T	Solid	3550C	
280-66773-8	J1V589	T	Solid	3550C	
Analysis Batch:280-269253					
LCS 280-269044/2-A	Lab Control Sample	T	Solid	8310	280-269044
MB 280-269044/1-A	Method Blank	T	Solid	8310	280-269044
280-66773-1	J1V4H0	T	Solid	8310	280-269044
280-66773-2	J1V4H1	T	Solid	8310	280-269044
280-66773-3	J1V4H2	T	Solid	8310	280-269044
280-66773-4	J1V4H3	T	Solid	8310	280-269044
280-66773-5	J1V586	T	Solid	8310	280-269044
280-66773-6	J1V587	T	Solid	8310	280-269044
280-66773-7	J1V588	T	Solid	8310	280-269044
280-66773-7MS	Matrix Spike	T	Solid	8310	280-269044
280-66773-7MSD	Matrix Spike Duplicate	T	Solid	8310	280-269044
280-66773-8	J1V589	T	Solid	8310	280-269044

Report Basis
T = Total

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-233-082

Collector STOWE, QG	**Company Contact** Joan Kessner	**Telephone No.** 375-4688	**Project Coordinator** KESSNER, JH
Price Code 8 B	**Data Turnaround** 7 days		
Project Designation 100-IU-2 & 100-IU-6 Remaining Waste Sites	**Sampling Location** 600-358 (excavation and SPA)		**SAF No.** RC-233
Ice Chest No. RCC-08-017	**Field Logbook No.** EL-1667-03	**COA** 0603582600	**Method of Shipment** Commercial Carrier \Fed Ex
Shipped To TestAmerica Denver	**Offsite Property No.** A131395		**Bill of Lading/Air Bill No.** See OSPC

Other Labs Shipped To

N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

N/A

Special Handling and/or Storage

Cool 4C

280-66773 Chain of Custody

Preservation	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C					
Type of Container	G/P	aG	aG	aG	aG	aG					
No. of Container(s)	1	1	1	1	1	1					
Volume	03/18/15 ~~60mL~~ 125 mL	125mL	125mL	125mL	125mL	125mL					
Sample Analysis	See item (1) in Special Instructions	PAHs - 8310	PCBs - 8082	TPH-Diesel Range - WTPH-D +	Semi-VOA - 8270 (TCL)	Pesticides - 8081; Chloro-Herbicides - EPA8151					

Sample No.	Matrix	Sample Date	Sample Time										
J1V4H0	SOIL	03/18/15	1143	X	X	X	X	X	X				
J1V4H1	SOIL	03/18/15	1147	X	X	X	X	X	X				
J1V4H2	SOIL	03/18/15	1152	X	X	X	X	X	X				
J1V4H3	SOIL	03/18/15	1156	X	X	X	X	X	X				
J1V586	SOIL	03/18/15	1209	X	X	X	X	X	X				

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

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Quincy Stowe	1216 3-18-15	c.martinez/c.martinez	1216 03/18/15
c.martinez/c.martinez	03/18/15	C. Bingham	3-18-15 1610
C. Bingham	3-18-15 1620	1060 Battelle fridge #3A	1620 3-18-15
1060 Battelle fridge #3A	3-19-15 0710	C. Bingham	3-19-15 0710
C. Bingham WCH	3-19-15 0715	fed Ex	3-19-15
			3-20-15 9:30

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, Magnesium, Manganese, Molybdenum, Nickel, Potassium, Selenium, Silicon, Silver, Sodium, Vanadium, Zinc}; Mercury - 7471 - (CV) {Mercury}

3.4, 2.1, 4.1, 2.8 IRS 70.2
Transferred By MS 3/20/15

REVIEWED BY K.Wood/Vicenn DATE 3/19/15

JP0929

WCH-EE-011

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-233-082

Collector STOWE, QG	**Company Contact** Joan Kessner	**Telephone No.** 375-4688	**Project Coordinator** KESSNER, JH
Project Designation 100-IU-2 & 100-IU-6 Remaining Waste Sites	**Sampling Location** 600-358 (excavation and SPA)		**SAF No.** RC-233
Ice Chest No. RCC-08-017	**Field Logbook No.** EL-1667-03	**COA** 0603582600	**Method of Shipment** Commercial Carrier \ Fed Ex
Shipped To TestAmerica Denver	**Offsite Property No.** A131395		**Bill of Lading/Air Bill No.** See OSPC

Price Code 8B

Data Turnaround 7 days

Other Labs Shipped To NA

POSSIBLE SAMPLE HAZARDS/REMARKS
N/A

Special Handling and/or Storage
Cool 4C

Preservation	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C					
Type of Container	G/P	aG	aG	aG	aG	aG					
No. of Container(s)	1	1	1	1	1	1					
Volume	03/18/15 ~~60mL~~ 125 mL	125mL	125mL	125mL	125mL	125mL					
Sample Analysis	See item (1) in Special Instructions	PAHs - 8310	PCBs - 8082	TPH-Diesel Range - WTPH-D +	Semi-VOA - 8270 (TCL)	Pesticides - 8081; Chloro-Herbicides - EPA8151					

Sample No.	Matrix	Sample Date	Sample Time										
J1V587	SOIL	03/18/15	1206	X	X	X	X	X	X				
J1V588	SOIL	03/18/15	1203	X	X	X	X	X	X				
J1V589	SOIL	03/18/15	1200	X	X	X	X	X	X				
J1V590	SOIL												
J1V591	SOIL												

03/18/15

Page 133 of 142

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

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Quincy Stowe	03/18/15 1216	C. Martinez / C. Martinez	1216 03/18/15
C. Martinez / C. Martinez	03/18/15 1610	C. Bingham	3-18-15 1610
C. Bingham	3-18-15 1620	1060 Battelle, fridge #34	1620 3-18-15
1060 Battelle, fridge #34	3-19-15 0710	C. Bingham	3-19-15 0710
C. Bingham WCH	3-19-15 0715	fed Ex	3-19-15
			3-20-15 9:30

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, Magnesium, Manganese, Molybdenum, Nickel, Potassium, Selenium, Silicon, Silver, Sodium, Vanadium, Zinc}; Mercury - 7471 - (CV) {Mercury}

REVIEWED BY K. Wood Viacomb DATE 3/19/15

JP0929

WCH-EE-011

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

90 w/Permission

Project 28002142
Report Due: 3/27/2015 D.B. 3-20-15
TALs TAT: 5 Day Rush

3.4, 2.1, 4.1, 2.8 IR5+0.2
Transferred By MJ 3/20/15

Sample Check-in List

Date/Time Received: 3/20/15 9:30 GM Screen Result 13 microR/hr

Client: Washington Closure Hanford SDG #: JP0929 NA[ ] SAF #: RC-233 NA [ ]

Job Number: 66773 Chain of Custody # RC-233-082
WCH-08-067 RCC-08-017

Shipping Container ID: WCH-08-050 WCH-08-071 Air Bill # 7731 6672 6364 - Master (3 coolers) 7731 6678 2776

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? NA [ ] Yes [✓] No [ ]
4. Cooler Temperature °C: 3.4, 2.1, 4.1, 2.8 IR5+0.2 NA [ ] 5. Vermiculite/packing materials is NA [ ] Wet [ ] Dry [✓]
6. Number of samples in shipping container: 8
7. Sample holding times exceeded? NA [ ] Yes [ ] No [✓]
8. Samples have:
   ✓ Tape
   ✓ Custody Seals
   ✓ Hazard Labels
   ✓ Appropriate Sample Labels
9. Samples are:
   ✓ In Good Condition
   ___ Broken
   ___ Leaking
   ___ Have Air Bubbles
   (Only for samples requiring no head space.)
10. Sample pH taken? NA [✓] pH<2 [ ] pH>2 [ ] pH>9 [ ] Amount HNO_3 Added ___
11. Sample Location, Sample Collector Listed? * yes
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): ___

Sample Custodian: [signature] Date: 3/20/15

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 3-20-15

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

J151215022303uv

Ship Date: 19MAR15
ActWgt: 61.0 LB
CAD: 105266502/INET3610

Delivery Address Bar Code

SHIP TO: (303) 736-0190

BILL THIRD PARTY

Kae Yoder
TestAmerica
4955 Yarrow St.
A131395
ARVADA, CO 80002

Ref # 01H2852000
Invoice #
PO #
Dept #

1 of 3

FRI - 20 MAR 10:30A
PRIORITY OVERNIGHT

TRK# 0201 7731 6672 6364

MASTER

XH WHHA

80002
CO-US
DEN

537J1/879AEE4B

After printing this label:
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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

J1512150223031u

Ship Date: 19MAR15
ActWgt: 72.0 LB
CAD: 105266502/INET3610

Delivery Address Bar Code

Ref # 01H2852000
Invoice #
PO #
Dept #

SHIP TO: (303) 736-0190

BILL THIRD PARTY

Kae Yoder
TestAmerica
4955 Yarrow St.
A131395
ARVADA, CO 80002

2 of 3

FRI - 20 MAR 10:30A
PRIORITY OVERNIGHT

MPS# 7731 6672 6136
0263
Mstr# 7731 6672 6364 0201

XH WHHA

80002
CO-US
DEN

537J1/879A/EE4B

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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

J1512150022303uv

Ship Date: 6MAR15
ActWgt: 7.0 LB
CAD: 106685502/INET3610

Delivery Address Bar Code

Ref # 01H2852000
Invoice #
PO #
Dept #

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

Kae Yoder
TestAmerica
4955 Yarrow St.
A131395
ARVADA, CO 80002

3 of 3

FRI - 20 MAR 10:30A
PRIORITY OVERNIGHT

MPS# 7731 6672 5699
0263
Mstr# 7731 6672 6364
0201

XH WHHA

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CO-US
DEN

537J/879A/EE4B

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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

J15121502230 3uv

Ship Date: 19MAR15
ActWgt: 66.0 LB
CAD: 105266502/INET3610

Delivery Address Bar Code

SHIP TO: (303) 736-0190

BILL THIRD PARTY

Kae Yoder
TestAmerica
4955 Yarrow St.
A131395
ARVADA, CO 80002

Ref # 01H2852000
Invoice #
PO #
Dept #

FRI - 20 MAR 10:30A
PRIORITY OVERNIGHT

TRK# 0201 7731 6678 2776

XH WHHA

80002
CO-US
DEN

537J1/879A/EE4B

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
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