0098319

SAF-RC-181
ARRA 100-F Remaining Sites Remediation – Soil Full Protocol
FINAL DATA PACKAGE

COMPLETE COPY OF DATA PACKAGE TO:

Kathy Wendt H4-21 KW 7/19/11
INITIAL/DATE

COMMENTS:

SDG J01152 SAF-RC-181

Rad only ☑ Chem only Rad & Chem

☑ Complete Partial

Sample Location: 100-F-55/100-F-62 VERIFICATION (NX)

RECEIVED
AUG 22 2011
EDMC

Analytical Data Package Prepared For

Washington Closure Hanford

RECEIVED

Radiochemical Analysis By

TestAmerica

2800 G.W. Way, Richland Wa, 99354, (509)-375-3131.

Assigned Laboratory Code: TARL

Data Package Contains 36 *Pages*

Report No.: 47257

Results in this report relate only to the sample(s) analyzed.

SDG No.	Order No.	Client Sample ID (List Order)	Lot-Sa No.	Work Order	Report DB ID	Batch No.
J01152	RC-181	J1K3N2	J1F290487-1	MKK081AA	9MKK0810	1181041
		J1K3N3	J1F290487-2	MKK091AA	9MKK0910	1181041
		J1K3N4	J1F290487-3	MKK1C1AA	9MKK1C10	1181041
		J1K3N5	J1F290487-4	MKK1D1AA	9MKK1D10	1181041
		J1K3N6	J1F290487-5	MKK1E1AA	9MKK1E10	1181041
		J1K3N7	J1F290487-6	MKK1F1AA	9MKK1F10	1181041
		J1K3N8	J1F290487-7	MKK1G1AA	9MKK1G10	1181041
		J1K3N9	J1F290487-8	MKK1H1AA	9MKK1H10	1181041
		J1K3P0	J1F290487-9	MKK1K1AA	9MKK1K10	1181041
		J1K3P1	J1F290487-10	MKK1L1AA	9MKK1L10	1181041
	RC-181	J1K3P2	J1F290487-11	MKK1L1AA	9MKK1M10	1181041
		J1K3P3	J1F290487-12	MKK1N1AA	9MKK1N10	1181041
		J1K3P4	J1F290487-13	MKK1P1AA	9MKK1P10	1181041

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

Washington Hanford Closure
2620 Fermi Avenue
Richland, WA 99354

TestAmerica Laboratories, Inc.

July 1, 2011

Attention: Joan Kessner

SAF Number	:	RC-181
Date SDG Closed	:	June 29, 2011
Number of Samples	:	Thirteen (13)
Sample Type	:	Soil
SDG Number	:	J01152
Data Deliverable	:	15– Day / Summary

CASE NARRATIVE

I. Introduction

On June 29, 2011, thirteen soil samples were received at TestAmerica for radiochemical analysis. Upon receipt, the samples were assigned the following laboratory ID number to correspond with the Washington Closure Hanford (WCH) specific ID:

WCH ID#	TARL ID#	MATRIX	DATE OF RECEIPT
J1K3N2	MKK08	SOIL	6/29/11
J1K3N3	MKK09	SOIL	6/29/11
J1K3N4	MKK1C	SOIL	6/29/11
J1K3N5	MKK1D	SOIL	6/29/11
J1K3N6	MKK1E	SOIL	6/29/11
J1K3N7	MKK1F	SOIL	6/29/11
J1K3N8	MKK1G	SOIL	6/29/11
J1K3N9	MKK1H	SOIL	6/29/11
J1K3P0	MKK1K	SOIL	6/29/11
J1K3P1	MKK1L	SOIL	6/29/11
J1K3P2	MKK1N	SOIL	6/29/11
J1K3P3	MKK1N	SOIL	6/29/11
J1K3P4	MKK1P	SOIL	6/29/11

II. Sample Receipt

The samples were received in good condition and no anomalies were noted during check-in.

III. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information, analytical results and the appropriate associated statistical errors.

The requested analyses were:

Chemical Analysis
Hexavalent Chromium by EPA method 7196A

IV. Quality Control

The analytical results for each analysis performed includes a minimum of one laboratory control sample (LCS), one method (reagent) blank, and one duplicate sample analysis. Any exceptions have been noted in the "Comments" section.

QC and sample results are reported in the same units.

V. Comments

Chemical Analysis
Hexavalent Chromium by EPA method 7196A
The matrix spike recovered low at 39%. The post digestive matrix spike recovered at 87% and the insoluble matrix spike recovered at 101%. This implies a reducing capacity in the sample, but not enough to exhaust the more copious insoluble matrix spike. Except as noted, The LCS, batch blank, samples, sample duplicate (J1K3N2) and sample matrix spike (J1K3N2) results are within contractual requirements.

I certify that this Certificate of Analysis is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. 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 following signature.

Reviewed and approved:

Rhonda Wagar
Project Manager

Drinking Water Method Cross References

	DRINKING WATER ASTM METHOD CROSS REFERENCES	
Referenced Method	**Isotope(s)**	**TestAmerica Richland's SOP No.**
EPA 901.1	Cs-134, I-131	RL-GAM-001
EPA 900.0	Alpha & Beta	RL-GPC-001
EPA 00-02	Gross Alpha (Coprecipitation)	RL-GPC-002
EPA 903.0	Total Alpha Radium (Ra-226)	RL-RA-002
EPA 903.1	Ra-226	RL-RA-001
EPA 904.0	Ra-228	RL-RA-001
EPA 905.0	Sr-89/90	RL-GPC-003
ASTM D5174	Uranium	RL-KPA-003
EPA 906.0	Tritium	RL-LSC-005

Results in this report relate only to the sample(s) analyzed.

Uncertainty Estimation

TestAmerica Richland has adopted the internationally accepted approach to estimating uncertainties described in "NIST Technical Note 1297, 1994 Edition". The approach, "Law of Propagation of Errors", involves the identification of all variables in an analytical method which are used to derive a result. These variables are related to the analytical result (R) by some functional relationship, R = constants * f(x,y,z,...). The components (x,y,z) are evaluated to determine their contribution to the overall method uncertainty. The individual component uncertainties (u_i) are then combined using a statistical model that provides the most probable overall uncertainty value. All component uncertainties are categorized as type A, evaluated by statistical methods, or type B, evaluated by other means. Uncertainties not included in the components, such as sample homogeneity, are combined with the component uncertainty as the square root of the sum-of-the-squares of the individual uncertainties. The uncertainty associated with the derived result is the combined uncertainty (u_c) multiplied by the coverage factor (1,2, or 3).

When three or more sample replicates are used to derive the analytical result, the type A uncertainty is the standard deviation of the mean value (S/?n), where S is the standard deviation of the derived results. The type B uncertainties are all other random or non-random components that are not included in the standard deviation.

The derivation of the general "Law of Propagation of Errors" equations and specific example are available on request.

Report Definitions

Action Lev	An agreed upon activity level used to trigger some action when the final result is greater than or equal to the Action Level. Often the Action Level is related to the Decision Limit.
Batch	The QC preparation batch number that relates laboratory samples to QC samples that were prepared and analyzed together.
Bias	Defined by the equation (Result/Expected)-1 as defined by ANSI N13.30.
COC No	Chain of Custody Number assigned by the Client or TestAmerica.
Count Error (#s)	Poisson counting statistics of the gross sample count and background. The uncertainty is absolute and in the same units as the result. For Liquid Scintillation Counting (LSC) the batch blank count is the background.
Total Uncert (#s) ***u_c - Combined Uncertainty.***	All known uncertainties associated with the preparation and analysis of the sample are propagated to give a measure of the uncertainty associated with the result, ***u_c the combined uncertainty.*** The uncertainty is absolute and in the same units as the result.
(#s), Coverage Factor	The coverage factor defines the width of the confidence interval, 1, 2 or 3 standard deviations.
CRDL (RL)	Contractual Required Detection Limit as defined in the Client's Statement Of Work or TestAmerica "default" nominal detection limit. Often referred to the reporting level (RL)
Lc	Decision Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume associated with the sample. The Type I error probability is approximately 5%. Lc=(1.645 * Sqrt(2*(BkgrndCnt/BkgrndCntMin)/SCntMin)) * (ConvFct/(Eff*Yld*Abn*Vol) * IngrFct). For LSC methods the batch blank is used as a measure of the background variability. Lc cannot be calculated when the background count is zero.
Lot-Sample No	The number assigned by the LIMS software to track samples received on the same day for a given client. The sample number is a sequential number assigned to each sample in the Lot.
MDC|MDA	Detection Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume with a Type I and II error probability of approximately 5%. MDC = (4.65 * Sqrt((BkgrndCnt/BkgrndCntMin)/SCntMin) + 2.71/SCntMin) * (ConvFct/(Eff * Yld * Abn * Vol) * IngrFct). For LSC methods the batch blank is used as a measure of the background variability.
Primary Detector	The instrument identifier associated with the analysis of the sample aliquot.
Ratio U-234/U-238	The U-234 result divided by the U-238 result. The U-234/U-238 ratio for natural uranium in NIST SRM 4321C is 1.038.
Rst/MDC	Ratio of the Result to the MDC. A value greater than 1 may indicate activity above background at a high level of confidence. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Rst/TotUcert	Ratio of the Result to the Total Uncertainty. If the uncertainty has a coverage factor of 2 a value greater than 1 may indicate activity above background at approximately the 95% level of confidence assuming a two-sided confidence interval. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Report DB No	Sample Identifier used by the report system. The number is based upon the first five digits of the **Work Order** Number.
RER	The equation Replicate Error Ratio = (S-D)/[sqrt($TPUs^2$ + $TPUd^2$)] as defined by ICPT BOA where S is the original sample result, D is the result of the duplicate, TPUs is the total uncertainty of the original sample and TPUd is the total uncertainty of the duplicate sample.
SDG	Sample Delivery Group Number assigned by the Client or assigned by TestAmerica upon sample receipt.
Sum Rpt Alpha Spec Rst(s)	The sum of the reported alpha spec results for tests derived from the same sample excluding duplicate result where the results are in the same units.
Work Order	The LIMS software assign test specific identifier.
Yield	The recovery of the tracer added to the sample such as Pu-242 used to trace a Pu-239/40 method.

Sample Results Summary

TestAmerica TARL

Ordered by Method, Batch No., Client Sample ID.

Date: 01-Jul-11

Report No. : 47257

SDG No: J01152

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDC or MDA	CRDL	RPD
1181041	7196_CR6								
	J1K3N2								
	MKK081AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	MKK081AD	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	3.50E-01	0.0
	J1K3N3								
	MKK091AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	J1K3N4								
	MKK1C1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	J1K3N5								
	MKK1D1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	J1K3N6								
	MKK1E1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	J1K3N7								
	MKK1F1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	J1K3N8								
	MKK1G1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	J1K3N9								
	MKK1H1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	J1K3P0								
	MKK1K1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	J1K3P1								
	MKK1L1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	J1K3P2								
	MKK1L1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	J1K3P3								
	MKK1N1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	J1K3P4								
	MKK1P1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	

No. of Results: 14

TestAmerica

rptSTLRchSaSummary2 V5.2.15
A2002

RPD - Relative Percent Difference.

U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

QC Results Summary

TestAmerica TARL

Ordered by Method, Batch No, QC Type,.

Date: 01-Jul-11

Report No. : 47257

SDG No.: J01152

Batch Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDC|MDA
7196_CR6								
1181041 MATRIX SPIKE, J1K3N2								
MKK081AC	HEXCHROME	3.91E+00 +- 0.0E+00		mg/kg	N/A	39%	-0.6	1.55E-01
1181041 LCS,								
MKK4E1AC	HEXCHROME	1.78E+01 +- 0.0E+00		mg/kg	N/A	89%	-0.1	1.55E-01
1181041 BLANK QC,								
MKK4E1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A			1.55E-01

No. of Results: 3

TestAmerica

rptSTLRchQcSummary V5.2.15
A2002

Bias - (Result/Expected)-1 as defined by ANSI N13.30.

U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 01-Jul-11

Lab Name:	TestAmerica	SDG:	J01152	Collection Date:	6/29/2011 8:40:00 AM
Lot-Sample No.:	J1F290487-1	Report No. :	47257	Received Date:	6/29/2011 3:40:00 PM
Client Sample ID:	J1K3N2	COC No. :	RC-181-018	Matrix:	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1181041	7196_CR6			Work Order:	MKK081AA		Report DB ID:	9MKK0810				
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	6/30/11 09:00 a		2.518	
							1.55E-01	*N/A*			g	

No. of Results: 1 Comments:

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 01-Jul-11

Lab Name:	TestAmerica	**SDG:**	J01152	**Collection Date:**	6/29/2011 8:50:00 AM
Lot-Sample No.:	J1F290487-2	**Report No. :**	47257	**Received Date:**	6/29/2011 3:40:00 PM
Client Sample ID:	J1K3N3	**COC No. :**	RC-181-018	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1181041	7196_CR6			**Work Order:**	MKK091AA		**Report DB ID:**	9MKK0910				
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	6/30/11 09:00 a		2.5183	
							1.55E-01	*N/A*			g	

No. of Results: 1 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 01-Jul-11

Lab Name:	TestAmerica	SDG:	J01152	Collection Date:	6/29/2011 9:00:00 AM
Lot-Sample No.:	J1F290487-3	Report No. :	47257	Received Date:	6/29/2011 3:40:00 PM
Client Sample ID:	J1K3N4	COC No. :	RC-181-018	Matrix:	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1181041	7196_CR6			Work Order:	MKK1C1AA		Report DB ID:	9MKK1C10				
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	6/30/11 09:00 a		2.5131	
							1.55E-01	*N/A*			g	

No. of Results: 1 Comments:

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 01-Jul-11

Lab Name:	TestAmerica	**SDG:**	J01152	**Collection Date:**	6/29/2011 9:10:00 AM
Lot-Sample No.:	J1F290487-4	**Report No. :**	47257	**Received Date:**	6/29/2011 3:40:00 PM
Client Sample ID:	J1K3N5	**COC No. :**	RC-181-018	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1181041	7196_CR6			**Work Order:** MKK1D1AA			**Report DB ID:** 9MKK1D10					
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	6/30/11 09:00 a		2.5173	
							1.55E-01	*N/A*			g	

No. of Results: 1 **Comments:**

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 01-Jul-11

Lab Name:	TestAmerica	SDG:	J01152	Collection Date:	6/29/2011 9:20:00 AM
Lot-Sample No.:	J1F290487-5	Report No. :	47257	Received Date:	6/29/2011 3:40:00 PM
Client Sample ID:	J1K3N6	COC No. :	RC-181-018	Matrix:	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1181041	7196_CR6			Work Order:	MKK1E1AA		Report DB ID:	9MKK1E10				
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	6/30/11 09:00 a		2.5141	
							1.55E-01	*N/A*			g	

No. of Results: 1 Comments:

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 01-Jul-11

Lab Name:	**TestAmerica**	**SDG:**	J01152	**Collection Date:**	6/29/2011 9:30:00 AM
Lot-Sample No.:	**J1F290487-6**	**Report No. :**	47257	**Received Date:**	6/29/2011 3:40:00 PM
Client Sample ID:	**J1K3N7**	**COC No. :**	RC-181-018	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1181041	7196_CR6			**Work Order:** MKK1F1AA			**Report DB ID:** 9MKK1F10					
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A 1.55E-01	*1.* *N/A*	6/30/11 09:00 a		2.5196 g	

No. of Results: 1 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 01-Jul-11

Lab Name:	TestAmerica	SDG:	J01152	Collection Date:	6/29/2011 9:40:00 AM
Lot-Sample No.:	J1F290487-7	Report No. :	47257	Received Date:	6/29/2011 3:40:00 PM
Client Sample ID:	J1K3N8	COC No. :	RC-181-018	Matrix:	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1181041	7196_CR6			Work Order:	MKK1G1AA		Report DB ID:	9MKK1G10				
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	6/30/11 09:00 a		2.5201	
							1.55E-01	*N/A*			g	

No. of Results: 1 Comments:

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 01-Jul-11

Lab Name:	TestAmerica	**SDG:**	J01152	**Collection Date:**	6/29/2011 9:50:00 AM
Lot-Sample No.:	J1F290487-8	**Report No. :**	47257	**Received Date:**	6/29/2011 3:40:00 PM
Client Sample ID:	J1K3N9	**COC No. :**	RC-181-018	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1181041	7196_CR6			**Work Order:**	MKK1H1AA		**Report DB ID:**	9MKK1H10				
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	6/30/11 09:00 a		2.5065	
							1.55E-01	*N/A*			g	

No. of Results: 1 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 01-Jul-11

Lab Name:	TestAmerica	**SDG:**	J01152	**Collection Date:**	6/29/2011 10:00:00 AM
Lot-Sample No.:	J1F290487-9	**Report No. :**	47257	**Received Date:**	6/29/2011 3:40:00 PM
Client Sample ID:	J1K3P0	**COC No. :**	RC-181-018	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1181041	7196_CR6			**Work Order:**	MKK1K1AA		**Report DB ID:**	9MKK1K10				
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	6/30/11 09:00 a		2.5128	
							1.55E-01	*N/A*			g	

No. of Results: 1 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 01-Jul-11

Lab Name:	TestAmerica	SDG:	J01152	Collection Date:	6/29/2011 10:10:00 AM
Lot-Sample No.:	J1F290487-10	Report No. :	47257	Received Date:	6/29/2011 3:40:00 PM
Client Sample ID:	J1K3P1	COC No. :	RC-181-018	Matrix:	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Frep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1181041	7196_CR6			Work Order:	MKK1L1AA		Report DB ID:	9MKK1L10				
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	6/30/11 09:00 a		2.5032	
							1.55E-01	*N/A*			g	

No. of Results: 1 Comments:

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 01-Jul-11

Lab Name:	TestAmerica	**SDG:**	J01152	**Collection Date:**	6/29/2011 10:20:00 AM
Lot-Sample No.:	J1F290487-11	**Report No. :**	47257	**Received Date:**	6/29/2011 3:40:00 PM
Client Sample ID:	J1K3P2	**COC No. :**	RC-181-018	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1181041	7196_CR6			**Work Order:**	MKK1L1AA		**Report DB ID:**	9MKK1M10				
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	6/30/11 09:00 a		2.5104	
							1.55E-01	*N/A*			g	

No. of Results: 1 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 01-Jul-11

Lab Name:	TestAmerica	**SDG:**	J01152	**Collection Date:**	6/29/2011 10:30:00 AM
Lot-Sample No.:	J1F290487-12	**Report No. :**	47257	**Received Date:**	6/29/2011 3:40:00 PM
Client Sample ID:	J1K3P3	**COC No. :**	RC-181-018	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1181041	7196_CR6			**Work Order:** MKK1N1AA			**Report DB ID:** 9MKK1N10					
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	6/30/11 09:00 a		2.5125	
							1.55E-01	*N/A*			g	

No. of Results: 1 **Comments:**

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 01-Jul-11

Lab Name:	TestAmerica	**SDG:**	J01152	**Collection Date:**	6/29/2011 10:00:00 AM
Lot-Sample No.:	J1F290487-13	**Report No. :**	47257	**Received Date:**	6/29/2011 3:40:00 PM
Client Sample ID:	J1K3P4	**COC No. :**	RC-181-018	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1181041	7196_CR6			**Work Order:**	MKK1P1AA		**Report DB ID:**	9MKK1P10				
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	6/30/11 09:00 a		2.5193	
							1.55E-01	*N/A*			g	

No. of Results: 1 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM II

Date: 01-Jul-11

DUPLICATE RESULTS

Lab Name:	TestAmerica	SDG:	J01152	Collection Date:	6/29/2011 8:40:00 AM
Lot-Sample No.:	J1F290487-1	Report No. :	47257	Received Date:	6/29/2011 3:40:00 PM
Client Sample ID:	J1K3N2	COC No. :	RC-181-018	Matrix:	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1181041	7196_CR6			Work Order: MKK081AD		Report DB ID: MKK081ER			Orig Sa DB ID: 9MKK0810			
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	1.	6/30/11 09:00 a		2.5034	
	1.55E-01	U	RPD 0.0			3.50E-01		N/A			g	

No. of Results: 1 Comments:

TestAmerica
rptSTLRchDupV5.2
.15 A2002

RPD - Relative Percent Difference.
MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, EDL or not identified by gamma scan software.

FORM II

BLANK RESULTS

Date: 01-Jul-11

Lab Name: TestAmerica

Matrix: SOIL

SDG: J01152

Report No. : 47257

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA ,	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1181041	7196_CR6			**Work Order:**	MKK4E1AA		**Report DB ID:**	MKK4E1AB				
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	1.	6/30/11 09:00 a		2.5	
						1.55E-01		N/A			g	

No. of Results: 1 **Comments:**

TestAmerica
rptSTLRchBlank
V5.2.15 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM II

LCS RESULTS

Date: 01-Jul-11

Lab Name: TestAmerica

Matrix: SOIL

SDG: J01152

Report No. : 47257

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA	Report Unit	Yield	Expected	Expected Uncert	Recovery, Bias	Analysis, Prep Date	Aliquot Size	Primary Detector
Batch: 1181041	7196_CR6			Work Order:	MKK4E1AC		Report DB ID:	MKK4E1AS					
HEXCHROME	1.78E+01			0.0E+00	1.55E-01	mg/kg	N/A	2.00E+01		89%	6/30/11 09:00 a	2.5	
							Rec Limits:	80	120	-0.1		g	

No. of Results: 1 Comments:

TestAmerica Bias - (Result/Expected)-1 as defined by ANSI N13.30.

rptSTLRchLcs
V5.2.15 A2002

FORM II

MATRIX SPIKE RESULTS

Date: 01-Jul-11

Lab Name: TestAmerica **SDG:** J01152

Lot-Sample No.: J1F290487-1, J1K3N2 **Report No. :** 47257 **Matrix:** SOIL

Parameter	SpikeResult, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA	Rpt Unit, CRDL	Yield	Rec-overy	Expected, Uncert	Analysis, Prep Date	Aliquot Size	Analy Method, Primary Detector
Batch: 1181041	Work Order:	MKK081AC		Report DB ID:	MKK081CW		Orig Sa DB ID:	9MKK0810				
HEXCHROME	3.91E+00			0.0E+00	1.55E-01	mg/kg	N/A	38.69%	1.01E+01	6/30/11 09:00 a	2.5092	7196_CR6
	1.55E-01										g	

Number of Results: 1

Comments:

TestAmerica
rptSTLRchMs
V5.2.15 A2002

RER - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.
Bias - (Result/Expected)-1 as defined by ANSI N13.30.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Richland Laboratory
Data Review Check List
Hexavalent Chromium

Batch Number(s): 1181041

Lab Sample Numbers or SDG: **J01152**

Method/Test/Parameter: **Cr+6 in SOLID / RL-WC-004**

Review Item	Yes (✓)	No (✓)	N/A (✓)	2nd Level Review (✓)
A. Initial Calibration 1. Performed at required frequency with required number of levels?	✓			✓
2. Correlation coefficient within QC limits?	✓			✓
3. Initial calibration verification (ICV) analyzed immediately after calibration and results within QC limits?	✓			✓
4. Initial calibration blank (ICB) analyzed immediately after ICV and concentrations of all parameters ≤ reporting limit?	✓			✓
B. Continuing Calibration 1. CCV analyzed at required frequency and all parameters within QC limits?	✓			✓
2. CCB analyzed at required frequency and all results ≤ reporting limit?	✓			✓
C. Sample Analysis 1. Were any samples with concentrations above the linear range for any parameter diluted and reanalyzed?			✓	✓
2. Were all sample holding times met?	✓			✓
D. QC Samples 1. All results for the preparation blank below limits?	✓			✓
2. MS or MS/MSD recoveries within QC limits and %RPD (for MSD) acceptable?		✓		✓
3. LCS percent recovery within QC limits and %RPD (for LCSD) acceptable?	✓			✓
4. Analytical spikes within QC limits where applicable?		✓		✓
5. ICP only: One serial dilution performed per SDG?			✓	✓
6. ICP only: CRDL standard (CRI or CRA) analyzed at required frequency?			✓	✓
7. ICP only: Interference check samples (ICSA, ICSAB) and HICAL analyzed at the required frequencies and within QC limits?			✓	✓

Review Item	Yes (✓)	No (✓)	N/A (✓)	2nd Level Review (✓)
E. Other	✓			
1. Are all nonconformances included and noted?				✓
2. Is the correct date and time of analysis shown?	✓			✓
3. Did the analyst sign and date the front page of the analytical run?	✓			✓
4. Correct methodology used?	✓			✓
5. Transcriptions checked?	✓			✓
6. Calculations checked at minimum frequency?	✓			✓
7. Units checked?	✓			✓

Comments on any "No" response: The MS recovered low at 38.7%. The insoluble MS recovered within limits at 100.9%. PDMS recovered at 87.1%.

Suspect reducing capacity in the sample, but not enough to exhaust the more copious insoluble MS.

Analyst: H.R. Date: 7-1-11

Second-Level Review: Date: 7/1/11

Clouseau
Nonconformance Memo

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

NCM #: **10-18693**
NCM Initiated By: Hooshang Rahavi
Date Opened: 07/01/2011
Date Closed:

Classification: **Anomaly**
Status: **PMREVIEW**
Production Area: Classical Chemistry
Tests: 7196A
Lot #'s (Sample #'s): J1F290487 (1,10,11,12,13,2,3,4,5,6,7,8,9),
QC Batches: 1181041,

Nonconformance: QC data exceeded criteria
Subcategory: MS/MSD accuracy and/or precision out of control

Problem Description / Root Cause

Name	Date	Description
Hooshang Rahavi	07/01/2011	The MS recovered low at 38.7%. The insoluble MS recovered within limits at 100.9%. PDMS recovered at 87.1%. Suspect reducing capacity in the sample, but not enough to exhaust the more copious insoluble MS.

Corrective Action

Name	Date	Corrective Action
Hooshang Rahavi	07/01/2011	Report data

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note	Response	Response Note

Quality Assurance Verification

Verified By	Due Date	Status	Notes
		This section not yet completed by QA.	

Approval History

Date Approved	Approved By	Position

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-181-018	Page 1 of 3

Collector RICE, DD	**Company Contact** JL Russell	**Telephone No.** (509) 380-8093	**Project Coordinator** KESSNER, JH
Price Code ~~8L~~ 8C JR 6/29/11	**Data Turnaround** ~~21 Days~~ 15/15 JR 6/29/11		
Project Designation ARRA 100F Remaining Sites Remediation - Soil Full Protoc	**Sampling Location** 100-F-55/62 VERIFICATION (NX)		**SAF No.** RC-181
Ice Chest No. NA	**Field Logbook No.** EL-1651-01	**COA** S00F552000	**Method of Shipment** Hand Deliver
Shipped To TestAmerica Incorporated, Richland	**Offsite Property No.** NA		**Bill of Lading/Air Bill No.** NA

POSSIBLE SAMPLE HAZARDS/REMARKS

None

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	G/P	aG	aG	aG	aG				
No. of Container(s)	1	1	1	1	1	1				
Volume	60mL	60mL	120mL	120mL	120mL	120mL				
SAMPLE ANALYSIS	See item (1) in Special Instructions. JR 6/29/11	Chromium Hex - 7196	Semi-VOA - 8270A (TCL)	PAHs - 8310 JR 6/29/11	PCBs - 8082	Pesticides - 8081	J1F290487			

Sample No.	Matrix *	Sample Date	Sample Time									
J1K3N2	SOIL	6-29-11	0840		X						MKK08	1
J1K3N3	SOIL	6-29-11	0850		X						MKK09	2
J1K3N4	SOIL	6-29-11	0900		X						MKK1C	3
J1K3N5	SOIL	6-29-11	0910		X						MKK1D	4
J1K3N6	SOIL	6-29-11	0920		X						MKK1E	5

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

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
David O. Rice	6-29-11 1330	JL Russell	6/29/11 1330
JL Russell	6/29/11 1500	1060 #1 A. PORTER	6-29-11 1500
1060 #1 A. PORTER / WCH	6-29-11 1540	TAR Lucas Velazquez	6/29/11 1540

SPECIAL INSTRUCTIONS

~~(1) ICP Metals - 6010TR (Close-out 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)~~ AP 6-29-11

SDG J01152

Due 7.14.11

REVIEWED BY AF DATE 6-29-11

Matrix *

S=Soil
SE=Sediment
SO=Solid
SI=Sludge
W = Water
O=Oil
A=Air
DS=Drum Solids
DL=Drum Liquids
T=Tissue
WI=Wipe
L=Liquid
V=Vegetation
X=Other

LABORATORY SECTION	Received By	Title	Date/Time
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

WCH-EE-011

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-181-018	Page 2 of 3
Collector: RICE, DD	Company Contact: JL Russell; Telephone No.: (509) 380-8093	Project Coordinator: KESSNER, JH	Price Code: ~~8L~~ 8C (JR 6/29/11); Data Turnaround: ~~21 Days~~ 15/15 (JR 6/29/11)
Project Designation: ARRA 100F Remaining Sites Remediation - Soil Full Protoc	Sampling Location: 100-F-55/62 VERIFICATION (NX)	SAF No.: RC-181	
Ice Chest No.: NA	Field Logbook No.: EL-1651-01; COA: S00F552000	Method of Shipment: Hand Deliver	
Shipped To: TestAmerica Incorporated, Richland	Offsite Property No.: NA	Bill of Lading/Air Bill No.: NA	

POSSIBLE SAMPLE HAZARDS/REMARKS

None

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	G/P	aG	aG	aG	aG				
No. of Container(s)	1	1	1	1	1	1				
Volume	60mL	60mL	120mL	120mL	120mL	120mL				
SAMPLE ANALYSIS	See item (1) in Special Instructions. (6/29/11)	Chromium Hex - 7196	Semi-VOA - 8270A (TCL)	PAHs - 8310 (6/29/11)	PCBs - 8082	Pesticides - 8081				

Sample No.	Matrix *	Sample Date	Sample Time									
J1K3N7	SOIL	6-29-11	0930		X						MKK1F	6
J1K3N8	SOIL	6-29-11	0940		X						MKK1G	7
J1K3N9	SOIL	6-29-11	0950		X						MKK1H	8
J1K3P0	SOIL	6-29-11	1000		X						MKK1K	9
J1K3P1	SOIL	6-29-11	1010		X						MKK1L	10

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

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
David D. Rice	6-29-11 1330	Len Russell / JL Russell	6/29/11 1330
Len Russell / JL Russell	6/29/11 1500	A-PORTER / APR (1060 #1)	6-29-11 1500
A-PORTER / WCH (1060 #1)	6-29-11 1540	Lucas Velazquez / LVelazquez	6/29/11 1540

SPECIAL INSTRUCTIONS

~~(1) ICP Metals - 6010TR (Close-out 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)~~ AP 6-29-11

REVIEWED BY AF
DATE 6-29-11

Matrix *
S=Soil
SE=Sediment
SO=Solid
SL=Sludge
W = Water
O=Oil
A=Air
DS=Drum Solids
DL=Drum Liquids
T=Tissue
WI=Wipe
L=Liquid
V=Vegetation
X=Other

LABORATORY SECTION	Received By	Title	Date/Time
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

WCH-EE-011

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-181-018	Page 3 of 3

Collector RICE, DD	Company Contact JL Russell	Telephone No. (509) 380-8093	Project Coordinator KESSNER, JH
Project Designation ARRA 100F Remaining Sites Remediation - Soil Full Protoc	Sampling Location 100-F-55/62 VERIFICATION (NX)		SAF No. RC-181
Ice Chest No. NA	Field Logbook No. EL-1651-01	COA S00F552000	Method of Shipment Hand Deliver
Shipped To TestAmerica Incorporated, Richland	Offsite Property No. NA		Bill of Lading/Air Bill No. NA

Price Code ~~8L~~ JR 6/29/11 8C

Data Turnaround ~~21 Days~~ JR 6/29/11 15/15

POSSIBLE SAMPLE HAZARDS/REMARKS

None

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	G/P	aG	aG	aG	aG					
No. of Container(s)	1	1	1	1	1	1					
Volume	60mL	60mL	120mL	120mL	120mL	120mL					
SAMPLE ANALYSIS	See item (1) in Special Instructions. JR 6/29/11	Chromium Hex - 7196	Semi-VOA - 8270A (TCL)	PAHs - 8310 JR 6/29/11	PCBs - 8082	Pesticides - 8081					
Sample No.	Matrix *	Sample Date	Sample Time								
J1K3P2	SOIL	6-29-11	1020		X					MKK1M	NX-11
J1K3P3	SOIL	6-29-11	1030		X					MKK1N	NX-12
J1K3P4	SOIL	6-29-11	1000		X					MKK1P	DUP
~~J1K3P5~~ ~~JR 6/29/11~~	SOIL										

CHAIN OF POSSESSION — Sign/Print Names

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
David P. Rice	6-29-11 1330	Jen Russell / JL Russell	6/29/11 1330
Jen Russell / JL Russell	6/29/11 1500	106071 A. Porter	6-29-11 1500
106071 A. PORTER / WCH	6-29-11 1540	TAIR Lucas Velazquez	6/29/11 1540

SPECIAL INSTRUCTIONS

~~(1) ICP Metals - 6010TR (Close-out 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)~~ AP 6-29-11

SI

REVIEWED BY AJ DATE 6-29-11

Matrix *
S=Soil
SE=Sediment
SO=Solid
SL=Sludge
W = Water
O=Oil
A=Air
DS=Drum Solids
DL=Drum Liquids
T=Tissue
WI=Wipe
L=Liquid
V=Vegetation
X=Other

LABORATORY SECTION	Received By	Title	Date/Time
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

WCH-EE-011

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 6/29/11 @ 1540 GM Screen Result: (Airlock) 66 Initials HC
(Sample Receiving) 108 Initials HC

Client: WCH SDG #: J01152 NA [ ] SAF #: RC-181 NA [ ]

Lot Number: J1F290487

Chain of Custody # RC-181-018

Shipping Container ID: Hand delivered NA [ ]

Samples received inside shipping container/cooler/box Yes HC Continue with 1 through 4. Initial appropriate response.
No [ ] Go to 5, add comment to #16.

1. Custody Seals on shipping container intact? Yes [ ] No [ ] No Custody Seal HC
2. Custody Seals dated and signed? Yes [ ] No [ ] No Custody Seal HC
3. Cooler temperature: A °C on ice NA [ ]
4. Vermiculite/packing materials is NA [ ] Wet [ ] Dry HC

Item 5 through 16 for samples. Initial appropriate response.

5. Chain of Custody record present? Yes HC No [ ] HC 6/29/11
6. Number of samples received (Each sample may contain multiple bottles): 13 & Samples @ 1 jar
7. Containers received: 13 x 60mL jar

8. Sample holding times exceeded? NA [ ] Yes [ ] No HC
9. Samples have:
   ___ tape
   HC custody seals
   ___ hazard labels
   HC appropriate sample labels
10. Matrix:
    HC A (FLT, Wipe, Solid, Soil)
    ___ S (Air, Niosh 7400)
    ___ I (Water)
    ___ T (Biological, Ni-63)
    J1F290487
11. Samples:
    HC are in good condition
    ___ are broken
    ___ are leaking
    ___ have air bubbles (Only for samples requiring no head space)
    ___ Other
12. Sample pH appropriate for analysis requested Yes [ ] No [ ] NA HC
    (If acidification is necessary, then document sample ID, initial pH, amount of HNO_3 added and pH after addition on table overleaf)
    RPL ID # of preservative used :
13. Were any anomalies identified in sample receipt? Yes [ ] No HC
14. Description of anomalies (include sample numbers): NA HC

LS-023, Rev. 14, 06/11 See over for additional information.

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15. Sample Location, Sample Collector Listed on COC? * Yes [✓] No [ ]
*For documentation only. No corrective action needed.

16. Additional Information: _____

[ ] Client/Courier denied temperature check. [✓] Client/Courier unpack cooler.

Sample Custodian: Haylee Carnes Date: 6/29/11 @ 1540

Client Informed on _____ by _____ Person contacted _____

[✓] No action necessary; process as is

Project Manager [signature] Date 6/29/11

SAMPLE ID	Initial pH	Acid Amt	Final pH	SAMPLE ID	Initial pH	Acid Amt	Final pH

6/30/2011 8:14:44 AM

Sample Preparation/Analysis

127642, Washington Closure Hanford LLC , DW Alkaline Digestion by method 3060A
Bechtel Hanford, Inc. EA Chromium, Hexavalent (7196A)

AnalyDueDate: 07/14/2011 5I CLIENT: HANFORD

Batch: 1181041 SOIL mg/kg PM, Quote: RW2, 27038
SEQ Batch, Test: None

Balance Id: JO1152
Pipet #:
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MKK08-1-AA J1F290487-1-SAMP 06/29/2011 08:40		2.5150 AmtRec: 1X60MLAG	#Containers: 1					Scr:	Alpha:	Beta:
2 MKK08-1-AC-S J1F290487-1-MS 06/29/2011 08:40		2.5092 AmtRec: 1X60MLAG	#Containers: 1					Scr:	Alpha:	Beta:
3 MKK08-1-AD-X J1F290487-1-DUP 06/29/2011 08:40		2.5034 / pbcro4: 2.5055 AmtRec: 1X60MLAG	#Containers: 1					Scr:	Alpha:	Beta:
4 MKK09-1-AA J1F290487-2-SAMP 06/29/2011 08:50		2.5183 AmtRec: 1X60MLAG	#Containers: 1					Scr:	Alpha:	Beta:
5 MKK1C-1-AA J1F290487-3-SAMP 06/29/2011 09:00		2.5131 AmtRec: 1X60MLAG	#Containers: 1					Scr:	Alpha:	Beta:
6 MKK1D-1-AA J1F290487-4-SAMP 06/29/2011 09:10		2.5173 AmtRec: 1X60MLAG	#Containers: 1					Scr:	Alpha:	Beta:
7 MKK1E-1-AA J1F290487-5-SAMP 06/29/2011 09:20		2.5191 AmtRec: 1X60MLAG	#Containers: 1					Scr:	Alpha:	Beta:

6/30/2011 8:14:45 AM

Sample Preparation/Analysis

127642, Washington Closure Hanford LLC
Bechtel Hanford, Inc.

DW Alkaline Digestion by method 3060A
EA Chromium, Hexavalent (7196A)
5I CLIENT: HANFORD

Balance Id:
Pipet #:
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 07/14/2011

Batch: 1181041 SOIL mg/kg PM, Quote: RW2, 27038
SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 MKK1F-1-AA J1F290487-6-SAMP 06/29/2011 09:30		2.5196 AmtRec: 1X60MLAG	#Containers: 1					Scr:	Alpha:	Beta:
9 MKK1G-1-AA J1F290487-7-SAMP 06/29/2011 09:40		2.5201 AmtRec: 1X60MLAG	#Containers: 1					Scr:	Alpha:	Beta:
10 MKK1H-1-AA J1F290487-8-SAMP 06/29/2011 09:50		2.5065 AmtRec: 1X60MLAG	#Containers: 1					Scr:	Alpha:	Beta:
11 MKK1K-1-AA J1F290487-9-SAMP 06/29/2011 10:00		2.5128 AmtRec: 1X60MLAG	#Containers: 1					Scr:	Alpha:	Beta:
12 MKK1L-1-AA J1F290487-10-SAMP 06/29/2011 10:10		2.5032 AmtRec: 1X60MLAG	#Containers: 1					Scr:	Alpha:	Beta:
13 MKK1M-1-AA J1F290487-11-SAMP 06/29/2011 10:20		2.5104 AmtRec: 1X60MLAG	#Containers: 1					Scr:	Alpha:	Beta:
14 MKK1N-1-AA J1F290487-12-SAMP 06/29/2011 10:30		2.5125 AmtRec: 1X60MLAG	#Containers: 1					Scr:	Alpha:	Beta:

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6/30/2011 8:14:45 AM

Sample Preparation/Analysis

127642, Washington Closure Hanford LLC , Bechtel Hanford, Inc.

DW Alkaline Digestion by method 3060A
EA Chromium, Hexavalent (7196A)
5I CLIENT: HANFORD

Balance Id:
Pipet #:
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 07/14/2011

Batch: 1181041 SOIL mg/kg PM, Quote: RW2, 27038

SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count (24hr)	On | Off Circle	CR Analyst, Init/Date	Comments:
15 MKK1P-1-AA J1F290487-13-SAMP 06/29/2011 10:00		2.5193 AmtRec: 1X60MLAG	#Containers: 1							Scr: Alpha: Beta:	
16 MKK4E-1-AA-B J1F300000-41-BLK 06/30/2011 08:14 pd		AmtRec:	#Containers: 1							Scr: Alpha: Beta:	
17 MKK4E-1-AC-C J1F300000-41-LCS 06/30/2011 08:14 pd		AmtRec:	#Containers: 1							Scr: Alpha: Beta:	

Comments:

```
All Clients for Batch:
   127642, Washington Closure Hanford LLC          Bechtel Hanford, Inc.        , RW2, 27038

MKK081AA-SAMP Constituent List:
  HEXCHROME   RDL:0.1548      mg/kg     LCL:80      UCL:120     RPD:20
MKK081AC-MS Constituent List:

MKK4E1AA-BLK:

MKK4E1AC-LCS:

MKK081AA-SAMP Calc Info:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
MKK081AC-MS Calc Info:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
MKK4E1AA-BLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
```

Sample Preparation/Analysis

DW Alkaline Digestion by method 3060A
EA Chromium, Hexavalent (7196A)
5I CLIENT: HANFORD

Balance Id:
Pipet #:
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 07/14/2011

Batch: 1181041 mg/kg
SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

MKK4E1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

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ANALYTICAL REPORT

Job Number: 280-17587-1

SDG Number: J01152

Job Description: SAF# RC-181

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

Attention: Joan H Kessner

RECEIVED
JUL 2011

Approved for release.
Kae E Yoder
Project Manager II
7/18/2011 2:17 PM

Kae E Yoder
Project Manager II
kae.yoder@testamericainc.com
07/18/2011

The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Denver Project Manager.

The Lab Certification ID# is E87667.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

TestAmerica Laboratories, Inc.
TestAmerica Denver 4955 Yarrow Street, Arvada, CO 80002
Tel (303) 736-0100 Fax (303) 431-7171 www.testamericainc.com

ACCREDITED IN ACCORDANCE WITH nelac

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CASE NARRATIVE

Client: Washington Closure Hanford

Project: WASHINGTON CLOSURE HANFORD

Report Number: 280-17587-1

SDG #: J01152
SAF#: RC-181

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

CLIENT ID	LAB ID	ANALYSES REQUESTED	ANALYSES PERFORMED
J1K3N2	280-17587-1	6010/7471/8270A/8310/8082/8081	6010B/7471A/8270C/8310/8082/8081A
J1K3N3	280-17587-2	6010/7471/8270A/8310/8082/8081	6010B/7471A/8270C/8310/8082/8081A
J1K3N4	280-17587-3	6010/7471/8270A/8310/8082/8081	6010B/7471A/8270C/8310/8082/8081A
J1K3N5	280-17587-4	6010/7471/8270A/8310/8082/8081	6010B/7471A/8270C/8310/8082/8081A
J1K3N6	280-17587-5	6010/7471/8270A/8310/8082/8081	6010B/7471A/8270C/8310/8082/8081A
J1K3N7	280-17587-6	6010/7471/8270A/8310/8082/8081	6010B/7471A/8270C/8310/8082/8081A
J1K3N8	280-17587-7	6010/7471/8270A/8310/8082/8081	6010B/7471A/8270C/8310/8082/8081A
J1K3N9	280-17587-8	6010/7471/8270A/8310/8082/8081	6010B/7471A/8270C/8310/8082/8081A
J1K3P0	280-17587-9	6010/7471/8270A/8310/8082/8081	6010B/7471A/8270C/8310/8082/8081A
J1K3P1	280-17587-10	6010/7471/8270A/8310/8082/8081	6010B/7471A/8270C/8310/8082/8081A
J1K3P2	280-17587-11	6010/7471/8270A/8310/8082/8081	6010B/7471A/8270C/8310/8082/8081A
J1K3P3	280-17587-12	6010/7471/8270A/8310/8082/8081	6010B/7471A/8270C/8310/8082/8081A
J1K3P4	280-17587-13	6010/7471/8270A/8310/8082/8081	6010B/7471A/8270C/8310/8082/8081A
J1K3P5	280-17587-14	6010/7471/8270A	6010B/7471A/8270C

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 7/1/2011; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 2.7 C.

GC/MS SEMIVOLATILES - SW846 8270C
Compounds Benzo(b)fluoranthene and Benzo(k)fluoranthene were unresolved in several samples due to matrix interferences. It can be noted that these compounds were adequately resolved in associated standards, indicating the instrument is achieving separation. The combined peak was reported as Benzo(b)fluoranthene, while Benzo(k)fluoranthene was reported as undetected even though it may be present. Associated results have been flagged with a "K".

Low levels of Bis(2-ethylhexyl) phthalate, a common laboratory contaminant, are present in the method blank associated with batch 280-74911. Because the concentration in the method blank is not present at a level greater than the reporting limit, corrective action is deemed unnecessary. Associated sample results present above the MDL and/or RL have been flagged with a "B".

No other anomalies were encountered.

GC SEMIVOLATILES - SW846 8081A - PESTICIDEs

The organic prep laboratory noted that a Florisil clean-up was performed on the samples presented in this report to reduce matrix interferences.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. In some cases, due to the nature of the sample matrix, samples had to be analyzed at dilutions, and the associated results have been flagged with a "D". The reporting limits have been adjusted relative to the dilutions required.

In some cases, sample surrogate recoveries have been "D" flagged, as the recoveries obtained are calculated from diluted samples and are not considered reliable.

The RPD between the primary and confirmation columns exceeded 40% for analytes in samples J1K3N8 and J1K3P0. The lower of the two values have been reported, as matrix interference is evident. Associated results have been flagged with an "X".

Spike compound recoveries, RPD data and surrogate recoveries have been "D" flagged in the MS and MSD performed on sample J1K3N3, as the recoveries obtained are calculated from diluted samples and are not considered reliable. The acceptable LCS analysis data indicated that the analytical system was operating within control.

Continuing Calibration Verification (CCV) standards exhibited %Difference (%D) values >15%, biased low, as detailed below. The overall mean %D is ≤15%; therefore, method criteria have been met and corrective action is deemed unnecessary. Sequence is as follows: CCV1, J1K3N8, CCV2, J1K3N4, CCV3, J1K3N9, J1K3P2, CCV4

CCV1: All ok
CCV2: 4,4'-DDT -20%, Methoxychlor -16%, Toxaphene -22%
CCV3: 4,4'-DDT -33%, Methoxychlor -26%
CCV4: 4,4'-DDT -24%, Methoxychlor -17%

No other anomalies were encountered.

GC SEMIVOLATILES - SW846 8082 - PCBs

Samples J1K3N2, J1K3N3, J1K3N5, J1K3N7, J1K3N8, J1K3N9, J1K3P0, J1K3P1, J1K3P2 and J1K3P4 appear to contain polychlorinated biphenyls (PCBs); however, due to weathering or other environmental processes, the PCBs in the samples do not closely match any of the laboratory's Aroclor standards used for instrument calibration. The samples have been quantified and reported as Aroclor 1260; however, due to the poor match with the Aroclor standard(s), there is increased qualitative and quantitative uncertainty associated with these results.

In some cases, the RPD between the primary and confirmation columns exceeded 25% for Aroclor 1260. Associated results have been flagged with a "P".

No other anomalies were encountered.

HPLC - SW846 8310 - PAHs

In some cases, the RPD between the primary and confirmation columns exceeded 40%. The lower of the two values have been reported, as matrix interference is evident. Associated results have been flagged with an "X".

No other anomalies were encountered.

TOTAL METALS - SW846 6010B/7471A

Serial dilution of a digestate in batch 280-74997 indicates that physical and chemical interferences are present for Cobalt and Nickel. Results have been flagged with an "X".

Low levels of Silver are present in the method blank associated with batch 280-74997. Because the concentration in the method blank is not present at a level greater than the reporting limit, corrective action is deemed unnecessary.

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 J1K3N2; therefore, control limits are not applicable.

The duplicate analysis of sample J1K3N2 exhibited RPD data outside the control limits for Mercury, 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: 280-17587-1
Sdg Number: J01152

Lab Section	Qualifier	Description
GC/MS Semi VOA		
	B	Analyte was found in the associated method blank as well as in the sample.
	U	Analyzed for but not detected.
	K	Benzo (b&k) fluoranthene are unresolved due to matrix, result is reported as Benzo(b)fluoranthene.
	J	Indicates an Estimated Value for TICs
	N	Presumptive evidence of material.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
GC Semi VOA		
	U	Analyzed for but not detected.
	X	More than 40% difference between columns, lower result reported.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	D	The reported value is from a dilution.
	P	This flag is used for an aroclor target analyte where there is greater than 25% difference for detected concentrations between the two GC columns
Metals		
	U	Analyzed for but not detected.
	B	Estimated result. Result is less than the RL, but greater than MDL
	4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
	M	Sample duplicate precision not met.
	X	Serial dilution in the analytical batch indicates that physical and chemical interferences are present.

DATA REPORTING QUALIFIERS

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Lab Section	Qualifier	Description
General Chemistry		
	U	Analyzed for but not detected.
HPLC/IC		
	U	Analyzed for but not detected.
	X	More than 40% difference between columns, lower result reported.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

METHOD SUMMARY

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

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
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

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: 280-17587-1
Sdg Number: J01152

Method	Analyst	Analyst ID
SW846 8270C	Hoffman, Michael G	MGH
SW846 8270C	Tinkham, Sarah A	SAT
SW846 8081A	Reann, Brian E	BER
SW846 8081A	Wells, David	DW
SW846 8082	Pavlakovich, Adam M	AMP
SW846 6010B	Harre, John K	JKH
SW846 7471A	Niman, Katie M	KMN
ASTM D-2216	Gomer, Matthew R	MRG
SW846 8310	Hall, Koley J	KJH

SAMPLE SUMMARY

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-17587-1	J1K3N2	Solid	06/29/2011 0840	07/01/2011 0930
280-17587-2	J1K3N3	Solid	06/29/2011 0850	07/01/2011 0930
280-17587-3	J1K3N4	Solid	06/29/2011 0900	07/01/2011 0930
280-17587-4	J1K3N5	Solid	06/29/2011 0910	07/01/2011 0930
280-17587-5	J1K3N6	Solid	06/29/2011 0920	07/01/2011 0930
280-17587-6	J1K3N7	Solid	06/29/2011 0930	07/01/2011 0930
280-17587-7	J1K3N8	Solid	06/29/2011 0940	07/01/2011 0930
280-17587-8	J1K3N9	Solid	06/29/2011 0950	07/01/2011 0930
280-17587-9	J1K3P0	Solid	06/29/2011 1000	07/01/2011 0930
280-17587-10	J1K3P1	Solid	06/29/2011 1010	07/01/2011 0930
280-17587-11	J1K3P2	Solid	06/29/2011 1020	07/01/2011 0930
280-17587-12	J1K3P3	Solid	06/29/2011 1030	07/01/2011 0930
280-17587-13FD	J1K3P4	Solid	06/29/2011 1000	07/01/2011 0930
280-17587-14EB	J1K3P5	Solid	06/29/2011 0925	07/01/2011 0930

SAMPLE RESULTS

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N2**

Lab Sample ID: 280-17587-1
Client Matrix: Solid
% Moisture: 1.6

Date Sampled: 06/29/2011 0840
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1510.D
Dilution:	1.0			Initial Weight/Volume:	32.8 g
Analysis Date:	07/06/2011 2139			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		9.6	U	9.6	310
Acenaphthylene		16	U	16	310
Anthracene		16	U	16	310
Benzo[a]anthracene		40	J	19	310
Benzo[a]pyrene		37	J	19	310
Benzo[b]fluoranthene		65	J K	24	310
Benzo[ghi]perylene		24	J	15	310
Benzo[k]fluoranthene		37	U K	37	310
Bis(2-chloroethoxy)methane		21	U	21	310
Bis(2-chloroethyl)ether		15	U	15	310
bis (2-chloroisopropyl) ether		21	U	21	310
Bis(2-ethylhexyl) phthalate		68	J B	43	310
4-Bromophenyl phenyl ether		18	U	18	310
Butyl benzyl phthalate		40	U	40	310
Carbazole		33	U	33	310
4-Chloroaniline		76	U	76	310
4-Chloro-3-methylphenol		61	U	61	310
2-Chloronaphthalene		9.3	U	9.3	310
2-Chlorophenol		20	U	20	310
4-Chlorophenyl phenyl ether		20	U	20	310
Chrysene		44	J	25	310
Dibenz(a,h)anthracene		18	U	18	310
Dibenzofuran		19	U	19	310
1,2-Dichlorobenzene		20	U	20	310
1,3-Dichlorobenzene		11	U	11	310
1,4-Dichlorobenzene		13	U	13	310
3,3'-Dichlorobenzidine		84	U	84	610
2,4-Dichlorophenol		9.3	U	9.3	310
Diethyl phthalate		24	U	24	310
2,4-Dimethylphenol		61	U	61	310
Dimethyl phthalate		21	U	21	310
Di-n-butyl phthalate		27	U	27	310
4,6-Dinitro-2-methylphenol		310	U	310	610
2,4-Dinitrophenol		310	U	310	770
2,4-Dinitrotoluene		61	U	61	310
2,6-Dinitrotoluene		26	U	26	310
Di-n-octyl phthalate		13	U	13	310
Fluoranthene		71	J	33	310
Fluorene		17	U	17	310
Hexachlorobenzene		27	U	27	310
Hexachlorobutadiene		9.3	U	9.3	310
Hexachlorocyclopentadiene		46	U	46	310
Hexachloroethane		20	U	20	310
Indeno[1,2,3-cd]pyrene		21	J	20	310
Isophorone		16	U	16	310
2-Methylnaphthalene		18	U	18	310

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N2**

Lab Sample ID: 280-17587-1
Client Matrix: Solid
% Moisture: 1.6

Date Sampled: 06/29/2011 0840
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1510.D
Dilution:	1.0			Initial Weight/Volume:	32.8 g
Analysis Date:	07/06/2011 2139			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			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		46	U	46	310
3-Nitroaniline		68	U	68	310
4-Nitroaniline		67	U	67	310
Nitrobenzene		20	U	20	310
2-Nitrophenol		9.3	U	9.3	310
4-Nitrophenol		90	U	90	610
N-Nitrosodi-n-propylamine		29	U	29	310
N-Nitrosodiphenylamine		20	U	20	310
Pentachlorophenol		310	U	310	610
Phenanthrene		39	J	16	310
Phenol		17	U	17	310
Pyrene		74	J	11	310
1,2,4-Trichlorobenzene		26	U	26	310
2,4,5-Trichlorophenol		9.3	U	9.3	310
2,4,6-Trichlorophenol		9.3	U	9.3	310

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	86		50 - 120
2-Fluorophenol	86		53 - 120
Nitrobenzene-d5	84		50 - 120
Phenol-d5	89		52 - 120
Terphenyl-d14	97		55 - 120
2,4,6-Tribromophenol	101		51 - 120

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N2**

Lab Sample ID: 280-17587-1
Client Matrix: Solid
% Moisture: 1.6

Date Sampled: 06/29/2011 0840
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1510.D
Dilution:	1.0			Initial Weight/Volume:	32.8 g
Analysis Date:	07/06/2011 2139			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			Injection Volume:	0.5 uL

Tentatively Identified Compounds **Number TIC's Found:** 7

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	1.65	670	N J
	Unknown	3.26	5900	N J
112-95-8	Eicosane	11.73	240	N J
629-92-5	Nonadecane	12.39	180	N J
	Unknown	13.48	160	N J
	Unknown	14.36	420	N J
	Unknown	14.58	170	N J

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N3**

Lab Sample ID: 280-17587-2
Client Matrix: Solid
% Moisture: 0.9

Date Sampled: 06/29/2011 0850
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1513.D
Dilution:	1.0			Initial Weight/Volume:	31.1 g
Analysis Date:	07/06/2011 2241			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			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		28	J K	26	320
Benzo[ghi]perylene		16	J	16	320
Benzo[k]fluoranthene		39	U K	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		91	J B	45	320
4-Bromophenyl phenyl ether		19	U	19	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		19	U	19	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		42	J	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		19	U	19	320

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N3**

Lab Sample ID: 280-17587-2
Client Matrix: Solid
% Moisture: 0.9

Date Sampled: 06/29/2011 0850
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1513.D
Dilution:	1.0			Initial Weight/Volume:	31.1 g
Analysis Date:	07/06/2011 2241			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			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	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	320	640
Phenanthrene		17	U	17	320
Phenol		18	U	18	320
Pyrene		23	J	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	83		50 - 120
2-Fluorophenol	82		53 - 120
Nitrobenzene-d5	83		50 - 120
Phenol-d5	85		52 - 120
Terphenyl-d14	93		55 - 120
2,4,6-Tribromophenol	96		51 - 120

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N3**

Lab Sample ID: 280-17587-2
Client Matrix: Solid
% Moisture: 0.9

Date Sampled: 06/29/2011 0850
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1513.D
Dilution:	1.0			Initial Weight/Volume:	31.1 g
Analysis Date:	07/06/2011 2241			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	1.65	730	N J
	Unknown	3.26	6200	N J
112-95-8	Eicosane	11.72	160	N J

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N4**

Lab Sample ID: 280-17587-3
Client Matrix: Solid
% Moisture: 0.9

Date Sampled: 06/29/2011 0900
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1514.D
Dilution:	1.0			Initial Weight/Volume:	31.7 g
Analysis Date:	07/06/2011 2301			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		9.8	U	9.8	320
Acenaphthylene		16	U	16	320
Anthracene		25	J	16	320
Benzo[a]anthracene		120	J	19	320
Benzo[a]pyrene		110	J	19	320
Benzo[b]fluoranthene		210	J K	25	320
Benzo[ghi]perylene		71	J	15	320
Benzo[k]fluoranthene		38	U K	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		71	J B	44	320
4-Bromophenyl phenyl ether		18	U	18	320
Butyl benzyl phthalate		41	U	41	320
Carbazole		34	U	34	320
4-Chloroaniline		78	U	78	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		140	J	26	320
Dibenz(a,h)anthracene		21	J	18	320
Dibenzofuran		19	U	19	320
1,2-Dichlorobenzene		21	U	21	320
1,3-Dichlorobenzene		11	U	11	320
1,4-Dichlorobenzene		13	U	13	320
3,3'-Dichlorobenzidine		86	U	86	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		360		34	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		60	J	21	320
Isophorone		16	U	16	320
2-Methylnaphthalene		18	U	18	320

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N4**

Lab Sample ID: 280-17587-3
Client Matrix: Solid
% Moisture: 0.9

Date Sampled: 06/29/2011 0900
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1514.D
Dilution:	1.0			Initial Weight/Volume:	31.7 g
Analysis Date:	07/06/2011 2301			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			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		69	U	69	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	320	630
Phenanthrene		220	J	16	320
Phenol		17	U	17	320
Pyrene		270	J	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	83		50 - 120
2-Fluorophenol	82		53 - 120
Nitrobenzene-d5	82		50 - 120
Phenol-d5	86		52 - 120
Terphenyl-d14	93		55 - 120
2,4,6-Tribromophenol	93		51 - 120

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N4**

Lab Sample ID: 280-17587-3
Client Matrix: Solid
% Moisture: 0.9

Date Sampled: 06/29/2011 0900
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1514.D
Dilution:	1.0			Initial Weight/Volume:	31.7 g
Analysis Date:	07/06/2011 2301			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	1.65	480	N J
	Unknown	3.26	5500	N J
	Unknown	10.73	150	N J

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N5**

Lab Sample ID: 280-17587-4
Client Matrix: Solid
% Moisture: 1.2

Date Sampled: 06/29/2011 0910
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1530.D
Dilution:	1.0			Initial Weight/Volume:	32.4 g
Analysis Date:	07/07/2011 0430			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		9.6	U	9.6	310
Acenaphthylene		16	U	16	310
Anthracene		16	U	16	310
Benzo[a]anthracene		42	J	19	310
Benzo[a]pyrene		42	J	19	310
Benzo[b]fluoranthene		70	J K	25	310
Benzo[ghi]perylene		25	J	15	310
Benzo[k]fluoranthene		37	U K	37	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		69	J B	43	310
4-Bromophenyl phenyl ether		18	U	18	310
Butyl benzyl phthalate		40	U	40	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		55	J	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		84	U	84	620
2,4-Dichlorophenol		9.4	U	9.4	310
Diethyl phthalate		24	U	24	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	770
2,4-Dinitrotoluene		62	U	62	310
2,6-Dinitrotoluene		26	U	26	310
Di-n-octyl phthalate		13	U	13	310
Fluoranthene		77	J	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	J	21	310
Isophorone		16	U	16	310
2-Methylnaphthalene		18	U	18	310

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N5**

Lab Sample ID: 280-17587-4
Client Matrix: Solid
% Moisture: 1.2

Date Sampled: 06/29/2011 0910
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1530.D
Dilution:	1.0			Initial Weight/Volume:	32.4 g
Analysis Date:	07/07/2011 0430			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			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		68	U	68	310
4-Nitroaniline		68	U	68	310
Nitrobenzene		21	U	21	310
2-Nitrophenol		9.4	U	9.4	310
4-Nitrophenol		91	U	91	620
N-Nitrosodi-n-propylamine		29	U	29	310
N-Nitrosodiphenylamine		20	U	20	310
Pentachlorophenol		310	U	310	620
Phenanthrene		36	J	16	310
Phenol		17	U	17	310
Pyrene		79	J	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	85		50 - 120
2-Fluorophenol	83		53 - 120
Nitrobenzene-d5	82		50 - 120
Phenol-d5	86		52 - 120
Terphenyl-d14	94		55 - 120
2,4,6-Tribromophenol	97		51 - 120

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N5**

Lab Sample ID: 280-17587-4
Client Matrix: Solid
% Moisture: 1.2

Date Sampled: 06/29/2011 0910
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1530.D
Dilution:	1.0			Initial Weight/Volume:	32.4 g
Analysis Date:	07/07/2011 0430			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			Injection Volume:	0.5 uL

Tentatively Identified Compounds **Number TIC's Found:** 2

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	1.65	600	N J
	Unknown	3.26	4900	N J

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N6**

Lab Sample ID: 280-17587-5
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 06/29/2011 0920
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1531.D
Dilution:	1.0			Initial Weight/Volume:	30.9 g
Analysis Date:	07/07/2011 0450			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		34	J	10	320
Acenaphthylene		140	J	17	320
Anthracene		200	J	17	320
Benzo[a]anthracene		450		20	320
Benzo[a]pyrene		380		20	320
Benzo[b]fluoranthene		620	K	26	320
Benzo[ghi]perylene		200	J	16	320
Benzo[k]fluoranthene		39	U K	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		71	J B	45	320
4-Bromophenyl phenyl ether		19	U	19	320
Butyl benzyl phthalate		42	U	42	320
Carbazole		98	J	35	320
4-Chloroaniline		80	U	80	320
4-Chloro-3-methylphenol		64	U	64	320
2-Chloronaphthalene		9.8	U	9.8	320
2-Chlorophenol		21	U	21	320
4-Chlorophenyl phenyl ether		21	U	21	320
Chrysene		480		26	320
Dibenz(a,h)anthracene		72	J	19	320
Dibenzofuran		83	J	20	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		9.8	U	9.8	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		330	U	330	810
2,4-Dinitrotoluene		64	U	64	320
2,6-Dinitrotoluene		27	U	27	320
Di-n-octyl phthalate		14	U	14	320
Fluoranthene		1100		35	320
Fluorene		170	J	18	320
Hexachlorobenzene		28	U	28	320
Hexachlorobutadiene		9.8	U	9.8	320
Hexachlorocyclopentadiene		49	U	49	320
Hexachloroethane		21	U	21	320
Indeno[1,2,3-cd]pyrene		190	J	21	320
Isophorone		17	U	17	320
2-Methylnaphthalene		44	J	19	320

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N6**

Lab Sample ID: 280-17587-5
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 06/29/2011 0920
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1531.D
Dilution:	1.0			Initial Weight/Volume:	30.9 g
Analysis Date:	07/07/2011 0450			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			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		70	J	30	320
2-Nitroaniline		49	U	49	320
3-Nitroaniline		71	U	71	320
4-Nitroaniline		71	U	71	320
Nitrobenzene		21	U	21	320
2-Nitrophenol		9.8	U	9.8	320
4-Nitrophenol		95	U	95	640
N-Nitrosodi-n-propylamine		30	U	30	320
N-Nitrosodiphenylamine		21	U	21	320
Pentachlorophenol		320	U	320	640
Phenanthrene		1100		17	320
Phenol		18	U	18	320
Pyrene		1000		12	320
1,2,4-Trichlorobenzene		27	U	27	320
2,4,5-Trichlorophenol		9.8	U	9.8	320
2,4,6-Trichlorophenol		9.8	U	9.8	320

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	86		50 - 120
2-Fluorophenol	83		53 - 120
Nitrobenzene-d5	83		50 - 120
Phenol-d5	88		52 - 120
Terphenyl-d14	92		55 - 120
2,4,6-Tribromophenol	95		51 - 120

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N6**

Lab Sample ID: 280-17587-5
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 06/29/2011 0920
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1531.D
Dilution:	1.0			Initial Weight/Volume:	30.9 g
Analysis Date:	07/07/2011 0450			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			Injection Volume:	0.5 uL

Tentatively Identified Compounds **Number TIC's Found:** 6

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	1.64	700	N J
	Unknown	3.25	6900	N J
90-12-0	1-Methylnaphthalene	6.80	45	J N
203-64-5	4H-Cyclopenta[def]phenanthrene	9.45	260	N J
198-55-0	Perylene	12.22	190	N J
	Unknown	13.88	170	N J

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N7**

Lab Sample ID: 280-17587-6
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 06/29/2011 0930
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1532.D
Dilution:	1.0			Initial Weight/Volume:	32.1 g
Analysis Date:	07/07/2011 0511			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			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	J	16	310
Benzo[a]anthracene		53	J	19	310
Benzo[a]pyrene		48	J	19	310
Benzo[b]fluoranthene		88	J K	25	310
Benzo[ghi]perylene		29	J	15	310
Benzo[k]fluoranthene		38	U K	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		87	J B	43	310
4-Bromophenyl phenyl ether		18	U	18	310
Butyl benzyl phthalate		40	U	40	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		58	J	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		24	U	24	310
2,4-Dimethylphenol		62	U	62	310
Dimethyl phthalate		22	U	22	310
Di-n-butyl phthalate		49	J	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		110	J	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		28	J	21	310
Isophorone		16	U	16	310
2-Methylnaphthalene		18	U	18	310

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N7**

Lab Sample ID: 280-17587-6
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 06/29/2011 0930
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1532.D
Dilution:	1.0			Initial Weight/Volume:	32.1 g
Analysis Date:	07/07/2011 0511			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			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	68	310
Nitrobenzene		21	U	21	310
2-Nitrophenol		9.4	U	9.4	310
4-Nitrophenol		91	U	91	620
N-Nitrosodi-n-propylamine		29	U	29	310
N-Nitrosodiphenylamine		20	U	20	310
Pentachlorophenol		310	U	310	620
Phenanthrene		84	J	16	310
Phenol		17	U	17	310
Pyrene		110	J	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	94		50 - 120
2-Fluorophenol	87		53 - 120
Nitrobenzene-d5	87		50 - 120
Phenol-d5	96		52 - 120
Terphenyl-d14	104		55 - 120
2,4,6-Tribromophenol	105		51 - 120

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N7**

Lab Sample ID: 280-17587-6
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 06/29/2011 0930
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1532.D
Dilution:	1.0			Initial Weight/Volume:	32.1 g
Analysis Date:	07/07/2011 0511			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			Injection Volume:	0.5 uL

Tentatively Identified Compounds **Number TIC's Found:** **6**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	1.65	540	N J
	Unknown	3.26	6200	N J
57-10-3	Hexadecanoic acid	9.27	130	N J
	Unknown	10.48	150	N J
	Unknown	10.74	140	N J
	Unknown	11.75	290	N J

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N8**

Lab Sample ID: 280-17587-7
Client Matrix: Solid

% Moisture: 0.8

Date Sampled: 06/29/2011 0940
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1533.D
Dilution:	1.0			Initial Weight/Volume:	30.0 g
Analysis Date:	07/07/2011 0531			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			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		34	J K	26	330
Benzo[ghi]perylene		16	U	16	330
Benzo[k]fluoranthene		40	U K	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		83	J B	46	330
4-Bromophenyl phenyl ether		19	U	19	330
Butyl benzyl phthalate		43	U	43	330
Carbazole		36	U	36	330
4-Chloroaniline		83	U	83	330
4-Chloro-3-methylphenol		67	U	67	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		91	U	91	670
2,4-Dichlorophenol		10	U	10	330
Diethyl phthalate		26	U	26	330
2,4-Dimethylphenol		67	U	67	330
Dimethyl phthalate		23	U	23	330
Di-n-butyl phthalate		35	J	29	330
4,6-Dinitro-2-methylphenol		330	U	330	670
2,4-Dinitrophenol		340	U	340	830
2,4-Dinitrotoluene		67	U	67	330
2,6-Dinitrotoluene		28	U	28	330
Di-n-octyl phthalate		15	U	15	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: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N8**

Lab Sample ID: 280-17587-7
Client Matrix: Solid
% Moisture: 0.8

Date Sampled: 06/29/2011 0940
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1533.D
Dilution:	1.0			Initial Weight/Volume:	30.0 g
Analysis Date:	07/07/2011 0531			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			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		74	U	74	330
4-Nitroaniline		73	U	73	330
Nitrobenzene		22	U	22	330
2-Nitrophenol		10	U	10	330
4-Nitrophenol		98	U	98	670
N-Nitrosodi-n-propylamine		31	U	31	330
N-Nitrosodiphenylamine		21	U	21	330
Pentachlorophenol		330	U	330	670
Phenanthrene		21	J	17	330
Phenol		18	U	18	330
Pyrene		26	J	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	84		50 - 120
2-Fluorophenol	82		53 - 120
Nitrobenzene-d5	81		50 - 120
Phenol-d5	85		52 - 120
Terphenyl-d14	95		55 - 120
2,4,6-Tribromophenol	95		51 - 120

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N8**

Lab Sample ID: 280-17587-7
Client Matrix: Solid
% Moisture: 0.8

Date Sampled: 06/29/2011 0940
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1533.D
Dilution:	1.0			Initial Weight/Volume:	30.0 g
Analysis Date:	07/07/2011 0531			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			Injection Volume:	0.5 uL

Tentatively Identified Compounds **Number TIC's Found:** **6**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	1.65	780	N J
	Unknown	3.26	6300	N J
297-03-0	Cyclotetracosane	10.74	160	N J
112-95-8	Eicosane	11.74	750	N J
629-92-5	Nonadecane	12.40	370	N J
	Unknown	12.47	160	N J

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N9**

Lab Sample ID: 280-17587-8
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 06/29/2011 0950
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1534.D
Dilution:	1.0			Initial Weight/Volume:	31.9 g
Analysis Date:	07/07/2011 0552			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			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		26	J	19	310
Benzo[a]pyrene		29	J	19	310
Benzo[b]fluoranthene		43	J K	25	310
Benzo[ghi]perylene		16	J	15	310
Benzo[k]fluoranthene		38	U K	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		71	J B	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		62	U	62	310
2-Chloronaphthalene		9.5	U	9.5	310
2-Chlorophenol		20	U	20	310
4-Chlorophenyl phenyl ether		20	U	20	310
Chrysene		33	J	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		85	U	85	620
2,4-Dichlorophenol		9.5	U	9.5	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		320	U	320	780
2,4-Dinitrotoluene		62	U	62	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		27	U	27	310
Hexachlorobutadiene		9.5	U	9.5	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: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N9**

Lab Sample ID: 280-17587-8
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 06/29/2011 0950
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1534.D
Dilution:	1.0			Initial Weight/Volume:	31.9 g
Analysis Date:	07/07/2011 0552			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			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		69	U	69	310
Nitrobenzene		21	U	21	310
2-Nitrophenol		9.5	U	9.5	310
4-Nitrophenol		92	U	92	620
N-Nitrosodi-n-propylamine		29	U	29	310
N-Nitrosodiphenylamine		20	U	20	310
Pentachlorophenol		310	U	310	620
Phenanthrene		16	U	16	310
Phenol		17	U	17	310
Pyrene		45	J	11	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	82		50 - 120
2-Fluorophenol	81		53 - 120
Nitrobenzene-d5	82		50 - 120
Phenol-d5	84		52 - 120
Terphenyl-d14	95		55 - 120
2,4,6-Tribromophenol	95		51 - 120

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N9**

Lab Sample ID: 280-17587-8
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 06/29/2011 0950
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1534.D
Dilution:	1.0			Initial Weight/Volume:	31.9 g
Analysis Date:	07/07/2011 0552			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			Injection Volume:	0.5 uL

Tentatively Identified Compounds **Number TIC's Found:** 4

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	1.65	690	N J
	Unknown	3.26	5600	N J
18435-45-5	1-Nonadecene	10.74	140	N J
112-95-8	Eicosane	11.75	150	N J

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P0**

Lab Sample ID: 280-17587-9
Client Matrix: Solid
% Moisture: 0.8

Date Sampled: 06/29/2011 1000
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1535.D
Dilution:	1.0			Initial Weight/Volume:	31.9 g
Analysis Date:	07/07/2011 0612			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			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		90	J B	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		85	U	85	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		120	J	27	310
4,6-Dinitro-2-methylphenol		310	U	310	630
2,4-Dinitrophenol		320	U	320	780
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		27	U	27	310
Hexachlorobutadiene		9.5	U	9.5	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: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P0**

Lab Sample ID: 280-17587-9
Client Matrix: Solid

% Moisture: 0.8

Date Sampled: 06/29/2011 1000
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1535.D
Dilution:	1.0			Initial Weight/Volume:	31.9 g
Analysis Date:	07/07/2011 0612			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			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	69	U	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	29	U	29	310
N-Nitrosodiphenylamine	20	U	20	310
Pentachlorophenol	310	U	310	630
Phenanthrene	16	U	16	310
Phenol	17	U	17	310
Pyrene	15	J	11	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	83		50 - 120
2-Fluorophenol	80		53 - 120
Nitrobenzene-d5	80		50 - 120
Phenol-d5	85		52 - 120
Terphenyl-d14	94		55 - 120
2,4,6-Tribromophenol	95		51 - 120

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P0**

Lab Sample ID: 280-17587-9
Client Matrix: Solid
% Moisture: 0.8

Date Sampled: 06/29/2011 1000
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1535.D
Dilution:	1.0			Initial Weight/Volume:	31.9 g
Analysis Date:	07/07/2011 0612			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	1.65	560	N J
	Unknown	3.26	5800	N J
629-96-9	1-Eicosanol	10.74	230	N J

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P1**

Lab Sample ID: 280-17587-10
Client Matrix: Solid
% Moisture: 0.5

Date Sampled: 06/29/2011 1010
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1536.D
Dilution:	1.0			Initial Weight/Volume:	32.2 g
Analysis Date:	07/07/2011 0633			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		9.6	U	9.6	310
Acenaphthylene		25	J	16	310
Anthracene		22	J	16	310
Benzo[a]anthracene		110	J	19	310
Benzo[a]pyrene		160	J	19	310
Benzo[b]fluoranthene		330	K	25	310
Benzo[ghi]perylene		81	J	15	310
Benzo[k]fluoranthene		37	U K	37	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		75	J B	43	310
4-Bromophenyl phenyl ether		18	U	18	310
Butyl benzyl phthalate		40	U	40	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		180	J	25	310
Dibenz(a,h)anthracene		23	J	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		84	U	84	620
2,4-Dichlorophenol		9.4	U	9.4	310
Diethyl phthalate		24	U	24	310
2,4-Dimethylphenol		62	U	62	310
Dimethyl phthalate		22	U	22	310
Di-n-butyl phthalate		32	J	27	310
4,6-Dinitro-2-methylphenol		310	U	310	620
2,4-Dinitrophenol		310	U	310	770
2,4-Dinitrotoluene		62	U	62	310
2,6-Dinitrotoluene		26	U	26	310
Di-n-octyl phthalate		13	U	13	310
Fluoranthene		180	J	34	310
Fluorene		23	J	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		76	J	21	310
Isophorone		16	U	16	310
2-Methylnaphthalene		18	U	18	310

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P1**

Lab Sample ID: 280-17587-10
Client Matrix: Solid
% Moisture: 0.5

Date Sampled: 06/29/2011 1010
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1536.D
Dilution:	1.0			Initial Weight/Volume:	32.2 g
Analysis Date:	07/07/2011 0633			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			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		68	U	68	310
4-Nitroaniline		68	U	68	310
Nitrobenzene		21	U	21	310
2-Nitrophenol		9.4	U	9.4	310
4-Nitrophenol		91	U	91	620
N-Nitrosodi-n-propylamine		29	U	29	310
N-Nitrosodiphenylamine		20	U	20	310
Pentachlorophenol		310	U	310	620
Phenanthrene		170	J	16	310
Phenol		17	U	17	310
Pyrene		220	J	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	85		50 - 120
2-Fluorophenol	85		53 - 120
Nitrobenzene-d5	84		50 - 120
Phenol-d5	88		52 - 120
Terphenyl-d14	97		55 - 120
2,4,6-Tribromophenol	99		51 - 120

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P1**

Lab Sample ID: 280-17587-10
Client Matrix: Solid
% Moisture: 0.5

Date Sampled: 06/29/2011 1010
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1536.D
Dilution:	1.0			Initial Weight/Volume:	32.2 g
Analysis Date:	07/07/2011 0633			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	1.65	710	N J
	Unknown	3.26	5600	N J
90-12-0	1-Methylnaphthalene	6.80	11	J N
629-96-9	1-Eicosanol	10.73	170	N J
198-55-0	Perylene	12.21	150	N J

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P2**

Lab Sample ID: 280-17587-11
Client Matrix: Solid
% Moisture: 0.5

Date Sampled: 06/29/2011 1020
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1537.D
Dilution:	1.0			Initial Weight/Volume:	30.8 g
Analysis Date:	07/07/2011 0653			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			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		25	J	20	320
Benzo[a]pyrene		21	J	20	320
Benzo[b]fluoranthene		38	J K	26	320
Benzo[ghi]perylene		16	U	16	320
Benzo[k]fluoranthene		39	U K	39	320
Bis(2-chloroethoxy)methane		23	U	23	320
Bis(2-chloroethyl)ether		16	U	16	320
bis (2-chloroisopropyl) ether		23	U	23	320
Bis(2-ethylhexyl) phthalate		77	J B	45	320
4-Bromophenyl phenyl ether		19	U	19	320
Butyl benzyl phthalate		42	U	42	320
Carbazole		35	U	35	320
4-Chloroaniline		80	U	80	320
4-Chloro-3-methylphenol		65	U	65	320
2-Chloronaphthalene		9.8	U	9.8	320
2-Chlorophenol		21	U	21	320
4-Chlorophenyl phenyl ether		21	U	21	320
Chrysene		26	U	26	320
Dibenz(a,h)anthracene		19	U	19	320
Dibenzofuran		20	U	20	320
1,2-Dichlorobenzene		22	U	22	320
1,3-Dichlorobenzene		12	U	12	320
1,4-Dichlorobenzene		13	U	13	320
3,3'-Dichlorobenzidine		88	U	88	650
2,4-Dichlorophenol		9.8	U	9.8	320
Diethyl phthalate		25	U	25	320
2,4-Dimethylphenol		65	U	65	320
Dimethyl phthalate		23	U	23	320
Di-n-butyl phthalate		28	U	28	320
4,6-Dinitro-2-methylphenol		320	U	320	650
2,4-Dinitrophenol		330	U	330	810
2,4-Dinitrotoluene		65	U	65	320
2,6-Dinitrotoluene		27	U	27	320
Di-n-octyl phthalate		14	U	14	320
Fluoranthene		42	J	35	320
Fluorene		18	U	18	320
Hexachlorobenzene		28	U	28	320
Hexachlorobutadiene		9.8	U	9.8	320
Hexachlorocyclopentadiene		49	U	49	320
Hexachloroethane		21	U	21	320
Indeno[1,2,3-cd]pyrene		22	U	22	320
Isophorone		17	U	17	320
2-Methylnaphthalene		19	U	19	320

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P2**

Lab Sample ID: 280-17587-11
Client Matrix: Solid
% Moisture: 0.5

Date Sampled: 06/29/2011 1020
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1537.D
Dilution:	1.0			Initial Weight/Volume:	30.8 g
Analysis Date:	07/07/2011 0653			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			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	71	320
Nitrobenzene		22	U	22	320
2-Nitrophenol		9.8	U	9.8	320
4-Nitrophenol		95	U	95	650
N-Nitrosodi-n-propylamine		30	U	30	320
N-Nitrosodiphenylamine		21	U	21	320
Pentachlorophenol		320	U	320	650
Phenanthrene		29	J	17	320
Phenol		18	U	18	320
Pyrene		43	J	12	320
1,2,4-Trichlorobenzene		27	U	27	320
2,4,5-Trichlorophenol		9.8	U	9.8	320
2,4,6-Trichlorophenol		9.8	U	9.8	320

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	69		50 - 120
2-Fluorophenol	69		53 - 120
Nitrobenzene-d5	68		50 - 120
Phenol-d5	72		52 - 120
Terphenyl-d14	92		55 - 120
2,4,6-Tribromophenol	88		51 - 120

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P2**

Lab Sample ID: 280-17587-11
Client Matrix: Solid
% Moisture: 0.5

Date Sampled: 06/29/2011 1020
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1537.D
Dilution:	1.0			Initial Weight/Volume:	30.8 g
Analysis Date:	07/07/2011 0653			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			Injection Volume:	0.5 uL

Tentatively Identified Compounds **Number TIC's Found:** **2**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	1.65	470	N J
	Unknown	3.26	5800	N J

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P3**

Lab Sample ID: 280-17587-12
Client Matrix: Solid
% Moisture: 0.5

Date Sampled: 06/29/2011 1030
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1538.D
Dilution:	1.0			Initial Weight/Volume:	30.0 g
Analysis Date:	07/07/2011 0714			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			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		81	J B	46	330
4-Bromophenyl phenyl ether		19	U	19	330
Butyl benzyl phthalate		43	U	43	330
Carbazole		36	U	36	330
4-Chloroaniline		82	U	82	330
4-Chloro-3-methylphenol		66	U	66	330
2-Chloronaphthalene		10	U	10	330
2-Chlorophenol		21	U	21	330
4-Chlorophenyl phenyl ether		21	U	21	330
Chrysene		27	U	27	330
Dibenz(a,h)anthracene		19	U	19	330
Dibenzofuran		20	U	20	330
1,2-Dichlorobenzene		22	U	22	330
1,3-Dichlorobenzene		12	U	12	330
1,4-Dichlorobenzene		14	U	14	330
3,3'-Dichlorobenzidine		90	U	90	660
2,4-Dichlorophenol		10	U	10	330
Diethyl phthalate		26	U	26	330
2,4-Dimethylphenol		66	U	66	330
Dimethyl phthalate		23	U	23	330
Di-n-butyl phthalate		29	U	29	330
4,6-Dinitro-2-methylphenol		330	U	330	660
2,4-Dinitrophenol		330	U	330	830
2,4-Dinitrotoluene		66	U	66	330
2,6-Dinitrotoluene		28	U	28	330
Di-n-octyl phthalate		14	U	14	330
Fluoranthene		36	U	36	330
Fluorene		18	U	18	330
Hexachlorobenzene		29	U	29	330
Hexachlorobutadiene		10	U	10	330
Hexachlorocyclopentadiene		50	U	50	330
Hexachloroethane		21	U	21	330
Indeno[1,2,3-cd]pyrene		22	U	22	330
Isophorone		17	U	17	330
2-Methylnaphthalene		19	U	19	330

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P3**

Lab Sample ID: 280-17587-12
Client Matrix: Solid
% Moisture: 0.5

Date Sampled: 06/29/2011 1030
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1538.D
Dilution:	1.0			Initial Weight/Volume:	30.0 g
Analysis Date:	07/07/2011 0714			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			Injection Volume:	0.5 uL

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

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	78		50 - 120
2-Fluorophenol	80		53 - 120
Nitrobenzene-d5	77		50 - 120
Phenol-d5	82		52 - 120
Terphenyl-d14	91		55 - 120
2,4,6-Tribromophenol	90		51 - 120

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P3**

Lab Sample ID: 280-17587-12
Client Matrix: Solid
% Moisture: 0.5

Date Sampled: 06/29/2011 1030
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1538.D
Dilution:	1.0			Initial Weight/Volume:	30.0 g
Analysis Date:	07/07/2011 0714			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			Injection Volume:	0.5 uL

Tentatively Identified Compounds **Number TIC's Found:** **2**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	1.65	750	N J
	Unknown	3.26	6300	N J

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P4**

Lab Sample ID: 280-17587-13FD
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 06/29/2011 1000
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75767	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1563.D
Dilution:	1.0			Initial Weight/Volume:	30.3 g
Analysis Date:	07/08/2011 0340			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			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		79	J B	46	330
4-Bromophenyl phenyl ether		19	U	19	330
Butyl benzyl phthalate		43	U	43	330
Carbazole		36	U	36	330
4-Chloroaniline		82	U	82	330
4-Chloro-3-methylphenol		66	U	66	330
2-Chloronaphthalene		10	U	10	330
2-Chlorophenol		21	U	21	330
4-Chlorophenyl phenyl ether		21	U	21	330
Chrysene		27	U	27	330
Dibenz(a,h)anthracene		19	U	19	330
Dibenzofuran		20	U	20	330
1,2-Dichlorobenzene		22	U	22	330
1,3-Dichlorobenzene		12	U	12	330
1,4-Dichlorobenzene		14	U	14	330
3,3'-Dichlorobenzidine		90	U	90	660
2,4-Dichlorophenol		10	U	10	330
Diethyl phthalate		26	U	26	330
2,4-Dimethylphenol		66	U	66	330
Dimethyl phthalate		23	U	23	330
Di-n-butyl phthalate		29	U	29	330
4,6-Dinitro-2-methylphenol		330	U	330	660
2,4-Dinitrophenol		330	U	330	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: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P4**

Lab Sample ID: 280-17587-13FD
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 06/29/2011 1000
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75767	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1563.D
Dilution:	1.0			Initial Weight/Volume:	30.3 g
Analysis Date:	07/08/2011 0340			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2-Methylphenol		13	U	13	330
3 & 4 Methylphenol		33	U	33	330
Naphthalene		31	U	31	330
2-Nitroaniline		50	U	50	330
3-Nitroaniline		73	U	73	330
4-Nitroaniline		72	U	72	330
Nitrobenzene		22	U	22	330
2-Nitrophenol		10	U	10	330
4-Nitrophenol		97	U	97	660
N-Nitrosodi-n-propylamine		31	U	31	330
N-Nitrosodiphenylamine		21	U	21	330
Pentachlorophenol		330	U	330	660
Phenanthrene		17	U	17	330
Phenol		18	U	18	330
Pyrene		16	J	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	82		50 - 120
2-Fluorophenol	79		53 - 120
Nitrobenzene-d5	81		50 - 120
Phenol-d5	84		52 - 120
Terphenyl-d14	94		55 - 120
2,4,6-Tribromophenol	94		51 - 120

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P4**

Lab Sample ID: 280-17587-13FD
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 06/29/2011 1000
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75767	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1563.D
Dilution:	1.0			Initial Weight/Volume:	30.3 g
Analysis Date:	07/08/2011 0340			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			Injection Volume:	0.5 uL

Tentatively Identified Compounds **Number TIC's Found:** **4**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	1.65	690	N J
	Unknown	3.26	5300	N J
1599-67-3	1-Docosene	10.73	140	N J
112-95-8	Eicosane	11.72	160	N J

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P5**

Lab Sample ID: 280-17587-14EB
Client Matrix: Solid
% Moisture: 0.1

Date Sampled: 06/29/2011 0925
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75767	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1564.D
Dilution:	1.0			Initial Weight/Volume:	30.7 g
Analysis Date:	07/08/2011 0400			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			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		20	U	20	320
Benzo[a]pyrene		20	U	20	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		75	J B	45	320
4-Bromophenyl phenyl ether		19	U	19	320
Butyl benzyl phthalate		42	U	42	320
Carbazole		35	U	35	320
4-Chloroaniline		80	U	80	320
4-Chloro-3-methylphenol		65	U	65	320
2-Chloronaphthalene		9.8	U	9.8	320
2-Chlorophenol		21	U	21	320
4-Chlorophenyl phenyl ether		21	U	21	320
Chrysene		26	U	26	320
Dibenz(a,h)anthracene		19	U	19	320
Dibenzofuran		20	U	20	320
1,2-Dichlorobenzene		22	U	22	320
1,3-Dichlorobenzene		12	U	12	320
1,4-Dichlorobenzene		13	U	13	320
3,3'-Dichlorobenzidine		88	U	88	650
2,4-Dichlorophenol		9.8	U	9.8	320
Diethyl phthalate		25	U	25	320
2,4-Dimethylphenol		65	U	65	320
Dimethyl phthalate		22	U	22	320
Di-n-butyl phthalate		28	U	28	320
4,6-Dinitro-2-methylphenol		320	U	320	650
2,4-Dinitrophenol		330	U	330	810
2,4-Dinitrotoluene		65	U	65	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		9.8	U	9.8	320
Hexachlorocyclopentadiene		49	U	49	320
Hexachloroethane		21	U	21	320
Indeno[1,2,3-cd]pyrene		22	U	22	320
Isophorone		17	U	17	320
2-Methylnaphthalene		19	U	19	320

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P5**

Lab Sample ID: 280-17587-14EB
Client Matrix: Solid
% Moisture: 0.1

Date Sampled: 06/29/2011 0925
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75767	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1564.D
Dilution:	1.0			Initial Weight/Volume:	30.7 g
Analysis Date:	07/08/2011 0400			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			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	71	320
Nitrobenzene		22	U	22	320
2-Nitrophenol		9.8	U	9.8	320
4-Nitrophenol		95	U	95	650
N-Nitrosodi-n-propylamine		30	U	30	320
N-Nitrosodiphenylamine		21	U	21	320
Pentachlorophenol		320	U	320	650
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		9.8	U	9.8	320
2,4,6-Trichlorophenol		9.8	U	9.8	320

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	79		50 - 120
2-Fluorophenol	79		53 - 120
Nitrobenzene-d5	80		50 - 120
Phenol-d5	82		52 - 120
Terphenyl-d14	98		55 - 120
2,4,6-Tribromophenol	96		51 - 120

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P5**

Lab Sample ID: 280-17587-14EB
Client Matrix: Solid % Moisture: 0.1

Date Sampled: 06/29/2011 0925
Date Received: 07/01/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-75767	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-74911	Lab File ID:	Y1564.D
Dilution:	1.0			Initial Weight/Volume:	30.7 g
Analysis Date:	07/08/2011 0400			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			Injection Volume:	0.5 uL

Tentatively Identified Compounds **Number TIC's Found:** 2

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	1.64	800	N J
	Unknown	3.26	5800	N J

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N2**

Lab Sample ID: 280-17587-1
Client Matrix: Solid
% Moisture: 1.6

Date Sampled: 06/29/2011 0840
Date Received: 07/01/2011 0930

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-75674	Instrument ID:	GCS_P2
Prep Method:	3550C	Prep Batch:	280-74921	Initial Weight/Volume:	30.0 g
Dilution:	10			Final Weight/Volume:	10000 uL
Analysis Date:	07/08/2011 0225			Injection Volume:	
Prep Date:	07/01/2011 1735			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		5.5	U D	5.5	17
4,4'-DDE		12	J D	2.4	17
4,4'-DDT		11	J D	6.0	17
Aldrin		2.6	U D	2.6	17
alpha-BHC		2.2	U D	2.2	17
beta-BHC		6.7	U D	6.7	17
delta-BHC		4.1	U D	4.1	17
gamma-BHC (Lindane)		4.7	U D	4.7	17
Heptachlor		2.2	U D	2.2	17
Heptachlor epoxide		4.3	U D	4.3	17
Endosulfan I		1.8	U D	1.8	17
Endosulfan II		2.9	U D	2.9	17
Endosulfan sulfate		2.8	U D	2.8	17
Endrin		3.1	U D	3.1	17
Endrin aldehyde		1.7	U D	1.7	17
Endrin ketone		5.0	U D	5.0	17
gamma-Chlordane		5.4	J D	2.7	17
Methoxychlor		4.6	U D	4.6	34
alpha-Chlordane		7.3	J D	3.3	17
Dieldrin		32	D	2.1	17
Toxaphene		160	U D	160	1700

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	107	D	59 - 115
Decachlorobiphenyl	95	D	63 - 124

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N3**

Lab Sample ID: 280-17587-2
Client Matrix: Solid
% Moisture: 0.9

Date Sampled: 06/29/2011 0850
Date Received: 07/01/2011 0930

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-75674	Instrument ID:	GCS_P2
Prep Method:	3550C	Prep Batch:	280-74921	Initial Weight/Volume:	31.4 g
Dilution:	10			Final Weight/Volume:	10000 uL
Analysis Date:	07/08/2011 0331			Injection Volume:	
Prep Date:	07/01/2011 1735			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		5.3	U D	5.3	16
4,4'-DDE		2.3	U D	2.3	16
4,4'-DDT		5.7	U D	5.7	16
Aldrin		2.4	U D	2.4	16
alpha-BHC		2.1	U D	2.1	16
beta-BHC		6.4	U D	6.4	16
delta-BHC		3.9	U D	3.9	16
gamma-BHC (Lindane)		4.5	U D	4.5	16
Heptachlor		2.1	U D	2.1	16
Heptachlor epoxide		4.1	U D	4.1	16
Endosulfan I		1.7	U D	1.7	16
Endosulfan II		2.8	U D	2.8	16
Endosulfan sulfate		2.7	U D	2.7	16
Endrin		3.0	U D	3.0	16
Endrin aldehyde		1.6	U D	1.6	16
Endrin ketone		4.7	U D	4.7	16
gamma-Chlordane		2.6	U D	2.6	16
Methoxychlor		4.3	U D	4.3	32
alpha-Chlordane		3.1	U D	3.1	16
Dieldrin		11	J D	2.0	16
Toxaphene		150	U D	150	1600

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	101	D	59 - 115
Decachlorobiphenyl	85	D	63 - 124

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N4**

Lab Sample ID: 280-17587-3
Client Matrix: Solid
% Moisture: 0.9

Date Sampled: 06/29/2011 0900
Date Received: 07/01/2011 0930

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-76549	Instrument ID:	GCS_P1
Prep Method:	3550C	Prep Batch:	280-74921	Initial Weight/Volume:	30.6 g
Dilution:	10			Final Weight/Volume:	10000 uL
Analysis Date:	07/12/2011 1823			Injection Volume:	1 uL
Prep Date:	07/01/2011 1735			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		5.4	U D	5.4	17
4,4'-DDE		2.4	U D	2.4	17
4,4'-DDT		5.8	U D	5.8	17
Aldrin		2.5	U D	2.5	16
alpha-BHC		2.1	U D	2.1	16
beta-BHC		6.6	U D	6.6	16
delta-BHC		4.0	U D	4.0	16
gamma-BHC (Lindane)		4.6	U D	4.6	16
Heptachlor		2.1	U D	2.1	16
Heptachlor epoxide		4.2	U D	4.2	16
Endosulfan I		1.7	U D	1.7	16
Endosulfan II		2.8	U D	2.8	17
Endosulfan sulfate		2.7	U D	2.7	17
Endrin		3.0	U D	3.0	17
Endrin aldehyde		1.7	U D	1.7	17
Endrin ketone		4.8	U D	4.8	17
gamma-Chlordane		2.6	U D	2.6	17
Methoxychlor		4.5	U D	4.5	33
alpha-Chlordane		3.2	U D	3.2	17
Dieldrin		2.1	U D	2.1	17
Toxaphene		160	U D	160	1600

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	67	D	59 - 115
Decachlorobiphenyl	75	D	63 - 124

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N5**

Lab Sample ID: 280-17587-4
Client Matrix: Solid
% Moisture: 1.2

Date Sampled: 06/29/2011 0910
Date Received: 07/01/2011 0930

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-75674	Instrument ID:	GCS_P2
Prep Method:	3550C	Prep Batch:	280-74921	Initial Weight/Volume:	30.8 g
Dilution:	10			Final Weight/Volume:	10000 uL
Analysis Date:	07/08/2011 0420			Injection Volume:	
Prep Date:	07/01/2011 1735			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		5.4	U D	5.4	17
4,4'-DDE		2.3	U D	2.3	17
4,4'-DDT		5.8	U D	5.8	17
Aldrin		2.5	U D	2.5	16
alpha-BHC		2.1	U D	2.1	16
beta-BHC		6.5	U D	6.5	16
delta-BHC		4.0	U D	4.0	16
gamma-BHC (Lindane)		4.6	U D	4.6	16
Heptachlor		2.1	U D	2.1	16
Heptachlor epoxide		4.2	U D	4.2	16
Endosulfan I		1.7	U D	1.7	16
Endosulfan II		2.8	U D	2.8	17
Endosulfan sulfate		2.7	U D	2.7	17
Endrin		3.0	U D	3.0	17
Endrin aldehyde		1.7	U D	1.7	17
Endrin ketone		4.8	U D	4.8	17
gamma-Chlordane		2.6	U D	2.6	17
Methoxychlor		4.4	U D	4.4	33
alpha-Chlordane		3.2	U D	3.2	17
Dieldrin		75	D	2.1	17
Toxaphene		160	U D	160	1600

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	104	D	59 - 115
Decachlorobiphenyl	252	D	63 - 124

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N6**

Lab Sample ID: 280-17587-5
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 06/29/2011 0920
Date Received: 07/01/2011 0930

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-75674	Instrument ID:	GCS_P2
Prep Method:	3550C	Prep Batch:	280-74921	Initial Weight/Volume:	30.9 g
Dilution:	10			Final Weight/Volume:	10000 uL
Analysis Date:	07/08/2011 0436			Injection Volume:	
Prep Date:	07/01/2011 1735			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		5.3	U D	5.3	17
4,4'-DDE		2.3	U D	2.3	17
4,4'-DDT		5.8	U D	5.8	17
Aldrin		2.5	U D	2.5	16
alpha-BHC		2.1	U D	2.1	16
beta-BHC		6.5	U D	6.5	16
delta-BHC		3.9	U D	3.9	16
gamma-BHC (Lindane)		4.5	U D	4.5	16
Heptachlor		2.1	U D	2.1	16
Heptachlor epoxide		4.2	U D	4.2	16
Endosulfan I		1.7	U D	1.7	16
Endosulfan II		2.8	U D	2.8	17
Endosulfan sulfate		2.7	U D	2.7	17
Endrin		3.0	U D	3.0	17
Endrin aldehyde		1.7	U D	1.7	17
Endrin ketone		4.8	U D	4.8	17
gamma-Chlordane		2.6	U D	2.6	17
Methoxychlor		4.4	U D	4.4	32
alpha-Chlordane		3.2	U D	3.2	17
Dieldrin		2.1	U D	2.1	17
Toxaphene		150	U D	150	1600

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	111	D	59 - 115
Decachlorobiphenyl	93	D	63 - 124

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N7**

Lab Sample ID: 280-17587-6
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 06/29/2011 0930
Date Received: 07/01/2011 0930

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-75674	Instrument ID:	GCS_P2
Prep Method:	3550C	Prep Batch:	280-74921	Initial Weight/Volume:	30.0 g
Dilution:	10			Final Weight/Volume:	10000 uL
Analysis Date:	07/08/2011 0453			Injection Volume:	
Prep Date:	07/01/2011 1735			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		5.5	U D	5.5	17
4,4'-DDE		2.4	U D	2.4	17
4,4'-DDT		5.9	U D	5.9	17
Aldrin		2.5	U D	2.5	17
alpha-BHC		2.2	U D	2.2	17
beta-BHC		6.7	U D	6.7	17
delta-BHC		4.0	U D	4.0	17
gamma-BHC (Lindane)		4.7	U D	4.7	17
Heptachlor		2.2	U D	2.2	17
Heptachlor epoxide		4.3	U D	4.3	17
Endosulfan I		1.8	U D	1.8	17
Endosulfan II		2.9	U D	2.9	17
Endosulfan sulfate		2.8	U D	2.8	17
Endrin		3.1	U D	3.1	17
Endrin aldehyde		1.7	U D	1.7	17
Endrin ketone		4.9	U D	4.9	17
gamma-Chlordane		6.0	J D	2.7	17
Methoxychlor		4.5	U D	4.5	33
alpha-Chlordane		4.9	J D	3.2	17
Dieldrin		6.4	J D	2.1	17
Toxaphene		160	U D	160	1700

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	94	D	59 - 115
Decachlorobiphenyl	83	D	63 - 124

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N8**

Lab Sample ID: 280-17587-7
Client Matrix: Solid
% Moisture: 0.8

Date Sampled: 06/29/2011 0940
Date Received: 07/01/2011 0930

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-75674	Instrument ID:	GCS_P2
Prep Method:	3550C	Prep Batch:	280-74921	Initial Weight/Volume:	30.2 g
Dilution:	10			Final Weight/Volume:	10000 uL
Analysis Date:	07/08/2011 0509			Injection Volume:	
Prep Date:	07/01/2011 1735			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		5.5	U D	5.5	17
4,4'-DDE		2.4	U D	2.4	17
4,4'-DDT		5.9	U D	5.9	17
Aldrin		2.5	U D	2.5	17
alpha-BHC		2.1	U D	2.1	17
beta-BHC		6.6	U D	6.6	17
delta-BHC		4.0	U D	4.0	17
gamma-BHC (Lindane)		4.6	U D	4.6	17
Heptachlor		2.1	U D	2.1	17
Heptachlor epoxide		4.3	U D	4.3	17
Endosulfan I		1.8	U D	1.8	17
Endosulfan II		2.9	U D	2.9	17
Endosulfan sulfate		2.8	U D	2.8	17
Endrin		3.1	U D	3.1	17
Endrin aldehyde		1.7	U D	1.7	17
Endrin ketone		4.9	U D	4.9	17
gamma-Chlordane		22	D	2.7	17
Methoxychlor		4.5	U D	4.5	33
alpha-Chlordane		28	D	3.2	17
Dieldrin		2.2	J X D	2.1	17
Toxaphene		160	U D	160	1700

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	101	D	59 - 115
Decachlorobiphenyl	132	D	63 - 124

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N9**

Lab Sample ID: 280-17587-8
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 06/29/2011 0950
Date Received: 07/01/2011 0930

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-76549	Instrument ID:	GCS_P1
Prep Method:	3550C	Prep Batch:	280-74921	Initial Weight/Volume:	31.5 g
Dilution:	10			Final Weight/Volume:	10000 uL
Analysis Date:	07/12/2011 1840			Injection Volume:	1 uL
Prep Date:	07/01/2011 1735			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		5.2	U D	5.2	16
4,4'-DDE		2.3	U D	2.3	16
4,4'-DDT		5.7	U D	5.7	16
Aldrin		2.4	U D	2.4	16
alpha-BHC		2.1	U D	2.1	16
beta-BHC		6.4	U D	6.4	16
delta-BHC		3.8	U D	3.8	16
gamma-BHC (Lindane)		4.4	U D	4.4	16
Heptachlor		2.1	U D	2.1	16
Heptachlor epoxide		4.1	U D	4.1	16
Endosulfan I		1.7	U D	1.7	16
Endosulfan II		2.8	U D	2.8	16
Endosulfan sulfate		2.6	U D	2.6	16
Endrin		2.9	U D	2.9	16
Endrin aldehyde		1.6	U D	1.6	16
Endrin ketone		4.7	U D	4.7	16
gamma-Chlordane		3.3	J D	2.5	16
Methoxychlor		4.3	U D	4.3	32
alpha-Chlordane		4.5	J D	3.1	16
Dieldrin		2.0	U D	2.0	16
Toxaphene		150	U D	150	1600

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	67	D	59 - 115
Decachlorobiphenyl	57	D	63 - 124

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P0**

Lab Sample ID: 280-17587-9
Client Matrix: Solid
% Moisture: 0.8

Date Sampled: 06/29/2011 1000
Date Received: 07/01/2011 0930

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-75674	Instrument ID:	GCS_P2
Prep Method:	3550C	Prep Batch:	280-74921	Initial Weight/Volume:	32.2 g
Dilution:	10			Final Weight/Volume:	10000 uL
Analysis Date:	07/08/2011 0526			Injection Volume:	
Prep Date:	07/01/2011 1735			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		5.1	U D	5.1	16
4,4'-DDE		4.4	J X D	2.2	16
4,4'-DDT		7.4	J D	5.5	16
Aldrin		2.4	U D	2.4	15
alpha-BHC		2.0	U D	2.0	15
beta-BHC		6.2	U D	6.2	15
delta-BHC		3.8	U D	3.8	15
gamma-BHC (Lindane)		4.4	U D	4.4	15
Heptachlor		2.0	U D	2.0	15
Heptachlor epoxide		4.0	U D	4.0	15
Endosulfan I		1.7	U D	1.7	15
Endosulfan II		2.7	U D	2.7	16
Endosulfan sulfate		2.6	U D	2.6	16
Endrin		2.9	U D	2.9	16
Endrin aldehyde		1.6	U D	1.6	16
Endrin ketone		4.6	U D	4.6	16
gamma-Chlordane		3.6	J D	2.5	16
Methoxychlor		4.2	U D	4.2	31
alpha-Chlordane		3.0	U D	3.0	16
Dieldrin		3.4	J X D	2.0	16
Toxaphene		150	U D	150	1500

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	106	D	59 - 115
Decachlorobiphenyl	164	D	63 - 124

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P1**

Lab Sample ID: 280-17587-10
Client Matrix: Solid
% Moisture: 0.5

Date Sampled: 06/29/2011 1010
Date Received: 07/01/2011 0930

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-75674	Instrument ID:	GCS_P2
Prep Method:	3550C	Prep Batch:	280-74921	Initial Weight/Volume:	32.7 g
Dilution:	10			Final Weight/Volume:	10000 uL
Analysis Date:	07/08/2011 0542			Injection Volume:	
Prep Date:	07/01/2011 1735			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		5.0	U D	5.0	16
4,4'-DDE		2.2	U D	2.2	16
4,4'-DDT		5.4	U D	5.4	16
Aldrin		2.3	U D	2.3	15
alpha-BHC		2.0	U D	2.0	15
beta-BHC		6.1	U D	6.1	15
delta-BHC		3.7	U D	3.7	15
gamma-BHC (Lindane)		4.3	U D	4.3	15
Heptachlor		2.0	U D	2.0	15
Heptachlor epoxide		3.9	U D	3.9	15
Endosulfan I		1.6	U D	1.6	15
Endosulfan II		2.6	U D	2.6	16
Endosulfan sulfate		2.5	U D	2.5	16
Endrin		2.8	U D	2.8	16
Endrin aldehyde		1.6	U D	1.6	16
Endrin ketone		4.5	U D	4.5	16
gamma-Chlordane		20	D	2.5	16
Methoxychlor		4.1	U D	4.1	30
alpha-Chlordane		22	D	3.0	16
Dieldrin		1.9	U D	1.9	16
Toxaphene		150	U D	150	1500

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	97	D	59 - 115
Decachlorobiphenyl	84	D	63 - 124

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P2**

Lab Sample ID: 280-17587-11
Client Matrix: Solid
% Moisture: 0.5

Date Sampled: 06/29/2011 1020
Date Received: 07/01/2011 0930

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-76549	Instrument ID:	GCS_P1
Prep Method:	3550C	Prep Batch:	280-74921	Initial Weight/Volume:	30.5 g
Dilution:	10			Final Weight/Volume:	10000 uL
Analysis Date:	07/12/2011 1856			Injection Volume:	1 uL
Prep Date:	07/01/2011 1735			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		5.4	U D	5.4	17
4,4'-DDE		2.4	U D	2.4	17
4,4'-DDT		5.8	U D	5.8	17
Aldrin		2.5	U D	2.5	16
alpha-BHC		2.1	U D	2.1	16
beta-BHC		6.6	U D	6.6	16
delta-BHC		4.0	U D	4.0	16
gamma-BHC (Lindane)		4.6	U D	4.6	16
Heptachlor		2.1	U D	2.1	16
Heptachlor epoxide		4.2	U D	4.2	16
Endosulfan I		1.7	U D	1.7	16
Endosulfan II		2.8	U D	2.8	17
Endosulfan sulfate		2.7	U D	2.7	17
Endrin		3.0	U D	3.0	17
Endrin aldehyde		1.7	U D	1.7	17
Endrin ketone		4.8	U D	4.8	17
gamma-Chlordane		2.6	U D	2.6	17
Methoxychlor		4.4	U D	4.4	33
alpha-Chlordane		3.2	U D	3.2	17
Dieldrin		2.1	U D	2.1	17
Toxaphene		160	U D	160	1600

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	66	D	59 - 115
Decachlorobiphenyl	61	D	63 - 124

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P3**

Lab Sample ID: 280-17587-12
Client Matrix: Solid
% Moisture: 0.5

Date Sampled: 06/29/2011 1030
Date Received: 07/01/2011 0930

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-75431	Instrument ID:	GCS_P2
Prep Method:	3550C	Prep Batch:	280-74921	Initial Weight/Volume:	32.8 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	07/07/2011 0419			Injection Volume:	
Prep Date:	07/01/2011 1735			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.50	U	0.50	1.6
4,4'-DDE		0.22	U	0.22	1.6
4,4'-DDT		0.54	U	0.54	1.6
Aldrin		0.23	U	0.23	1.5
alpha-BHC		0.20	U	0.20	1.5
beta-BHC		0.61	U	0.61	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		0.39	U	0.39	1.5
Endosulfan I		0.16	U	0.16	1.5
Endosulfan II		0.26	U	0.26	1.6
Endosulfan sulfate		0.25	U	0.25	1.6
Endrin		0.28	U	0.28	1.6
Endrin aldehyde		0.16	U	0.16	1.6
Endrin ketone		0.45	U	0.45	1.6
gamma-Chlordane		0.71	J	0.24	1.6
Methoxychlor		0.41	U	0.41	3.0
alpha-Chlordane		0.30	U	0.30	1.6
Dieldrin		0.19	U	0.19	1.6
Toxaphene		15	U	15	150

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

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P4**

Lab Sample ID: 280-17587-13FD
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 06/29/2011 1000
Date Received: 07/01/2011 0930

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-76028	Instrument ID:	GCS_P1
Prep Method:	3550C	Prep Batch:	280-75510	Initial Weight/Volume:	31.8 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	07/09/2011 0916			Injection Volume:	1 uL
Prep Date:	07/07/2011 1321			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		6.9		0.23	1.6
4,4'-DDT		5.9		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		1.7		0.25	1.6
Methoxychlor		0.43	U	0.43	3.1
alpha-Chlordane		2.8		0.31	1.6
Dieldrin		7.9		0.20	1.6
Toxaphene		15	U	15	160

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	83		59 - 115
Decachlorobiphenyl	86		63 - 124

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N2**

Lab Sample ID: 280-17587-1
Client Matrix: Solid
% Moisture: 1.6

Date Sampled: 06/29/2011 0840
Date Received: 07/01/2011 0930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-76388	Instrument ID:	GCS_P3
Prep Method:	3550C	Prep Batch:	280-74933	Initial Weight/Volume:	30.1 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	07/12/2011 0825			Injection Volume:	1 uL
Prep Date:	07/01/2011 1920			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		27	P	2.6	10

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	70		59 - 130
Tetrachloro-m-xylene	75		53 - 128

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N3**

Lab Sample ID: 280-17587-2
Client Matrix: Solid
% Moisture: 0.9

Date Sampled: 06/29/2011 0850
Date Received: 07/01/2011 0930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-76388	Instrument ID:	GCS_P3
Prep Method:	3550C	Prep Batch:	280-74933	Initial Weight/Volume:	30.3 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	07/12/2011 0847			Injection Volume:	1 uL
Prep Date:	07/01/2011 1920			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		17	P	2.6	10

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	80		59 - 130
Tetrachloro-m-xylene	90		53 - 128

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N4**

Lab Sample ID: 280-17587-3
Client Matrix: Solid
% Moisture: 0.9

Date Sampled: 06/29/2011 0900
Date Received: 07/01/2011 0930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-76388	Instrument ID:	GCS_P3
Prep Method:	3550C	Prep Batch:	280-74933	Initial Weight/Volume:	30.1 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	07/12/2011 0908			Injection Volume:	1 uL
Prep Date:	07/01/2011 1920			Result Type:	PRIMARY

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

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	66		59 - 130
Tetrachloro-m-xylene	74		53 - 128

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N5**

Lab Sample ID: 280-17587-4
Client Matrix: Solid
% Moisture: 1.2

Date Sampled: 06/29/2011 0910
Date Received: 07/01/2011 0930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-76388	Instrument ID:	GCS_P3
Prep Method:	3550C	Prep Batch:	280-74933	Initial Weight/Volume:	31.7 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	07/12/2011 0929			Injection Volume:	1 uL
Prep Date:	07/01/2011 1920			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		2.7	U	2.7	9.6
Aroclor 1221		7.7	U	7.7	16
Aroclor 1232		1.9	U	1.9	9.6
Aroclor 1242		4.5	U	4.5	9.6
Aroclor 1248		4.5	U	4.5	9.6
Aroclor 1254		2.5	U	2.5	9.6
Aroclor 1260		8.4	J	2.5	9.6

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	67		59 - 130
Tetrachloro-m-xylene	76		53 - 128

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N6**

Lab Sample ID: 280-17587-5
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 06/29/2011 0920
Date Received: 07/01/2011 0930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-76388	Instrument ID:	GCS_P3
Prep Method:	3550C	Prep Batch:	280-74933	Initial Weight/Volume:	31.3 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	07/12/2011 1033			Injection Volume:	1 uL
Prep Date:	07/01/2011 1920			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		2.7	U	2.7	9.6
Aroclor 1221		7.7	U	7.7	16
Aroclor 1232		1.9	U	1.9	9.6
Aroclor 1242		4.5	U	4.5	9.6
Aroclor 1248		4.5	U	4.5	9.6
Aroclor 1254		2.5	U	2.5	9.6
Aroclor 1260		2.5	U	2.5	9.6

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	68		59 - 130
Tetrachloro-m-xylene	84		53 - 128

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N7**

Lab Sample ID: 280-17587-6
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 06/29/2011 0930
Date Received: 07/01/2011 0930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-76388	Instrument ID:	GCS_P3
Prep Method:	3550C	Prep Batch:	280-74933	Initial Weight/Volume:	31.6 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	07/12/2011 1055			Injection Volume:	1 uL
Prep Date:	07/01/2011 1920			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		2.6	U	2.6	9.6
Aroclor 1221		7.7	U	7.7	16
Aroclor 1232		1.9	U	1.9	9.6
Aroclor 1242		4.5	U	4.5	9.6
Aroclor 1248		4.5	U	4.5	9.6
Aroclor 1254		2.5	U	2.5	9.6
Aroclor 1260		12	P	2.5	9.6

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	59		59 - 130
Tetrachloro-m-xylene	83		53 - 128

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N8**

Lab Sample ID: 280-17587-7
Client Matrix: Solid
% Moisture: 0.8

Date Sampled: 06/29/2011 0940
Date Received: 07/01/2011 0930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-76396	Instrument ID:	GCS_P3
Prep Method:	3550C	Prep Batch:	280-74933	Initial Weight/Volume:	31.1 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	07/12/2011 1159			Injection Volume:	1 uL
Prep Date:	07/01/2011 1920			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		29	P	2.5	9.7

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	121		59 - 130
Tetrachloro-m-xylene	79		53 - 128

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N9**

Lab Sample ID: 280-17587-8
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 06/29/2011 0950
Date Received: 07/01/2011 0930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-76388	Instrument ID:	GCS_P3
Prep Method:	3550C	Prep Batch:	280-74933	Initial Weight/Volume:	30.4 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	07/12/2011 1159			Injection Volume:	1 uL
Prep Date:	07/01/2011 1920			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	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		8.7	J	2.6	9.9

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	79		59 - 130
Tetrachloro-m-xylene	89		53 - 128

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P0**

Lab Sample ID: 280-17587-9
Client Matrix: Solid
% Moisture: 0.8

Date Sampled: 06/29/2011 1000
Date Received: 07/01/2011 0930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-76388	Instrument ID:	GCS_P3
Prep Method:	3550C	Prep Batch:	280-74933	Initial Weight/Volume:	32.5 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	07/12/2011 1220			Injection Volume:	1 uL
Prep Date:	07/01/2011 1920			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		2.6	U	2.6	9.3
Aroclor 1221		7.5	U	7.5	15
Aroclor 1232		1.9	U	1.9	9.3
Aroclor 1242		4.3	U	4.3	9.3
Aroclor 1248		4.3	U	4.3	9.3
Aroclor 1254		2.4	U	2.4	9.3
Aroclor 1260		16	P	2.4	9.3

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	65		59 - 130
Tetrachloro-m-xylene	74		53 - 128

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P1**

Lab Sample ID: 280-17587-10
Client Matrix: Solid
% Moisture: 0.5

Date Sampled: 06/29/2011 1010
Date Received: 07/01/2011 0930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-76396	Instrument ID:	GCS_P3
Prep Method:	3550C	Prep Batch:	280-74933	Initial Weight/Volume:	30.6 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	07/12/2011 1303			Injection Volume:	1 uL
Prep Date:	07/01/2011 1920			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		25	P	2.6	9.9

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	95		59 - 130
Tetrachloro-m-xylene	92		53 - 128

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P2**

Lab Sample ID: 280-17587-11
Client Matrix: Solid
% Moisture: 0.5

Date Sampled: 06/29/2011 1020
Date Received: 07/01/2011 0930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-76388	Instrument ID:	GCS_P3
Prep Method:	3550C	Prep Batch:	280-74933	Initial Weight/Volume:	30.5 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	07/12/2011 1303			Injection Volume:	1 uL
Prep Date:	07/01/2011 1920			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		5.2	J	2.6	9.9

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	83		59 - 130
Tetrachloro-m-xylene	87		53 - 128

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P3**

Lab Sample ID: 280-17587-12
Client Matrix: Solid
% Moisture: 0.5

Date Sampled: 06/29/2011 1030
Date Received: 07/01/2011 0930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-76396	Instrument ID:	GCS_P3
Prep Method:	3550C	Prep Batch:	280-74933	Initial Weight/Volume:	32.2 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	07/12/2011 1346			Injection Volume:	1 uL
Prep Date:	07/01/2011 1920			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		2.6	U	2.6	9.4
Aroclor 1221		7.5	U	7.5	15
Aroclor 1232		1.9	U	1.9	9.4
Aroclor 1242		4.4	U	4.4	9.4
Aroclor 1248		4.4	U	4.4	9.4
Aroclor 1254		2.4	U	2.4	9.4
Aroclor 1260		2.4	U	2.4	9.4

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

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P4**

Lab Sample ID: 280-17587-13FD
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 06/29/2011 1000
Date Received: 07/01/2011 0930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-76388	Instrument ID:	GCS_P3
Prep Method:	3550C	Prep Batch:	280-74933	Initial Weight/Volume:	31.1 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	07/12/2011 1346			Injection Volume:	1 uL
Prep Date:	07/01/2011 1920			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		20	P	2.5	9.7

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	78		59 - 130
Tetrachloro-m-xylene	85		53 - 128

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N2**

Lab Sample ID: 280-17587-1
Client Matrix: Solid
% Moisture: 1.6

Date Sampled: 06/29/2011 0840
Date Received: 07/01/2011 0930

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-75137	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-74929	Initial Weight/Volume:	30.8 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	07/05/2011 1712			Injection Volume:	20 uL
Prep Date:	07/01/2011 1820			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		9.3	J X	3.0	20
Benzo[a]anthracene		45	X	3.2	15
Benzo[a]pyrene		44		6.3	15
Benzo[b]fluoranthene		37	X	4.2	15
Benzo[g,h,i]perylene		17	J X	7.1	30
Benzo[k]fluoranthene		17		3.9	15
Chrysene		51		4.8	40
Dibenzo(a,h)anthracene		11	U	11	30
Fluoranthene		95		13	40
Fluorene		5.2	U	5.2	30
Indeno[1,2,3-cd]pyrene		29	J	12	30
Naphthalene		12	U	12	99
Phenanthrene		65		12	40
Pyrene		76	X	12	40

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	87		72 - 115

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N3**

Lab Sample ID: 280-17587-2
Client Matrix: Solid
% Moisture: 0.9

Date Sampled: 06/29/2011 0850
Date Received: 07/01/2011 0930

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-75137	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-74929	Initial Weight/Volume:	31.2 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	07/05/2011 1743			Injection Volume:	20 uL
Prep Date:	07/01/2011 1820			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		13	J	6.2	15
Benzo[b]fluoranthene		12	J X	4.1	15
Benzo[g,h,i]perylene		7.0	U	7.0	29
Benzo[k]fluoranthene		5.1	J X	3.8	15
Chrysene		17	J	4.7	39
Dibenzo(a,h)anthracene		11	U	11	29
Fluoranthene		23	J	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		17	J X	12	39

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	81		72 - 115

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N4**

Lab Sample ID: 280-17587-3
Client Matrix: Solid

% Moisture: 0.9

Date Sampled: 06/29/2011 0900
Date Received: 07/01/2011 0930

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-75137	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-74929	Initial Weight/Volume:	32.1 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	07/05/2011 1813			Injection Volume:	20 uL
Prep Date:	07/01/2011 1820			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		110		3.0	14
Benzo[a]pyrene		95		6.0	14
Benzo[b]fluoranthene		92		4.0	14
Benzo[g,h,i]perylene		48		6.8	28
Benzo[k]fluoranthene		56		3.7	14
Chrysene		97		4.6	38
Dibenzo(a,h)anthracene		18	J X	10	28
Fluoranthene		260		12	38
Fluorene		17	J	5.0	28
Indeno[1,2,3-cd]pyrene		63		11	28
Naphthalene		11	U	11	94
Phenanthrene		170		11	38
Pyrene		230		11	38

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	102		72 - 115

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N5**

Lab Sample ID: 280-17587-4
Client Matrix: Solid
% Moisture: 1.2

Date Sampled: 06/29/2011 0910
Date Received: 07/01/2011 0930

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-75137	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-74929	Initial Weight/Volume:	30.3 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	07/05/2011 1945			Injection Volume:	20 uL
Prep Date:	07/01/2011 1820			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	100
Acenaphthylene		9.0	U	9.0	100
Anthracene		3.1	U	3.1	20
Benzo[a]anthracene		3.2	U	3.2	15
Benzo[a]pyrene		18		6.4	15
Benzo[b]fluoranthene		20	X	4.2	15
Benzo[g,h,i]perylene		10	J	7.2	30
Benzo[k]fluoranthene		7.4	J	3.9	15
Chrysene		25	J	4.8	40
Dibenzo(a,h)anthracene		11	U	11	30
Fluoranthene		26	J	13	40
Fluorene		8.4	J	5.3	30
Indeno[1,2,3-cd]pyrene		20	J	12	30
Naphthalene		12	U	12	100
Phenanthrene		13	J	12	40
Pyrene		25	J X	12	40

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

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N6**

Lab Sample ID: 280-17587-5
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 06/29/2011 0920
Date Received: 07/01/2011 0930

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-75137	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-74929	Initial Weight/Volume:	30.4 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	07/05/2011 2015			Injection Volume:	20 uL
Prep Date:	07/01/2011 1820			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		9.9	U	9.9	99
Acenaphthylene		19	J	8.9	99
Anthracene		59	X	3.0	20
Benzo[a]anthracene		220		3.2	15
Benzo[a]pyrene		180		6.4	15
Benzo[b]fluoranthene		140	X	4.2	15
Benzo[g,h,i]perylene		80		7.1	30
Benzo[k]fluoranthene		69		3.9	15
Chrysene		220		4.8	40
Dibenzo(a,h)anthracene		21	J X	11	30
Fluoranthene		490		13	40
Fluorene		67		5.2	30
Indeno[1,2,3-cd]pyrene		120		12	30
Naphthalene		12	U	12	99
Phenanthrene		430		12	40
Pyrene		460		12	40

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	107		72 - 115

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N7**

Lab Sample ID: 280-17587-6
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 06/29/2011 0930
Date Received: 07/01/2011 0930

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-75137	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-74929	Initial Weight/Volume:	30.3 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	07/05/2011 2046			Injection Volume:	20 uL
Prep Date:	07/01/2011 1820			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		16	J X	10	100
Acenaphthylene		9.0	U	9.0	100
Anthracene		15	J X	3.0	20
Benzo[a]anthracene		53		3.2	15
Benzo[a]pyrene		67		6.4	15
Benzo[b]fluoranthene		67		4.2	15
Benzo[g,h,i]perylene		17	J	7.2	30
Benzo[k]fluoranthene		24		3.9	15
Chrysene		75		4.8	40
Dibenzo(a,h)anthracene		11	U	11	30
Fluoranthene		120		13	40
Fluorene		12	J	5.3	30
Indeno[1,2,3-cd]pyrene		40		12	30
Naphthalene		12	U	12	100
Phenanthrene		100		12	40
Pyrene		140		12	40

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

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N8**

Lab Sample ID: 280-17587-7
Client Matrix: Solid
% Moisture: 0.8

Date Sampled: 06/29/2011 0940
Date Received: 07/01/2011 0930

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-75137	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-74929	Initial Weight/Volume:	30.5 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	07/05/2011 2147			Injection Volume:	20 uL
Prep Date:	07/01/2011 1820			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		12	J	3.2	15
Benzo[a]pyrene		15		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		18	J	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	J	12	40
Pyrene		16	J X	12	40

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

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N9**

Lab Sample ID: 280-17587-8
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 06/29/2011 0950
Date Received: 07/01/2011 0930

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-75137	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-74929	Initial Weight/Volume:	31.2 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	07/05/2011 2217			Injection Volume:	20 uL
Prep Date:	07/01/2011 1820			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		8.2	J	3.1	15
Benzo[a]pyrene		8.2	J	6.2	15
Benzo[b]fluoranthene		14	J X	4.1	15
Benzo[g,h,i]perylene		7.0	U	7.0	29
Benzo[k]fluoranthene		5.2	J	3.8	15
Chrysene		19	J	4.7	39
Dibenzo(a,h)anthracene		11	U	11	29
Fluoranthene		18	J	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		16	J X	12	39

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	99		72 - 115

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P0**

Lab Sample ID: 280-17587-9
Client Matrix: Solid
% Moisture: 0.8

Date Sampled: 06/29/2011 1000
Date Received: 07/01/2011 0930

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-75137	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-74929	Initial Weight/Volume:	31.8 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	07/05/2011 2248			Injection Volume:	20 uL
Prep Date:	07/01/2011 1820			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		9.5	U	9.5	95
Acenaphthylene		8.6	U	8.6	95
Anthracene		2.9	U	2.9	19
Benzo[a]anthracene		7.7	J	3.0	14
Benzo[a]pyrene		12	J	6.1	14
Benzo[b]fluoranthene		13	J X	4.0	14
Benzo[g,h,i]perylene		6.8	U	6.8	29
Benzo[k]fluoranthene		5.2	J	3.7	14
Chrysene		13	J	4.6	38
Dibenzo(a,h)anthracene		10	U	10	29
Fluoranthene		15	J	12	38
Fluorene		5.0	U	5.0	29
Indeno[1,2,3-cd]pyrene		11	J	11	29
Naphthalene		11	U	11	95
Phenanthrene		11	U	11	38
Pyrene		19	J	11	38

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	97		72 - 115

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P1**

Lab Sample ID: 280-17587-10
Client Matrix: Solid
% Moisture: 0.5

Date Sampled: 06/29/2011 1010
Date Received: 07/01/2011 0930

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-75137	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-74929	Initial Weight/Volume:	31.4 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	07/05/2011 2318			Injection Volume:	20 uL
Prep Date:	07/01/2011 1820			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		9.6	U	9.6	96
Acenaphthylene		8.6	U	8.6	96
Anthracene		7.7	J X	2.9	19
Benzo[a]anthracene		59		3.1	14
Benzo[a]pyrene		110		6.2	14
Benzo[b]fluoranthene		92	X	4.0	14
Benzo[g,h,i]perylene		21	J X	6.9	29
Benzo[k]fluoranthene		55		3.8	14
Chrysene		100		4.6	38
Dibenzo(a,h)anthracene		11	U	11	29
Fluoranthene		100		12	38
Fluorene		7.2	J	5.1	29
Indeno[1,2,3-cd]pyrene		53		12	29
Naphthalene		12	U	12	96
Phenanthrene		65		12	38
Pyrene		140		12	38

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	97		72 - 115

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P2**

Lab Sample ID: 280-17587-11
Client Matrix: Solid
% Moisture: 0.5

Date Sampled: 06/29/2011 1020
Date Received: 07/01/2011 0930

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-75137	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-74929	Initial Weight/Volume:	31.8 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	07/05/2011 2349			Injection Volume:	20 uL
Prep Date:	07/01/2011 1820			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		9.5	U	9.5	95
Acenaphthylene		8.5	U	8.5	95
Anthracene		5.8	J X	2.9	19
Benzo[a]anthracene		22	X	3.0	14
Benzo[a]pyrene		22		6.1	14
Benzo[b]fluoranthene		20	X	4.0	14
Benzo[g,h,i]perylene		6.8	U	6.8	28
Benzo[k]fluoranthene		8.4	J	3.7	14
Chrysene		29	J	4.6	38
Dibenzo(a,h)anthracene		10	U	10	28
Fluoranthene		52		12	38
Fluorene		6.3	J	5.0	28
Indeno[1,2,3-cd]pyrene		18	J	11	28
Naphthalene		11	U	11	95
Phenanthrene		46		11	38
Pyrene		59		11	38

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	94		72 - 115

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P3**

Lab Sample ID: 280-17587-12
Client Matrix: Solid
% Moisture: 0.5

Date Sampled: 06/29/2011 1030
Date Received: 07/01/2011 0930

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-75137	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-74929	Initial Weight/Volume:	31.0 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	07/06/2011 0019			Injection Volume:	20 uL
Prep Date:	07/01/2011 1820			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		9.7	U	9.7	97
Acenaphthylene		8.8	U	8.8	97
Anthracene		3.0	U	3.0	19
Benzo[a]anthracene		4.0	J X	3.1	15
Benzo[a]pyrene		16		6.2	15
Benzo[b]fluoranthene		19		4.1	15
Benzo[g,h,i]perylene		7.0	U	7.0	29
Benzo[k]fluoranthene		7.1	J	3.8	15
Chrysene		9.1	J X	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)	98		72 - 115

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P4**

Lab Sample ID: 280-17587-13FD
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 06/29/2011 1000
Date Received: 07/01/2011 0930

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-75137	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-74929	Initial Weight/Volume:	31.8 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	07/06/2011 0050			Injection Volume:	20 uL
Prep Date:	07/01/2011 1820			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		9.5	U	9.5	95
Acenaphthylene		27	J	8.5	95
Anthracene		2.9	U	2.9	19
Benzo[a]anthracene		15		3.0	14
Benzo[a]pyrene		20		6.1	14
Benzo[b]fluoranthene		35	X	4.0	14
Benzo[g,h,i]perylene		10	J	6.8	28
Benzo[k]fluoranthene		8.3	J	3.7	14
Chrysene		25	J	4.6	38
Dibenzo(a,h)anthracene		10	U	10	28
Fluoranthene		18	J X	12	38
Fluorene		5.0	U	5.0	28
Indeno[1,2,3-cd]pyrene		19	J	11	28
Naphthalene		11	U	11	95
Phenanthrene		11	U	11	38
Pyrene		16	J	11	38

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	97		72 - 115

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N2**

Lab Sample ID: 280-17587-1
Client Matrix: Solid
% Moisture: 1.6

Date Sampled: 06/29/2011 0840
Date Received: 07/01/2011 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-75947	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-74997	Lab File ID:	25A3070811.asc
Dilution:	1.0			Initial Weight/Volume:	1.13 g
Analysis Date:	07/08/2011 1932			Final Weight/Volume:	100 mL
Prep Date:	07/07/2011 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8660		1.4	4.5
Antimony		0.34	U	0.34	0.54
Arsenic		3.0		0.59	0.90
Barium		92.9		0.068	0.45
Beryllium		0.28		0.030	0.18
Cadmium		0.17	B	0.037	0.18
Calcium		3760		12.7	45.0
Chromium		11.8		0.052	0.18
Cobalt		6.2	X	0.090	0.90
Copper		16.6		0.20	0.90
Iron		17300		3.4	4.5
Lead		7.8		0.24	0.45
Magnesium		4060		3.3	18.0
Manganese		298		0.090	0.90
Molybdenum		0.23	U	0.23	1.8
Nickel		11.4	X	0.11	3.6
Potassium		1600		36.9	270
Selenium		0.77	U	0.77	0.90
Silicon		278		5.1	9.0
Silver		0.14	U	0.14	0.18
Sodium		208		53.1	108
Vanadium		38.3		0.085	1.8
Zinc		49.9		0.36	0.90

Analysis Method:	6010B	Analysis Batch:	280-76112	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-74997	Lab File ID:	25A6071111.asc
Dilution:	1.0			Initial Weight/Volume:	1.13 g
Analysis Date:	07/12/2011 0005			Final Weight/Volume:	100 mL
Prep Date:	07/07/2011 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Boron		1.8		0.88	1.8

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-76340	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-75827	Lab File ID:	110712TE.txt
Dilution:	1.0			Initial Weight/Volume:	0.62 g
Analysis Date:	07/13/2011 0255			Final Weight/Volume:	50 mL
Prep Date:	07/12/2011 1755				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.026	M	0.0054	0.017

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N3**

Lab Sample ID: 280-17587-2
Client Matrix: Solid
% Moisture: 0.9

Date Sampled: 06/29/2011 0850
Date Received: 07/01/2011 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-75947	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-74997	Lab File ID:	25A3070811.asc
Dilution:	1.0			Initial Weight/Volume:	1.11 g
Analysis Date:	07/08/2011 1941			Final Weight/Volume:	100 mL
Prep Date:	07/07/2011 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8760		1.4	4.5
Antimony		0.35	U	0.35	0.55
Arsenic		2.9		0.60	0.91
Barium		93.3		0.069	0.45
Beryllium		0.27		0.030	0.18
Cadmium		0.11	B	0.037	0.18
Calcium		3930		12.8	45.5
Chromium		11.3		0.053	0.18
Cobalt		6.8	X	0.091	0.91
Copper		15.6		0.20	0.91
Iron		18400		3.5	4.5
Lead		6.8		0.25	0.45
Magnesium		4240		3.4	18.2
Manganese		316		0.091	0.91
Molybdenum		0.24	U	0.24	1.8
Nickel		11.3	X	0.11	3.6
Potassium		1570		37.3	273
Selenium		0.78	U	0.78	0.91
Silicon		236		5.1	9.1
Silver		0.15	U	0.15	0.18
Sodium		216		53.7	109
Vanadium		42.6		0.085	1.8
Zinc		45.7		0.36	0.91

Analysis Method:	6010B	Analysis Batch:	280-76112	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-74997	Lab File ID:	25A6071111.asc
Dilution:	1.0			Initial Weight/Volume:	1.11 g
Analysis Date:	07/12/2011 0014			Final Weight/Volume:	100 mL
Prep Date:	07/07/2011 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Boron		1.8		0.89	1.8

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-76340	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-75827	Lab File ID:	110712TE.txt
Dilution:	1.0			Initial Weight/Volume:	0.67 g
Analysis Date:	07/13/2011 0302			Final Weight/Volume:	50 mL
Prep Date:	07/12/2011 1755				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.019		0.0050	0.015

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N4**

Lab Sample ID: 280-17587-3
Client Matrix: Solid
% Moisture: 0.9

Date Sampled: 06/29/2011 0900
Date Received: 07/01/2011 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-75947	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-74997	Lab File ID:	25A3070811.asc
Dilution:	1.0			Initial Weight/Volume:	1.01 g
Analysis Date:	07/08/2011 1944			Final Weight/Volume:	100 mL
Prep Date:	07/07/2011 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		9090		1.5	5.0
Antimony		0.38	U	0.38	0.60
Arsenic		3.0		0.66	1.0
Barium		82.4		0.076	0.50
Beryllium		0.28		0.033	0.20
Cadmium		0.078	B	0.041	0.20
Calcium		3920		14.1	50.0
Chromium		11.2		0.058	0.20
Cobalt		7.0	X	0.10	1.0
Copper		14.0		0.22	1.0
Iron		19200		3.8	5.0
Lead		9.0		0.27	0.50
Magnesium		4150		3.7	20.0
Manganese		337		0.10	1.0
Molybdenum		0.26	U	0.26	2.0
Nickel		11.0	X	0.12	4.0
Potassium		1560		41.0	300
Selenium		0.86	U	0.86	1.0
Silicon		341		5.7	10
Silver		0.16	U	0.16	0.20
Sodium		224		59.0	120
Vanadium		43.7		0.094	2.0
Zinc		39.3		0.40	1.0

Analysis Method:	6010B	Analysis Batch:	280-76112	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-74997	Lab File ID:	25A6071111.asc
Dilution:	1.0			Initial Weight/Volume:	1.01 g
Analysis Date:	07/12/2011 0017			Final Weight/Volume:	100 mL
Prep Date:	07/07/2011 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Boron		1.1	B	0.98	2.0

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-76340	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-75827	Lab File ID:	110712TE.txt
Dilution:	1.0			Initial Weight/Volume:	0.61 g
Analysis Date:	07/13/2011 0305			Final Weight/Volume:	50 mL
Prep Date:	07/12/2011 1755				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.011	B	0.0055	0.017

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N5**

Lab Sample ID: 280-17587-4
Client Matrix: Solid
% Moisture: 1.2

Date Sampled: 06/29/2011 0910
Date Received: 07/01/2011 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-75947	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-74997	Lab File ID:	25A3070811.asc
Dilution:	1.0			Initial Weight/Volume:	1.10 g
Analysis Date:	07/08/2011 1946			Final Weight/Volume:	100 mL
Prep Date:	07/07/2011 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		9280		1.4	4.6
Antimony		0.35	U	0.35	0.55
Arsenic		3.0		0.61	0.92
Barium		110		0.070	0.46
Beryllium		0.30		0.030	0.18
Cadmium		0.16	B	0.038	0.18
Calcium		4500		13.0	46.0
Chromium		13.0		0.053	0.18
Cobalt		6.8	X	0.092	0.92
Copper		17.1		0.20	0.92
Iron		18500		3.5	4.6
Lead		136		0.25	0.46
Magnesium		4480		3.4	18.4
Manganese		318		0.092	0.92
Molybdenum		0.24	U	0.24	1.8
Nickel		12.6	X	0.11	3.7
Potassium		1540		37.7	276
Selenium		0.79	U	0.79	0.92
Silicon		239		5.2	9.2
Silver		0.15	U	0.15	0.18
Sodium		262		54.3	110
Vanadium		42.1		0.086	1.8
Zinc		52.9		0.37	0.92

Analysis Method:	6010B	Analysis Batch:	280-76112	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-74997	Lab File ID:	25A6071111.asc
Dilution:	1.0			Initial Weight/Volume:	1.10 g
Analysis Date:	07/12/2011 0019			Final Weight/Volume:	100 mL
Prep Date:	07/07/2011 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Boron		2.2		0.90	1.8

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-76340	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-75827	Lab File ID:	110712TE.txt
Dilution:	1.0			Initial Weight/Volume:	0.63 g
Analysis Date:	07/13/2011 0307			Final Weight/Volume:	50 mL
Prep Date:	07/12/2011 1755				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.039		0.0053	0.016

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N6**

Lab Sample ID: 280-17587-5
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 06/29/2011 0920
Date Received: 07/01/2011 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-75947	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-74997	Lab File ID:	25A3070811.asc
Dilution:	1.0			Initial Weight/Volume:	1.02 g
Analysis Date:	07/08/2011 1958			Final Weight/Volume:	100 mL
Prep Date:	07/07/2011 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8580		1.5	4.9
Antimony		0.37	U	0.37	0.59
Arsenic		3.1		0.65	0.99
Barium		107		0.075	0.49
Beryllium		0.29		0.033	0.20
Cadmium		0.089	B	0.040	0.20
Calcium		4780		13.9	49.3
Chromium		11.7		0.057	0.20
Cobalt		6.7	X	0.099	0.99
Copper		18.3		0.21	0.99
Iron		17500		3.7	4.9
Lead		6.4		0.27	0.49
Magnesium		4100		3.6	19.7
Manganese		297		0.099	0.99
Molybdenum		0.26	U	0.26	2.0
Nickel		11.4	X	0.12	3.9
Potassium		1520		40.4	296
Selenium		0.85	U	0.85	0.99
Silicon		306		5.6	9.9
Silver		0.16	U	0.16	0.20
Sodium		237		58.2	118
Vanadium		41.3		0.093	2.0
Zinc		41.6		0.39	0.99

Analysis Method:	6010B	Analysis Batch:	280-76112	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-74997	Lab File ID:	25A6071111.asc
Dilution:	1.0			Initial Weight/Volume:	1.02 g
Analysis Date:	07/12/2011 0030			Final Weight/Volume:	100 mL
Prep Date:	07/07/2011 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Boron		2.9		0.97	2.0

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-76340	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-75827	Lab File ID:	110712TE.txt
Dilution:	1.0			Initial Weight/Volume:	0.67 g
Analysis Date:	07/13/2011 0314			Final Weight/Volume:	50 mL
Prep Date:	07/12/2011 1755				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.017		0.0050	0.015

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N7**

Lab Sample ID: 280-17587-6
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 06/29/2011 0930
Date Received: 07/01/2011 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-75947	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-74997	Lab File ID:	25A3070811.asc
Dilution:	1.0			Initial Weight/Volume:	1.04 g
Analysis Date:	07/08/2011 2000			Final Weight/Volume:	100 mL
Prep Date:	07/07/2011 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		7180		1.5	4.8
Antimony		0.37	U	0.37	0.58
Arsenic		2.6		0.64	0.97
Barium		101		0.074	0.48
Beryllium		0.22		0.032	0.19
Cadmium		0.11	B	0.040	0.19
Calcium		3770		13.6	48.4
Chromium		9.6		0.056	0.19
Cobalt		5.7	X	0.097	0.97
Copper		13.9		0.21	0.97
Iron		15300		3.7	4.8
Lead		7.2		0.26	0.48
Magnesium		3640		3.6	19.3
Manganese		255		0.097	0.97
Molybdenum		0.25	U	0.25	1.9
Nickel		11.1	X	0.12	3.9
Potassium		1370		39.7	290
Selenium		0.83	U	0.83	0.97
Silicon		288		5.5	9.7
Silver		0.15	U	0.15	0.19
Sodium		203		57.1	116
Vanadium		35.2		0.091	1.9
Zinc		47.2		0.38	0.97

Analysis Method:	6010B	Analysis Batch:	280-76112	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-74997	Lab File ID:	25A6071111.asc
Dilution:	1.0			Initial Weight/Volume:	1.04 g
Analysis Date:	07/12/2011 0032			Final Weight/Volume:	100 mL
Prep Date:	07/07/2011 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Boron		2.5		0.95	1.9

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-76340	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-75827	Lab File ID:	110712TE.txt
Dilution:	1.0			Initial Weight/Volume:	0.68 g
Analysis Date:	07/13/2011 0316			Final Weight/Volume:	50 mL
Prep Date:	07/12/2011 1755				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.022		0.0049	0.015

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N8**

Lab Sample ID: 280-17587-7
Client Matrix: Solid
% Moisture: 0.8

Date Sampled: 06/29/2011 0940
Date Received: 07/01/2011 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-75947	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-74997	Lab File ID:	25A3070811.asc
Dilution:	1.0			Initial Weight/Volume:	1.01 g
Analysis Date:	07/08/2011 2002			Final Weight/Volume:	100 mL
Prep Date:	07/07/2011 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		9270		1.5	5.0
Antimony		0.38	U	0.38	0.60
Arsenic		4.3		0.66	1.0
Barium		115		0.076	0.50
Beryllium		0.29		0.033	0.20
Cadmium		0.16	B	0.041	0.20
Calcium		4890		14.1	49.9
Chromium		13.8		0.058	0.20
Cobalt		6.9	X	0.10	1.0
Copper		18.5		0.22	1.0
Iron		18400		3.8	5.0
Lead		12.6		0.27	0.50
Magnesium		4890		3.7	20.0
Manganese		319		0.10	1.0
Molybdenum		0.26	B	0.26	2.0
Nickel		13.3	X	0.12	4.0
Potassium		1580		40.9	299
Selenium		0.86	U	0.86	1.0
Silicon		272		5.6	10
Silver		0.16	U	0.16	0.20
Sodium		248		58.9	120
Vanadium		40.9		0.094	2.0
Zinc		64.7		0.40	1.0

Analysis Method:	6010B	Analysis Batch:	280-76112	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-74997	Lab File ID:	25A6071111.asc
Dilution:	1.0			Initial Weight/Volume:	1.01 g
Analysis Date:	07/12/2011 0035			Final Weight/Volume:	100 mL
Prep Date:	07/07/2011 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Boron		2.4		0.98	2.0

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-76340	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-75827	Lab File ID:	110712TE.txt
Dilution:	1.0			Initial Weight/Volume:	0.66 g
Analysis Date:	07/13/2011 0319			Final Weight/Volume:	50 mL
Prep Date:	07/12/2011 1755				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.026		0.0051	0.016

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3N9**

Lab Sample ID: 280-17587-8
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 06/29/2011 0950
Date Received: 07/01/2011 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-75947	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-74997	Lab File ID:	25A3070811.asc
Dilution:	1.0			Initial Weight/Volume:	1.02 g
Analysis Date:	07/08/2011 2004			Final Weight/Volume:	100 mL
Prep Date:	07/07/2011 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		9250		1.5	4.9
Antimony		0.37	U	0.37	0.59
Arsenic		2.8		0.65	0.99
Barium		89.0		0.075	0.49
Beryllium		0.29		0.033	0.20
Cadmium		0.084	B	0.040	0.20
Calcium		4310		13.9	49.3
Chromium		12.0		0.057	0.20
Cobalt		7.2	X	0.099	0.99
Copper		15.8		0.21	0.99
Iron		19500		3.7	4.9
Lead		6.8		0.27	0.49
Magnesium		4550		3.7	19.7
Manganese		328		0.099	0.99
Molybdenum		0.26	U	0.26	2.0
Nickel		11.9	X	0.12	3.9
Potassium		1540		40.5	296
Selenium		0.85	U	0.85	0.99
Silicon		261		5.6	9.9
Silver		0.16	U	0.16	0.20
Sodium		224		58.2	118
Vanadium		45.3		0.093	2.0
Zinc		43.7		0.39	0.99

Analysis Method:	6010B	Analysis Batch:	280-76112	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-74997	Lab File ID:	25A6071111.asc
Dilution:	1.0			Initial Weight/Volume:	1.02 g
Analysis Date:	07/12/2011 0037			Final Weight/Volume:	100 mL
Prep Date:	07/07/2011 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Boron		1.1	B	0.97	2.0

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-76340	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-75827	Lab File ID:	110712TE.txt
Dilution:	1.0			Initial Weight/Volume:	0.67 g
Analysis Date:	07/13/2011 0321			Final Weight/Volume:	50 mL
Prep Date:	07/12/2011 1755				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.012	B	0.0050	0.015

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P0**

Lab Sample ID: 280-17587-9
Client Matrix: Solid
% Moisture: 0.8

Date Sampled: 06/29/2011 1000
Date Received: 07/01/2011 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-75947	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-74997	Lab File ID:	25A3070811.asc
Dilution:	1.0			Initial Weight/Volume:	1.06 g
Analysis Date:	07/08/2011 2007			Final Weight/Volume:	100 mL
Prep Date:	07/07/2011 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8350		1.5	4.8
Antimony		0.36	U	0.36	0.57
Arsenic		3.0		0.63	0.95
Barium		101		0.072	0.48
Beryllium		0.26		0.031	0.19
Cadmium		0.12	B	0.039	0.19
Calcium		4690		13.4	47.5
Chromium		11.3		0.055	0.19
Cobalt		6.5	X	0.095	0.95
Copper		13.8		0.21	0.95
Iron		18100		3.6	4.8
Lead		7.5		0.26	0.48
Magnesium		4140		3.5	19.0
Manganese		312		0.095	0.95
Molybdenum		0.25	U	0.25	1.9
Nickel		11.5	X	0.12	3.8
Potassium		1600		39.0	285
Selenium		0.82	U	0.82	0.95
Silicon		226		5.4	9.5
Silver		0.15	U	0.15	0.19
Sodium		204		56.1	114
Vanadium		42.5		0.089	1.9
Zinc		52.9		0.38	0.95

Analysis Method:	6010B	Analysis Batch:	280-76112	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-74997	Lab File ID:	25A6071111.asc
Dilution:	1.0			Initial Weight/Volume:	1.06 g
Analysis Date:	07/12/2011 0039			Final Weight/Volume:	100 mL
Prep Date:	07/07/2011 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Boron		1.9		0.93	1.9

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-76340	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-75827	Lab File ID:	110712TE.txt
Dilution:	1.0			Initial Weight/Volume:	0.66 g
Analysis Date:	07/13/2011 0323			Final Weight/Volume:	50 mL
Prep Date:	07/12/2011 1755				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.020		0.0051	0.016

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P1**

Lab Sample ID: 280-17587-10
Client Matrix: Solid
% Moisture: 0.5

Date Sampled: 06/29/2011 1010
Date Received: 07/01/2011 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-75947	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-74997	Lab File ID:	25A3070811.asc
Dilution:	1.0			Initial Weight/Volume:	1.06 g
Analysis Date:	07/08/2011 2009			Final Weight/Volume:	100 mL
Prep Date:	07/07/2011 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8210		1.5	4.7
Antimony		0.36	U	0.36	0.57
Arsenic		3.1		0.63	0.95
Barium		103		0.072	0.47
Beryllium		0.25		0.031	0.19
Cadmium		0.11	B	0.039	0.19
Calcium		4600		13.4	47.4
Chromium		11.4		0.055	0.19
Cobalt		6.6	X	0.095	0.95
Copper		19.0		0.21	0.95
Iron		18300		3.6	4.7
Lead		9.5		0.26	0.47
Magnesium		4240		3.5	19.0
Manganese		300		0.095	0.95
Molybdenum		0.25	U	0.25	1.9
Nickel		12.1	X	0.12	3.8
Potassium		1540		38.9	284
Selenium		0.82	U	0.82	0.95
Silicon		222		5.4	9.5
Silver		0.15	U	0.15	0.19
Sodium		210		55.9	114
Vanadium		42.3		0.089	1.9
Zinc		64.0		0.38	0.95

Analysis Method:	6010B	Analysis Batch:	280-76112	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-74997	Lab File ID:	25A6071111.asc
Dilution:	1.0			Initial Weight/Volume:	1.06 g
Analysis Date:	07/12/2011 0042			Final Weight/Volume:	100 mL
Prep Date:	07/07/2011 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Boron		1.8	B	0.93	1.9

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-76340	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-75827	Lab File ID:	110712TE.txt
Dilution:	1.0			Initial Weight/Volume:	0.60 g
Analysis Date:	07/13/2011 0326			Final Weight/Volume:	50 mL
Prep Date:	07/12/2011 1755				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.021		0.0056	0.017

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P2**

Lab Sample ID: 280-17587-11
Client Matrix: Solid
% Moisture: 0.5

Date Sampled: 06/29/2011 1020
Date Received: 07/01/2011 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-75947	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-74997	Lab File ID:	25A3070811.asc
Dilution:	1.0			Initial Weight/Volume:	1.01 g
Analysis Date:	07/08/2011 2012			Final Weight/Volume:	100 mL
Prep Date:	07/07/2011 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		10100		1.5	5.0
Antimony		0.38	U	0.38	0.60
Arsenic		3.2		0.66	1.0
Barium		100		0.076	0.50
Beryllium		0.30		0.033	0.20
Cadmium		0.097	B	0.041	0.20
Calcium		3580		14.0	49.8
Chromium		11.6		0.058	0.20
Cobalt		7.4	X	0.10	1.0
Copper		13.7		0.22	1.0
Iron		20100		3.8	5.0
Lead		5.6		0.27	0.50
Magnesium		4210		3.7	19.9
Manganese		360		0.10	1.0
Molybdenum		0.26	U	0.26	2.0
Nickel		11.1	X	0.12	4.0
Potassium		1950		40.8	299
Selenium		0.86	U	0.86	1.0
Silicon		305		5.6	10
Silver		0.16	U	0.16	0.20
Sodium		247		58.7	119
Vanadium		43.3		0.094	2.0
Zinc		49.6		0.40	1.0

Analysis Method:	6010B	Analysis Batch:	280-76112	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-74997	Lab File ID:	25A6071111.asc
Dilution:	1.0			Initial Weight/Volume:	1.01 g
Analysis Date:	07/12/2011 0044			Final Weight/Volume:	100 mL
Prep Date:	07/07/2011 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Boron		1.1	B	0.98	2.0

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-76340	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-75827	Lab File ID:	110712TE.txt
Dilution:	1.0			Initial Weight/Volume:	0.68 g
Analysis Date:	07/13/2011 0328			Final Weight/Volume:	50 mL
Prep Date:	07/12/2011 1755				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0095	B	0.0049	0.015

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P3**

Lab Sample ID: 280-17587-12
Client Matrix: Solid
% Moisture: 0.5

Date Sampled: 06/29/2011 1030
Date Received: 07/01/2011 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-75947	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-74997	Lab File ID:	25A3070811.asc
Dilution:	1.0			Initial Weight/Volume:	1.00 g
Analysis Date:	07/08/2011 2014			Final Weight/Volume:	100 mL
Prep Date:	07/07/2011 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8380		1.6	5.0
Antimony		0.38	U	0.38	0.60
Arsenic		2.7		0.66	1.0
Barium		81.8		0.076	0.50
Beryllium		0.24		0.033	0.20
Cadmium		0.090	B	0.041	0.20
Calcium		3800		14.2	50.3
Chromium		13.0		0.058	0.20
Cobalt		6.4	X	0.10	1.0
Copper		13.8		0.22	1.0
Iron		18000		3.8	5.0
Lead		5.5		0.27	0.50
Magnesium		3970		3.7	20.1
Manganese		303		0.10	1.0
Molybdenum		0.26	U	0.26	2.0
Nickel		11.0	X	0.12	4.0
Potassium		1620		41.2	302
Selenium		0.86	U	0.86	1.0
Silicon		309		5.7	10.1
Silver		0.16	U	0.16	0.20
Sodium		195		59.3	121
Vanadium		40.4		0.094	2.0
Zinc		41.6		0.40	1.0

Analysis Method:	6010B	Analysis Batch:	280-76112	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-74997	Lab File ID:	25A6071111.asc
Dilution:	1.0			Initial Weight/Volume:	1.00 g
Analysis Date:	07/12/2011 0047			Final Weight/Volume:	100 mL
Prep Date:	07/07/2011 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Boron		1.0	B	0.99	2.0

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-76340	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-75827	Lab File ID:	110712TE.txt
Dilution:	1.0			Initial Weight/Volume:	0.66 g
Analysis Date:	07/13/2011 0330			Final Weight/Volume:	50 mL
Prep Date:	07/12/2011 1755				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.024		0.0051	0.016

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P4**

Lab Sample ID: 280-17587-13FD
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 06/29/2011 1000
Date Received: 07/01/2011 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-75947	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-74997	Lab File ID:	25A3070811.asc
Dilution:	1.0			Initial Weight/Volume:	1.08 g
Analysis Date:	07/08/2011 2017			Final Weight/Volume:	100 mL
Prep Date:	07/07/2011 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8400		1.4	4.7
Antimony		0.35	U	0.35	0.56
Arsenic		3.1		0.61	0.93
Barium		104		0.071	0.47
Beryllium		0.26		0.031	0.19
Cadmium		0.14	B	0.038	0.19
Calcium		4730		13.1	46.6
Chromium		11.3		0.054	0.19
Cobalt		6.5	X	0.093	0.93
Copper		14.5		0.20	0.93
Iron		17400		3.5	4.7
Lead		7.6		0.25	0.47
Magnesium		4120		3.4	18.6
Manganese		297		0.093	0.93
Molybdenum		0.24	U	0.24	1.9
Nickel		11.1	X	0.11	3.7
Potassium		1610		38.2	279
Selenium		0.80	U	0.80	0.93
Silicon		228		5.3	9.3
Silver		0.15	U	0.15	0.19
Sodium		232		55.0	112
Vanadium		41.2		0.088	1.9
Zinc		50.7		0.37	0.93

Analysis Method:	6010B	Analysis Batch:	280-76112	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-74997	Lab File ID:	25A6071111.asc
Dilution:	1.0			Initial Weight/Volume:	1.08 g
Analysis Date:	07/12/2011 0049			Final Weight/Volume:	100 mL
Prep Date:	07/07/2011 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Boron		2.4		0.91	1.9

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-76340	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-75827	Lab File ID:	110712TE.txt
Dilution:	1.0			Initial Weight/Volume:	0.67 g
Analysis Date:	07/13/2011 0333			Final Weight/Volume:	50 mL
Prep Date:	07/12/2011 1755				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.024		0.0050	0.015

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Client Sample ID: **J1K3P5**

Lab Sample ID: 280-17587-14EB
Client Matrix: Solid
% Moisture: 0.1

Date Sampled: 06/29/2011 0925
Date Received: 07/01/2011 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-75947	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-74997	Lab File ID:	25A3070811.asc
Dilution:	1.0			Initial Weight/Volume:	1.14 g
Analysis Date:	07/08/2011 2019			Final Weight/Volume:	100 mL
Prep Date:	07/07/2011 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		167		1.4	4.4
Antimony		0.33	U	0.33	0.53
Arsenic		0.58	U	0.58	0.88
Barium		2.2		0.067	0.44
Beryllium		0.032	B	0.029	0.18
Cadmium		0.036	U	0.036	0.18
Calcium		35.8	B	12.4	43.9
Chromium		0.15	B	0.051	0.18
Cobalt		0.10	B X	0.088	0.88
Copper		0.19	U	0.19	0.88
Iron		252		3.3	4.4
Lead		0.40	B	0.24	0.44
Magnesium		21.4		3.2	17.6
Manganese		5.5		0.088	0.88
Molybdenum		0.23	U	0.23	1.8
Nickel		0.13	B X	0.11	3.5
Potassium		49.7	B	36.0	263
Selenium		0.75	U	0.75	0.88
Silicon		105		5.0	8.8
Silver		0.14	U	0.14	0.18
Sodium		51.8	U	51.8	105
Vanadium		0.25	B	0.083	1.8
Zinc		1.0		0.35	0.88

Analysis Method:	6010B	Analysis Batch:	280-76112	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-74997	Lab File ID:	25A6071111.asc
Dilution:	1.0			Initial Weight/Volume:	1.14 g
Analysis Date:	07/12/2011 0051			Final Weight/Volume:	100 mL
Prep Date:	07/07/2011 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Boron		0.86	U	0.86	1.8

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-76340	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-75827	Lab File ID:	110712TE.txt
Dilution:	1.0			Initial Weight/Volume:	0.62 g
Analysis Date:	07/13/2011 0335			Final Weight/Volume:	50 mL
Prep Date:	07/12/2011 1755				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0054	U	0.0054	0.016

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

General Chemistry

Client Sample ID: **J1K3N2**

Lab Sample ID: 280-17587-1
Client Matrix: Solid

Date Sampled: 06/29/2011 0840
Date Received: 07/01/2011 0930

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

Analysis Batch: 280-74920 Analysis Date: 07/01/2011 1500 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

General Chemistry

Client Sample ID: **J1K3N3**

Lab Sample ID: 280-17587-2
Client Matrix: Solid

Date Sampled: 06/29/2011 0850
Date Received: 07/01/2011 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	0.93		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-74920 Analysis Date: 07/01/2011 1500 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

General Chemistry

Client Sample ID: **J1K3N4**

Lab Sample ID: 280-17587-3
Client Matrix: Solid

Date Sampled: 06/29/2011 0900
Date Received: 07/01/2011 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	0.95		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-74920 Analysis Date: 07/01/2011 1500 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

General Chemistry

Client Sample ID: **J1K3N5**

Lab Sample ID: 280-17587-4
Client Matrix: Solid

Date Sampled: 06/29/2011 0910
Date Received: 07/01/2011 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	1.2		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-74920 Analysis Date: 07/01/2011 1500 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

General Chemistry

Client Sample ID: **J1K3N6**

Lab Sample ID: 280-17587-5
Client Matrix: Solid

Date Sampled: 06/29/2011 0920
Date Received: 07/01/2011 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	0.56		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-74920 Analysis Date: 07/01/2011 1500 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

General Chemistry

Client Sample ID: **J1K3N7**

Lab Sample ID: 280-17587-6
Client Matrix: Solid

Date Sampled: 06/29/2011 0930
Date Received: 07/01/2011 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	0.60		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-74920 Analysis Date: 07/01/2011 1500 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

General Chemistry

Client Sample ID: **J1K3N8**

Lab Sample ID: 280-17587-7
Client Matrix: Solid

Date Sampled: 06/29/2011 0940
Date Received: 07/01/2011 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	0.77		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-74920 Analysis Date: 07/01/2011 1500 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

General Chemistry

Client Sample ID: **J1K3N9**

Lab Sample ID: 280-17587-8
Client Matrix: Solid

Date Sampled: 06/29/2011 0950
Date Received: 07/01/2011 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	0.64		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-74920 Analysis Date: 07/01/2011 1500 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

General Chemistry

Client Sample ID: **J1K3P0**

Lab Sample ID: 280-17587-9
Client Matrix: Solid

Date Sampled: 06/29/2011 1000
Date Received: 07/01/2011 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	0.78		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-74920 Analysis Date: 07/01/2011 1500 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

General Chemistry

Client Sample ID: **J1K3P1**

Lab Sample ID: 280-17587-10
Client Matrix: Solid

Date Sampled: 06/29/2011 1010
Date Received: 07/01/2011 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	0.48		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-74920 Analysis Date: 07/01/2011 1500 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

General Chemistry

Client Sample ID: **J1K3P2**

Lab Sample ID: 280-17587-11
Client Matrix: Solid

Date Sampled: 06/29/2011 1020
Date Received: 07/01/2011 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	0.51		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-74920 Analysis Date: 07/01/2011 1500 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

General Chemistry

Client Sample ID: **J1K3P3**

Lab Sample ID: 280-17587-12
Client Matrix: Solid

Date Sampled: 06/29/2011 1030
Date Received: 07/01/2011 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	0.51		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-74920 Analysis Date: 07/01/2011 1500 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

General Chemistry

Client Sample ID: **J1K3P4**

Lab Sample ID: 280-17587-13FD
Client Matrix: Solid

Date Sampled: 06/29/2011 1000
Date Received: 07/01/2011 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	0.61		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-74920 Analysis Date: 07/01/2011 1500 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

General Chemistry

Client Sample ID: **J1K3P5**

Lab Sample ID: 280-17587-14EB
Client Matrix: Solid

Date Sampled: 06/29/2011 0925
Date Received: 07/01/2011 0930

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

Analysis Batch: 280-74920 Analysis Date: 07/01/2011 1500 DryWt Corrected: N

QUALITY CONTROL RESULTS

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 280-74911					
LCS 280-74911/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-74911/1-A	Method Blank	T	Solid	3550C	
280-17587-1	J1K3N2	T	Solid	3550C	
280-17587-1MS	Matrix Spike	T	Solid	3550C	
280-17587-1MSD	Matrix Spike Duplicate	T	Solid	3550C	
280-17587-2	J1K3N3	T	Solid	3550C	
280-17587-3	J1K3N4	T	Solid	3550C	
280-17587-4	J1K3N5	T	Solid	3550C	
280-17587-5	J1K3N6	T	Solid	3550C	
280-17587-6	J1K3N7	T	Solid	3550C	
280-17587-7	J1K3N8	T	Solid	3550C	
280-17587-8	J1K3N9	T	Solid	3550C	
280-17587-9	J1K3P0	T	Solid	3550C	
280-17587-10	J1K3P1	T	Solid	3550C	
280-17587-11	J1K3P2	T	Solid	3550C	
280-17587-12	J1K3P3	T	Solid	3550C	
280-17587-13FD	J1K3P4	T	Solid	3550C	
280-17587-14EB	J1K3P5	T	Solid	3550C	
Analysis Batch:280-75451					
LCS 280-74911/2-A	Lab Control Sample	T	Solid	8270C	280-74911
MB 280-74911/1-A	Method Blank	T	Solid	8270C	280-74911
280-17587-1	J1K3N2	T	Solid	8270C	280-74911
280-17587-1MS	Matrix Spike	T	Solid	8270C	280-74911
280-17587-1MSD	Matrix Spike Duplicate	T	Solid	8270C	280-74911
280-17587-2	J1K3N3	T	Solid	8270C	280-74911
280-17587-3	J1K3N4	T	Solid	8270C	280-74911
280-17587-4	J1K3N5	T	Solid	8270C	280-74911
280-17587-5	J1K3N6	T	Solid	8270C	280-74911
280-17587-6	J1K3N7	T	Solid	8270C	280-74911
280-17587-7	J1K3N8	T	Solid	8270C	280-74911
280-17587-8	J1K3N9	T	Solid	8270C	280-74911
280-17587-9	J1K3P0	T	Solid	8270C	280-74911
280-17587-10	J1K3P1	T	Solid	8270C	280-74911
280-17587-11	J1K3P2	T	Solid	8270C	280-74911
280-17587-12	J1K3P3	T	Solid	8270C	280-74911
Analysis Batch:280-75767					
280-17587-13FD	J1K3P4	T	Solid	8270C	280-74911
280-17587-14EB	J1K3P5	T	Solid	8270C	280-74911

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 280-74921					
LCS 280-74921/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-74921/1-A	Method Blank	T	Solid	3550C	
280-17587-1	J1K3N2	T	Solid	3550C	
280-17587-2	J1K3N3	T	Solid	3550C	
280-17587-2MS	Matrix Spike	T	Solid	3550C	
280-17587-2MSD	Matrix Spike Duplicate	T	Solid	3550C	
280-17587-3	J1K3N4	T	Solid	3550C	
280-17587-4	J1K3N5	T	Solid	3550C	
280-17587-5	J1K3N6	T	Solid	3550C	
280-17587-6	J1K3N7	T	Solid	3550C	
280-17587-7	J1K3N8	T	Solid	3550C	
280-17587-8	J1K3N9	T	Solid	3550C	
280-17587-9	J1K3P0	T	Solid	3550C	
280-17587-10	J1K3P1	T	Solid	3550C	
280-17587-11	J1K3P2	T	Solid	3550C	
280-17587-12	J1K3P3	T	Solid	3550C	
Prep Batch: 280-74933					
LCS 280-74933/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-74933/1-A	Method Blank	T	Solid	3550C	
280-17587-1	J1K3N2	T	Solid	3550C	
280-17587-2	J1K3N3	T	Solid	3550C	
280-17587-3	J1K3N4	T	Solid	3550C	
280-17587-4	J1K3N5	T	Solid	3550C	
280-17587-4MS	Matrix Spike	T	Solid	3550C	
280-17587-4MSD	Matrix Spike Duplicate	T	Solid	3550C	
280-17587-5	J1K3N6	T	Solid	3550C	
280-17587-6	J1K3N7	T	Solid	3550C	
280-17587-7	J1K3N8	T	Solid	3550C	
280-17587-8	J1K3N9	T	Solid	3550C	
280-17587-9	J1K3P0	T	Solid	3550C	
280-17587-10	J1K3P1	T	Solid	3550C	
280-17587-11	J1K3P2	T	Solid	3550C	
280-17587-12	J1K3P3	T	Solid	3550C	
280-17587-13FD	J1K3P4	T	Solid	3550C	
Analysis Batch:280-75431					
280-17587-12	J1K3P3	T	Solid	8081A	280-74921
Prep Batch: 280-75510					
LCS 280-75510/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-75510/1-A	Method Blank	T	Solid	3550C	
280-17587-13FD	J1K3P4	T	Solid	3550C	
280-17587-13MS	Matrix Spike	T	Solid	3550C	
280-17587-13MSD	Matrix Spike Duplicate	T	Solid	3550C	

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Analysis Batch:280-75674					
280-17587-1	J1K3N2	T	Solid	8081A	280-74921
280-17587-2	J1K3N3	T	Solid	8081A	280-74921
280-17587-2MS	Matrix Spike	T	Solid	8081A	280-74921
280-17587-2MSD	Matrix Spike Duplicate	T	Solid	8081A	280-74921
280-17587-4	J1K3N5	T	Solid	8081A	280-74921
280-17587-5	J1K3N6	T	Solid	8081A	280-74921
280-17587-6	J1K3N7	T	Solid	8081A	280-74921
280-17587-7	J1K3N8	T	Solid	8081A	280-74921
280-17587-9	J1K3P0	T	Solid	8081A	280-74921
280-17587-10	J1K3P1	T	Solid	8081A	280-74921
Analysis Batch:280-76028					
LCS 280-75510/2-A	Lab Control Sample	T	Solid	8081A	280-75510
MB 280-75510/1-A	Method Blank	T	Solid	8081A	280-75510
280-17587-13FD	J1K3P4	T	Solid	8081A	280-75510
280-17587-13MS	Matrix Spike	T	Solid	8081A	280-75510
280-17587-13MSD	Matrix Spike Duplicate	T	Solid	8081A	280-75510
Analysis Batch:280-76388					
LCS 280-74933/2-A	Lab Control Sample	T	Solid	8082	280-74933
MB 280-74933/1-A	Method Blank	T	Solid	8082	280-74933
280-17587-1	J1K3N2	T	Solid	8082	280-74933
280-17587-2	J1K3N3	T	Solid	8082	280-74933
280-17587-3	J1K3N4	T	Solid	8082	280-74933
280-17587-4	J1K3N5	T	Solid	8082	280-74933
280-17587-4MS	Matrix Spike	T	Solid	8082	280-74933
280-17587-4MSD	Matrix Spike Duplicate	T	Solid	8082	280-74933
280-17587-5	J1K3N6	T	Solid	8082	280-74933
280-17587-6	J1K3N7	T	Solid	8082	280-74933
280-17587-7	J1K3N8	T	Solid	8082	280-74933
280-17587-8	J1K3N9	T	Solid	8082	280-74933
280-17587-9	J1K3P0	T	Solid	8082	280-74933
280-17587-10	J1K3P1	T	Solid	8082	280-74933
280-17587-11	J1K3P2	T	Solid	8082	280-74933
280-17587-12	J1K3P3	T	Solid	8082	280-74933
280-17587-13FD	J1K3P4	T	Solid	8082	280-74933

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Analysis Batch:280-76396					
LCS 280-74933/2-A	Lab Control Sample	T	Solid	8082	280-74933
MB 280-74933/1-A	Method Blank	T	Solid	8082	280-74933
280-17587-1	J1K3N2	T	Solid	8082	280-74933
280-17587-2	J1K3N3	T	Solid	8082	280-74933
280-17587-4	J1K3N5	T	Solid	8082	280-74933
280-17587-4MS	Matrix Spike	T	Solid	8082	280-74933
280-17587-4MSD	Matrix Spike Duplicate	T	Solid	8082	280-74933
280-17587-6	J1K3N7	T	Solid	8082	280-74933
280-17587-7	J1K3N8	T	Solid	8082	280-74933
280-17587-8	J1K3N9	T	Solid	8082	280-74933
280-17587-9	J1K3P0	T	Solid	8082	280-74933
280-17587-10	J1K3P1	T	Solid	8082	280-74933
280-17587-11	J1K3P2	T	Solid	8082	280-74933
280-17587-12	J1K3P3	T	Solid	8082	280-74933
280-17587-13FD	J1K3P4	T	Solid	8082	280-74933
Analysis Batch:280-76549					
LCS 280-74921/2-A	Lab Control Sample	T	Solid	8081A	280-74921
MB 280-74921/1-A	Method Blank	T	Solid	8081A	280-74921
280-17587-3	J1K3N4	T	Solid	8081A	280-74921
280-17587-8	J1K3N9	T	Solid	8081A	280-74921
280-17587-11	J1K3P2	T	Solid	8081A	280-74921

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-74997					
LCS 280-74997/2-A	Lab Control Sample	T	Solid	3050B	
MB 280-74997/1-A	Method Blank	T	Solid	3050B	
280-17587-1	J1K3N2	T	Solid	3050B	
280-17587-1DU	Duplicate	T	Solid	3050B	
280-17587-1MS	Matrix Spike	T	Solid	3050B	
280-17587-2	J1K3N3	T	Solid	3050B	
280-17587-3	J1K3N4	T	Solid	3050B	
280-17587-4	J1K3N5	T	Solid	3050B	
280-17587-5	J1K3N6	T	Solid	3050B	
280-17587-6	J1K3N7	T	Solid	3050B	
280-17587-7	J1K3N8	T	Solid	3050B	
280-17587-8	J1K3N9	T	Solid	3050B	
280-17587-9	J1K3P0	T	Solid	3050B	
280-17587-10	J1K3P1	T	Solid	3050B	
280-17587-11	J1K3P2	T	Solid	3050B	
280-17587-12	J1K3P3	T	Solid	3050B	
280-17587-13FD	J1K3P4	T	Solid	3050B	
280-17587-14EB	J1K3P5	T	Solid	3050B	
Prep Batch: 280-75827					
LCS 280-75827/2-A	Lab Control Sample	T	Solid	7471A	
MB 280-75827/1-A	Method Blank	T	Solid	7471A	
280-17587-1	J1K3N2	T	Solid	7471A	
280-17587-1DU	Duplicate	T	Solid	7471A	
280-17587-1MS	Matrix Spike	T	Solid	7471A	
280-17587-2	J1K3N3	T	Solid	7471A	
280-17587-3	J1K3N4	T	Solid	7471A	
280-17587-4	J1K3N5	T	Solid	7471A	
280-17587-5	J1K3N6	T	Solid	7471A	
280-17587-6	J1K3N7	T	Solid	7471A	
280-17587-7	J1K3N8	T	Solid	7471A	
280-17587-8	J1K3N9	T	Solid	7471A	
280-17587-9	J1K3P0	T	Solid	7471A	
280-17587-10	J1K3P1	T	Solid	7471A	
280-17587-11	J1K3P2	T	Solid	7471A	
280-17587-12	J1K3P3	T	Solid	7471A	
280-17587-13FD	J1K3P4	T	Solid	7471A	
280-17587-14EB	J1K3P5	T	Solid	7471A	

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:280-75947					
LCS 280-74997/2-A	Lab Control Sample	T	Solid	6010B	280-74997
MB 280-74997/1-A	Method Blank	T	Solid	6010B	280-74997
280-17587-1	J1K3N2	T	Solid	6010B	280-74997
280-17587-1DU	Duplicate	T	Solid	6010B	280-74997
280-17587-1MS	Matrix Spike	T	Solid	6010B	280-74997
280-17587-2	J1K3N3	T	Solid	6010B	280-74997
280-17587-3	J1K3N4	T	Solid	6010B	280-74997
280-17587-4	J1K3N5	T	Solid	6010B	280-74997
280-17587-5	J1K3N6	T	Solid	6010B	280-74997
280-17587-6	J1K3N7	T	Solid	6010B	280-74997
280-17587-7	J1K3N8	T	Solid	6010B	280-74997
280-17587-8	J1K3N9	T	Solid	6010B	280-74997
280-17587-9	J1K3P0	T	Solid	6010B	280-74997
280-17587-10	J1K3P1	T	Solid	6010B	280-74997
280-17587-11	J1K3P2	T	Solid	6010B	280-74997
280-17587-12	J1K3P3	T	Solid	6010B	280-74997
280-17587-13FD	J1K3P4	T	Solid	6010B	280-74997
280-17587-14EB	J1K3P5	T	Solid	6010B	280-74997
Analysis Batch:280-76112					
LCS 280-74997/2-A	Lab Control Sample	T	Solid	6010B	280-74997
MB 280-74997/1-A	Method Blank	T	Solid	6010B	280-74997
280-17587-1	J1K3N2	T	Solid	6010B	280-74997
280-17587-1DU	Duplicate	T	Solid	6010B	280-74997
280-17587-1MS	Matrix Spike	T	Solid	6010B	280-74997
280-17587-2	J1K3N3	T	Solid	6010B	280-74997
280-17587-3	J1K3N4	T	Solid	6010B	280-74997
280-17587-4	J1K3N5	T	Solid	6010B	280-74997
280-17587-5	J1K3N6	T	Solid	6010B	280-74997
280-17587-6	J1K3N7	T	Solid	6010B	280-74997
280-17587-7	J1K3N8	T	Solid	6010B	280-74997
280-17587-8	J1K3N9	T	Solid	6010B	280-74997
280-17587-9	J1K3P0	T	Solid	6010B	280-74997
280-17587-10	J1K3P1	T	Solid	6010B	280-74997
280-17587-11	J1K3P2	T	Solid	6010B	280-74997
280-17587-12	J1K3P3	T	Solid	6010B	280-74997
280-17587-13FD	J1K3P4	T	Solid	6010B	280-74997
280-17587-14EB	J1K3P5	T	Solid	6010B	280-74997

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:280-76340					
LCS 280-75827/2-A	Lab Control Sample	T	Solid	7471A	280-75827
MB 280-75827/1-A	Method Blank	T	Solid	7471A	280-75827
280-17587-1	J1K3N2	T	Solid	7471A	280-75827
280-17587-1DU	Duplicate	T	Solid	7471A	280-75827
280-17587-1MS	Matrix Spike	T	Solid	7471A	280-75827
280-17587-2	J1K3N3	T	Solid	7471A	280-75827
280-17587-3	J1K3N4	T	Solid	7471A	280-75827
280-17587-4	J1K3N5	T	Solid	7471A	280-75827
280-17587-5	J1K3N6	T	Solid	7471A	280-75827
280-17587-6	J1K3N7	T	Solid	7471A	280-75827
280-17587-7	J1K3N8	T	Solid	7471A	280-75827
280-17587-8	J1K3N9	T	Solid	7471A	280-75827
280-17587-9	J1K3P0	T	Solid	7471A	280-75827
280-17587-10	J1K3P1	T	Solid	7471A	280-75827
280-17587-11	J1K3P2	T	Solid	7471A	280-75827
280-17587-12	J1K3P3	T	Solid	7471A	280-75827
280-17587-13FD	J1K3P4	T	Solid	7471A	280-75827
280-17587-14EB	J1K3P5	T	Solid	7471A	280-75827

Report Basis
T = Total

General Chemistry

Analysis Batch:280-74920				
280-17587-1	J1K3N2	T	Solid	D-2216
280-17587-1DU	Duplicate	T	Solid	D-2216
280-17587-2	J1K3N3	T	Solid	D-2216
280-17587-3	J1K3N4	T	Solid	D-2216
280-17587-4	J1K3N5	T	Solid	D-2216
280-17587-5	J1K3N6	T	Solid	D-2216
280-17587-6	J1K3N7	T	Solid	D-2216
280-17587-7	J1K3N8	T	Solid	D-2216
280-17587-8	J1K3N9	T	Solid	D-2216
280-17587-9	J1K3P0	T	Solid	D-2216
280-17587-10	J1K3P1	T	Solid	D-2216
280-17587-11	J1K3P2	T	Solid	D-2216
280-17587-12	J1K3P3	T	Solid	D-2216
280-17587-13FD	J1K3P4	T	Solid	D-2216
280-17587-14EB	J1K3P5	T	Solid	D-2216

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
HPLC/IC					
Prep Batch: 280-74929					
LCS 280-74929/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-74929/1-A	Method Blank	T	Solid	3550C	
280-17587-1	J1K3N2	T	Solid	3550C	
280-17587-2	J1K3N3	T	Solid	3550C	
280-17587-3	J1K3N4	T	Solid	3550C	
280-17587-3MS	Matrix Spike	T	Solid	3550C	
280-17587-3MSD	Matrix Spike Duplicate	T	Solid	3550C	
280-17587-4	J1K3N5	T	Solid	3550C	
280-17587-5	J1K3N6	T	Solid	3550C	
280-17587-6	J1K3N7	T	Solid	3550C	
280-17587-7	J1K3N8	T	Solid	3550C	
280-17587-8	J1K3N9	T	Solid	3550C	
280-17587-9	J1K3P0	T	Solid	3550C	
280-17587-10	J1K3P1	T	Solid	3550C	
280-17587-11	J1K3P2	T	Solid	3550C	
280-17587-12	J1K3P3	T	Solid	3550C	
280-17587-13FD	J1K3P4	T	Solid	3550C	
Analysis Batch:280-75137					
LCS 280-74929/2-A	Lab Control Sample	T	Solid	8310	280-74929
MB 280-74929/1-A	Method Blank	T	Solid	8310	280-74929
280-17587-1	J1K3N2	T	Solid	8310	280-74929
280-17587-2	J1K3N3	T	Solid	8310	280-74929
280-17587-3	J1K3N4	T	Solid	8310	280-74929
280-17587-3MS	Matrix Spike	T	Solid	8310	280-74929
280-17587-3MSD	Matrix Spike Duplicate	T	Solid	8310	280-74929
280-17587-4	J1K3N5	T	Solid	8310	280-74929
280-17587-5	J1K3N6	T	Solid	8310	280-74929
280-17587-6	J1K3N7	T	Solid	8310	280-74929
280-17587-7	J1K3N8	T	Solid	8310	280-74929
280-17587-8	J1K3N9	T	Solid	8310	280-74929
280-17587-9	J1K3P0	T	Solid	8310	280-74929
280-17587-10	J1K3P1	T	Solid	8310	280-74929
280-17587-11	J1K3P2	T	Solid	8310	280-74929
280-17587-12	J1K3P3	T	Solid	8310	280-74929
280-17587-13FD	J1K3P4	T	Solid	8310	280-74929

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Method Blank - Batch: 280-74911

Method: 8270C
Preparation: 3550C

Lab Sample ID:	MB 280-74911/1-A	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Client Matrix:	Solid	Prep Batch:	280-74911	Lab File ID:	Y1508.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.6 g
Analysis Date:	07/06/2011 2057	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acenaphthene	10	U	10	320
Acenaphthylene	17	U	17	320
Anthracene	17	U	17	320
Benzo[a]anthracene	20	U	20	320
Benzo[a]pyrene	20	U	20	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	23	U	23	320
Bis(2-chloroethyl)ether	16	U	16	320
bis (2-chloroisopropyl) ether	23	U	23	320
Bis(2-ethylhexyl) phthalate	67.6	J	45	320
4-Bromophenyl phenyl ether	19	U	19	320
Butyl benzyl phthalate	42	U	42	320
Carbazole	35	U	35	320
4-Chloroaniline	80	U	80	320
4-Chloro-3-methylphenol	65	U	65	320
2-Chloronaphthalene	9.8	U	9.8	320
2-Chlorophenol	21	U	21	320
4-Chlorophenyl phenyl ether	21	U	21	320
Chrysene	26	U	26	320
Dibenz(a,h)anthracene	19	U	19	320
Dibenzofuran	20	U	20	320
1,2-Dichlorobenzene	22	U	22	320
1,3-Dichlorobenzene	12	U	12	320
1,4-Dichlorobenzene	13	U	13	320
3,3'-Dichlorobenzidine	88	U	88	650
2,4-Dichlorophenol	9.8	U	9.8	320
Diethyl phthalate	25	U	25	320
2,4-Dimethylphenol	65	U	65	320
Dimethyl phthalate	23	U	23	320
Di-n-butyl phthalate	28	U	28	320
4,6-Dinitro-2-methylphenol	320	U	320	650
2,4-Dinitrophenol	330	U	330	810
2,4-Dinitrotoluene	65	U	65	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	9.8	U	9.8	320
Hexachlorocyclopentadiene	49	U	49	320
Hexachloroethane	21	U	21	320
Indeno[1,2,3-cd]pyrene	22	U	22	320
Isophorone	17	U	17	320

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Method Blank - Batch: 280-74911

Method: 8270C
Preparation: 3550C

Lab Sample ID:	MB 280-74911/1-A	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Client Matrix:	Solid	Prep Batch:	280-74911	Lab File ID:	Y1508.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.6 g
Analysis Date:	07/06/2011 2057	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
2-Methylnaphthalene	19	U	19	320
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	72	U	72	320
4-Nitroaniline	71	U	71	320
Nitrobenzene	22	U	22	320
2-Nitrophenol	9.8	U	9.8	320
4-Nitrophenol	95	U	95	650
N-Nitrosodi-n-propylamine	30	U	30	320
N-Nitrosodiphenylamine	21	U	21	320
Pentachlorophenol	320	U	320	650
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	9.8	U	9.8	320
2,4,6-Trichlorophenol	9.8	U	9.8	320

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	79	50 - 120
2-Fluorophenol	82	53 - 120
Nitrobenzene-d5	79	50 - 120
Phenol-d5	85	52 - 120
Terphenyl-d14	91	55 - 120
2,4,6-Tribromophenol	91	51 - 120

Method Blank TICs- Batch: 280-74911

Cas Number	Analyte	RT	Est. Result	Qual
	Unknown	3.26	4360	N J
	Unknown	1.65	7760	N J

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Lab Control Sample - Batch: 280-74911

Method: 8270C
Preparation: 3550C

Lab Sample ID:	LCS 280-74911/2-A	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Client Matrix:	Solid	Prep Batch:	280-74911	Lab File ID:	Y1509.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.7 g
Analysis Date:	07/06/2011 2118	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acenaphthene	2610	2210	85	52 - 120	
Anthracene	2610	2430	93	57 - 120	
Carbazole	2610	2360	90	54 - 120	
4-Chloro-3-methylphenol	2610	2390	92	57 - 120	
2-Chlorophenol	2610	2160	83	53 - 120	
1,4-Dichlorobenzene	2610	2010	77	46 - 120	
2,4-Dinitrotoluene	2610	2490	95	53 - 120	
2-Methylnaphthalene	2610	2120	81	55 - 120	
2-Methylphenol	2610	2160	83	51 - 120	
4-Nitrophenol	2610	2730	105	41 - 120	
N-Nitrosodi-n-propylamine	2610	2170	83	51 - 120	
Pentachlorophenol	2610	2190	84	30 - 120	
Phenol	2610	2190	84	54 - 120	
Pyrene	2610	2440	94	50 - 120	
1,2,4-Trichlorobenzene	2610	1920	74	50 - 120	
2,4,6-Trichlorophenol	2610	2370	91	50 - 120	

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	84	50 - 120
2-Fluorophenol	84	53 - 120
Nitrobenzene-d5	83	50 - 120
Phenol-d5	86	52 - 120
Terphenyl-d14	92	55 - 120
2,4,6-Tribromophenol	103	51 - 120

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-74911

Method: 8270C
Preparation: 3550C

MS Lab Sample ID:	280-17587-1	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Client Matrix:	Solid	Prep Batch:	280-74911	Lab File ID:	Y1511.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	32.4 g
Analysis Date:	07/06/2011 2159			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			Injection Volume:	0.5 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-17587-1	Analysis Batch:	280-75451	Instrument ID:	MSS_Y
Client Matrix:	Solid	Prep Batch:	280-74911	Lab File ID:	Y1512.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	32.6 g
Analysis Date:	07/06/2011 2220			Final Weight/Volume:	1000 uL
Prep Date:	07/01/2011 1655			Injection Volume:	0.5 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acenaphthene	86	94	52 - 120	9	30		
Anthracene	94	104	57 - 120	9	30		
Carbazole	93	100	54 - 120	8	30		
4-Chloro-3-methylphenol	96	103	57 - 120	6	30		
2-Chlorophenol	79	90	53 - 120	12	30		
1,4-Dichlorobenzene	71	80	46 - 120	12	30		
2,4-Dinitrotoluene	93	100	53 - 120	7	30		
2-Methylnaphthalene	80	92	55 - 120	12	30		
2-Methylphenol	80	94	51 - 120	15	30		
4-Nitrophenol	101	110	41 - 120	8	30		
N-Nitrosodi-n-propylamine	79	90	51 - 120	13	30		
Pentachlorophenol	72	81	30 - 120	11	30		
Phenol	80	91	54 - 120	13	30		
Pyrene	97	107	50 - 120	9	38		
1,2,4-Trichlorobenzene	71	81	50 - 120	12	30		
2,4,6-Trichlorophenol	91	99	50 - 120	8	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
2-Fluorobiphenyl	85	92	50 - 120
2-Fluorophenol	78	88	53 - 120
Nitrobenzene-d5	82	90	50 - 120
Phenol-d5	84	94	52 - 120
Terphenyl-d14	94	99	55 - 120
2,4,6-Tribromophenol	100	106	51 - 120

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Method Blank - Batch: 280-74921

Method: 8081A
Preparation: 3550C

Lab Sample ID:	MB 280-74921/1-A	Analysis Batch:	280-76549	Instrument ID:	GCS_P1
Client Matrix:	Solid	Prep Batch:	280-74921	Lab File ID:	011F1101.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.6 g
Analysis Date:	07/12/2011 1913	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	07/01/2011 1735			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

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

Surrogate	% Rec	Acceptance Limits
Tetrachloro-m-xylene	80	59 - 115
Decachlorobiphenyl	89	63 - 124

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Lab Control Sample - Batch: 280-74921

Method: 8081A
Preparation: 3550C

Lab Sample ID:	LCS 280-74921/2-A	Analysis Batch:	280-76549	Instrument ID:	GCS_P1
Client Matrix:	Solid	Prep Batch:	280-74921	Lab File ID:	007F0701.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	32.9 g
Analysis Date:	07/12/2011 1807	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	07/01/2011 1735			Injection Volume:	
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
4,4'-DDD	15.2	11.4	75	57 - 118	
4,4'-DDE	15.2	11.6	76	61 - 115	
4,4'-DDT	15.2	12.0	79	53 - 125	
Aldrin	15.2	10.9	72	60 - 115	
alpha-BHC	15.2	11.3	74	54 - 115	
beta-BHC	15.2	11.4	75	58 - 115	
delta-BHC	15.2	11.1	73	62 - 115	
gamma-BHC (Lindane)	15.2	11.2	74	59 - 115	
Heptachlor	15.2	11.5	76	61 - 115	
Heptachlor epoxide	15.2	11.6	77	62 - 112	
Endosulfan I	15.2	11.5	76	55 - 115	
Endosulfan II	15.2	12.0	79	60 - 115	
Endosulfan sulfate	15.2	11.7	77	58 - 118	
Endrin	15.2	13.2	87	61 - 121	
Endrin aldehyde	15.2	10.3	68	54 - 115	
Endrin ketone	15.2	10.2	67	61 - 118	
gamma-Chlordane	15.2	11.6	77	60 - 115	
Methoxychlor	15.2	12.3	81	52 - 123	
alpha-Chlordane	15.2	11.4	75	60 - 115	
Dieldrin	15.2	11.7	77	63 - 117	

Surrogate	% Rec	Acceptance Limits
Tetrachloro-m-xylene	81	59 - 115
Decachlorobiphenyl	92	63 - 124

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-74921

Method: 8081A
Preparation: 3550C

MS Lab Sample ID:	280-17587-2	Analysis Batch:	280-75674	Instrument ID:	GCS_P2
Client Matrix:	Solid	Prep Batch:	280-74921	Lab File ID:	07070045.D
Dilution:	10	Leach Batch:	N/A	Initial Weight/Volume:	32.2 g
Analysis Date:	07/08/2011 0347			Final Weight/Volume:	10000 uL
Prep Date:	07/01/2011 1735			Injection Volume:	
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-17587-2	Analysis Batch:	280-75674	Instrument ID:	GCS_P2
Client Matrix:	Solid	Prep Batch:	280-74921	Lab File ID:	07070046.D
Dilution:	10	Leach Batch:	N/A	Initial Weight/Volume:	32.3 g
Analysis Date:	07/08/2011 0404			Final Weight/Volume:	10000 uL
Prep Date:	07/01/2011 1735			Injection Volume:	
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
4,4'-DDD	0	0	57 - 118	NC	20	U D	U D
4,4'-DDE	104	112	61 - 115	7	15	D	D
4,4'-DDT	102	111	53 - 125	8	29	D	D
Aldrin	80	91	60 - 115	14	50	J D	J D
alpha-BHC	75	86	54 - 115	14	17	J D	J D
beta-BHC	84	93	58 - 115	11	17	J D	J D
delta-BHC	70	81	62 - 115	14	19	J D	J D
gamma-BHC (Lindane)	76	87	59 - 115	14	24	J D	J D
Heptachlor	81	93	61 - 115	14	18	J D	J D
Heptachlor epoxide	85	96	62 - 112	12	18	J D	D
Endosulfan I	75	84	55 - 115	12	26	J D	J D
Endosulfan II	80	91	60 - 115	13	20	J D	J D
Endosulfan sulfate	63	79	58 - 118	23	22	J D	J D
Endrin	92	104	61 - 121	13	30	J D	D
Endrin aldehyde	70	83	54 - 115	17	29	J D	J D
Endrin ketone	66	79	61 - 118	18	20	J D	J D
gamma-Chlordane	94	109	60 - 115	15	21	J D	D
Methoxychlor	83	84	52 - 123	2	23	J D	J D
alpha-Chlordane	124	135	60 - 115	8	18	D	D
Dieldrin	74	136	63 - 117	27	25	D	D

Surrogate	MS % Rec		MSD % Rec		Acceptance Limits
Tetrachloro-m-xylene	98	D	104	D	59 - 115
Decachlorobiphenyl	78	D	89	D	63 - 124

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Method Blank - Batch: 280-75510

Method: 8081A
Preparation: 3550C

Lab Sample ID:	MB 280-75510/1-A	Analysis Batch:	280-76028	Instrument ID:	GCS_P1
Client Matrix:	Solid	Prep Batch:	280-75510	Lab File ID:	032F3201.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.7 g
Analysis Date:	07/09/2011 0312	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	07/07/2011 1321			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
4,4'-DDD	0.53	U	0.53	1.7
4,4'-DDE	0.23	U	0.23	1.7
4,4'-DDT	0.58	U	0.58	1.7
Aldrin	0.25	U	0.25	1.6
alpha-BHC	0.21	U	0.21	1.6
beta-BHC	0.65	U	0.65	1.6
delta-BHC	0.39	U	0.39	1.6
gamma-BHC (Lindane)	0.45	U	0.45	1.6
Heptachlor	0.21	U	0.21	1.6
Heptachlor epoxide	0.42	U	0.42	1.6
Endosulfan I	0.17	U	0.17	1.6
Endosulfan II	0.28	U	0.28	1.7
Endosulfan sulfate	0.27	U	0.27	1.7
Endrin	0.30	U	0.30	1.7
Endrin aldehyde	0.17	U	0.17	1.7
Endrin ketone	0.48	U	0.48	1.7
gamma-Chlordane	0.26	U	0.26	1.7
Methoxychlor	0.44	U	0.44	3.2
alpha-Chlordane	0.32	U	0.32	1.7
Dieldrin	0.21	U	0.21	1.7
Toxaphene	15	U	15	160

Surrogate	% Rec	Acceptance Limits
Tetrachloro-m-xylene	88	59 - 115
Decachlorobiphenyl	102	63 - 124

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Lab Control Sample - Batch: 280-75510

Method: 8081A
Preparation: 3550C

Lab Sample ID:	LCS 280-75510/2-A	Analysis Batch:	280-76028	Instrument ID:	GCS_P1
Client Matrix:	Solid	Prep Batch:	280-75510	Lab File ID:	028F2801.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.5 g
Analysis Date:	07/09/2011 0206	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	07/07/2011 1321			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
4,4'-DDD	16.4	14.1	86	57 - 118	
4,4'-DDE	16.4	14.0	85	61 - 115	
4,4'-DDT	16.4	14.9	91	53 - 125	
Aldrin	16.4	13.3	81	60 - 115	
alpha-BHC	16.4	13.3	81	54 - 115	
beta-BHC	16.4	13.6	83	58 - 115	
delta-BHC	16.4	13.6	83	62 - 115	
gamma-BHC (Lindane)	16.4	13.4	82	59 - 115	
Heptachlor	16.4	13.8	84	61 - 115	
Heptachlor epoxide	16.4	14.2	86	62 - 112	
Endosulfan I	16.4	14.0	85	55 - 115	
Endosulfan II	16.4	14.8	90	60 - 115	
Endosulfan sulfate	16.4	14.9	91	58 - 118	
Endrin	16.4	16.4	100	61 - 121	
Endrin aldehyde	16.4	11.9	72	54 - 115	
Endrin ketone	16.4	12.8	78	61 - 118	
gamma-Chlordane	16.4	14.0	86	60 - 115	
Methoxychlor	16.4	15.3	93	52 - 123	
alpha-Chlordane	16.4	13.7	84	60 - 115	
Dieldrin	16.4	14.3	87	63 - 117	

Surrogate	% Rec	Acceptance Limits
Tetrachloro-m-xylene	85	59 - 115
Decachlorobiphenyl	102	63 - 124

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-75510

Method: 8081A
Preparation: 3550C

MS Lab Sample ID:	280-17587-13	Analysis Batch:	280-76028	Instrument ID:	GCS_P1
Client Matrix:	Solid	Prep Batch:	280-75510	Lab File ID:	055F5501.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.5 g
Analysis Date:	07/09/2011 0933			Final Weight/Volume:	10000 uL
Prep Date:	07/07/2011 1321			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-17587-13	Analysis Batch:	280-76028	Instrument ID:	GCS_P1
Client Matrix:	Solid	Prep Batch:	280-75510	Lab File ID:	056F5601.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.5 g
Analysis Date:	07/09/2011 0949			Final Weight/Volume:	10000 uL
Prep Date:	07/07/2011 1321			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
4,4'-DDD	79	79	57 - 118	0	20		
4,4'-DDE	70	74	61 - 115	4	15		
4,4'-DDT	72	81	53 - 125	8	29		
Aldrin	73	71	60 - 115	3	50		
alpha-BHC	77	75	54 - 115	3	17		
beta-BHC	74	73	58 - 115	1	17		
delta-BHC	75	73	62 - 115	3	19		
gamma-BHC (Lindane)	78	75	59 - 115	4	24		
Heptachlor	78	76	61 - 115	2	18		
Heptachlor epoxide	81	78	62 - 112	4	18		
Endosulfan I	77	74	55 - 115	4	26		
Endosulfan II	75	74	60 - 115	2	20		
Endosulfan sulfate	75	74	58 - 118	1	22		
Endrin	89	86	61 - 121	3	30		
Endrin aldehyde	68	71	54 - 115	4	29		
Endrin ketone	66	64	61 - 118	3	20		
gamma-Chlordane	76	76	60 - 115	1	21		
Methoxychlor	78	76	52 - 123	1	23		
alpha-Chlordane	93	94	60 - 115	1	18		
Dieldrin	73	74	63 - 117	0	25		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Tetrachloro-m-xylene	81	83	59 - 115
Decachlorobiphenyl	86	89	63 - 124

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Method Blank - Batch: 280-74933

Method: 8082
Preparation: 3550C

Lab Sample ID:	MB 280-74933/1-A	Analysis Batch:	280-76388	Instrument ID:	GCS_P3
Client Matrix:	Solid	Prep Batch:	280-74933	Lab File ID:	043F4301.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.4 g
Analysis Date:	07/12/2011 0743	Units:	ug/Kg	Final Weight/Volume:	5000 uL
Prep Date:	07/01/2011 1920			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Aroclor 1016	2.6	U	2.6	9.6
Aroclor 1221	7.7	U	7.7	16
Aroclor 1232	1.9	U	1.9	9.6
Aroclor 1242	4.5	U	4.5	9.6
Aroclor 1248	4.5	U	4.5	9.6
Aroclor 1254	2.5	U	2.5	9.6
Aroclor 1260	2.5	U	2.5	9.6

Surrogate	% Rec	Acceptance Limits
Decachlorobiphenyl	92	59 - 130
Tetrachloro-m-xylene	86	53 - 128

Lab Control Sample - Batch: 280-74933

Method: 8082
Preparation: 3550C

Lab Sample ID:	LCS 280-74933/2-A	Analysis Batch:	280-76388	Instrument ID:	GCS_P3
Client Matrix:	Solid	Prep Batch:	280-74933	Lab File ID:	044F4401.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	32.8 g
Analysis Date:	07/12/2011 0804	Units:	ug/Kg	Final Weight/Volume:	5000 uL
Prep Date:	07/01/2011 1920			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aroclor 1016	30.5	29.0	95	54 - 132	
Aroclor 1260	30.5	30.4	100	62 - 129	

Surrogate	% Rec	Acceptance Limits
Decachlorobiphenyl	90	59 - 130
Tetrachloro-m-xylene	81	53 - 128

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-74933

Method: 8082
Preparation: 3550C

MS Lab Sample ID:	280-17587-4	Analysis Batch:	280-76388	Instrument ID:	GCS_P3
Client Matrix:	Solid	Prep Batch:	280-74933	Lab File ID:	049F4901.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.3 g
Analysis Date:	07/12/2011 0951			Final Weight/Volume:	5000 uL
Prep Date:	07/01/2011 1920			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-17587-4	Analysis Batch:	280-76388	Instrument ID:	GCS_P3
Client Matrix:	Solid	Prep Batch:	280-74933	Lab File ID:	050F5001.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.8 g
Analysis Date:	07/12/2011 1012			Final Weight/Volume:	5000 uL
Prep Date:	07/01/2011 1920			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	125	115	54 - 132	7	26		
Aroclor 1260	109	103	62 - 129	4	26		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Decachlorobiphenyl	74	74	59 - 130
Tetrachloro-m-xylene	88	86	53 - 128

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Method Blank - Batch: 280-74929

Method: 8310
Preparation: 3550C

Lab Sample ID:	MB 280-74929/1-A	Analysis Batch:	280-75137	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-74929	Lab File ID:	G0705008.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.5 g
Analysis Date:	07/05/2011 1611	Units:	ug/Kg	Final Weight/Volume:	4000 uL
Prep Date:	07/01/2011 1820			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Acenaphthene	9.5	U	9.5	95
Acenaphthylene	8.6	U	8.6	95
Anthracene	2.9	U	2.9	19
Benzo[a]anthracene	3.0	U	3.0	14
Benzo[a]pyrene	6.1	U	6.1	14
Benzo[b]fluoranthene	4.0	U	4.0	14
Benzo[g,h,i]perylene	6.9	U	6.9	29
Benzo[k]fluoranthene	3.8	U	3.8	14
Chrysene	4.6	U	4.6	38
Dibenzo(a,h)anthracene	10	U	10	29
Fluoranthene	12	U	12	38
Fluorene	5.0	U	5.0	29
Indeno[1,2,3-cd]pyrene	11	U	11	29
Naphthalene	11	U	11	95
Phenanthrene	11	U	11	38
Pyrene	11	U	11	38

Surrogate	% Rec	Acceptance Limits
Terphenyl-d14 (SUR)	97	72 - 115

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Lab Control Sample - Batch: 280-74929

Method: 8310
Preparation: 3550C

Lab Sample ID:	LCS 280-74929/2-A	Analysis Batch:	280-75137	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-74929	Lab File ID:	G0705009.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.2 g
Analysis Date:	07/05/2011 1642	Units:	ug/Kg	Final Weight/Volume:	4000 uL
Prep Date:	07/01/2011 1820			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acenaphthene	1920	1850	96	72 - 115	
Acenaphthylene	1920	1880	98	60 - 115	
Anthracene	1920	1840	96	61 - 115	
Benzo[a]anthracene	1920	2040	106	76 - 115	
Benzo[a]pyrene	1920	2010	104	69 - 115	
Benzo[b]fluoranthene	1920	1920	100	81 - 115	
Benzo[g,h,i]perylene	1920	2000	104	71 - 115	
Benzo[k]fluoranthene	1920	1930	100	85 - 115	
Chrysene	1920	1890	98	70 - 115	
Dibenzo(a,h)anthracene	1920	1970	102	79 - 115	
Fluoranthene	1920	1930	100	67 - 115	
Fluorene	1920	1890	98	72 - 115	
Indeno[1,2,3-cd]pyrene	1920	2090	108	76 - 115	
Naphthalene	1920	1870	97	77 - 115	
Phenanthrene	1920	1900	99	79 - 115	
Pyrene	1920	1940	101	77 - 115	

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

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-74929

Method: 8310
Preparation: 3550C

MS Lab Sample ID:	280-17587-3	Analysis Batch:	280-75137	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-74929	Lab File ID:	G0705013.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.7 g
Analysis Date:	07/05/2011 1844			Final Weight/Volume:	4000 uL
Prep Date:	07/01/2011 1820			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-17587-3	Analysis Batch:	280-75137	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-74929	Lab File ID:	G0705014.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	32.1 g
Analysis Date:	07/05/2011 1914			Final Weight/Volume:	4000 uL
Prep Date:	07/01/2011 1820			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acenaphthene	99	88	72 - 115	13	20		
Acenaphthylene	99	89	60 - 115	12	21		
Anthracene	97	88	61 - 115	11	20		
Benzo[a]anthracene	103	95	76 - 115	9	20		
Benzo[a]pyrene	104	96	69 - 115	9	20		
Benzo[b]fluoranthene	98	90	81 - 115	9	20		
Benzo[g,h,i]perylene	100	93	71 - 115	9	20		
Benzo[k]fluoranthene	100	92	85 - 115	9	20		
Chrysene	97	88	70 - 115	10	20		
Dibenzo(a,h)anthracene	101	93	79 - 115	10	20		
Fluoranthene	100	94	67 - 115	7	20		
Fluorene	100	90	72 - 115	12	20		
Indeno[1,2,3-cd]pyrene	106	99	76 - 115	8	20		
Naphthalene	99	89	77 - 115	12	20		
Phenanthrene	99	90	79 - 115	10	20		
Pyrene	101	94	77 - 115	7	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Terphenyl-d14 (SUR)	100	93	72 - 115

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Method Blank - Batch: 280-74997

Method: 6010B
Preparation: 3050B

Lab Sample ID:	MB 280-74997/1-A	Analysis Batch:	280-75947	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-74997	Lab File ID:	25A3070811.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	07/08/2011 1928	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	07/07/2011 1500				
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	0.076	U	0.076	0.50
Beryllium	0.033	U	0.033	0.20
Cadmium	0.041	U	0.041	0.20
Calcium	14.1	U	14.1	50.0
Chromium	0.058	U	0.058	0.20
Cobalt	0.10	U	0.10	1.0
Copper	0.22	U	0.22	1.0
Iron	3.8	U	3.8	5.0
Lead	0.27	U	0.27	0.50
Magnesium	3.7	U	3.7	20.0
Manganese	0.10	U	0.10	1.0
Molybdenum	0.26	U	0.26	2.0
Nickel	0.12	U	0.12	4.0
Potassium	41.0	U	41.0	300
Selenium	0.86	U	0.86	1.0
Silicon	5.7	U	5.7	10.0
Silver	0.180	B	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: 280-74997

Method: 6010B
Preparation: 3050B

Lab Sample ID:	MB 280-74997/1-A	Analysis Batch:	280-76112	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-74997	Lab File ID:	25A6071111.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	07/12/2011 0001	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	07/07/2011 1500				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Boron	0.98	U	0.98	2.0

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Lab Control Sample - Batch: 280-74997

Method: 6010B
Preparation: 3050B

Lab Sample ID:	LCS 280-74997/2-A	Analysis Batch:	280-75947	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-74997	Lab File ID:	25A3070811.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	07/08/2011 1930	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	07/07/2011 1500				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	200	175.5	88	82 - 116	
Antimony	50.0	45.41	91	82 - 110	
Arsenic	100	103.6	104	85 - 110	
Barium	200	213.0	107	87 - 112	
Beryllium	5.00	4.71	94	84 - 114	
Cadmium	10.0	9.83	98	87 - 110	
Calcium	5000	4637	93	82 - 114	
Chromium	20.0	20.03	100	84 - 114	
Cobalt	50.0	47.92	96	87 - 110	
Copper	25.0	26.36	105	88 - 110	
Iron	100	99.44	99	87 - 120	
Lead	50.0	50.01	100	86 - 110	
Magnesium	5000	4739	95	90 - 110	
Manganese	50.0	50.63	101	88 - 110	
Molybdenum	100	98.90	99	86 - 110	
Nickel	50.0	48.01	96	87 - 110	
Potassium	5000	5020	100	89 - 110	
Selenium	200	196.1	98	83 - 110	
Silicon	1000	202.5	20	10 - 70	
Silver	5.00	5.18	104	87 - 114	
Sodium	5000	5204	104	90 - 112	
Vanadium	50.0	51.94	104	88 - 110	
Zinc	50.0	47.19	94	76 - 114	

Lab Control Sample - Batch: 280-74997

Method: 6010B
Preparation: 3050B

Lab Sample ID:	LCS 280-74997/2-A	Analysis Batch:	280-76112	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-74997	Lab File ID:	25A6071111.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	07/12/2011 0003	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	07/07/2011 1500				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Boron	100	89.10	89	81 - 110	

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Matrix Spike - Batch: 280-74997

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-17587-1	Analysis Batch:	280-75947	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-74997	Lab File ID:	25A3070811.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.13 g
Analysis Date:	07/08/2011 1937	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	07/07/2011 1500				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	8660		180	11410	1531	50 - 200	4
Antimony	0.34	U	45.0	19.45	43	20 - 200	
Arsenic	3.0		89.9	87.02	93	76 - 111	
Barium	92.9		180	284.3	106	52 - 159	
Beryllium	0.28		4.50	4.14	86	72 - 105	
Cadmium	0.17	B	8.99	8.29	90	40 - 130	
Calcium	3760		4500	8637	108	43 - 165	
Chromium	11.8		18.0	29.67	100	70 - 200	
Cobalt	6.2		45.0	45.32	87	72 - 106	
Copper	16.6		22.5	40.52	107	37 - 187	
Iron	17300		89.9	18770	1676	70 - 200	4
Lead	7.8		45.0	48.33	90	70 - 200	
Magnesium	4060		4500	8449	97	64 - 145	
Manganese	298		45.0	368.2	157	40 - 200	4
Molybdenum	0.23	U	89.9	78.96	88	75 - 103	
Nickel	11.4		45.0	50.46	87	61 - 126	
Potassium	1600		4500	6088	100	56 - 172	
Selenium	0.77	U	180	159.5	89	76 - 104	
Silicon	278		899	482.8	23	20 - 200	
Silver	0.14	U	4.50	4.36	97	75 - 141	
Sodium	208		4500	4759	101	78 - 111	
Vanadium	38.3		45.0	87.55	109	50 - 169	
Zinc	49.9		45.0	89.54	88	70 - 200	

Matrix Spike - Batch: 280-74997

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-17587-1	Analysis Batch:	280-76112	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-74997	Lab File ID:	25A6071111.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.13 g
Analysis Date:	07/12/2011 0009	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	07/07/2011 1500				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Boron	1.8	89.9	73.00	79	75 - 107	

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Duplicate - Batch: 280-74997

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-17587-1	Analysis Batch:	280-75947	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-74997	Lab File ID:	25A3070811.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.10 g
Analysis Date:	07/08/2011 1939	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	07/07/2011 1500				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Aluminum	8660		8745	1	40	
Antimony	0.34	U	0.35	NC	40	U
Arsenic	3.0		3.08	3	30	
Barium	92.9		98.97	6	30	
Beryllium	0.28		0.274	1	30	
Cadmium	0.17	B	0.162	7	30	B
Calcium	3760		4021	7	30	
Chromium	11.8		13.24	12	40	
Cobalt	6.2		6.49	5	30	
Copper	16.6		17.89	8	30	
Iron	17300		17780	3	40	
Lead	7.8		9.91	24	40	
Magnesium	4060		4162	2	30	
Manganese	298		306.3	3	40	
Molybdenum	0.23	U	0.24	NC	30	U
Nickel	11.4		12.24	7	30	
Potassium	1600		1621	2	40	
Selenium	0.77	U	0.79	NC	30	U
Silicon	278		266.6	4	40	
Silver	0.14	U	0.15	NC	30	U
Sodium	208		216.1	4	30	
Vanadium	38.3		39.79	4	30	
Zinc	49.9		53.28	7	40	

Duplicate - Batch: 280-74997

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-17587-1	Analysis Batch:	280-76112	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-74997	Lab File ID:	25A6071111.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.10 g
Analysis Date:	07/12/2011 0012	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	07/07/2011 1500				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Boron	1.8		1.99	8	30	

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Method Blank - Batch: 280-75827

Method: 7471A
Preparation: 7471A

Lab Sample ID:	MB 280-75827/1-A	Analysis Batch:	280-76340	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-75827	Lab File ID:	110712TE.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.6 g
Analysis Date:	07/13/2011 0251	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	07/12/2011 1755				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	0.0055	U	0.0055	0.017

Lab Control Sample - Batch: 280-75827

Method: 7471A
Preparation: 7471A

Lab Sample ID:	LCS 280-75827/2-A	Analysis Batch:	280-76340	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-75827	Lab File ID:	110712TE.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.6 g
Analysis Date:	07/13/2011 0253	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	07/12/2011 1755				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.417	0.393	94	87 - 111	

Matrix Spike - Batch: 280-75827

Method: 7471A
Preparation: 7471A

Lab Sample ID:	280-17587-1	Analysis Batch:	280-76340	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-75827	Lab File ID:	110712TE.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.64 g
Analysis Date:	07/13/2011 0300	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	07/12/2011 1755				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.026	0.397	0.392	92	87 - 111	

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Duplicate - Batch: 280-75827

Method: 7471A
Preparation: 7471A

Lab Sample ID:	280-17587-1	Analysis Batch:	280-76340	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-75827	Lab File ID:	110712TE.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.67 g
Analysis Date:	07/13/2011 0258	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	07/12/2011 1755				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Mercury	0.026	0.0206	24	20	M

Client: Washington Closure Hanford

Job Number: 280-17587-1
Sdg Number: J01152

Duplicate - Batch: 280-74920

Method: D-2216
Preparation: N/A

Lab Sample ID:	280-17587-1	Analysis Batch:	280-74920	Instrument ID:	No Equipment
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	07/01/2011 1500	Units:	%	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Moisture	1.6	1.8	8	20	

2.7°C IRI SAB 7/1/11

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-181-018	Page 1 of 3

Collector RICE, DD	Company Contact JL Russell	Telephone No. (509) 380-8093	Project Coordinator KESSNER, JH
Price Code ~~8L~~ 8C JR 6/29/11	Data Turnaround ~~21 Days~~ 15/15 JR 6/29/11		
Project Designation ARRA 100F Remaining Sites Remediation - Soil Full Protoc	Sampling Location 100-F-55/62 VERIFICATION (NX)		SAF No. RC-181
Ice Chest No. WCH-11-009	Field Logbook No. EL-1651-01	COA S00F552000	Method of Shipment FedEx
Shipped To TestAmerica Incorporated, Richland (Denver)	Offsite Property No. NA		Bill of Lading/Air Bill No. 794928113816

POSSIBLE SAMPLE HAZARDS/REMARKS

None

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	G/P	aG	aG	aG	aG				
No. of Container(s)	1	1	1 JR 6/29/11	0	0	0				
Volume	60mL	60mL	~~120mL~~ 500mL	120mL	120mL	120mL				
SAMPLE ANALYSIS	See item (1) in Special Instructions.	Chromium Hex - 7196	Semi-VOA - 8270A (TCL)	PAHs - 8310	PCBs - 8082	Pesticides - 8081				

Sample No.	Matrix *	Sample Date	Sample Time										LOCATION
J1K3N2	SOIL	6-29-11	0840	X		X	X	X	X				NX-1
J1K3N3	SOIL	6-29-11	0850	X		X	X	X	X				2
J1K3N4	SOIL	6-29-11	0900	X		X	X	X	X				3
J1K3N5	SOIL	6-29-11	0910	X		X	X	X	X				4
J1K3N6	SOIL	6-29-11	0920	X		X	X	X	X				5

CHAIN OF POSSESSION	Sign/Print Names		
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
David P. Rice	6-29-11 1330	JenRussell/JLRussell	6/29/11 1330
JenRussell/JLRussell	6/29/11 1500	A. Porter/A. Porter	1060 1500 6-29-11
A. Porter/A. Porter	1060 WCH 0930 6-30-11	Fed Ex	
			7/1/11 0930

SPECIAL INSTRUCTIONS

(1) ICP Metals - 6010TR (Close-out 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 CMB DATE 6/30/11

SDG J0115 2

Matrix *
S=Soil
SE=Sediment
SO=Solid
SJ=Sludge
W = Water
O=Oil
A=Air
DS=Drum Solids
DL=Drum Liquids
T=Tissue
WI=Wipe
L=Liquid
V=Vegetation
X=Other

LABORATORY SECTION	Received By	Title	Date/Time
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

WCH-EE-011

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-181-018	Page 2 of 3
Collector: RICE, DD	Company Contact: JL Russell; Telephone No.: (509) 380-8093	Project Coordinator: KESSNER, JH	Price Code: ~~8L~~ JR 6/29/11 8C; Data Turnaround: ~~21 Days~~ 15/15 JR 6/29/11
Project Designation: ARRA 100F Remaining Sites Remediation - Soil Full Protoc	Sampling Location: 100-F-55/62 VERIFICATION (NX)	SAF No.: RC-181	
Ice Chest No.: WCH-11-009	Field Logbook No.: EL-1651-01; COA: S00F552000	Method of Shipment: FedEx	
Shipped To: TestAmerica Incorporated, Richland (Denver)	Offsite Property No.: NA	Bill of Lading/Air Bill No.: 7949281138 16	

POSSIBLE SAMPLE HAZARDS/REMARKS

None

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	G/P	aG	aG	aG	aG			
No. of Container(s)			1	1	1 JR 6/29/11	0	0	0			
Volume			60mL	60mL	~~120mL~~ 500mL	120mL	120mL	120mL			
SAMPLE ANALYSIS			See item (1) in Special Instructions.	Chromium Hex - 7196 JR 6/29/11	Semi-VOA - 8270A (TCL)	PAHs - 8310	PCBs - 8082	Pesticides - 8081			
Sample No.	Matrix *	Sample Date	Sample Time								XX
J1K3N7	SOIL	6/29/11	0930	X		X	X	X	X		6
J1K3N8	SOIL	6/29/11	0940	X		X	X	X	X		7
J1K3N9	SOIL	6/29/11	0950	X		X	X	X	X		8
J1K3P0	SOIL	6/29/11	1000	X		X	X	X	X		9
J1K3P1	SOIL	6/29/11	1010	X		X	X	X	X		10

Page 1 of 55

CHAIN OF POSSESSION — Sign/Print Names

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
David D. Rice	6-29-11 1330	Jen Russell JL Russell	6/29/11 1330
Jen Russell JL Russell	6/29/11 1500	A. PORTER (1060#1)	1500 6-29-11
A. PORTER (1060#1) / WCH	6-30-11 0930	Fed Ex	
			7/1/11 930

SPECIAL INSTRUCTIONS

(1) ICP Metals - 6010TR (Close-out 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 CMB DATE 6/30/11

SDG J01152

Matrix *: S=Soil, SE=Sediment, SO=Solid, SL=Sludge, W=Water, O=Oil, A=Air, DS=Drum Solids, DL=Drum Liquids, T=Tissue, WI=Wipe, L=Liquid, V=Vegetation, X=Other

LABORATORY SECTION	Received By	Title	Date/Time
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

WCH-EE-011

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-181-018	Page 3 of 3
Collector: RICE, DD	Company Contact: JL Russell — Telephone No.: (509) 380-8093	Project Coordinator: KESSNER, JH	Price Code: ~~8L~~ JR 6/29/11 8C — Data Turnaround: ~~21 Days~~ 15/15 JR 6/29/11
Project Designation: ARRA 100F Remaining Sites Remediation - Soil Full Protoc	Sampling Location: 100-F-55/62 VERIFICATION (NX)	SAF No.: RC-181	
Ice Chest No.: WCH-11-009	Field Logbook No.: EL-1651-01 — COA: S00F552000	Method of Shipment: FedEx	
Shipped To: TestAmerica Incorporated, Richland (Denver)	Offsite Property No.: NA	Bill of Lading/Air Bill No.: 7949281138 16	

POSSIBLE SAMPLE HAZARDS/REMARKS

None

Special Handling and/or Storage

Cool 4C

Preservation	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C				
Type of Container	G/P	G/P	aG	aG	aG	aG	aG				
No. of Container(s)	1	1	1 JR 6/29/11	1	1	1	1				
Volume	60mL	60mL	~~120mL~~ 500mL	120mL	120mL	120mL	120mL				
SAMPLE ANALYSIS	See item (1) in Special Instructions.	Chromium Hex - 7196	Semi-VOA - 8270A (TCL)	PAHs - 8310	PCBs - 8082	Pesticides - 8081	Semi-VOA 8270A (TCL)				
Sample No. / Matrix * / Sample Date / Sample Time											
J1K3P2 / SOIL / 6-29-11 / 1020	X	~~X~~	X	X	X	X				NX-11	
J1K3P3 / SOIL / 6-29-11 / 1030	X	~~X~~	X	X	X	X				NX-12	
J1K3P4 / SOIL / 6-29-11 / 1000	X		X	X	X	X				DUP	
J1K3P5 / SOIL / 6-29-11 / 0925	X		~~JR 6/29/11~~				X			EB	

CHAIN OF POSSESSION — Sign/Print Names

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
David D. Rice	6-29-11 1330	Len Russell / JL Russell	6/29/11 1330
Len Russell / JL Russell	6/29/11 1500	1060 #1 A. Portsa / A. Portsa	6-29-11 1500
1060 #1 A. Portsa / A. Portsa / WCH	6-30-11 0930	Fed Ex	
		~~Received By/Stored In~~	7/1/11 930

SPECIAL INSTRUCTIONS

(1) ICP Metals - 6010TR (Close-out 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 CMB DATE 6/30/11

SDG J01152

Matrix *

S=Soil, SE=Sediment, SO=Solid, SL=Sludge, W=Water, O=Oil, A=Air, DS=Drum Solids, DL=Drum Liquids, T=Tissue, WI=Wipe, L=Liquid, V=Vegetation, X=Other

LABORATORY SECTION	Received By	Title	Date/Time
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

WCH-EE-011

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Project 28002142 [illegible]

Analytical Due:

Report Due: 7/18/11 (Rush 10 day TAT)

Sample Check-in List

Date/Time Received: 7/1/11 930 **GM Screen Result** 13 **microR/hr**

Client: Washington Closure Hanford **SDG #:** J01152 **NA[ ] SAF #:** RC-181 **NA [ ]**

Job Number: 17587 **Chain of Custody #** RC-181-018

Shipping Container ID: WCH-11-009 **Air Bill #** 7949281138 16

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: 2-7 NA [ ] 5. Vermiculite/packing materials is NA [ ] Wet [ ] Dry [✓]
6. Number of samples in shipping container: 14
7. Sample holding times exceeded? NA [ ] Yes [ ] No [✓]
8. Samples have:
   - ✓ Tape
   - ✓ Custody Seals
   - ✓ Hazard Lables
   - ✓ Appropriate Sample Lables
9. Samples are:
   - ✓ In Good Condition
   - ___ Broken
   - ___ Leaking
   - ___ Have Air Bubbles
   - (Only for samples requiring no head space.)
10. Sample pH taken? NA [✓] pH<2 [ ] pH>2 [ ] pH>9 [ ] **Amount HNO_3 Added** ___
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): ___

Sample Custodian: [illegible] **Date:** RCC 7/1/11

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on ___ by ___ Person Contacted ___

[ ] No action necessary; process as is.

Project Manager [signature] Date 7/5/11

LS-023, Rev. 7, 1/08

From: (509) 375-4640 Origin ID: PSCA
WCH MAILROOM
WASHINGTON CLOSURE HANFORD
2620 FERMI AVE

RICHLAND, WA 99354

FedEx. Express

J11201104290225

Ship Date: 30JUN11
ActWgt: 113.0 LB
CAD: 8897843/INET3180

Delivery Address Bar Code

SHIP TO: (303) 736-0100 BILL SENDER

Sample Recieving
Test America Denver
4955 YARROW ST

ARVADA, CO 80002

Ref #
Invoice #
PO #
Dept #

FRI - 01 JUL A1
PRIORITY OVERNIGHT

TRK# 0201 7949 2811 3816

XH WHHA

80002
CO-US
DEN

50FG1/0CB0/F5F4

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

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

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic valueof the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.