SAF-RC-075
100-D/DR Burial Grounds & Remaining Sites – Soil Full Protocol
FINAL DATA PACKAGE

COMPLETE COPY OF DATA PACKAGE TO:

Kathy Wendt H4-21 KW 8/14/12
INITIAL/DATE

COMMENTS:

SDG J01571 SAF RC-075

Rad only ☑ Chem only Rad & Chem

☑ Complete Partial

Waste Site: 100-D-73 & 100-D-76 Waste Sites - SPAs

Analytical Data Package Prepared For

Washington Closure Hanford

Radiochemical Analysis By

TestAmerica

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

Assigned Laboratory Code: TARL

Data Package Contains 38 *Pages*

Report No.: 52483

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.
J01571	RC-075	J1PVT3	J2G250484-1	MVR101AA	9MVR1010	2208046
		J1PVT4	J2G250484-2	MVR121AA	9MVR1210	2208046
		J1PVT5	J2G250484-3	MVR131AA	9MVR1310	2208046
		J1PVT6	J2G250484-4	MVR141AA	9MVR1410	2208046
		J1PVT7	J2G250484-5	MVR151AA	9MVR1510	2208046
		J1PVT8	J2G250484-6	MVR161AA	9MVR1610	2208046
		J1PVT9	J2G250484-7	MVR181AA	9MVR1810	2208046
		J1PVV0	J2G250484-8	MVR191AA	9MVR1910	2208046
		J1PVV1	J2G250484-9	MVR2A1AA	9MVR2A10	2208046
		J1PVV2	J2G250484-10	MVR2C1AA	9MVR2C10	2208046
	RC-075	J1PVV3	J2G250484-11	MVR2D1AA	9MVR2D10	2208046
		J1PVV4	J2G250484-12	MVR2E1AA	9MVR2E10	2208046
		J1PVV5	J2G250484-13	MVR2F1AA	9MVR2F10	2208046
		J1PVV6	J2G250484-14	MVR2G1AA	9MVR2G10	2208046
		J1PVV7	J2G250484-15	MVR2H1AA	9MVR2H10	2208046

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

Washington Hanford Closure
2620 Fermi Avenue
Richland, WA 99354

TestAmerica Laboratories, Inc.

July 30, 2012

Attention: Joan Kessner

SAF Number	:	RC-075
Date SDG Closed	:	July 25, 2012
Number of Samples	:	Fifteen (15)
Sample Type	:	Soil
SDG Number	:	J01571
Data Deliverable	:	21– Day / Summary

CASE NARRATIVE

I. Introduction

On July 25, 2012, fifteen soil samples were received at TestAmerica for chemical analysis. Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the Washington Closure Hanford (WCH) specific ID:

WCH ID#	TARL ID#	MATRIX	DATE OF RECEIPT
J1PVT3	MVR10	SOIL	7/25/12
J1PVT4	MVR12	SOIL	7/25/12
J1PVT5	MVR13	SOIL	7/25/12
J1PVT6	MVR14	SOIL	7/25/12
J1PVT7	MVR15	SOIL	7/25/12
J1PVT8	MVR16	SOIL	7/25/12
J1PVT9	MVR18	SOIL	7/25/12
J1PVV0	MVR19	SOIL	7/25/12
J1PVV1	MVR2A	SOIL	7/25/12
J1PVV2	MVR2C	SOIL	7/25/12
J1PVV3	MVR2D	SOIL	7/25/12
J1PVV4	MVR2E	SOIL	7/25/12
J1PVV5	MVR2F	SOIL	7/25/12
J1PVV6	MVR2G	SOIL	7/25/12
J1PVV7	MVR2H	SOIL	7/25/12

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 74%. The post digestive matrix spike recovered at 75.5% and the insoluble matrix spike recovered at 94%. This implies a reducing capacity in the sample, but not enough to exhaust the more copious insoluble matrix spike. Sample J1PVV2 was diluted before colorization due to the dark sample color. Except as noted; the LCS, batch blank, samples, sample duplicate (J1PVT3) and sample matrix spike (J1PVT3) 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: 30-Jul-12

Report No. : 52483

SDG No: J01571

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDL	CRDL	RPD
2208046	7196_CR6								
	J1PVT3								
	MVR101AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	MVR101AD	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	3.50E-01	0.0
	J1PVT4								
	MVR121AA	HEXCHROME	2.50E-01 +- 0.0E+00		mg/kg	N/A	1.55E-01	1.55E-01	
	J1PVT5								
	MVR131AA	HEXCHROME	2.75E-01 +- 0.0E+00		mg/kg	N/A	1.55E-01	1.55E-01	
	J1PVT6								
	MVR141AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	J1PVT7								
	MVR151AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	J1PVT8								
	MVR161AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	J1PVT9								
	MVR181AA	HEXCHROME	2.74E-01 +- 0.0E+00		mg/kg	N/A	1.55E-01	1.55E-01	
	J1PVV0								
	MVR191AA	HEXCHROME	1.59E-01 +- 0.0E+00		mg/kg	N/A	1.55E-01	1.55E-01	
	J1PVV1								
	MVR2A1AA	HEXCHROME	2.73E-01 +- 0.0E+00		mg/kg	N/A	1.55E-01	1.55E-01	
	J1PVV2								
	MVR2C1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	J1PVV3								
	MVR2D1AA	HEXCHROME	2.49E-01 +- 0.0E+00		mg/kg	N/A	1.55E-01	1.55E-01	
	J1PVV4								
	MVR2E1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	J1PVV5								
	MVR2F1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	J1PVV6								
	MVR2G1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	J1PVV7								
	MVR2H1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	

No. of Results: 16

TestAmerica

rptSTLRchSaSummary2 V5.2.20 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: 30-Jul-12

Report No. : 52483

SDG No.: J01571

Batch Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDL
7196_CR6								
2208046 MATRIX SPIKE, J1PVT3								
MVR101AC	HEXCHROME	7.38E+00 +- 0.0E+00		mg/kg	N/A	74%	-0.3	1.55E-01
2208046 LCS,								
MVR7N1AC	HEXCHROME	1.90E+01 +- 0.0E+00		mg/kg	N/A	95%	-0.1	1.55E-01
2208046 BLANK QC,								
MVR7N1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A			1.55E-01

No. of Results: 3

TestAmerica

rptSTLRchQcSummary V5.2.20 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: 30-Jul-12

Lab Name:	TestAmerica	**SDG:**	J01571	**Collection Date:**	7/24/2012 7:45:00 AM
Lot-Sample No.:	J2G250484-1	**Report No. :**	52483	**Received Date:**	7/25/2012 2:55:00 PM
Client Sample ID:	J1PVT3	**COC No. :**	RC-075-306	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 2208046	7196_CR6			**Work Order:**	MVR101AA		**Report DB ID:**	9MVR1010				
HEXCHROME	**1.55E-01**	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	7/26/12 08:30 a		2.5175	
							1.55E-01	*N/A*			g	

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

TestAmerica
rptSTLRchSample
V5.2.20 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: 30-Jul-12

Lab Name:	TestAmerica	**SDG:**	J01571	**Collection Date:**	7/24/2012 7:50:00 AM
Lot-Sample No.:	J2G250484-2	**Report No. :**	52483	**Received Date:**	7/25/2012 2:55:00 PM
Client Sample ID:	J1PVT4	**COC No. :**	RC-075-306	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 2208046	7196_CR6			**Work Order:**	MVR121AA		**Report DB ID:**	9MVR1210				
HEXCHROME	**2.50E-01**			0.0E+00	1.55E-01	mg/kg	N/A	*(1.6)*	7/26/12 08:30 a		2.5213	
							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: 30-Jul-12

Lab Name:	**TestAmerica**	**SDG:**	J01571	**Collection Date:**	7/24/2012 8:30:00 AM
Lot-Sample No.:	**J2G250484-3**	**Report No. :**	52483	**Received Date:**	7/25/2012 2:55:00 PM
Client Sample ID:	**J1PVT5**	**COC No. :**	RC-075-306	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 2208046	7196_CR6			**Work Order:**	MVR131AA		**Report DB ID:**	9MVR1310				
HEXCHROME	**2.75E-01**			0.0E+00	1.55E-01	mg/kg	N/A	*(1.8)*	7/26/12 08:30 a		2.5011	
							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: 30-Jul-12

Lab Name:	**TestAmerica**	**SDG:**	J01571	**Collection Date:**	7/24/2012 7:55:00 AM
Lot-Sample No.:	**J2G250484-4**	**Report No. :**	52483	**Received Date:**	7/25/2012 2:55:00 PM
Client Sample ID:	**J1PVT6**	**COC No. :**	RC-075-306	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 2208046	7196_CR6			**Work Order:**	MVR141AA		**Report DB ID:**	9MVR1410				
HEXCHROME	**1.55E-01**	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	7/26/12 08:30 a		2.5194	
							1.55E-01	*N/A*			g	

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

TestAmerica
rptSTLRchSample
V5.2.20 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: 30-Jul-12

Lab Name:	TestAmerica	**SDG:**	J01571	**Collection Date:**	7/24/2012 8:35:00 AM
Lot-Sample No.:	J2G250484-5	**Report No. :**	52483	**Received Date:**	7/25/2012 2:55:00 PM
Client Sample ID:	J1PVT7	**COC No. :**	RC-075-306	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 2208046	7196_CR6			**Work Order:**	MVR151AA		**Report DB ID:**	9MVR1510				
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	7/26/12 08:30 a		2.5136	
							1.55E-01	*N/A*			g	

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

TestAmerica
rptSTLRchSample
V5.2.20 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: 30-Jul-12

Lab Name:	TestAmerica	**SDG:**	J01571	**Collection Date:**	7/24/2012 8:00:00 AM
Lot-Sample No.:	J2G250484-6	**Report No. :**	52483	**Received Date:**	7/25/2012 2:55:00 PM
Client Sample ID:	J1PVT8	**COC No. :**	RC-075-306	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 2208046	7196_CR6			**Work Order:** MVR161AA			**Report DB ID:** 9MVR1610					
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	7/26/12 08:30 a		2.5263	
							1.55E-01	*N/A*			g	

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

TestAmerica
rptSTLRchSample
V5.2.20 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: 30-Jul-12

Lab Name:	**TestAmerica**	**SDG:**	J01571	**Collection Date:**	7/24/2012 8:05:00 AM
Lot-Sample No.:	**J2G250484-7**	**Report No. :**	52483	**Received Date:**	7/25/2012 2:55:00 PM
Client Sample ID:	**J1PVT9**	**COC No. :**	RC-075-306	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 2208046	7196_CR6			**Work Order:**	MVR181AA		**Report DB ID:**	9MVR1810				
HEXCHROME	**2.74E-01**			0.0E+00	1.55E-01	mg/kg	N/A	*(1.8)*	7/26/12 08:30 a		2.5028	
							1.55E-01	*N/A*			g	

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

TestAmerica
rptSTLRchSample
V5.2.20 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: 30-Jul-12

Lab Name:	TestAmerica	**SDG:**	J01571	**Collection Date:**	7/24/2012 9:00:00 AM
Lot-Sample No.:	J2G250484-8	**Report No. :**	52483	**Received Date:**	7/25/2012 2:55:00 PM
Client Sample ID:	J1PVV0	**COC No. :**	RC-075-306	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 2208046	7196_CR6			**Work Order:**	MVR191AA		**Report DB ID:**	9MVR1910				
HEXCHROME	1.59E-01			0.0E+00	1.55E-01	mg/kg	N/A	*(1.)*	7/26/12 08:30 a		2.5011	
							1.55E-01	*N/A*			g	

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

TestAmerica
rptSTLRchSample
V5.2.20 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: 30-Jul-12

Lab Name:	TestAmerica	**SDG:**	J01571	**Collection Date:**	7/24/2012 8:10:00 AM
Lot-Sample No.:	J2G250484-9	**Report No. :**	52483	**Received Date:**	7/25/2012 2:55:00 PM
Client Sample ID:	J1PVV1	**COC No. :**	RC-075-306	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 2208046	7196_CR6			**Work Order:**	MVR2A1AA		**Report DB ID:**	9MVR2A10				
HEXCHROME	**2.73E-01**			0.0E+00	1.55E-01	mg/kg	N/A	*(1.8)*	7/26/12 08:30 a		2.5099	
							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: 30-Jul-12

Lab Name:	**TestAmerica**	**SDG:**	J01571	**Collection Date:**	7/24/2012 8:45:00 AM
Lot-Sample No.:	**J2G250484-10**	**Report No. :**	52483	**Received Date:**	7/25/2012 2:55:00 PM
Client Sample ID:	**J1PVV2**	**COC No. :**	RC-075-306	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 2208046	7196_CR6			**Work Order:**	MVR2C1AA		**Report DB ID:**	9MVR2C10				
HEXCHROME	**1.55E-01**	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	7/26/12 08:30 a		2.5022	
							1.55E-01	*N/A*			g	

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

TestAmerica
rptSTLRchSample
V5.2.20 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: 30-Jul-12

Lab Name:	TestAmerica	**SDG:**	J01571	**Collection Date:**	7/24/2012 8:25:00 AM
Lot-Sample No.:	J2G250484-11	**Report No. :**	52483	**Received Date:**	7/25/2012 2:55:00 PM
Client Sample ID:	J1PVV3	**COC No. :**	RC-075-306	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 2208046	7196_CR6			**Work Order:**	MVR2D1AA		**Report DB ID:**	9MVR2D10				
HEXCHROME	**2.49E-01**			0.0E+00	1.55E-01	mg/kg	N/A	*(1.6)*	7/26/12 08:30 a		2.5063	
							1.55E-01	*N/A*			g	

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

TestAmerica
rptSTLRchSample
V5.2.20 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: 30-Jul-12

Lab Name:	**TestAmerica**	**SDG:**	J01571	**Collection Date:**	7/24/2012 8:20:00 AM
Lot-Sample No.:	**J2G250484-12**	**Report No. :**	52483	**Received Date:**	7/25/2012 2:55:00 PM
Client Sample ID:	**J1PVV4**	**COC No. :**	RC-075-306	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 2208046	7196_CR6			**Work Order:**	MVR2E1AA		**Report DB ID:**	9MVR2E10				
HEXCHROME	**1.55E-01**	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	7/26/12 08:30 a		2.5021	
							1.55E-01	*N/A*			g	

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

TestAmerica
rptSTLRchSample
V5.2.20 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: 30-Jul-12

Lab Name:	TestAmerica	**SDG:**	J01571	**Collection Date:**	7/24/2012 8:45:00 AM
Lot-Sample No.:	J2G250484-13	**Report No. :**	52483	**Received Date:**	7/25/2012 2:55:00 PM
Client Sample ID:	J1PVV5	**COC No. :**	RC-075-306	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 2208046	7196_CR6			**Work Order:** MVR2F1AA			**Report DB ID:** 9MVR2F10					
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	7/26/12 08:30 a		2.5199	
							1.55E-01	*N/A*			g	

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

TestAmerica
rptSTLRchSample
V5.2.20 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: 30-Jul-12

Lab Name:	TestAmerica	**SDG:**	J01571	**Collection Date:**	7/24/2012 8:50:00 AM
Lot-Sample No.:	J2G250484-14	**Report No. :**	52483	**Received Date:**	7/25/2012 2:55:00 PM
Client Sample ID:	J1PVV6	**COC No. :**	RC-075-306	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 2208046	7196_CR6			**Work Order:**	MVR2G1AA		**Report DB ID:**	9MVR2G10				
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	7/26/12 08:30 a		2.5	
							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: 30-Jul-12

Lab Name:	TestAmerica	**SDG:**	J01571	**Collection Date:**	7/24/2012 8:50:00 AM
Lot-Sample No.:	J2G250484-15	**Report No. :**	52483	**Received Date:**	7/25/2012 2:55:00 PM
Client Sample ID:	J1PVV7	**COC No. :**	RC-075-306	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 2208046	7196_CR6			**Work Order:**	MVR2H1AA		**Report DB ID:**	9MVR2H10				
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	7/26/12 08:30 a		2.4998	
							1.55E-01	*N/A*			g	

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

TestAmerica
rptSTLRchSample
V5.2.20 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: 30-Jul-12

DUPLICATE RESULTS

Lab Name:	TestAmerica	**SDG:**	J01571	**Collection Date:**	7/24/2012 7:45:00 AM
Lot-Sample No.:	J2G250484-1	**Report No. :**	52483	**Received Date:**	7/25/2012 2:55:00 PM
Client Sample ID:	J1PVT3	**COC No. :**	RC-075-306	**Matrix:**	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDL, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 2208046	7196_CR6			**Work Order:** MVR101AD		**Report DB ID:** MVR101ER			**Orig Sa DB ID:** 9MVR1010			
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	1.	7/26/12 08:30 a		2.5393	
	1.55E-01	U	**RPD**	**0.0**		3.50E-01		N/A			g	

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

TestAmerica Laboratories, Inc.

TestAmerica
rptSTLRchDupV5.
2.20 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, RDL or not identified by gamma scan software.

FORM II

BLANK RESULTS

Date: 30-Jul-12

Lab Name: TestAmerica

Matrix: SOIL

SDG: J01571

Report No. : 52483

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDL, Lc	Rpt Unit, CRDL	Yield	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 2208046	7196_CR6			**Work Order:**	MVR7N1AA	**Report DB ID:**	MVR7N1AB					
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	1.	7/26/12 08:30 a		2.5	
						1.55E-01		N/A			g	

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

TestAmerica

rptSTLRchBlank
V5.2.20 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: 30-Jul-12

Lab Name: TestAmerica

Matrix: SOIL

SDG: J01571

Report No. : 52483

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDL	Report Unit	Yield	Expected	Expected Uncert	Recovery, Bias	Analysis, Prep Date	Aliquot Size	Primary Detector
Batch: 2208046	7196_CR6			**Work Order:**	MVR7N1AC		**Report DB ID:**	MVR7N1AS					
HEXCHROME	1.90E+01			0.0E+00	1.55E-01	mg/kg	N/A	2.00E+01		95%	7/26/12 08:30 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
V5.2.20 A2002

FORM II

MATRIX SPIKE RESULTS

Date: 30-Jul-12

Lab Name: TestAmerica **SDG:** J01571

Lot-Sample No.: J2G250484-1, J1PVT3 **Report No. :** 52483 **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: 2208046	**Work Order:** MVR101AC			**Report DB ID:** MVR101CW			**Orig Sa DB ID:** 9MVR1010					
HEXCHROME	7.38E+00			0.0E+00	1.55E-01	mg/kg	N/A	73.72%	1.00E+01	7/26/12 08:30 a	2.5224	7196_CR6
	1.55E-01										g	

Number of Results: 1

Comments:

TestAmerica rptSTLRchMs V5.2.20 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):	2208046	Lab Sample Numbers or SDG:	J01571

Method/Test/Parameter: Cr+6 ☐ RL-WC-003(Aqueous) ☒ RL-WC-004(Solid)

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 greater than 0.97?	✓			✓
3. Initial calibration verification (ICV) analyzed immediately after calibration and results within 10% of expected?	✓			✓
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 10% of expected?	✓			✓
2. CCB analyzed at required frequency and all results ≤ reporting limit?	✓			✓
C. Sample Analysis 1. Were any samples with concentrations above the linear range diluted and reanalyzed?			✓	✓
2. Were all sample holding times met?	✓			✓
D. QC Samples 1. All results for the preparation blank below limits?	✓			✓
2. LCS percent recovery within 85-115%	✓			✓
3. $PbCrO_4$ percent recovery within 85-115%?	✓			✓
4. Sample and Duplicate within 20% (aqueous) or 35% (solid) RPD?	✓			✓
5. MS or MS/MSD recoveries within 85-115% (aqueous) or 75-125% (solid)?		✓		✓
6. On MS failure, PDMS within 85-115%?		✓		✓
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 or list NCM number: 10-21496

Analyst H. Rahari Date 7/27/12 2nd Review [signature] Date 7/27/12

CG-231 Rev 0, 2/12

Clouseau
Nonconformance Memo

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

NCM #: **10-21496**
NCM Initiated By: Hooshang Rahavi
Date Opened: 07/27/2012
Date Closed:

Classification: **Anomaly**
Status: **PMREVIEW**
Production Area: Classical Chemistry
Tests: 7196A
Lot #'s (Sample #'s): J2G250484 (1,10,11,12,13,14,15,2,3,4,5,6,7,8,9),
QC Batches: 2208046,

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

Problem Description / Root Cause

Name	Date	Description
Hooshang Rahavi	07/27/2012	The MS recovered low at 73.7%. The insoluble MS recovered within limits at 93.9%. PDMS recovered at 75.5%.

Corrective Action

Name	Date	Corrective Action
Hooshang Rahavi	07/27/2012	Suspect reducing capacity in the sample, but not enough to exhaust the more copious insoluble MS. Sample 10 (MR2C1AA) was very dark an diluted before colorization.

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

Date Printed: 7/27/2012

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-075-306	Page 1 of 4

Collector: Q. Stowe	Company Contact: J Kessner	Telephone No.: 509-375-4688	Project Coordinator: KESSNER, JH
Price Code: 8L	Data Turnaround: 21 Days		
Project Designation: 100-D/DR Burial Grounds & Remaining Sites - Soil Full Prot	Sampling Location: 100-D-73 and 100-D-76 Waste Sites- SPAs		SAF No.: RC-075
Ice Chest No.: N/A	Field Logbook No.: EL-1607-14	COA: 010D732000	Method of Shipment: HAND DELIVER
Shipped To: TestAmerica Incorporated, Richland	Offsite Property No.: N/A		Bill of Lading/Air Bill No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

None

Special Handling and/or Storage

Cool 4 Deg C/ Freeze (VOA)

J2G250484 J2G250484

J01571
Due 8-15-12

SAMPLE ANALYSIS

Preservation	Cool 4C	Cool 4C	Freeze	Cool 4C						
Type of Container	G/P	G/P	Gs*	aG						
No. of Container(s)	1	1	5	1						
Volume	125mL	125mL	40mL	125mL						
	See item (1) in Special Instructions.	Chromium Hex - 7196	VOA - 5035/8260 (TCL)	Semi-VOA - 8270A (TCL)						

Sample No.	Matrix *	Sample Date	Sample Time										
~~J1PVT2~~ 2	SOIL	7-24-12											
J1PVT3 MVR10	SOIL	7-24-12	0745		X								
J1PVT4 MVR12	SOIL	7-24-12	0750		X								
J1PVT5 MVR13	SOIL	7-24-12	0830		X								
J1PVT6 MVR14	SOIL	7-24-12	0755		X								

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

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Quincy Stowe	0920 7/24/12	DWoolsey	7-24-12 0920
DWoolsey	7-24-12 1550	A. Freier (1060#1)	7-24-12 1550
A. Freier (WCH)	7-25-12 1060#1 1455	J. Beck	7-25-12 1455

SPECIAL INSTRUCTIONS

Freeze VOAs upon recept to preserve analysis hold times.

(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
DATE 7-25-12

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-075-306	Page 2 of 4

Collector Q. Stowe	Company Contact J Kessner	Telephone No. 509-375-4688	Project Coordinator KESSNER, JH
Price Code 8L	Data Turnaround 21 Days		
Project Designation 100-D/DR Burial Grounds & Remaining Sites - Soil Full Prot	Sampling Location 100-D-73 and 100-D-76 Waste Sites- SPAs		SAF No. RC-075
Ice Chest No. N/A	Field Logbook No. EL-1607-14	COA 010D732000	Method of Shipment HAND DELIVER
Shipped To TestAmerica Incorporated, Richland	Offsite Property No. N/A		Bill of Lading/Air Bill No. N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

None

Special Handling and/or Storage

Cool 4 Deg C/ Freeze (VOA)

J2625484

J01571
Due 8-15-12

SAMPLE ANALYSIS

Preservation	Cool 4C	Cool 4C	Freeze	Cool 4C								
Type of Container	G/P	G/P	Gs*	aG								
No. of Container(s)	1	1	5	1								
Volume	125mL	125mL	40mL	125mL								
	See item (1) in Special Instructions.	Chromium Hex - 7196	VOA - 5035/8260 (TCL)	Semi-VOA - 8270A (TCL)								
Sample No.	Matrix *	Sample Date	Sample Time									
J1PVT7 MVR15	SOIL	7-24-12	0835		X							
J1PVT8 MVR16	SOIL	7-24-12	0800		X							
J1PVT9 MVR18	SOIL	7-24-12	0805		X							
J1PVV0 MVR19	SOIL	7-24-12	0900		X							
J1PVV1 MVR2A	SOIL	7-24-12	0810		X							

7-24-12

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

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Quincy Stowe	0920 7/24/12	DWOOLERY	7-24-12 0920
DWOOLERY	7-24-12 1550	A. Freier (1060#1)	7-24-12 1550
A Freier (WCH)	1060#1 7-25-12 1455	J. Bock TAL	7-25-12 1455

SPECIAL INSTRUCTIONS

Freeze VOAs upon recept to preserve analysis hold times.

(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
DATE 7-25-12

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-075-306	Page 3 of 4

Collector Q. Stowe	Company Contact J Kessner	Telephone No. 509-375-4688	Project Coordinator KESSNER, JH	Price Code 8L	Data Turnaround 21 Days
Project Designation 100-D/DR Burial Grounds & Remaining Sites - Soil Full Prot	Sampling Location 100-D-73 and 100-D-76 Waste Sites- SPAs		SAF No. RC-075		
Ice Chest No. N/A	Field Logbook No. EL-1607-14	COA 010D732000	Method of Shipment HAND DELIVER		
Shipped To TestAmerica Incorporated, Richland	Offsite Property No. N/A		Bill of Lading/Air Bill No. N/A		

POSSIBLE SAMPLE HAZARDS/REMARKS

None

Special Handling and/or Storage

Cool 4 Deg C/ Freeze (VOA)

J26250484

J01571
Due 8-15-12

SAMPLE ANALYSIS

Preservation				Cool 4C	Cool 4C	Freeze	Cool 4C					
Type of Container				G/P	G/P	Gs*	aG					
No. of Container(s)				1	1	5	1					
Volume				125mL	125mL	40mL	125mL					
				See item (1) in Special Instructions.	Chromium Hex - 7196	VOA - 5035/8260 (TCL)	Semi-VOA - 8270A (TCL)					
Sample No.	Matrix *	Sample Date	Sample Time									
J1PVV2 MVR2C	SOIL	7-24-12	0840		X							
J1PVV3 MVR2D	SOIL	7-24-12	0825		X							
J1PVV4 MVR2E	SOIL	7-24-12	0820		X							
J1PVV5 MVR2F	SOIL	7-24-12	0845		X							
J1PVV6 MVR2G	SOIL	7-24-12	0850		X							

7-24-12 7-24-12

CHAIN OF POSSESSION	Sign/Print Names		
Relinquished By/Removed From Quincy Stowe	Date/Time 0920 7/24/12	Received By/Stored In Dwoodson	Date/Time 7-24-12 0920
Relinquished By/Removed From Dwoodson	Date/Time 7-24-12 1550	Received By/Stored In 1060#1 A. Freier	Date/Time 1550 7-24-12
Relinquished By/Removed From WCH A. Freier	Date/Time 1060#1 7-25-12 1455	Received By/Stored In Julie Bock TAL	Date/Time 1455 7-25-12
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time

SPECIAL INSTRUCTIONS

Freeze VOAs upon recept to preserve analysis hold times.

(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
DATE 7-25-12

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-075-306	Page 4 of 4

Collector Q. Stowe	Company Contact J Kessner	Telephone No. 509-375-4688	Project Coordinator KESSNER, JH
Price Code 8L	Data Turnaround 21 Days		
Project Designation 100-D/DR Burial Grounds & Remaining Sites - Soil Full Prot	Sampling Location 100-D-73 and 100-D-76 Waste Sites- SPAs		SAF No. RC-075
Ice Chest No. N/A	Field Logbook No. EL-1607-14	COA 010D732000	Method of Shipment HAND DELIVER
Shipped To TestAmerica Incorporated, Richland	Offsite Property No. N/A		Bill of Lading/Air Bill No. N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

None

Special Handling and/or Storage

Cool 4 Deg C/ Freeze (VOA)

J2b250484

J01571
Due 8-15-12

SAMPLE ANALYSIS

Preservation				Cool 4C	Cool 4C	Freeze	Cool 4C						
Type of Container				G/P	G/P	Gs*	aG						
No. of Container(s)				1	1	5	1						
Volume				125mL	125mL	40mL	125mL						
				See item (1) in Special Instructions.	Chromium Hex - 7196	VOA - 5035/8260 (TCL)	Semi-VOA - 8270A (TCL)						
Sample No.	Matrix *	Sample Date	Sample Time										
J1PVV7 MVR2H	SOIL	7-24-12	0850		X								
~~J1PVV8~~ 2	SOIL	7-24-12											

CHAIN OF POSSESSION	Date/Time	Sign/Print Names: Received By/Stored In	Date/Time
Relinquished By/Removed From Quincy Stowe	7/24/12 0920	Received By/Stored In DWoolsey	7-24-12 0920
Relinquished By/Removed From DWoolsey	7-24-12 1550	Received By/Stored In 1060#1 A. Freier	7-24-12 1550
Relinquished By/Removed From WCH A Freier	7-25-12 1455	Received By/Stored In Julie Beck	7-25-12 1455
Relinquished By/Removed From		Received By/Stored In	
Relinquished By/Removed From		Received By/Stored In	
Relinquished By/Removed From		Received By/Stored In	

SPECIAL INSTRUCTIONS

Freeze VOAs upon recept to preserve analysis hold times.

(1) ICP Metals - 6010TR (Close-out List) {Aluminum, Antimony, Arsenic, Barium,Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Mangarese, Molybdenum, Nickel, Potassium, Selenium,Silicon, Silver, Sodium, Vanadium, Zinc}; Mercury - 7471 - (CV) {Mercury}

REVIEWED BY
DATE 7-25-12

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 Laboratories, Inc.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 7-25-12 / 1455 Container GM Screen Result: (Airlock) .02 Initials [RB]
Sample GM Screen Result (Sample Receiving) .06 Initials [RB]

Client: WXH SDG #: J01571 NA [ ] SAF #: RC-075 NA [ ]

Lot Number: J262504 84

Chain of Custody #

Shipping Container ID: hand de Div. NA [✓] Air Bill Number: NA [RB]

Samples received inside shipping container/cooler/box Yes [RB] 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 [RB]
2. Custody Seals dated and signed? Yes [ ] No [ ] No Custody Seal [RB]
3. Cooler temperature: 9.7 °C NA [ ]
4. Vermiculite/packing materials is NA [RB] Wet [ ] Dry [ ]

Item 5 through 16 for samples. Initial appropriate response.

5. Chain of Custody record present? Yes [RB] No [ ]
6. Number of samples received (Each sample may contain multiple bottles): 15
7. Containers received: 15x 125mL AG

8. Sample holding times exceeded? NA [ ] Yes [ ] No [RB]
9. Samples have:
   ____tape ____hazard labels
   RB custody seals RB appropriate sample labels
10. Matrix:
    RB A (FLT, Wipe, Solid, Soil) ____I (Water)
    ____S (Air, Niosh 7400) ____T (Biological, Ni-63)
11. Samples:
    RB are in good condition ____are leaking
    ____are broken ____have air bubbles (Only for samples requiring no head space)
    ____Other
12. Sample pH appropriate for analysis requested Yes [ ] No [ ] NA [RB]
    (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 [RB]
14. Description of anomalies (include sample numbers): NA [RB]

LS-023, Rev. 15, 07/11 See over for additional information.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

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: [signature] Date: 7-25-12

Client Informed on _____ by _____ Person contacted _____

[X] No action necessary, process as is

Project Manager [signature] Date 7/26/12

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

[signature] 7-25-12 [signature] 7-25-12

JL G250484 RW 7/26/12

LS-023, Rev. 15, 07/11

See over for additional information.

7/26/2012 8:41:33 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 #: _____

AnalyDueDate: 08/15/2012

Sep1 DT/Tm Tech:

Batch: 2208046 **SOIL** **mg/kg** **PM, Quote: RW2, 27038**

SEQ Batch, Test: None All Tests: 2208046 DWEA,

Sep2 DT/Tm Tech:

Prep Tech:

Work Ord, Lot, Sample Date	Total Amt/Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MVR10-1-AA													
J2G250484-1-SAMP													
07/24/2012 07:45			AmtRec: 1X125MLAG		#Containers: 1				Scr:		Alpha:		Beta:
2 MVR10-1-AC-S													
J2G250484-1-MS													
07/24/2012 07:45			AmtRec: 1X125MLAG		#Containers: 1				Scr:		Alpha:		Beta:
3 MVR10-1-AD-X													
J2G250484-1-DUP													
07/24/2012 07:45			AmtRec: 1X125MLAG		#Containers: 1				Scr:		Alpha:		Beta:
4 MVR12-1-AA													
J2G250484-2-SAMP													
07/24/2012 07:50			AmtRec: 1X125MLAG		#Containers: 1				Scr:		Alpha:		Beta:
5 MVR13-1-AA													
J2G250484-3-SAMP													
07/24/2012 08:30			AmtRec: 1X125MLAG		#Containers: 1				Scr:		Alpha:		Beta:
6 MVR14-1-AA													
J2G250484-4-SAMP													
07/24/2012 07:55			AmtRec: 1X125MLAG		#Containers: 1				Scr:		Alpha:		Beta:
7 MVR15-1-AA													
J2G250484-5-SAMP													
07/24/2012 08:35			AmtRec: 1X125MLAG		#Containers: 1				Scr:		Alpha:		Beta:

7/26/2012 8:41:34 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

AnalyDueDate: 08/15/2012

Batch: 2208046 **SOIL** **mg/kg** **PM, Quote: RW2, 27038**
SEQ Batch, Test: None

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

Work Ord, Lot, Sample Date	Total Amt/Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 MVR16-1-AA													
J2G250484-6-SAMP													
07/24/2012 08:00			AmtRec: 1X125MLAG		#Containers: 1				Scr:		Alpha:		Beta:
9 MVR18-1-AA													
J2G250484-7-SAMP													
07/24/2012 08:05			AmtRec: 1X125MLAG		#Containers: 1				Scr:		Alpha:		Beta:
10 MVR19-1-AA													
J2G250484-8-SAMP													
07/24/2012 09:00			AmtRec: 1X125MLAG		#Containers: 1				Scr:		Alpha:		Beta:
11 MVR2A-1-AA													
J2G250484-9-SAMP													
07/24/2012 08:10			AmtRec: 1X125MLAG		#Containers: 1				Scr:		Alpha:		Beta:
12 MVR2C-1-AA													
J2G250484-10-SAMP													
07/24/2012 08:40			AmtRec: 1X125MLAG		#Containers: 1				Scr:		Alpha:		Beta:
13 MVR2D-1-AA													
J2G250484-11-SAMP													
07/24/2012 08:25			AmtRec: 1X125MLAG		#Containers: 1				Scr:		Alpha:		Beta:
14 MVR2E-1-AA													
J2G250484-12-SAMP													
07/24/2012 08:20			AmtRec: 1X125MLAG		#Containers: 1				Scr:		Alpha:		Beta:

7/26/2012 8:41:34 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 #:

AnalyDueDate: 08/15/2012

Sep1 DT/Tm Tech:

Batch: 2208046 SOIL mg/kg PM, Quote: RW2, 27038

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech:

Work Ord, Lot, Sample Date	Total Amt/Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
15 MVR2F-1-AA													
J2G250484-13-SAMP													
07/24/2012 08:45			AmtRec: 1X125MLAG		#Containers: 1				Scr:		Alpha:		Beta:
16 MVR2G-1-AA													
J2G250484-14-SAMP													
07/24/2012 08:50			AmtRec: 1X125MLAG		#Containers: 1				Scr:		Alpha:		Beta:
17 MVR2H-1-AA													
J2G250484-15-SAMP													
07/24/2012 08:50			AmtRec: 1X125MLAG		#Containers: 1				Scr:		Alpha:		Beta:
18 MVR7N-1-AA-B													
J2G260000-46-BLK													
07/26/2012 08:41 pd			AmtRec:		#Containers: 1				Scr:		Alpha:		Beta:
19 MVR7N-1-AC-C													
J2G260000-46-LCS													
07/26/2012 08:41 pd			AmtRec:		#Containers: 1				Scr:		Alpha:		Beta:

Comments:

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

MVR101AA-SAMP Constituent List:
HEXCHROME RDL:.1548 mg/kg LCL:80 UCL:120 RPD:20

7/26/2012 8:41:34 AM

Sample Preparation/Analysis

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

AnalyDueDate: 08/15/2012

Batch: 2208046 mg/kg
SEQ Batch, Test: None

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

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

```
MVR101AC-MS Constituent List:

MVR7N1AA-BLK:

MVR7N1AC-LCS:

MVR101AA-SAMP Calc Info:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
MVR101AC-MS Calc Info:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
MVR7N1AA-BLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
MVR7N1AC-LCS:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
```

ANALYTICAL REPORT

Job Number: 280-31493-1

SDG Number: J01571

Job Description: SAF# RC-075

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

Attention: Joan H Kessner

Approved for release.
Kae E Yoder
Project Manager II
8/14/2012 1:08 PM

Kae E Yoder
Project Manager II
kae.yoder@testamericainc.com
08/14/2012

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

The Lab Certification ID# is E87667.

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

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CASE NARRATIVE

Client: Washington Closure Hanford

Project: WASHINGTON CLOSURE HANFORD

Report Number: 280-31493-1

SDG #: J01571
SAF#: RC-075

Date SDG Closed: July 26, 2012
Data Deliverable: 21 Day / Summary

CLIENT ID	LAB ID	ANALYSES REQUESTED	ANALYSES PERFORMED
J1PVT2	280-31493-1	8260	8260B
J1PVT3	280-31493-2	6010/7471/8260/8270A	6010B/7471A/8260B/8270C
J1PVT4	280-31493-3	6010/7471/8260/8270A	6010B/7471A/8260B/8270C
J1PVT5	280-31493-4	6010/7471/8260/8270A	6010B/7471A/8260B/8270C
J1PVT6	280-31493-5	6010/7471/8260/8270A	6010B/7471A/8260B/8270C
J1PVT7	280-31493-6	6010/7471/8260/8270A	6010B/7471A/8260B/8270C
J1PVT8	280-31493-7	6010/7471/8260/8270A	6010B/7471A/8260B/8270C
J1PVT9	280-31493-8	6010/7471/8260/8270A	6010B/7471A/8260B/8270C
J1PVV0	280-31493-9	6010/7471/8260/8270A	6010B/7471A/8260B/8270C
J1PVV1	280-31493-10	6010/7471/8260/8270A	6010B/7471A/8260B/8270C
J1PVV2	280-31493-11	6010/7471/8260/8270A	6010B/7471A/8260B/8270C
J1PVV3	280-31493-12	6010/7471/8260/8270A	6010B/7471A/8260B/8270C
J1PVV4	280-31493-13	6010/7471/8260/8270A	6010B/7471A/8260B/8270C
J1PVV5	280-31493-14	6010/7471/8260/8270A	6010B/7471A/8260B/8270C
J1PVV6	280-31493-15	6010/7471/8260/8270A	6010B/7471A/8260B/8270C
J1PVV7	280-31493-16	6010/7471/8260/8270A	6010B/7471A/8260B/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 7/26/2012 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.0º C and 3.8º C.

The 5035/8260B VOA samples were received at the laboratory at temperatures of 2.0º C and 3.8º C; however, it can be noted that the chains-of-custody indicate that VOA samples were frozen upon collection.

Samples requesting 5035/8260 VOA analysis were either received at the laboratory after the recommended 48 hour sample holding time had expired or with insufficient time remaining for the laboratory to perform the 5035 prep within the recommended 48 hour sample holing time. The client was notified on 7/27/2012.

GC/MS VOLATILES - SW846 8260B

The 5035 prep for the samples presented in this report was performed after the recommended 48 hour sample holding times had expired. The holding times were either expired at the time of sample receipt or the samples were received at the laboratory with insufficient time remaining for the laboratory to perform the prep within the holding times. The client was notified on 7/27/2012.

A deviation from the Percent Moisture in Soils and Wastes SOP occurred for the %Moisture analysis of sample J1PVT2 requesting 5035/8260B VOA analysis. The SOP states that 15 grams (±2 grams) of sample should be used; however, only ~8.5 grams were used due to limited sample volume submitted by the client.

The MSD aliquot of the MS/MSD performed on sample J1PVV6 exhibited a percent recovery outside the control limits for Styrene, and the associated sample result has been flagged "T". The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary.

No other anomalies were encountered.

GC/MS SEMIVOLATILES - SW846 8270C

Compounds Benzo(b)fluoranthene and Benzo(k)fluoranthene were unresolved in samples J1PVT3, J1PVV2 and J1PVV7 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 280-129723. 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".

The MS/MSD performed on sample J1PVT3 exhibited spike compound recoveries outside the control limits, and the associated sample results have been flagged "T". The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary.

No other anomalies were encountered.

TOTAL METALS - SW846 6010B/7471A

Serial dilution of a digestate in batch 280-129649 indicates that physical and chemical interferences are present for several elements. Results have been flagged with an "X".

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the methods. Sample J1PVT5 required a 5X dilution prior to the analysis of Antimony, Beryllium, Cobalt, Copper, Lead and Vanadium to minimize the interference caused by the high concentration of Titanium present. The reporting limits have been adjusted relative to the dilution required.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the methods. Due to matrix interference, samples J1PVT7 and J1PVV5 required a 5X dilution prior to the analysis of Antimony and Selenium. The reporting limits have been adjusted relative to the dilution required.

Low levels of Calcium, Manganese, Nickel and Zinc are present in the method blank associated with batch 280-129649. Because the concentrations in the method blank are not present at levels greater than half the reporting limit or the associated sample amounts are twenty times greater than the method blank concentration, corrective action is deemed unnecessary.

Antimony is present in the method blank associated with batch 280-129649 at 0.40 mg/kg, which is greater than half the project specific reporting limit (PSRL) of 0.60 mg/kg. TestAmerica's practical quantitation limit (PQL) for Antimony is 1.5 mg/kg. The laboratory cannot maintain system cleanliness at this low level; therefore, corrective action is not initiated. It can be noted that the concentration found in the method blank is less than half of the laboratory standard PQL.

Low levels of Antimony are present at a level greater than half the reporting limit in the instrument blank (CCB) associated with samples J1PVT5, J1PVT7, J1PVT9 and J1PVV5 in analysis batch 280-130658. Antimony is not present at a level greater than the reporting limit in the associated samples; therefore, 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 J1PVT3; therefore, control limits are not applicable.

Silicon was recovered outside the control limits in the Matrix Spike performed on sample J1PVT3, and the associated sample result has been flagged "N". There is no indication that the analytical system was operating out of control, and method accuracy has been verified by the acceptable LCS analysis data; therefore, corrective action is deemed unnecessary.

The duplicate analysis of sample J1PVT3 exhibited RPD data outside the control limits for Molybdenum, 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: 280-31493-1
Sdg Number: J01571

Lab Section	Qualifier	Description
GC/MS VOA		
	U	Analyzed for but not detected.
	J	Indicates an Estimated Value for TICs
	T	MS, MSD: Recovery exceeds upper or lower control limits.
	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/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
	T	MS, MSD: Recovery exceeds upper or lower control limits.
	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.
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.
	N	Recovery exceeds upper or lower control limits
	M	Sample duplicate precision not met.
	X	Serial dilution in the analytical batch indicates that physical and chemical interferences are present.
	C	The analyte was detected in both the sample and the assoicated QC blank, and the sample concentration was </= 5X the blank concentration.

METHOD SUMMARY

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Volatile Organic Compounds (GC/MS)	TAL DEN	SW846 8260B	
Closed System Purge and Trap	TAL DEN		SW846 5035
Semivolatile Organic Compounds (GC/MS)	TAL DEN	SW846 8270C	
Ultrasonic Extraction	TAL DEN		SW846 3550C
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: 280-31493-1
Sdg Number: J01571

Method	Analyst	Analyst ID
SW846 8260B	Hubbs, Lisa M	LMH
SW846 8270C	Hoffman, Michael G	MGH
SW846 6010B	Bowen, Heidi E	HEB
SW846 6010B	Harre, John K	JKH
SW846 7471A	Rawlings, Brendon L	BLR
ASTM D-2216	Blythe, Scott	SB

SAMPLE SUMMARY

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-31493-1	J1PVT2	Solid	07/24/2012 0730	07/26/2012 0930
280-31493-2	J1PVT3	Solid	07/24/2012 0745	07/26/2012 0930
280-31493-3	J1PVT4	Solid	07/24/2012 0750	07/26/2012 0930
280-31493-4	J1PVT5	Solid	07/24/2012 0830	07/26/2012 0930
280-31493-5	J1PVT6	Solid	07/24/2012 0755	07/26/2012 0930
280-31493-6	J1PVT7	Solid	07/24/2012 0835	07/26/2012 0930
280-31493-7	J1PVT8	Solid	07/24/2012 0800	07/26/2012 0930
280-31493-8	J1PVT9	Solid	07/24/2012 0805	07/26/2012 0930
280-31493-9	J1PVV0	Solid	07/24/2012 0900	07/26/2012 0930
280-31493-10	J1PVV1	Solid	07/24/2012 0810	07/26/2012 0930
280-31493-11	J1PVV2	Solid	07/24/2012 0840	07/26/2012 0930
280-31493-12	J1PVV3	Solid	07/24/2012 0825	07/26/2012 0930
280-31493-13	J1PVV4	Solid	07/24/2012 0820	07/26/2012 0930
280-31493-14	J1PVV5	Solid	07/24/2012 0845	07/26/2012 0930
280-31493-15	J1PVV6	Solid	07/24/2012 0850	07/26/2012 0930
280-31493-16	J1PVV7	Solid	07/24/2012 0850	07/26/2012 0930

SAMPLE RESULTS

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT2**

Lab Sample ID: 280-31493-1
Client Matrix: Solid
% Moisture: 0.1

Date Sampled: 07/24/2012 0730
Date Received: 07/26/2012 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-129703	Lab File ID:	G2_9139.D
Dilution:	1.0			Initial Weight/Volume:	4.611 g
Analysis Date:	07/27/2012 0007			Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1741				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		24		5.8	22
Benzene		0.51	U	0.51	5.4
Bromodichloromethane		0.24	U	0.24	5.4
Bromoform		0.25	U	0.25	5.4
Bromomethane		0.54	U	0.54	11
2-Butanone (MEK)		5.2	J	2.0	11
Carbon disulfide		0.46	U	0.46	5.4
Carbon tetrachloride		0.68	U	0.68	5.4
Chlorobenzene		0.59	U	0.59	5.4
Dibromochloromethane		0.62	U	0.62	5.4
Chloroethane		0.97	U	0.97	11
Chloroform		0.31	U	0.31	5.4
Chloromethane		0.84	U	0.84	11
1,1-Dichloroethane		0.23	U	0.23	5.4
1,2-Dichloroethane		0.76	U	0.76	5.4
1,1-Dichloroethene		0.64	U	0.64	5.4
1,2-Dichloroethene, Total		0.42	U	0.42	5.4
1,2-Dichloropropane		0.60	U	0.60	5.4
cis-1,3-Dichloropropene		1.4	U	1.4	5.4
trans-1,3-Dichloropropene		0.73	U	0.73	5.4
Ethylbenzene		0.73	U	0.73	5.4
2-Hexanone		5.3	U	5.3	22
Methylene Chloride		1.7	U	1.7	5.4
4-Methyl-2-pentanone (MIBK)		4.7	U	4.7	11
Styrene		0.68	U	0.68	5.4
1,1,2,2-Tetrachloroethane		0.66	U	0.66	5.4
Tetrachloroethene		0.64	U	0.64	5.4
Toluene		0.75	U	0.75	5.4
1,1,1-Trichloroethane		0.56	U	0.56	5.4
1,1,2-Trichloroethane		0.96	U	0.96	5.4
Trichloroethene		0.25	U	0.25	5.4
Vinyl chloride		1.5	U	1.5	5.4
Xylenes, Total		0.66	U	0.66	5.4

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	96		58 - 140
Toluene-d8 (Surr)	94		80 - 126
4-Bromofluorobenzene (Surr)	88		76 - 127
Dibromofluoromethane (Surr)	98		75 - 121

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT2**

Lab Sample ID: 280-31493-1
Client Matrix: Solid
% Moisture: 0.1

Date Sampled: 07/24/2012 0730
Date Received: 07/26/2012 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-129703	Lab File ID:	G2_9139.D
Dilution:	1.0			Initial Weight/Volume:	4.611 g
Analysis Date:	07/27/2012 0007			Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1741				

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
527-84-4	Benzene, 1-methyl-2-(1-methylethyl)-	11.71	5.8	N J
	Unknown	12.09	5.6	N J
103-09-3	Acetic acid, 2-ethylhexyl ester	12.85	6.1	N J

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT3**

Lab Sample ID: 280-31493-2
Client Matrix: Solid
% Moisture: 1.1

Date Sampled: 07/24/2012 0745
Date Received: 07/26/2012 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-129703	Lab File ID:	G2_9140.D
Dilution:	1.0			Initial Weight/Volume:	3.76 g
Analysis Date:	07/27/2012 0027			Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1741				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		7.2	U	7.2	27
Benzene		0.63	U	0.63	6.7
Bromodichloromethane		0.30	U	0.30	6.7
Bromoform		0.31	U	0.31	6.7
Bromomethane		0.67	U	0.67	13
2-Butanone (MEK)		2.5	U	2.5	13
Carbon disulfide		0.56	U	0.56	6.7
Carbon tetrachloride		0.85	U	0.85	6.7
Chlorobenzene		0.73	U	0.73	6.7
Dibromochloromethane		0.77	U	0.77	6.7
Chloroethane		1.2	U	1.2	13
Chloroform		0.39	U	0.39	6.7
Chloromethane		1.0	U	1.0	13
1,1-Dichloroethane		0.28	U	0.28	6.7
1,2-Dichloroethane		0.94	U	0.94	6.7
1,1-Dichloroethene		0.79	U	0.79	6.7
1,2-Dichloroethene, Total		0.52	U	0.52	6.7
1,2-Dichloropropane		0.74	U	0.74	6.7
cis-1,3-Dichloropropene		1.7	U	1.7	6.7
trans-1,3-Dichloropropene		0.90	U	0.90	6.7
Ethylbenzene		0.90	U	0.90	6.7
2-Hexanone		6.6	U	6.6	27
Methylene Chloride		2.2	U	2.2	6.7
4-Methyl-2-pentanone (MIBK)		5.9	U	5.9	13
Styrene		0.85	U	0.85	6.7
1,1,2,2-Tetrachloroethane		0.82	U	0.82	6.7
Tetrachloroethene		0.79	U	0.79	6.7
Toluene		0.93	U	0.93	6.7
1,1,1-Trichloroethane		0.70	U	0.70	6.7
1,1,2-Trichloroethane		1.2	U	1.2	6.7
Trichloroethene		0.31	U	0.31	6.7
Vinyl chloride		1.8	U	1.8	6.7
Xylenes, Total		0.82	U	0.82	6.7

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	97		58 - 140
Toluene-d8 (Surr)	95		80 - 126
4-Bromofluorobenzene (Surr)	99		76 - 127
Dibromofluoromethane (Surr)	99		75 - 121

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT3**

Lab Sample ID: 280-31493-2
Client Matrix: Solid
% Moisture: 1.1

Date Sampled: 07/24/2012 0745
Date Received: 07/26/2012 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-129703	Lab File ID:	G2_9140.D
Dilution:	1.0			Initial Weight/Volume:	3.76 g
Analysis Date:	07/27/2012 0027			Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1741				

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

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

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT4**

Lab Sample ID: 280-31493-3
Client Matrix: Solid
% Moisture: 3.0

Date Sampled: 07/24/2012 0750
Date Received: 07/26/2012 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-129703	Lab File ID:	G2_9141.D
Dilution:	1.0			Initial Weight/Volume:	5.673 g
Analysis Date:	07/27/2012 0046			Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1741				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		4.9	U	4.9	18
Benzene		0.43	U	0.43	4.5
Bromodichloromethane		0.20	U	0.20	4.5
Bromoform		0.21	U	0.21	4.5
Bromomethane		0.45	U	0.45	9.1
2-Butanone (MEK)		1.7	U	1.7	9.1
Carbon disulfide		0.38	U	0.38	4.5
Carbon tetrachloride		0.57	U	0.57	4.5
Chlorobenzene		0.49	U	0.49	4.5
Dibromochloromethane		0.52	U	0.52	4.5
Chloroethane		0.81	U	0.81	9.1
Chloroform		0.26	U	0.26	4.5
Chloromethane		0.70	U	0.70	9.1
1,1-Dichloroethane		0.19	U	0.19	4.5
1,2-Dichloroethane		0.64	U	0.64	4.5
1,1-Dichloroethene		0.54	U	0.54	4.5
1,2-Dichloroethene, Total		0.35	U	0.35	4.5
1,2-Dichloropropane		0.50	U	0.50	4.5
cis-1,3-Dichloropropene		1.2	U	1.2	4.5
trans-1,3-Dichloropropene		0.61	U	0.61	4.5
Ethylbenzene		0.61	U	0.61	4.5
2-Hexanone		4.4	U	4.4	18
Methylene Chloride		1.5	U	1.5	4.5
4-Methyl-2-pentanone (MIBK)		4.0	U	4.0	9.1
Styrene		0.57	U	0.57	4.5
1,1,2,2-Tetrachloroethane		0.55	U	0.55	4.5
Tetrachloroethene		0.54	U	0.54	4.5
Toluene		0.63	U	0.63	4.5
1,1,1-Trichloroethane		0.47	U	0.47	4.5
1,1,2-Trichloroethane		0.80	U	0.80	4.5
Trichloroethene		0.21	U	0.21	4.5
Vinyl chloride		1.2	U	1.2	4.5
Xylenes, Total		0.55	U	0.55	4.5

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	93		58 - 140
Toluene-d8 (Surr)	88		80 - 126
4-Bromofluorobenzene (Surr)	87		76 - 127
Dibromofluoromethane (Surr)	94		75 - 121

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT4**

Lab Sample ID: 280-31493-3
Client Matrix: Solid
% Moisture: 3.0

Date Sampled: 07/24/2012 0750
Date Received: 07/26/2012 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-129703	Lab File ID:	G2_9141.D
Dilution:	1.0			Initial Weight/Volume:	5.673 g
Analysis Date:	07/27/2012 0046			Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1741				

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

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

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT5**

Lab Sample ID: 280-31493-4
Client Matrix: Solid
% Moisture: 2.5

Date Sampled: 07/24/2012 0830
Date Received: 07/26/2012 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-129703	Lab File ID:	G2_9142.D
Dilution:	1.0			Initial Weight/Volume:	4.566 g
Analysis Date:	07/27/2012 0105			Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1741				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		6.0	U	6.0	22
Benzene		0.53	U	0.53	5.6
Bromodichloromethane		0.25	U	0.25	5.6
Bromoform		0.26	U	0.26	5.6
Bromomethane		0.56	U	0.56	11
2-Butanone (MEK)		2.1	U	2.1	11
Carbon disulfide		0.47	U	0.47	5.6
Carbon tetrachloride		0.71	U	0.71	5.6
Chlorobenzene		0.61	U	0.61	5.6
Dibromochloromethane		0.64	U	0.64	5.6
Chloroethane		1.0	U	1.0	11
Chloroform		0.33	U	0.33	5.6
Chloromethane		0.86	U	0.86	11
1,1-Dichloroethane		0.24	U	0.24	5.6
1,2-Dichloroethane		0.79	U	0.79	5.6
1,1-Dichloroethene		0.66	U	0.66	5.6
1,2-Dichloroethene, Total		0.44	U	0.44	5.6
1,2-Dichloropropane		0.62	U	0.62	5.6
cis-1,3-Dichloropropene		1.4	U	1.4	5.6
trans-1,3-Dichloropropene		0.75	U	0.75	5.6
Ethylbenzene		0.75	U	0.75	5.6
2-Hexanone		5.5	U	5.5	22
Methylene Chloride		1.8	U	1.8	5.6
4-Methyl-2-pentanone (MIBK)		4.9	U	4.9	11
Styrene		0.71	U	0.71	5.6
1,1,2,2-Tetrachloroethane		0.69	U	0.69	5.6
Tetrachloroethene		0.66	U	0.66	5.6
Toluene		0.77	U	0.77	5.6
1,1,1-Trichloroethane		0.58	U	0.58	5.6
1,1,2-Trichloroethane		0.99	U	0.99	5.6
Trichloroethene		0.26	U	0.26	5.6
Vinyl chloride		1.5	U	1.5	5.6
Xylenes, Total		0.69	U	0.69	5.6

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	94		58 - 140
Toluene-d8 (Surr)	92		80 - 126
4-Bromofluorobenzene (Surr)	90		76 - 127
Dibromofluoromethane (Surr)	97		75 - 121

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT5**

Lab Sample ID: 280-31493-4
Client Matrix: Solid
% Moisture: 2.5

Date Sampled: 07/24/2012 0830
Date Received: 07/26/2012 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-129703	Lab File ID:	G2_9142.D
Dilution:	1.0			Initial Weight/Volume:	4.566 g
Analysis Date:	07/27/2012 0105			Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1741				

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

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

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT6**

Lab Sample ID: 280-31493-5
Client Matrix: Solid
% Moisture: 3.8

Date Sampled: 07/24/2012 0755
Date Received: 07/26/2012 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-129703	Lab File ID:	G2_9143.D
Dilution:	1.0			Initial Weight/Volume:	5.714 g
Analysis Date:	07/27/2012 0124			Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1741				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		4.9	U	4.9	18
Benzene		0.43	U	0.43	4.5
Bromodichloromethane		0.20	U	0.20	4.5
Bromoform		0.21	U	0.21	4.5
Bromomethane		0.45	U	0.45	9.1
2-Butanone (MEK)		1.7	U	1.7	9.1
Carbon disulfide		0.38	U	0.38	4.5
Carbon tetrachloride		0.57	U	0.57	4.5
Chlorobenzene		0.49	U	0.49	4.5
Dibromochloromethane		0.52	U	0.52	4.5
Chloroethane		0.81	U	0.81	9.1
Chloroform		0.26	U	0.26	4.5
Chloromethane		0.70	U	0.70	9.1
1,1-Dichloroethane		0.19	U	0.19	4.5
1,2-Dichloroethane		0.64	U	0.64	4.5
1,1-Dichloroethene		0.54	U	0.54	4.5
1,2-Dichloroethene, Total		0.35	U	0.35	4.5
1,2-Dichloropropane		0.50	U	0.50	4.5
cis-1,3-Dichloropropene		1.2	U	1.2	4.5
trans-1,3-Dichloropropene		0.61	U	0.61	4.5
Ethylbenzene		0.61	U	0.61	4.5
2-Hexanone		4.4	U	4.4	18
Methylene Chloride		1.5	U	1.5	4.5
4-Methyl-2-pentanone (MIBK)		4.0	U	4.0	9.1
Styrene		0.57	U	0.57	4.5
1,1,2,2-Tetrachloroethane		0.56	U	0.56	4.5
Tetrachloroethene		0.54	U	0.54	4.5
Toluene		0.63	U	0.63	4.5
1,1,1-Trichloroethane		0.47	U	0.47	4.5
1,1,2-Trichloroethane		0.80	U	0.80	4.5
Trichloroethene		0.21	U	0.21	4.5
Vinyl chloride		1.2	U	1.2	4.5
Xylenes, Total		0.56	U	0.56	4.5

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	95		58 - 140
Toluene-d8 (Surr)	91		80 - 126
4-Bromofluorobenzene (Surr)	88		76 - 127
Dibromofluoromethane (Surr)	97		75 - 121

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT6**

Lab Sample ID: 280-31493-5
Client Matrix: Solid
% Moisture: 3.8

Date Sampled: 07/24/2012 0755
Date Received: 07/26/2012 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-129703	Lab File ID:	G2_9143.D
Dilution:	1.0			Initial Weight/Volume:	5.714 g
Analysis Date:	07/27/2012 0124			Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1741				

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	3.56	5.0	N J

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT7**

Lab Sample ID: 280-31493-6
Client Matrix: Solid
% Moisture: 2.3

Date Sampled: 07/24/2012 0835
Date Received: 07/26/2012 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-129703	Lab File ID:	G2_9144.D
Dilution:	1.0			Initial Weight/Volume:	4.892 g
Analysis Date:	07/27/2012 0143			Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1741				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		5.6	U	5.6	21
Benzene		0.49	U	0.49	5.2
Bromodichloromethane		0.23	U	0.23	5.2
Bromoform		0.24	U	0.24	5.2
Bromomethane		0.52	U	0.52	10
2-Butanone (MEK)		1.9	U	1.9	10
Carbon disulfide		0.44	U	0.44	5.2
Carbon tetrachloride		0.66	U	0.66	5.2
Chlorobenzene		0.57	U	0.57	5.2
Dibromochloromethane		0.60	U	0.60	5.2
Chloroethane		0.93	U	0.93	10
Chloroform		0.30	U	0.30	5.2
Chloromethane		0.81	U	0.81	10
1,1-Dichloroethane		0.22	U	0.22	5.2
1,2-Dichloroethane		0.73	U	0.73	5.2
1,1-Dichloroethene		0.62	U	0.62	5.2
1,2-Dichloroethene, Total		0.41	U	0.41	5.2
1,2-Dichloropropane		0.58	U	0.58	5.2
cis-1,3-Dichloropropene		1.4	U	1.4	5.2
trans-1,3-Dichloropropene		0.70	U	0.70	5.2
Ethylbenzene		0.70	U	0.70	5.2
2-Hexanone		5.1	U	5.1	21
Methylene Chloride		1.7	U	1.7	5.2
4-Methyl-2-pentanone (MIBK)		4.6	U	4.6	10
Styrene		0.66	U	0.66	5.2
1,1,2,2-Tetrachloroethane		0.64	U	0.64	5.2
Tetrachloroethene		0.62	U	0.62	5.2
Toluene		0.72	U	0.72	5.2
1,1,1-Trichloroethane		0.54	U	0.54	5.2
1,1,2-Trichloroethane		0.92	U	0.92	5.2
Trichloroethene		0.24	U	0.24	5.2
Vinyl chloride		1.4	U	1.4	5.2
Xylenes, Total		0.64	U	0.64	5.2

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	91		58 - 140
Toluene-d8 (Surr)	90		80 - 126
4-Bromofluorobenzene (Surr)	87		76 - 127
Dibromofluoromethane (Surr)	93		75 - 121

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT7**

Lab Sample ID: 280-31493-6
Client Matrix: Solid
% Moisture: 2.3

Date Sampled: 07/24/2012 0835
Date Received: 07/26/2012 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-129703	Lab File ID:	G2_9144.D
Dilution:	1.0			Initial Weight/Volume:	4.892 g
Analysis Date:	07/27/2012 0143			Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1741				

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

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

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT8**

Lab Sample ID: 280-31493-7
Client Matrix: Solid
% Moisture: 1.1

Date Sampled: 07/24/2012 0800
Date Received: 07/26/2012 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-129703	Lab File ID:	G2_9145.D
Dilution:	1.0			Initial Weight/Volume:	4.155 g
Analysis Date:	07/27/2012 0202			Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1741				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		6.5	U	6.5	24
Benzene		0.57	U	0.57	6.1
Bromodichloromethane		0.27	U	0.27	6.1
Bromoform		0.28	U	0.28	6.1
Bromomethane		0.61	U	0.61	12
2-Butanone (MEK)		2.2	U	2.2	12
Carbon disulfide		0.51	U	0.51	6.1
Carbon tetrachloride		0.77	U	0.77	6.1
Chlorobenzene		0.66	U	0.66	6.1
Dibromochloromethane		0.69	U	0.69	6.1
Chloroethane		1.1	U	1.1	12
Chloroform		0.35	U	0.35	6.1
Chloromethane		0.94	U	0.94	12
1,1-Dichloroethane		0.26	U	0.26	6.1
1,2-Dichloroethane		0.85	U	0.85	6.1
1,1-Dichloroethene		0.72	U	0.72	6.1
1,2-Dichloroethene, Total		0.47	U	0.47	6.1
1,2-Dichloropropane		0.67	U	0.67	6.1
cis-1,3-Dichloropropene		1.6	U	1.6	6.1
trans-1,3-Dichloropropene		0.82	U	0.82	6.1
Ethylbenzene		0.82	U	0.82	6.1
2-Hexanone		6.0	U	6.0	24
Methylene Chloride		1.9	U	1.9	6.1
4-Methyl-2-pentanone (MIBK)		5.3	U	5.3	12
Styrene		0.77	U	0.77	6.1
1,1,2,2-Tetrachloroethane		0.74	U	0.74	6.1
Tetrachloroethene		0.72	U	0.72	6.1
Toluene		0.84	U	0.84	6.1
1,1,1-Trichloroethane		0.63	U	0.63	6.1
1,1,2-Trichloroethane		1.1	U	1.1	6.1
Trichloroethene		0.28	U	0.28	6.1
Vinyl chloride		1.6	U	1.6	6.1
Xylenes, Total		0.74	U	0.74	6.1

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	96		58 - 140
Toluene-d8 (Surr)	94		80 - 126
4-Bromofluorobenzene (Surr)	93		76 - 127
Dibromofluoromethane (Surr)	98		75 - 121

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT8**

Lab Sample ID: 280-31493-7
Client Matrix: Solid
% Moisture: 1.1

Date Sampled: 07/24/2012 0800
Date Received: 07/26/2012 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-129703	Lab File ID:	G2_9145.D
Dilution:	1.0			Initial Weight/Volume:	4.155 g
Analysis Date:	07/27/2012 0202			Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1741				

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

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

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT9**

Lab Sample ID: 280-31493-8
Client Matrix: Solid
% Moisture: 2.9

Date Sampled: 07/24/2012 0805
Date Received: 07/26/2012 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-129703	Lab File ID:	G2_9146.D
Dilution:	1.0			Initial Weight/Volume:	5.708 g
Analysis Date:	07/27/2012 0221			Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1741				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		4.9	U	4.9	18
Benzene		0.42	U	0.42	4.5
Bromodichloromethane		0.20	U	0.20	4.5
Bromoform		0.21	U	0.21	4.5
Bromomethane		0.45	U	0.45	9.0
2-Butanone (MEK)		1.7	U	1.7	9.0
Carbon disulfide		0.38	U	0.38	4.5
Carbon tetrachloride		0.57	U	0.57	4.5
Chlorobenzene		0.49	U	0.49	4.5
Dibromochloromethane		0.51	U	0.51	4.5
Chloroethane		0.80	U	0.80	9.0
Chloroform		0.26	U	0.26	4.5
Chloromethane		0.69	U	0.69	9.0
1,1-Dichloroethane		0.19	U	0.19	4.5
1,2-Dichloroethane		0.63	U	0.63	4.5
1,1-Dichloroethene		0.53	U	0.53	4.5
1,2-Dichloroethene, Total		0.35	U	0.35	4.5
1,2-Dichloropropane		0.50	U	0.50	4.5
cis-1,3-Dichloropropene		1.2	U	1.2	4.5
trans-1,3-Dichloropropene		0.60	U	0.60	4.5
Ethylbenzene		0.60	U	0.60	4.5
2-Hexanone		4.4	U	4.4	18
Methylene Chloride		1.4	U	1.4	4.5
4-Methyl-2-pentanone (MIBK)		3.9	U	3.9	9.0
Styrene		0.57	U	0.57	4.5
1,1,2,2-Tetrachloroethane		0.55	U	0.55	4.5
Tetrachloroethene		0.53	U	0.53	4.5
Toluene		0.62	U	0.62	4.5
1,1,1-Trichloroethane		0.47	U	0.47	4.5
1,1,2-Trichloroethane		0.79	U	0.79	4.5
Trichloroethene		0.21	U	0.21	4.5
Vinyl chloride		1.2	U	1.2	4.5
Xylenes, Total		0.55	U	0.55	4.5

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	94		58 - 140
Toluene-d8 (Surr)	90		80 - 126
4-Bromofluorobenzene (Surr)	88		76 - 127
Dibromofluoromethane (Surr)	96		75 - 121

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT9**

Lab Sample ID: 280-31493-8
Client Matrix: Solid
% Moisture: 2.9

Date Sampled: 07/24/2012 0805
Date Received: 07/26/2012 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-129703	Lab File ID:	G2_9146.D
Dilution:	1.0			Initial Weight/Volume:	5.708 g
Analysis Date:	07/27/2012 0221			Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1741				

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

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

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV0**

Lab Sample ID: 280-31493-9
Client Matrix: Solid
% Moisture: 1.1

Date Sampled: 07/24/2012 0900
Date Received: 07/26/2012 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-129703	Lab File ID:	G2_9147.D
Dilution:	1.0			Initial Weight/Volume:	5.553 g
Analysis Date:	07/27/2012 0240			Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1741				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		4.9	U	4.9	18
Benzene		0.43	U	0.43	4.6
Bromodichloromethane		0.20	U	0.20	4.6
Bromoform		0.21	U	0.21	4.6
Bromomethane		0.46	U	0.46	9.1
2-Butanone (MEK)		1.7	U	1.7	9.1
Carbon disulfide		0.38	U	0.38	4.6
Carbon tetrachloride		0.57	U	0.57	4.6
Chlorobenzene		0.49	U	0.49	4.6
Dibromochloromethane		0.52	U	0.52	4.6
Chloroethane		0.81	U	0.81	9.1
Chloroform		0.26	U	0.26	4.6
Chloromethane		0.70	U	0.70	9.1
1,1-Dichloroethane		0.19	U	0.19	4.6
1,2-Dichloroethane		0.64	U	0.64	4.6
1,1-Dichloroethene		0.54	U	0.54	4.6
1,2-Dichloroethene, Total		0.36	U	0.36	4.6
1,2-Dichloropropane		0.50	U	0.50	4.6
cis-1,3-Dichloropropene		1.2	U	1.2	4.6
trans-1,3-Dichloropropene		0.61	U	0.61	4.6
Ethylbenzene		0.61	U	0.61	4.6
2-Hexanone		4.5	U	4.5	18
Methylene Chloride		1.5	U	1.5	4.6
4-Methyl-2-pentanone (MIBK)		4.0	U	4.0	9.1
Styrene		0.57	U	0.57	4.6
1,1,2,2-Tetrachloroethane		0.56	U	0.56	4.6
Tetrachloroethene		0.54	U	0.54	4.6
Toluene		0.63	U	0.63	4.6
1,1,1-Trichloroethane		0.47	U	0.47	4.6
1,1,2-Trichloroethane		0.80	U	0.80	4.6
Trichloroethene		0.21	U	0.21	4.6
Vinyl chloride		1.2	U	1.2	4.6
Xylenes, Total		0.56	U	0.56	4.6

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	93		58 - 140
Toluene-d8 (Surr)	87		80 - 126
4-Bromofluorobenzene (Surr)	85		76 - 127
Dibromofluoromethane (Surr)	95		75 - 121

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV0**

Lab Sample ID: 280-31493-9
Client Matrix: Solid
% Moisture: 1.1

Date Sampled: 07/24/2012 0900
Date Received: 07/26/2012 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-129703	Lab File ID:	G2_9147.D
Dilution:	1.0			Initial Weight/Volume:	5.553 g
Analysis Date:	07/27/2012 0240			Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1741				

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

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

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV1**

Lab Sample ID: 280-31493-10
Client Matrix: Solid
% Moisture: 2.7

Date Sampled: 07/24/2012 0810
Date Received: 07/26/2012 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-129703	Lab File ID:	G2_9148.D
Dilution:	1.0			Initial Weight/Volume:	5.109 g
Analysis Date:	07/27/2012 0259			Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1741				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		5.4	U	5.4	20
Benzene		0.47	U	0.47	5.0
Bromodichloromethane		0.22	U	0.22	5.0
Bromoform		0.23	U	0.23	5.0
Bromomethane		0.50	U	0.50	10
2-Butanone (MEK)		1.8	U	1.8	10
Carbon disulfide		0.42	U	0.42	5.0
Carbon tetrachloride		0.63	U	0.63	5.0
Chlorobenzene		0.54	U	0.54	5.0
Dibromochloromethane		0.57	U	0.57	5.0
Chloroethane		0.90	U	0.90	10
Chloroform		0.29	U	0.29	5.0
Chloromethane		0.77	U	0.77	10
1,1-Dichloroethane		0.21	U	0.21	5.0
1,2-Dichloroethane		0.70	U	0.70	5.0
1,1-Dichloroethene		0.59	U	0.59	5.0
1,2-Dichloroethene, Total		0.39	U	0.39	5.0
1,2-Dichloropropane		0.55	U	0.55	5.0
cis-1,3-Dichloropropene		1.3	U	1.3	5.0
trans-1,3-Dichloropropene		0.67	U	0.67	5.0
Ethylbenzene		0.67	U	0.67	5.0
2-Hexanone		4.9	U	4.9	20
Methylene Chloride		1.6	U	1.6	5.0
4-Methyl-2-pentanone (MIBK)		4.4	U	4.4	10
Styrene		0.63	U	0.63	5.0
1,1,2,2-Tetrachloroethane		0.61	U	0.61	5.0
Tetrachloroethene		0.59	U	0.59	5.0
Toluene		0.69	U	0.69	5.0
1,1,1-Trichloroethane		0.52	U	0.52	5.0
1,1,2-Trichloroethane		0.89	U	0.89	5.0
Trichloroethene		0.23	U	0.23	5.0
Vinyl chloride		1.3	U	1.3	5.0
Xylenes, Total		0.61	U	0.61	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	101		58 - 140
Toluene-d8 (Surr)	96		80 - 126
4-Bromofluorobenzene (Surr)	93		76 - 127
Dibromofluoromethane (Surr)	103		75 - 121

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV1**

Lab Sample ID: 280-31493-10
Client Matrix: Solid
% Moisture: 2.7

Date Sampled: 07/24/2012 0810
Date Received: 07/26/2012 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-129703	Lab File ID:	G2_9148.D
Dilution:	1.0			Initial Weight/Volume:	5.109 g
Analysis Date:	07/27/2012 0259			Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1741				

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	3.56	5.6	N J

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV2**

Lab Sample ID: 280-31493-11
Client Matrix: Solid
% Moisture: 3.6

Date Sampled: 07/24/2012 0840
Date Received: 07/26/2012 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-129703	Lab File ID:	G2_9149.D
Dilution:	1.0			Initial Weight/Volume:	3.14 g
Analysis Date:	07/27/2012 0318			Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1741				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		8.9	U	8.9	33
Benzene		0.78	U	0.78	8.3
Bromodichloromethane		0.36	U	0.36	8.3
Bromoform		0.38	U	0.38	8.3
Bromomethane		0.83	U	0.83	17
2-Butanone (MEK)		3.0	U	3.0	17
Carbon disulfide		0.69	U	0.69	8.3
Carbon tetrachloride		1.0	U	1.0	8.3
Chlorobenzene		0.89	U	0.89	8.3
Dibromochloromethane		0.94	U	0.94	8.3
Chloroethane		1.5	U	1.5	17
Chloroform		0.48	U	0.48	8.3
Chloromethane		1.3	U	1.3	17
1,1-Dichloroethane		0.35	U	0.35	8.3
1,2-Dichloroethane		1.2	U	1.2	8.3
1,1-Dichloroethene		0.97	U	0.97	8.3
1,2-Dichloroethene, Total		0.64	U	0.64	8.3
1,2-Dichloropropane		0.91	U	0.91	8.3
cis-1,3-Dichloropropene		2.1	U	2.1	8.3
trans-1,3-Dichloropropene		1.1	U	1.1	8.3
Ethylbenzene		1.1	U	1.1	8.3
2-Hexanone		8.1	U	8.1	33
Methylene Chloride		2.6	U	2.6	8.3
4-Methyl-2-pentanone (MIBK)		7.2	U	7.2	17
Styrene		1.0	U	1.0	8.3
1,1,2,2-Tetrachloroethane		1.0	U	1.0	8.3
Tetrachloroethene		0.97	U	0.97	8.3
Toluene		1.1	U	1.1	8.3
1,1,1-Trichloroethane		0.86	U	0.86	8.3
1,1,2-Trichloroethane		1.5	U	1.5	8.3
Trichloroethene		0.38	U	0.38	8.3
Vinyl chloride		2.2	U	2.2	8.3
Xylenes, Total		1.0	U	1.0	8.3

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	111		58 - 140
Toluene-d8 (Surr)	114		80 - 126
4-Bromofluorobenzene (Surr)	95		76 - 127
Dibromofluoromethane (Surr)	116		75 - 121

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV2**

Lab Sample ID: 280-31493-11
Client Matrix: Solid
% Moisture: 3.6

Date Sampled: 07/24/2012 0840
Date Received: 07/26/2012 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-129703	Lab File ID:	G2_9149.D
Dilution:	1.0			Initial Weight/Volume:	3.14 g
Analysis Date:	07/27/2012 0318			Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1741				

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

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

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV3**

Lab Sample ID: 280-31493-12
Client Matrix: Solid
% Moisture: 2.6

Date Sampled: 07/24/2012 0825
Date Received: 07/26/2012 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-129703	Lab File ID:	G2_9150.D
Dilution:	1.0			Initial Weight/Volume:	4.869 g
Analysis Date:	07/27/2012 0337			Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1741				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		5.7	U	5.7	21
Benzene		0.50	U	0.50	5.3
Bromodichloromethane		0.23	U	0.23	5.3
Bromoform		0.24	U	0.24	5.3
Bromomethane		0.53	U	0.53	11
2-Butanone (MEK)		1.9	U	1.9	11
Carbon disulfide		0.44	U	0.44	5.3
Carbon tetrachloride		0.66	U	0.66	5.3
Chlorobenzene		0.57	U	0.57	5.3
Dibromochloromethane		0.60	U	0.60	5.3
Chloroethane		0.94	U	0.94	11
Chloroform		0.31	U	0.31	5.3
Chloromethane		0.81	U	0.81	11
1,1-Dichloroethane		0.22	U	0.22	5.3
1,2-Dichloroethane		0.74	U	0.74	5.3
1,1-Dichloroethene		0.62	U	0.62	5.3
1,2-Dichloroethene, Total		0.41	U	0.41	5.3
1,2-Dichloropropane		0.58	U	0.58	5.3
cis-1,3-Dichloropropene		1.4	U	1.4	5.3
trans-1,3-Dichloropropene		0.71	U	0.71	5.3
Ethylbenzene		0.71	U	0.71	5.3
2-Hexanone		5.2	U	5.2	21
Methylene Chloride		1.7	U	1.7	5.3
4-Methyl-2-pentanone (MIBK)		4.6	U	4.6	11
Styrene		0.66	U	0.66	5.3
1,1,2,2-Tetrachloroethane		0.64	U	0.64	5.3
Tetrachloroethene		0.62	U	0.62	5.3
Toluene		0.73	U	0.73	5.3
1,1,1-Trichloroethane		0.55	U	0.55	5.3
1,1,2-Trichloroethane		0.93	U	0.93	5.3
Trichloroethene		0.24	U	0.24	5.3
Vinyl chloride		1.4	U	1.4	5.3
Xylenes, Total		0.64	U	0.64	5.3

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	96		58 - 140
Toluene-d8 (Surr)	91		80 - 126
4-Bromofluorobenzene (Surr)	88		76 - 127
Dibromofluoromethane (Surr)	98		75 - 121

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV3**

Lab Sample ID: 280-31493-12
Client Matrix: Solid
% Moisture: 2.6

Date Sampled: 07/24/2012 0825
Date Received: 07/26/2012 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-129703	Lab File ID:	G2_9150.D
Dilution:	1.0			Initial Weight/Volume:	4.869 g
Analysis Date:	07/27/2012 0337			Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1741				

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	3.56	5.4	N J

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV4**

Lab Sample ID: 280-31493-13
Client Matrix: Solid
% Moisture: 3.6

Date Sampled: 07/24/2012 0820
Date Received: 07/26/2012 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-129703	Lab File ID:	G2_9151.D
Dilution:	1.0			Initial Weight/Volume:	5.07 g
Analysis Date:	07/27/2012 0356			Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1741				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		5.5	U	5.5	20
Benzene		0.48	U	0.48	5.1
Bromodichloromethane		0.23	U	0.23	5.1
Bromoform		0.24	U	0.24	5.1
Bromomethane		0.51	U	0.51	10
2-Butanone (MEK)		1.9	U	1.9	10
Carbon disulfide		0.43	U	0.43	5.1
Carbon tetrachloride		0.64	U	0.64	5.1
Chlorobenzene		0.55	U	0.55	5.1
Dibromochloromethane		0.58	U	0.58	5.1
Chloroethane		0.91	U	0.91	10
Chloroform		0.30	U	0.30	5.1
Chloromethane		0.79	U	0.79	10
1,1-Dichloroethane		0.21	U	0.21	5.1
1,2-Dichloroethane		0.72	U	0.72	5.1
1,1-Dichloroethene		0.60	U	0.60	5.1
1,2-Dichloroethene, Total		0.40	U	0.40	5.1
1,2-Dichloropropane		0.56	U	0.56	5.1
cis-1,3-Dichloropropene		1.3	U	1.3	5.1
trans-1,3-Dichloropropene		0.69	U	0.69	5.1
Ethylbenzene		0.69	U	0.69	5.1
2-Hexanone		5.0	U	5.0	20
Methylene Chloride		1.6	U	1.6	5.1
4-Methyl-2-pentanone (MIBK)		4.5	U	4.5	10
Styrene		0.64	U	0.64	5.1
1,1,2,2-Tetrachloroethane		0.62	U	0.62	5.1
Tetrachloroethene		0.60	U	0.60	5.1
Toluene		0.71	U	0.71	5.1
1,1,1-Trichloroethane		0.53	U	0.53	5.1
1,1,2-Trichloroethane		0.90	U	0.90	5.1
Trichloroethene		0.24	U	0.24	5.1
Vinyl chloride		1.4	U	1.4	5.1
Xylenes, Total		0.62	U	0.62	5.1

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	95		58 - 140
Toluene-d8 (Surr)	91		80 - 126
4-Bromofluorobenzene (Surr)	89		76 - 127
Dibromofluoromethane (Surr)	96		75 - 121

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV4**

Lab Sample ID: 280-31493-13
Client Matrix: Solid
% Moisture: 3.6

Date Sampled: 07/24/2012 0820
Date Received: 07/26/2012 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-129703	Lab File ID:	G2_9151.D
Dilution:	1.0			Initial Weight/Volume:	5.07 g
Analysis Date:	07/27/2012 0356			Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1741				

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

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

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV5**

Lab Sample ID: 280-31493-14
Client Matrix: Solid
% Moisture: 2.7

Date Sampled: 07/24/2012 0845
Date Received: 07/26/2012 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-129703	Lab File ID:	G2_9152.D
Dilution:	1.0			Initial Weight/Volume:	4.118 g
Analysis Date:	07/27/2012 0415			Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1741				

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

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	98		58 - 140
Toluene-d8 (Surr)	93		80 - 126
4-Bromofluorobenzene (Surr)	91		76 - 127
Dibromofluoromethane (Surr)	98		75 - 121

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV5**

Lab Sample ID: 280-31493-14
Client Matrix: Solid
% Moisture: 2.7

Date Sampled: 07/24/2012 0845
Date Received: 07/26/2012 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-129703	Lab File ID:	G2_9152.D
Dilution:	1.0			Initial Weight/Volume:	4.118 g
Analysis Date:	07/27/2012 0415			Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1741				

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	3.56	6.3	N J

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV6**

Lab Sample ID: 280-31493-15
Client Matrix: Solid
% Moisture: 2.6

Date Sampled: 07/24/2012 0850
Date Received: 07/26/2012 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-129703	Lab File ID:	G2_9135.D
Dilution:	1.0			Initial Weight/Volume:	4.299 g
Analysis Date:	07/26/2012 2251			Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1741				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		6.4	U	6.4	24
Benzene		0.56	U	0.56	6.0
Bromodichloromethane		0.26	U	0.26	6.0
Bromoform		0.27	U	0.27	6.0
Bromomethane		0.60	U	0.60	12
2-Butanone (MEK)		2.2	U	2.2	12
Carbon disulfide		0.50	U	0.50	6.0
Carbon tetrachloride		0.75	U	0.75	6.0
Chlorobenzene		0.64	U	0.64	6.0
Dibromochloromethane		0.68	U	0.68	6.0
Chloroethane		1.1	U	1.1	12
Chloroform		0.35	U	0.35	6.0
Chloromethane		0.92	U	0.92	12
1,1-Dichloroethane		0.25	U	0.25	6.0
1,2-Dichloroethane		0.84	U	0.84	6.0
1,1-Dichloroethene		0.70	U	0.70	6.0
1,2-Dichloroethene, Total		0.47	U	0.47	6.0
1,2-Dichloropropane		0.66	U	0.66	6.0
cis-1,3-Dichloropropene		1.5	U	1.5	6.0
trans-1,3-Dichloropropene		0.80	U	0.80	6.0
Ethylbenzene		0.80	U	0.80	6.0
2-Hexanone		5.8	U	5.8	24
Methylene Chloride		1.9	U	1.9	6.0
4-Methyl-2-pentanone (MIBK)		5.2	U	5.2	12
Styrene		0.75	U T	0.75	6.0
1,1,2,2-Tetrachloroethane		0.73	U	0.73	6.0
Tetrachloroethene		0.70	U	0.70	6.0
Toluene		0.82	U	0.82	6.0
1,1,1-Trichloroethane		0.62	U	0.62	6.0
1,1,2-Trichloroethane		1.1	U	1.1	6.0
Trichloroethene		0.27	U	0.27	6.0
Vinyl chloride		1.6	U	1.6	6.0
Xylenes, Total		0.73	U	0.73	6.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	93		58 - 140
Toluene-d8 (Surr)	92		80 - 126
4-Bromofluorobenzene (Surr)	91		76 - 127
Dibromofluoromethane (Surr)	95		75 - 121

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV6**

Lab Sample ID: 280-31493-15
Client Matrix: Solid
% Moisture: 2.6

Date Sampled: 07/24/2012 0850
Date Received: 07/26/2012 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-129703	Lab File ID:	G2_9135.D
Dilution:	1.0			Initial Weight/Volume:	4.299 g
Analysis Date:	07/26/2012 2251			Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1741				

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

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

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV7**

Lab Sample ID: 280-31493-16
Client Matrix: Solid
% Moisture: 2.5

Date Sampled: 07/24/2012 0850
Date Received: 07/26/2012 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-129703	Lab File ID:	G2_9138.D
Dilution:	1.0			Initial Weight/Volume:	2.943 g
Analysis Date:	07/26/2012 2348			Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1741				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		9.4	U	9.4	35
Benzene		0.82	U	0.82	8.7
Bromodichloromethane		0.38	U	0.38	8.7
Bromoform		0.40	U	0.40	8.7
Bromomethane		0.87	U	0.87	17
2-Butanone (MEK)		3.2	U	3.2	17
Carbon disulfide		0.73	U	0.73	8.7
Carbon tetrachloride		1.1	U	1.1	8.7
Chlorobenzene		0.94	U	0.94	8.7
Dibromochloromethane		0.99	U	0.99	8.7
Chloroethane		1.6	U	1.6	17
Chloroform		0.51	U	0.51	8.7
Chloromethane		1.3	U	1.3	17
1,1-Dichloroethane		0.37	U	0.37	8.7
1,2-Dichloroethane		1.2	U	1.2	8.7
1,1-Dichloroethene		1.0	U	1.0	8.7
1,2-Dichloroethene, Total		0.68	U	0.68	8.7
1,2-Dichloropropane		0.96	U	0.96	8.7
cis-1,3-Dichloropropene		2.2	U	2.2	8.7
trans-1,3-Dichloropropene		1.2	U	1.2	8.7
Ethylbenzene		1.2	U	1.2	8.7
2-Hexanone		8.5	U	8.5	35
Methylene Chloride		2.8	U	2.8	8.7
4-Methyl-2-pentanone (MIBK)		7.6	U	7.6	17
Styrene		1.1	U	1.1	8.7
1,1,2,2-Tetrachloroethane		1.1	U	1.1	8.7
Tetrachloroethene		1.0	U	1.0	8.7
Toluene		1.2	U	1.2	8.7
1,1,1-Trichloroethane		0.91	U	0.91	8.7
1,1,2-Trichloroethane		1.5	U	1.5	8.7
Trichloroethene		0.40	U	0.40	8.7
Vinyl chloride		2.3	U	2.3	8.7
Xylenes, Total		1.1	U	1.1	8.7

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	94		58 - 140
Toluene-d8 (Surr)	92		80 - 126
4-Bromofluorobenzene (Surr)	91		76 - 127
Dibromofluoromethane (Surr)	96		75 - 121

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV7**

Lab Sample ID: 280-31493-16
Client Matrix: Solid
% Moisture: 2.5

Date Sampled: 07/24/2012 0850
Date Received: 07/26/2012 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Prep Method:	5035	Prep Batch:	280-129703	Lab File ID:	G2_9138.D
Dilution:	1.0			Initial Weight/Volume:	2.943 g
Analysis Date:	07/26/2012 2348			Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1741				

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

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

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT3**

Lab Sample ID: 280-31493-2
Client Matrix: Solid
% Moisture: 1.1

Date Sampled: 07/24/2012 0745
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9190.D
Dilution:	1.0			Initial Weight/Volume:	32.9 g
Analysis Date:	08/07/2012 1026			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		9.5	U	9.5	300
Acenaphthylene		16	U	16	300
Anthracene		16	U	16	300
Benzo[a]anthracene		18	U	18	300
Benzo[a]pyrene		58	J	18	300
Benzo[b]fluoranthene		96	J K	24	300
Benzo[ghi]perylene		15	U	15	300
Benzo[k]fluoranthene		37	U K	37	300
Bis(2-chloroethoxy)methane		21	U	21	300
Bis(2-chloroethyl)ether		15	U	15	300
bis (2-chloroisopropyl) ether		21	U	21	300
Bis(2-ethylhexyl) phthalate		93	J B	42	300
4-Bromophenyl phenyl ether		18	U	18	300
Butyl benzyl phthalate		40	U	40	300
Carbazole		33	U	33	300
4-Chloroaniline		75	U	75	300
4-Chloro-3-methylphenol		61	U	61	300
2-Chloronaphthalene		9.2	U	9.2	300
2-Chlorophenol		19	U	19	300
4-Chlorophenyl phenyl ether		19	U	19	300
Chrysene		25	U	25	300
Dibenz(a,h)anthracene		18	U	18	300
Dibenzofuran		18	U	18	300
1,2-Dichlorobenzene		20	U	20	300
1,3-Dichlorobenzene		11	U	11	300
1,4-Dichlorobenzene		13	U	13	300
3,3'-Dichlorobenzidine		83	U	83	610
2,4-Dichlorophenol		9.2	U	9.2	300
Diethyl phthalate		24	U	24	300
2,4-Dimethylphenol		61	U	61	300
Dimethyl phthalate		21	U	21	300
Di-n-butyl phthalate		27	U	27	300
4,6-Dinitro-2-methylphenol		300	U T	300	610
2,4-Dinitrophenol		310	U T	310	760
2,4-Dinitrotoluene		61	U	61	300
2,6-Dinitrotoluene		26	U	26	300
Di-n-octyl phthalate		13	U	13	300
Fluoranthene		33	U	33	300
Fluorene		17	U	17	300
Hexachlorobenzene		27	U	27	300
Hexachlorobutadiene		9.2	U	9.2	300
Hexachlorocyclopentadiene		46	U	46	300
Hexachloroethane		20	U	20	300
Indeno[1,2,3-cd]pyrene		20	U	20	300
Isophorone		16	U	16	300
2-Methylnaphthalene		18	U	18	300

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT3**

Lab Sample ID: 280-31493-2
Client Matrix: Solid
% Moisture: 1.1

Date Sampled: 07/24/2012 0745
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9190.D
Dilution:	1.0			Initial Weight/Volume:	32.9 g
Analysis Date:	08/07/2012 1026			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2-Methylphenol		12	U	12	300
3 & 4 Methylphenol		30	U	30	300
Naphthalene		29	U	29	300
2-Nitroaniline		46	U	46	300
3-Nitroaniline		67	U	67	300
4-Nitroaniline		67	U	67	300
Nitrobenzene		20	U	20	300
2-Nitrophenol		9.2	U	9.2	300
4-Nitrophenol		89	U	89	610
N-Nitrosodi-n-propylamine		29	U	29	300
N-Nitrosodiphenylamine		19	U	19	300
Pentachlorophenol		300	U	300	610
Phenanthrene		16	U	16	300
Phenol		17	U	17	300
Pyrene		19	J	11	300
1,2,4-Trichlorobenzene		26	U	26	300
2,4,5-Trichlorophenol		9.2	U	9.2	300
2,4,6-Trichlorophenol		9.2	U	9.2	300

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	81		50 - 120
2-Fluorophenol	85		53 - 120
Nitrobenzene-d5	83		50 - 120
Phenol-d5	87		52 - 120
Terphenyl-d14	101		55 - 120
2,4,6-Tribromophenol	87		51 - 120

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT3**

Lab Sample ID: 280-31493-2
Client Matrix: Solid
% Moisture: 1.1

Date Sampled: 07/24/2012 0745
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9190.D
Dilution:	1.0			Initial Weight/Volume:	32.9 g
Analysis Date:	08/07/2012 1026			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	3.22	2400	J N

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT4**

Lab Sample ID: 280-31493-3
Client Matrix: Solid
% Moisture: 3.0

Date Sampled: 07/24/2012 0750
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9203.D
Dilution:	1.0			Initial Weight/Volume:	31.7 g
Analysis Date:	08/07/2012 1450			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			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		98	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		9.8	U	9.8	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		20	U	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		320	U	320	810
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		9.8	U	9.8	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: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT4**

Lab Sample ID: 280-31493-3
Client Matrix: Solid
% Moisture: 3.0

Date Sampled: 07/24/2012 0750
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9203.D
Dilution:	1.0			Initial Weight/Volume:	31.7 g
Analysis Date:	08/07/2012 1450			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			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		9.8	U	9.8	320
4-Nitrophenol		95	U	95	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		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	81		50 - 120
2-Fluorophenol	82		53 - 120
Nitrobenzene-d5	84		50 - 120
Phenol-d5	86		52 - 120
Terphenyl-d14	104		55 - 120
2,4,6-Tribromophenol	83		51 - 120

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT4**

Lab Sample ID: 280-31493-3
Client Matrix: Solid
% Moisture: 3.0

Date Sampled: 07/24/2012 0750
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9203.D
Dilution:	1.0			Initial Weight/Volume:	31.7 g
Analysis Date:	08/07/2012 1450			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	1.96	140	N J
	Unknown	3.22	2700	N J

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT5**

Lab Sample ID: 280-31493-4
Client Matrix: Solid
% Moisture: 2.5

Date Sampled: 07/24/2012 0830
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9204.D
Dilution:	1.0			Initial Weight/Volume:	32.2 g
Analysis Date:	08/07/2012 1510			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			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		16	U	16	320
Benzo[a]anthracene		19	U	19	320
Benzo[a]pyrene		19	U	19	320
Benzo[b]fluoranthene		25	U	25	320
Benzo[ghi]perylene		15	U	15	320
Benzo[k]fluoranthene		38	U	38	320
Bis(2-chloroethoxy)methane		22	U	22	320
Bis(2-chloroethyl)ether		16	U	16	320
bis (2-chloroisopropyl) ether		22	U	22	320
Bis(2-ethylhexyl) phthalate		100	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		26	U	26	320
Dibenz(a,h)anthracene		18	U	18	320
Dibenzofuran		19	U	19	320
1,2-Dichlorobenzene		21	U	21	320
1,3-Dichlorobenzene		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		34	U	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		21	U	21	320
Isophorone		16	U	16	320
2-Methylnaphthalene		18	U	18	320

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT5**

Lab Sample ID: 280-31493-4
Client Matrix: Solid
% Moisture: 2.5

Date Sampled: 07/24/2012 0830
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9204.D
Dilution:	1.0			Initial Weight/Volume:	32.2 g
Analysis Date:	08/07/2012 1510			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			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		16	U	16	320
Phenol		17	U	17	320
Pyrene		12	U	12	320
1,2,4-Trichlorobenzene		27	U	27	320
2,4,5-Trichlorophenol		9.6	U	9.6	320
2,4,6-Trichlorophenol		9.6	U	9.6	320

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	75		50 - 120
2-Fluorophenol	76		53 - 120
Nitrobenzene-d5	75		50 - 120
Phenol-d5	81		52 - 120
Terphenyl-d14	101		55 - 120
2,4,6-Tribromophenol	82		51 - 120

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT5**

Lab Sample ID: 280-31493-4
Client Matrix: Solid
% Moisture: 2.5

Date Sampled: 07/24/2012 0830
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9204.D
Dilution:	1.0			Initial Weight/Volume:	32.2 g
Analysis Date:	08/07/2012 1510			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	1.96	200	N J
	Unknown	3.22	2100	N J

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT6**

Lab Sample ID: 280-31493-5
Client Matrix: Solid
% Moisture: 3.8

Date Sampled: 07/24/2012 0755
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9205.D
Dilution:	1.0			Initial Weight/Volume:	30.4 g
Analysis Date:	08/07/2012 1530			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		11	U	11	340
Acenaphthylene		17	U	17	340
Anthracene		17	U	17	340
Benzo[a]anthracene		21	U	21	340
Benzo[a]pyrene		21	U	21	340
Benzo[b]fluoranthene		27	U	27	340
Benzo[ghi]perylene		16	U	16	340
Benzo[k]fluoranthene		41	U	41	340
Bis(2-chloroethoxy)methane		24	U	24	340
Bis(2-chloroethyl)ether		17	U	17	340
bis (2-chloroisopropyl) ether		24	U	24	340
Bis(2-ethylhexyl) phthalate		120	J B	47	340
4-Bromophenyl phenyl ether		19	U	19	340
Butyl benzyl phthalate		44	U	44	340
Carbazole		37	U	37	340
4-Chloroaniline		84	U	84	340
4-Chloro-3-methylphenol		68	U	68	340
2-Chloronaphthalene		10	U	10	340
2-Chlorophenol		22	U	22	340
4-Chlorophenyl phenyl ether		22	U	22	340
Chrysene		28	U	28	340
Dibenz(a,h)anthracene		19	U	19	340
Dibenzofuran		21	U	21	340
1,2-Dichlorobenzene		23	U	23	340
1,3-Dichlorobenzene		12	U	12	340
1,4-Dichlorobenzene		14	U	14	340
3,3'-Dichlorobenzidine		92	U	92	680
2,4-Dichlorophenol		10	U	10	340
Diethyl phthalate		27	U	27	340
2,4-Dimethylphenol		68	U	68	340
Dimethyl phthalate		24	U	24	340
Di-n-butyl phthalate		30	U	30	340
4,6-Dinitro-2-methylphenol		340	U	340	680
2,4-Dinitrophenol		340	U	340	850
2,4-Dinitrotoluene		68	U	68	340
2,6-Dinitrotoluene		29	U	29	340
Di-n-octyl phthalate		15	U	15	340
Fluoranthene		37	U	37	340
Fluorene		18	U	18	340
Hexachlorobenzene		30	U	30	340
Hexachlorobutadiene		10	U	10	340
Hexachlorocyclopentadiene		51	U	51	340
Hexachloroethane		22	U	22	340
Indeno[1,2,3-cd]pyrene		23	U	23	340
Isophorone		17	U	17	340
2-Methylnaphthalene		19	U	19	340

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT6**

Lab Sample ID: 280-31493-5
Client Matrix: Solid
% Moisture: 3.8

Date Sampled: 07/24/2012 0755
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9205.D
Dilution:	1.0			Initial Weight/Volume:	30.4 g
Analysis Date:	08/07/2012 1530			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2-Methylphenol		13	U	13	340
3 & 4 Methylphenol		34	U	34	340
Naphthalene		32	U	32	340
2-Nitroaniline		51	U	51	340
3-Nitroaniline		75	U	75	340
4-Nitroaniline		74	U	74	340
Nitrobenzene		23	U	23	340
2-Nitrophenol		10	U	10	340
4-Nitrophenol		100	U	100	680
N-Nitrosodi-n-propylamine		32	U	32	340
N-Nitrosodiphenylamine		22	U	22	340
Pentachlorophenol		340	U	340	680
Phenanthrene		17	U	17	340
Phenol		18	U	18	340
Pyrene		12	U	12	340
1,2,4-Trichlorobenzene		29	U	29	340
2,4,5-Trichlorophenol		10	U	10	340
2,4,6-Trichlorophenol		10	U	10	340

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	76		50 - 120
2-Fluorophenol	80		53 - 120
Nitrobenzene-d5	78		50 - 120
Phenol-d5	82		52 - 120
Terphenyl-d14	101		55 - 120
2,4,6-Tribromophenol	78		51 - 120

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT6**

Lab Sample ID: 280-31493-5
Client Matrix: Solid
% Moisture: 3.8

Date Sampled: 07/24/2012 0755
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9205.D
Dilution:	1.0			Initial Weight/Volume:	30.4 g
Analysis Date:	08/07/2012 1530			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	1.96	170	N J
	Unknown	3.22	2700	N J

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT7**

Lab Sample ID: 280-31493-6
Client Matrix: Solid
% Moisture: 2.3

Date Sampled: 07/24/2012 0835
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9206.D
Dilution:	1.0			Initial Weight/Volume:	31.7 g
Analysis Date:	08/07/2012 1550			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	320
Acenaphthylene		16	U	16	320
Anthracene		16	U	16	320
Benzo[a]anthracene		19	U	19	320
Benzo[a]pyrene		19	U	19	320
Benzo[b]fluoranthene		25	U	25	320
Benzo[ghi]perylene		16	U	16	320
Benzo[k]fluoranthene		39	U	39	320
Bis(2-chloroethoxy)methane		22	U	22	320
Bis(2-chloroethyl)ether		16	U	16	320
bis (2-chloroisopropyl) ether		22	U	22	320
Bis(2-ethylhexyl) phthalate		98	J B	45	320
4-Bromophenyl phenyl ether		18	U	18	320
Butyl benzyl phthalate		42	U	42	320
Carbazole		35	U	35	320
4-Chloroaniline		79	U	79	320
4-Chloro-3-methylphenol		64	U	64	320
2-Chloronaphthalene		9.7	U	9.7	320
2-Chlorophenol		20	U	20	320
4-Chlorophenyl phenyl ether		20	U	20	320
Chrysene		26	U	26	320
Dibenz(a,h)anthracene		18	U	18	320
Dibenzofuran		19	U	19	320
1,2-Dichlorobenzene		21	U	21	320
1,3-Dichlorobenzene		12	U	12	320
1,4-Dichlorobenzene		13	U	13	320
3,3'-Dichlorobenzidine		87	U	87	640
2,4-Dichlorophenol		9.7	U	9.7	320
Diethyl phthalate		25	U	25	320
2,4-Dimethylphenol		64	U	64	320
Dimethyl phthalate		22	U	22	320
Di-n-butyl phthalate		28	U	28	320
4,6-Dinitro-2-methylphenol		320	U	320	640
2,4-Dinitrophenol		320	U	320	800
2,4-Dinitrotoluene		64	U	64	320
2,6-Dinitrotoluene		27	U	27	320
Di-n-octyl phthalate		14	U	14	320
Fluoranthene		35	U	35	320
Fluorene		17	U	17	320
Hexachlorobenzene		28	U	28	320
Hexachlorobutadiene		9.7	U	9.7	320
Hexachlorocyclopentadiene		48	U	48	320
Hexachloroethane		21	U	21	320
Indeno[1,2,3-cd]pyrene		21	U	21	320
Isophorone		16	U	16	320
2-Methylnaphthalene		18	U	18	320

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT7**

Lab Sample ID: 280-31493-6
Client Matrix: Solid
% Moisture: 2.3

Date Sampled: 07/24/2012 0835
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9206.D
Dilution:	1.0			Initial Weight/Volume:	31.7 g
Analysis Date:	08/07/2012 1550			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL

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

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	82		50 - 120
2-Fluorophenol	85		53 - 120
Nitrobenzene-d5	83		50 - 120
Phenol-d5	86		52 - 120
Terphenyl-d14	106		55 - 120
2,4,6-Tribromophenol	85		51 - 120

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT7**

Lab Sample ID: 280-31493-6
Client Matrix: Solid
% Moisture: 2.3

Date Sampled: 07/24/2012 0835
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9206.D
Dilution:	1.0			Initial Weight/Volume:	31.7 g
Analysis Date:	08/07/2012 1550			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	1.95	360	N J
	Unknown	3.22	2700	N J
54446-78-5	Ethanol, 1-(2-butoxyethoxy)-	5.74	160	N J

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT8**

Lab Sample ID: 280-31493-7
Client Matrix: Solid
% Moisture: 1.1

Date Sampled: 07/24/2012 0800
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9207.D
Dilution:	1.0			Initial Weight/Volume:	30.0 g
Analysis Date:	08/07/2012 1610			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			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		27	U	27	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		100	J B	47	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		29	U	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		51	U	51	330
Hexachloroethane		22	U	22	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: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT8**

Lab Sample ID: 280-31493-7
Client Matrix: Solid
% Moisture: 1.1

Date Sampled: 07/24/2012 0800
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9207.D
Dilution:	1.0			Initial Weight/Volume:	30.0 g
Analysis Date:	08/07/2012 1610			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			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		51	U	51	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		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	79		50 - 120
2-Fluorophenol	82		53 - 120
Nitrobenzene-d5	81		50 - 120
Phenol-d5	85		52 - 120
Terphenyl-d14	102		55 - 120
2,4,6-Tribromophenol	81		51 - 120

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT8**

Lab Sample ID: 280-31493-7
Client Matrix: Solid
% Moisture: 1.1

Date Sampled: 07/24/2012 0800
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9207.D
Dilution:	1.0			Initial Weight/Volume:	30.0 g
Analysis Date:	08/07/2012 1610			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	1.96	220	N J
	Unknown	3.22	2400	N J
	Unknown	11.84	430	N J

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT9**

Lab Sample ID: 280-31493-8
Client Matrix: Solid
% Moisture: 2.9

Date Sampled: 07/24/2012 0805
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9208.D
Dilution:	1.0			Initial Weight/Volume:	30.9 g
Analysis Date:	08/07/2012 1630			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			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		99	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: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT9**

Lab Sample ID: 280-31493-8
Client Matrix: Solid
% Moisture: 2.9

Date Sampled: 07/24/2012 0805
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9208.D
Dilution:	1.0			Initial Weight/Volume:	30.9 g
Analysis Date:	08/07/2012 1630			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			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		12	U	12	330
1,2,4-Trichlorobenzene		28	U	28	330
2,4,5-Trichlorophenol		10	U	10	330
2,4,6-Trichlorophenol		10	U	10	330

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	76		50 - 120
2-Fluorophenol	81		53 - 120
Nitrobenzene-d5	79		50 - 120
Phenol-d5	81		52 - 120
Terphenyl-d14	104		55 - 120
2,4,6-Tribromophenol	74		51 - 120

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT9**

Lab Sample ID: 280-31493-8
Client Matrix: Solid
% Moisture: 2.9

Date Sampled: 07/24/2012 0805
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9208.D
Dilution:	1.0			Initial Weight/Volume:	30.9 g
Analysis Date:	08/07/2012 1630			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	1.95	170	N J
	Unknown	3.22	2200	N J

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV0**

Lab Sample ID: 280-31493-9
Client Matrix: Solid
% Moisture: 1.1

Date Sampled: 07/24/2012 0900
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9209.D
Dilution:	1.0			Initial Weight/Volume:	30.5 g
Analysis Date:	08/07/2012 1651			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			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		100	J B	46	330
4-Bromophenyl phenyl ether		19	U	19	330
Butyl benzyl phthalate		43	U	43	330
Carbazole		36	U	36	330
4-Chloroaniline		81	U	81	330
4-Chloro-3-methylphenol		66	U	66	330
2-Chloronaphthalene		9.9	U	9.9	330
2-Chlorophenol		21	U	21	330
4-Chlorophenyl phenyl ether		21	U	21	330
Chrysene		27	U	27	330
Dibenz(a,h)anthracene		19	U	19	330
Dibenzofuran		20	U	20	330
1,2-Dichlorobenzene		22	U	22	330
1,3-Dichlorobenzene		12	U	12	330
1,4-Dichlorobenzene		14	U	14	330
3,3'-Dichlorobenzidine		90	U	90	660
2,4-Dichlorophenol		9.9	U	9.9	330
Diethyl phthalate		26	U	26	330
2,4-Dimethylphenol		66	U	66	330
Dimethyl phthalate		23	U	23	330
Di-n-butyl phthalate		29	U	29	330
4,6-Dinitro-2-methylphenol		330	U	330	660
2,4-Dinitrophenol		330	U	330	820
2,4-Dinitrotoluene		66	U	66	330
2,6-Dinitrotoluene		28	U	28	330
Di-n-octyl phthalate		14	U	14	330
Fluoranthene		36	U	36	330
Fluorene		18	U	18	330
Hexachlorobenzene		29	U	29	330
Hexachlorobutadiene		9.9	U	9.9	330
Hexachlorocyclopentadiene		50	U	50	330
Hexachloroethane		21	U	21	330
Indeno[1,2,3-cd]pyrene		22	U	22	330
Isophorone		17	U	17	330
2-Methylnaphthalene		19	U	19	330

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV0**

Lab Sample ID: 280-31493-9
Client Matrix: Solid
% Moisture: 1.1

Date Sampled: 07/24/2012 0900
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9209.D
Dilution:	1.0			Initial Weight/Volume:	30.5 g
Analysis Date:	08/07/2012 1651			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2-Methylphenol		13	U	13	330
3 & 4 Methylphenol		33	U	33	330
Naphthalene		31	U	31	330
2-Nitroaniline		50	U	50	330
3-Nitroaniline		73	U	73	330
4-Nitroaniline		72	U	72	330
Nitrobenzene		22	U	22	330
2-Nitrophenol		9.9	U	9.9	330
4-Nitrophenol		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		9.9	U	9.9	330
2,4,6-Trichlorophenol		9.9	U	9.9	330

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	78		50 - 120
2-Fluorophenol	81		53 - 120
Nitrobenzene-d5	78		50 - 120
Phenol-d5	83		52 - 120
Terphenyl-d14	103		55 - 120
2,4,6-Tribromophenol	68		51 - 120

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV0**

Lab Sample ID: 280-31493-9
Client Matrix: Solid
% Moisture: 1.1

Date Sampled: 07/24/2012 0900
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9209.D
Dilution:	1.0			Initial Weight/Volume:	30.5 g
Analysis Date:	08/07/2012 1651			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	2.14	150	N J
	Unknown	3.22	2200	N J

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV1**

Lab Sample ID: 280-31493-10
Client Matrix: Solid
% Moisture: 2.7

Date Sampled: 07/24/2012 0810
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9210.D
Dilution:	1.0			Initial Weight/Volume:	31.1 g
Analysis Date:	08/07/2012 1711			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	330
Acenaphthylene		17	U	17	330
Anthracene		17	U	17	330
Benzo[a]anthracene		20	U	20	330
Benzo[a]pyrene		20	U	20	330
Benzo[b]fluoranthene		26	U	26	330
Benzo[ghi]perylene		16	U	16	330
Benzo[k]fluoranthene		40	U	40	330
Bis(2-chloroethoxy)methane		23	U	23	330
Bis(2-chloroethyl)ether		16	U	16	330
bis (2-chloroisopropyl) ether		23	U	23	330
Bis(2-ethylhexyl) phthalate		100	J B	46	330
4-Bromophenyl phenyl ether		19	U	19	330
Butyl benzyl phthalate		43	U	43	330
Carbazole		36	U	36	330
4-Chloroaniline		81	U	81	330
4-Chloro-3-methylphenol		65	U	65	330
2-Chloronaphthalene		9.9	U	9.9	330
2-Chlorophenol		21	U	21	330
4-Chlorophenyl phenyl ether		21	U	21	330
Chrysene		27	U	27	330
Dibenz(a,h)anthracene		19	U	19	330
Dibenzofuran		20	U	20	330
1,2-Dichlorobenzene		22	U	22	330
1,3-Dichlorobenzene		12	U	12	330
1,4-Dichlorobenzene		13	U	13	330
3,3'-Dichlorobenzidine		89	U	89	650
2,4-Dichlorophenol		9.9	U	9.9	330
Diethyl phthalate		26	U	26	330
2,4-Dimethylphenol		65	U	65	330
Dimethyl phthalate		23	U	23	330
Di-n-butyl phthalate		29	U	29	330
4,6-Dinitro-2-methylphenol		330	U	330	650
2,4-Dinitrophenol		330	U	330	820
2,4-Dinitrotoluene		65	U	65	330
2,6-Dinitrotoluene		28	U	28	330
Di-n-octyl phthalate		14	U	14	330
Fluoranthene		36	U	36	330
Fluorene		18	U	18	330
Hexachlorobenzene		29	U	29	330
Hexachlorobutadiene		9.9	U	9.9	330
Hexachlorocyclopentadiene		50	U	50	330
Hexachloroethane		21	U	21	330
Indeno[1,2,3-cd]pyrene		22	U	22	330
Isophorone		17	U	17	330
2-Methylnaphthalene		19	U	19	330

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV1**

Lab Sample ID: 280-31493-10
Client Matrix: Solid
% Moisture: 2.7

Date Sampled: 07/24/2012 0810
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9210.D
Dilution:	1.0			Initial Weight/Volume:	31.1 g
Analysis Date:	08/07/2012 1711			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2-Methylphenol		13	U	13	330
3 & 4 Methylphenol		33	U	33	330
Naphthalene		31	U	31	330
2-Nitroaniline		50	U	50	330
3-Nitroaniline		72	U	72	330
4-Nitroaniline		72	U	72	330
Nitrobenzene		22	U	22	330
2-Nitrophenol		9.9	U	9.9	330
4-Nitrophenol		96	U	96	650
N-Nitrosodi-n-propylamine		31	U	31	330
N-Nitrosodiphenylamine		21	U	21	330
Pentachlorophenol		330	U	330	650
Phenanthrene		17	U	17	330
Phenol		18	U	18	330
Pyrene		12	U	12	330
1,2,4-Trichlorobenzene		28	U	28	330
2,4,5-Trichlorophenol		9.9	U	9.9	330
2,4,6-Trichlorophenol		9.9	U	9.9	330

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	77		50 - 120
2-Fluorophenol	81		53 - 120
Nitrobenzene-d5	80		50 - 120
Phenol-d5	82		52 - 120
Terphenyl-d14	101		55 - 120
2,4,6-Tribromophenol	74		51 - 120

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV1**

Lab Sample ID: 280-31493-10
Client Matrix: Solid
% Moisture: 2.7

Date Sampled: 07/24/2012 0810
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9210.D
Dilution:	1.0			Initial Weight/Volume:	31.1 g
Analysis Date:	08/07/2012 1711			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	1.89	150	N J
	Unknown	3.22	2600	N J

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV2**

Lab Sample ID: 280-31493-11
Client Matrix: Solid
% Moisture: 3.6

Date Sampled: 07/24/2012 0840
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9211.D
Dilution:	1.0			Initial Weight/Volume:	30.4 g
Analysis Date:	08/07/2012 1731			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		11	U	11	340
Acenaphthylene		17	U	17	340
Anthracene		17	U	17	340
Benzo[a]anthracene		20	U	20	340
Benzo[a]pyrene		65	J	20	340
Benzo[b]fluoranthene		110	J K	27	340
Benzo[ghi]perylene		16	U	16	340
Benzo[k]fluoranthene		41	U K	41	340
Bis(2-chloroethoxy)methane		24	U	24	340
Bis(2-chloroethyl)ether		17	U	17	340
bis (2-chloroisopropyl) ether		24	U	24	340
Bis(2-ethylhexyl) phthalate		100	J B	47	340
4-Bromophenyl phenyl ether		19	U	19	340
Butyl benzyl phthalate		44	U	44	340
Carbazole		37	U	37	340
4-Chloroaniline		84	U	84	340
4-Chloro-3-methylphenol		68	U	68	340
2-Chloronaphthalene		10	U	10	340
2-Chlorophenol		22	U	22	340
4-Chlorophenyl phenyl ether		22	U	22	340
Chrysene		28	U	28	340
Dibenz(a,h)anthracene		19	U	19	340
Dibenzofuran		20	U	20	340
1,2-Dichlorobenzene		23	U	23	340
1,3-Dichlorobenzene		12	U	12	340
1,4-Dichlorobenzene		14	U	14	340
3,3'-Dichlorobenzidine		92	U	92	680
2,4-Dichlorophenol		10	U	10	340
Diethyl phthalate		27	U	27	340
2,4-Dimethylphenol		68	U	68	340
Dimethyl phthalate		24	U	24	340
Di-n-butyl phthalate		30	U	30	340
4,6-Dinitro-2-methylphenol		340	U	340	680
2,4-Dinitrophenol		340	U	340	840
2,4-Dinitrotoluene		68	U	68	340
2,6-Dinitrotoluene		29	U	29	340
Di-n-octyl phthalate		15	U	15	340
Fluoranthene		37	U	37	340
Fluorene		18	U	18	340
Hexachlorobenzene		30	U	30	340
Hexachlorobutadiene		10	U	10	340
Hexachlorocyclopentadiene		51	U	51	340
Hexachloroethane		22	U	22	340
Indeno[1,2,3-cd]pyrene		23	U	23	340
Isophorone		17	U	17	340
2-Methylnaphthalene		19	U	19	340

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV2**

Lab Sample ID: 280-31493-11
Client Matrix: Solid
% Moisture: 3.6

Date Sampled: 07/24/2012 0840
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9211.D
Dilution:	1.0			Initial Weight/Volume:	30.4 g
Analysis Date:	08/07/2012 1731			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL

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

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	80		50 - 120
2-Fluorophenol	81		53 - 120
Nitrobenzene-d5	80		50 - 120
Phenol-d5	83		52 - 120
Terphenyl-d14	98		55 - 120
2,4,6-Tribromophenol	70		51 - 120

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV2**

Lab Sample ID: 280-31493-11
Client Matrix: Solid
% Moisture: 3.6

Date Sampled: 07/24/2012 0840
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9211.D
Dilution:	1.0			Initial Weight/Volume:	30.4 g
Analysis Date:	08/07/2012 1731			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	3.22	2700	N J
	Unknown	8.38	140	N J
	Unknown	9.60	280	N J
	Unknown	9.74	160	N J

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV3**

Lab Sample ID: 280-31493-12
Client Matrix: Solid
% Moisture: 2.6

Date Sampled: 07/24/2012 0825
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9212.D
Dilution:	1.0			Initial Weight/Volume:	30.9 g
Analysis Date:	08/07/2012 1751			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			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		100	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: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV3**

Lab Sample ID: 280-31493-12
Client Matrix: Solid
% Moisture: 2.6

Date Sampled: 07/24/2012 0825
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9212.D
Dilution:	1.0			Initial Weight/Volume:	30.9 g
Analysis Date:	08/07/2012 1751			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			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		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	75		50 - 120
2-Fluorophenol	77		53 - 120
Nitrobenzene-d5	77		50 - 120
Phenol-d5	80		52 - 120
Terphenyl-d14	97		55 - 120
2,4,6-Tribromophenol	63		51 - 120

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV3**

Lab Sample ID: 280-31493-12
Client Matrix: Solid
% Moisture: 2.6

Date Sampled: 07/24/2012 0825
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9212.D
Dilution:	1.0			Initial Weight/Volume:	30.9 g
Analysis Date:	08/07/2012 1751			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	1.95	470	N J
	Unknown	3.22	2300	N J

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV4**

Lab Sample ID: 280-31493-13
Client Matrix: Solid
% Moisture: 3.6

Date Sampled: 07/24/2012 0820
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9213.D
Dilution:	1.0			Initial Weight/Volume:	31.4 g
Analysis Date:	08/07/2012 1811			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	330
Acenaphthylene		17	U	17	330
Anthracene		17	U	17	330
Benzo[a]anthracene		20	U	20	330
Benzo[a]pyrene		20	U	20	330
Benzo[b]fluoranthene		26	U	26	330
Benzo[ghi]perylene		16	U	16	330
Benzo[k]fluoranthene		40	U	40	330
Bis(2-chloroethoxy)methane		23	U	23	330
Bis(2-chloroethyl)ether		16	U	16	330
bis (2-chloroisopropyl) ether		23	U	23	330
Bis(2-ethylhexyl) phthalate		99	J B	46	330
4-Bromophenyl phenyl ether		19	U	19	330
Butyl benzyl phthalate		43	U	43	330
Carbazole		36	U	36	330
4-Chloroaniline		81	U	81	330
4-Chloro-3-methylphenol		65	U	65	330
2-Chloronaphthalene		9.9	U	9.9	330
2-Chlorophenol		21	U	21	330
4-Chlorophenyl phenyl ether		21	U	21	330
Chrysene		27	U	27	330
Dibenz(a,h)anthracene		19	U	19	330
Dibenzofuran		20	U	20	330
1,2-Dichlorobenzene		22	U	22	330
1,3-Dichlorobenzene		12	U	12	330
1,4-Dichlorobenzene		13	U	13	330
3,3'-Dichlorobenzidine		89	U	89	650
2,4-Dichlorophenol		9.9	U	9.9	330
Diethyl phthalate		26	U	26	330
2,4-Dimethylphenol		65	U	65	330
Dimethyl phthalate		23	U	23	330
Di-n-butyl phthalate		29	U	29	330
4,6-Dinitro-2-methylphenol		330	U	330	650
2,4-Dinitrophenol		330	U	330	820
2,4-Dinitrotoluene		65	U	65	330
2,6-Dinitrotoluene		28	U	28	330
Di-n-octyl phthalate		14	U	14	330
Fluoranthene		36	U	36	330
Fluorene		18	U	18	330
Hexachlorobenzene		29	U	29	330
Hexachlorobutadiene		9.9	U	9.9	330
Hexachlorocyclopentadiene		50	U	50	330
Hexachloroethane		21	U	21	330
Indeno[1,2,3-cd]pyrene		22	U	22	330
Isophorone		17	U	17	330
2-Methylnaphthalene		19	U	19	330

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV4**

Lab Sample ID: 280-31493-13
Client Matrix: Solid
% Moisture: 3.6

Date Sampled: 07/24/2012 0820
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9213.D
Dilution:	1.0			Initial Weight/Volume:	31.4 g
Analysis Date:	08/07/2012 1811			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2-Methylphenol		13	U	13	330
3 & 4 Methylphenol		33	U	33	330
Naphthalene		31	U	31	330
2-Nitroaniline		50	U	50	330
3-Nitroaniline		72	U	72	330
4-Nitroaniline		72	U	72	330
Nitrobenzene		22	U	22	330
2-Nitrophenol		9.9	U	9.9	330
4-Nitrophenol		96	U	96	650
N-Nitrosodi-n-propylamine		31	U	31	330
N-Nitrosodiphenylamine		21	U	21	330
Pentachlorophenol		330	U	330	650
Phenanthrene		17	U	17	330
Phenol		18	U	18	330
Pyrene		15	J	12	330
1,2,4-Trichlorobenzene		28	U	28	330
2,4,5-Trichlorophenol		9.9	U	9.9	330
2,4,6-Trichlorophenol		9.9	U	9.9	330

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	77		50 - 120
2-Fluorophenol	79		53 - 120
Nitrobenzene-d5	78		50 - 120
Phenol-d5	80		52 - 120
Terphenyl-d14	103		55 - 120
2,4,6-Tribromophenol	72		51 - 120

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV4**

Lab Sample ID: 280-31493-13
Client Matrix: Solid
% Moisture: 3.6

Date Sampled: 07/24/2012 0820
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9213.D
Dilution:	1.0			Initial Weight/Volume:	31.4 g
Analysis Date:	08/07/2012 1811			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	1.95	280	N J
	Unknown	3.22	2200	N J

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV5**

Lab Sample ID: 280-31493-14
Client Matrix: Solid
% Moisture: 2.7

Date Sampled: 07/24/2012 0845
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9214.D
Dilution:	1.0			Initial Weight/Volume:	30.6 g
Analysis Date:	08/07/2012 1831			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			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		100	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		91	U	91	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		340	U	340	830
2,4-Dinitrotoluene		66	U	66	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: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV5**

Lab Sample ID: 280-31493-14
Client Matrix: Solid
% Moisture: 2.7

Date Sampled: 07/24/2012 0845
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9214.D
Dilution:	1.0			Initial Weight/Volume:	30.6 g
Analysis Date:	08/07/2012 1831			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			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	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	73		50 - 120
2-Fluorophenol	72		53 - 120
Nitrobenzene-d5	74		50 - 120
Phenol-d5	74		52 - 120
Terphenyl-d14	98		55 - 120
2,4,6-Tribromophenol	66		51 - 120

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV5**

Lab Sample ID: 280-31493-14
Client Matrix: Solid
% Moisture: 2.7

Date Sampled: 07/24/2012 0845
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9214.D
Dilution:	1.0			Initial Weight/Volume:	30.6 g
Analysis Date:	08/07/2012 1831			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	3.22	2200	N J
	Unknown	8.52	300	N J

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV6**

Lab Sample ID: 280-31493-15
Client Matrix: Solid
% Moisture: 2.6

Date Sampled: 07/24/2012 0850
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9215.D
Dilution:	1.0			Initial Weight/Volume:	30.3 g
Analysis Date:	08/07/2012 1851			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	340
Acenaphthylene		17	U	17	340
Anthracene		17	U	17	340
Benzo[a]anthracene		20	U	20	340
Benzo[a]pyrene		20	U	20	340
Benzo[b]fluoranthene		27	U	27	340
Benzo[ghi]perylene		16	U	16	340
Benzo[k]fluoranthene		41	U	41	340
Bis(2-chloroethoxy)methane		23	U	23	340
Bis(2-chloroethyl)ether		17	U	17	340
bis (2-chloroisopropyl) ether		23	U	23	340
Bis(2-ethylhexyl) phthalate		100	J B	47	340
4-Bromophenyl phenyl ether		19	U	19	340
Butyl benzyl phthalate		44	U	44	340
Carbazole		37	U	37	340
4-Chloroaniline		83	U	83	340
4-Chloro-3-methylphenol		67	U	67	340
2-Chloronaphthalene		10	U	10	340
2-Chlorophenol		21	U	21	340
4-Chlorophenyl phenyl ether		21	U	21	340
Chrysene		27	U	27	340
Dibenz(a,h)anthracene		19	U	19	340
Dibenzofuran		20	U	20	340
1,2-Dichlorobenzene		22	U	22	340
1,3-Dichlorobenzene		12	U	12	340
1,4-Dichlorobenzene		14	U	14	340
3,3'-Dichlorobenzidine		91	U	91	670
2,4-Dichlorophenol		10	U	10	340
Diethyl phthalate		26	U	26	340
2,4-Dimethylphenol		67	U	67	340
Dimethyl phthalate		23	U	23	340
Di-n-butyl phthalate		29	U	29	340
4,6-Dinitro-2-methylphenol		340	U	340	670
2,4-Dinitrophenol		340	U	340	840
2,4-Dinitrotoluene		67	U	67	340
2,6-Dinitrotoluene		28	U	28	340
Di-n-octyl phthalate		15	U	15	340
Fluoranthene		37	U	37	340
Fluorene		18	U	18	340
Hexachlorobenzene		29	U	29	340
Hexachlorobutadiene		10	U	10	340
Hexachlorocyclopentadiene		51	U	51	340
Hexachloroethane		22	U	22	340
Indeno[1,2,3-cd]pyrene		22	U	22	340
Isophorone		17	U	17	340
2-Methylnaphthalene		19	U	19	340

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV6**

Lab Sample ID: 280-31493-15
Client Matrix: Solid
% Moisture: 2.6

Date Sampled: 07/24/2012 0850
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9215.D
Dilution:	1.0			Initial Weight/Volume:	30.3 g
Analysis Date:	08/07/2012 1851			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2-Methylphenol		13	U	13	340
3 & 4 Methylphenol		34	U	34	340
Naphthalene		32	U	32	340
2-Nitroaniline		51	U	51	340
3-Nitroaniline		74	U	74	340
4-Nitroaniline		74	U	74	340
Nitrobenzene		22	U	22	340
2-Nitrophenol		10	U	10	340
4-Nitrophenol		99	U	99	670
N-Nitrosodi-n-propylamine		32	U	32	340
N-Nitrosodiphenylamine		21	U	21	340
Pentachlorophenol		340	U	340	670
Phenanthrene		17	U	17	340
Phenol		18	U	18	340
Pyrene		12	U	12	340
1,2,4-Trichlorobenzene		28	U	28	340
2,4,5-Trichlorophenol		10	U	10	340
2,4,6-Trichlorophenol		10	U	10	340

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	77		50 - 120
2-Fluorophenol	81		53 - 120
Nitrobenzene-d5	80		50 - 120
Phenol-d5	81		52 - 120
Terphenyl-d14	103		55 - 120
2,4,6-Tribromophenol	73		51 - 120

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV6**

Lab Sample ID: 280-31493-15
Client Matrix: Solid
% Moisture: 2.6

Date Sampled: 07/24/2012 0850
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9215.D
Dilution:	1.0			Initial Weight/Volume:	30.3 g
Analysis Date:	08/07/2012 1851			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	1.95	140	N J
	Unknown	3.22	2600	N J

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV7**

Lab Sample ID: 280-31493-16
Client Matrix: Solid
% Moisture: 2.5

Date Sampled: 07/24/2012 0850
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9216.D
Dilution:	1.0			Initial Weight/Volume:	31.3 g
Analysis Date:	08/07/2012 1911			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			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		86	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		96	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		81	U	81	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		27	U	27	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		89	U	89	650
2,4-Dichlorophenol		9.8	U	9.8	320
Diethyl phthalate		26	U	26	320
2,4-Dimethylphenol		65	U	65	320
Dimethyl phthalate		23	U	23	320
Di-n-butyl phthalate		29	U	29	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		28	U	28	320
Di-n-octyl phthalate		14	U	14	320
Fluoranthene		35	U	35	320
Fluorene		18	U	18	320
Hexachlorobenzene		29	U	29	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: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV7**

Lab Sample ID: 280-31493-16
Client Matrix: Solid
% Moisture: 2.5

Date Sampled: 07/24/2012 0850
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9216.D
Dilution:	1.0			Initial Weight/Volume:	31.3 g
Analysis Date:	08/07/2012 1911			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			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		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		28	U	28	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	73		50 - 120
2-Fluorophenol	75		53 - 120
Nitrobenzene-d5	75		50 - 120
Phenol-d5	76		52 - 120
Terphenyl-d14	101		55 - 120
2,4,6-Tribromophenol	71		51 - 120

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV7**

Lab Sample ID: 280-31493-16
Client Matrix: Solid
% Moisture: 2.5

Date Sampled: 07/24/2012 0850
Date Received: 07/26/2012 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Prep Method:	3550C	Prep Batch:	280-129723	Lab File ID:	Y9216.D
Dilution:	1.0			Initial Weight/Volume:	31.3 g
Analysis Date:	08/07/2012 1911			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	1.95	350	N J
	Unknown	3.22	2300	N J

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT3**

Lab Sample ID: 280-31493-2
Client Matrix: Solid
% Moisture: 1.1

Date Sampled: 07/24/2012 0745
Date Received: 07/26/2012 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-130482	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-129649	Lab File ID:	26b073112.asc
Dilution:	1.0			Initial Weight/Volume:	1.03 g
Analysis Date:	07/31/2012 2135			Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		9110	X	1.5	4.9
Arsenic		1.9		0.65	0.98
Barium		334	X	0.075	0.49
Beryllium		0.33		0.032	0.20
Boron		25.3		0.96	2.0
Cadmium		0.21		0.040	0.20
Calcium		11600	X	13.8	49.1
Chromium		9.1	X	0.057	0.20
Cobalt		9.0	X	0.098	0.98
Copper		20.5	X	0.21	0.98
Iron		24200	X	3.7	4.9
Lead		10.4		0.26	0.49
Magnesium		5440	X	3.6	19.6
Manganese		350	X	0.098	0.98
Molybdenum		0.77	B M	0.26	2.0
Nickel		12.5	X	0.12	3.9
Potassium		1450		40.2	294
Selenium		0.84	U	0.84	0.98
Silicon		339	N	5.6	9.8
Silver		0.16	U	0.16	0.20
Sodium		577		57.9	118
Vanadium		61.6	X	0.092	2.0
Zinc		53.3	X	0.39	0.98

Analysis Method:	6010B	Analysis Batch:	280-130658	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-129649	Lab File ID:	26a080112.asc
Dilution:	1.0			Initial Weight/Volume:	1.03 g
Analysis Date:	08/01/2012 1343			Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		1.2	C	0.37	0.59

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-130336	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-129700	Lab File ID:	120730aa.txt
Dilution:	1.0			Initial Weight/Volume:	0.63 g
Analysis Date:	07/30/2012 2225			Final Weight/Volume:	50 mL
Prep Date:	07/30/2012 1345				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.11		0.0053	0.016

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT4**

Lab Sample ID: 280-31493-3
Client Matrix: Solid
% Moisture: 3.0

Date Sampled: 07/24/2012 0750
Date Received: 07/26/2012 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-130482	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-129649	Lab File ID:	26b073112.asc
Dilution:	1.0			Initial Weight/Volume:	1.03 g
Analysis Date:	07/31/2012 2145			Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8600	X	1.6	5.0
Arsenic		2.7		0.66	1.0
Barium		90.8	X	0.076	0.50
Beryllium		0.22		0.033	0.20
Boron		5.1		0.98	2.0
Cadmium		0.12	B	0.041	0.20
Calcium		6700	X	14.1	50.1
Chromium		10.8	X	0.058	0.20
Cobalt		9.0	X	0.10	1.0
Copper		17.2	X	0.22	1.0
Iron		23600	X	3.8	5.0
Lead		5.6		0.27	0.50
Magnesium		4970	X	3.7	20.0
Manganese		344	X	0.10	1.0
Molybdenum		0.34	B	0.26	2.0
Nickel		12.6	X	0.12	4.0
Potassium		1290		41.1	300
Selenium		0.86	U	0.86	1.0
Silicon		562		5.7	10.0
Silver		0.16	U	0.16	0.20
Sodium		371		59.1	120
Vanadium		59.0	X	0.094	2.0
Zinc		46.1	X	0.40	1.0

Analysis Method:	6010B	Analysis Batch:	280-130658	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-129649	Lab File ID:	26a080112.asc
Dilution:	1.0			Initial Weight/Volume:	1.03 g
Analysis Date:	08/01/2012 1353			Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		1.0	C	0.38	0.60

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-130336	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-129700	Lab File ID:	120730aa.txt
Dilution:	1.0			Initial Weight/Volume:	0.71 g
Analysis Date:	07/30/2012 2237			Final Weight/Volume:	50 mL
Prep Date:	07/30/2012 1345				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.018		0.0048	0.015

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT5**

Lab Sample ID: 280-31493-4
Client Matrix: Solid
% Moisture: 2.5

Date Sampled: 07/24/2012 0830
Date Received: 07/26/2012 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-130482	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-129649	Lab File ID:	26b073112.asc
Dilution:	1.0			Initial Weight/Volume:	1.00 g
Analysis Date:	07/31/2012 2148			Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		5650	X	1.6	5.1
Arsenic		1.4		0.68	1.0
Barium		87.5	X	0.078	0.51
Boron		3.5		1.0	2.1
Cadmium		0.14	B	0.042	0.21
Calcium		8290	X	14.5	51.3
Chromium		6.5	X	0.059	0.21
Iron		26000	X	3.9	5.1
Magnesium		4570	X	3.8	20.5
Manganese		328	X	0.10	1.0
Molybdenum		0.27	B	0.27	2.1
Nickel		9.1	X	0.13	4.1
Potassium		782		42.0	308
Selenium		0.88	U	0.88	1.0
Silicon		290		5.8	10.3
Silver		0.16	U	0.16	0.21
Sodium		398		60.5	123
Zinc		61.8	X	0.41	1.0

Analysis Method:	6010B	Analysis Batch:	280-130658	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-129649	Lab File ID:	26a080112.asc
Dilution:	5.0			Initial Weight/Volume:	1.00 g
Analysis Date:	08/01/2012 1406			Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		1.9	U	1.9	3.1
Beryllium		0.17	U	0.17	1.0
Cobalt		11.5	X	0.51	5.1
Copper		28.8	X	1.1	5.1
Lead		8.3		1.4	2.6
Vanadium		84.5	X	0.48	10.3

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-130336	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-129700	Lab File ID:	120730aa.txt
Dilution:	1.0			Initial Weight/Volume:	0.56 g
Analysis Date:	07/30/2012 2239			Final Weight/Volume:	50 mL
Prep Date:	07/30/2012 1345				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.014	B	0.0061	0.019

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT6**

Lab Sample ID: 280-31493-5
Client Matrix: Solid
% Moisture: 3.8

Date Sampled: 07/24/2012 0755
Date Received: 07/26/2012 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-130482	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-129649	Lab File ID:	26b073112.asc
Dilution:	1.0			Initial Weight/Volume:	1.00 g
Analysis Date:	07/31/2012 2151			Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8070	X	1.6	5.2
Arsenic		1.7		0.69	1.0
Barium		78.5	X	0.079	0.52
Beryllium		0.16	B	0.034	0.21
Boron		3.4		1.0	2.1
Cadmium		0.098	B	0.043	0.21
Calcium		7620	X	14.7	52.0
Chromium		9.9	X	0.060	0.21
Cobalt		8.9	X	0.10	1.0
Copper		14.9	X	0.23	1.0
Iron		23500	X	4.0	5.2
Lead		4.1		0.28	0.52
Magnesium		4950	X	3.8	20.8
Manganese		354	X	0.10	1.0
Molybdenum		0.27	U	0.27	2.1
Nickel		11.7	X	0.13	4.2
Potassium		1260		42.6	312
Selenium		0.89	U	0.89	1.0
Silicon		467		5.9	10.4
Silver		0.17	U	0.17	0.21
Sodium		325		61.4	125
Vanadium		60.0	X	0.098	2.1
Zinc		45.6	X	0.41	1.0

Analysis Method:	6010B	Analysis Batch:	280-130872	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-129649	Lab File ID:	26A1080212.asc
Dilution:	1.0			Initial Weight/Volume:	1.00 g
Analysis Date:	08/02/2012 1424			Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.40	U	0.40	0.62

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-130336	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-129700	Lab File ID:	120730aa.txt
Dilution:	1.0			Initial Weight/Volume:	0.60 g
Analysis Date:	07/30/2012 2241			Final Weight/Volume:	50 mL
Prep Date:	07/30/2012 1345				

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

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT7**

Lab Sample ID: 280-31493-6
Client Matrix: Solid
% Moisture: 2.3

Date Sampled: 07/24/2012 0835
Date Received: 07/26/2012 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-130482	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-129649	Lab File ID:	26b073112.asc
Dilution:	1.0			Initial Weight/Volume:	1.07 g
Analysis Date:	07/31/2012 2153			Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		7360	X	1.5	4.8
Arsenic		1.7		0.63	0.96
Barium		86.6	X	0.073	0.48
Beryllium		0.13	B	0.032	0.19
Boron		3.1		0.94	1.9
Cadmium		0.13	B	0.039	0.19
Calcium		6740	X	13.5	47.8
Chromium		9.7	X	0.056	0.19
Cobalt		9.2	X	0.096	0.96
Copper		14.4	X	0.21	0.96
Iron		23600	X	3.6	4.8
Lead		4.3		0.26	0.48
Magnesium		4760	X	3.5	19.1
Manganese		422	X	0.096	0.96
Molybdenum		0.25	U	0.25	1.9
Nickel		11.0	X	0.12	3.8
Potassium		1430		39.2	287
Silicon		383		5.4	9.6
Silver		0.15	U	0.15	0.19
Sodium		280		56.5	115
Vanadium		64.0	X	0.090	1.9
Zinc		46.6	X	0.38	0.96

Analysis Method:	6010B	Analysis Batch:	280-130658	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-129649	Lab File ID:	26a080112.asc
Dilution:	5.0			Initial Weight/Volume:	1.07 g
Analysis Date:	08/01/2012 1411			Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		1.8	U	1.8	2.9
Selenium		4.1	U	4.1	4.8

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-130336	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-129700	Lab File ID:	120730aa.txt
Dilution:	1.0			Initial Weight/Volume:	0.61 g
Analysis Date:	07/30/2012 2244			Final Weight/Volume:	50 mL
Prep Date:	07/30/2012 1345				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.11		0.0056	0.017

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT8**

Lab Sample ID: 280-31493-7
Client Matrix: Solid
% Moisture: 1.1

Date Sampled: 07/24/2012 0800
Date Received: 07/26/2012 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-130482	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-129649	Lab File ID:	26b073112.asc
Dilution:	1.0			Initial Weight/Volume:	1.07 g
Analysis Date:	07/31/2012 2206			Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		7690	X	1.5	4.7
Arsenic		1.5		0.62	0.95
Barium		193	X	0.072	0.47
Beryllium		0.19		0.031	0.19
Boron		9.2		0.93	1.9
Cadmium		0.14	B	0.039	0.19
Calcium		8780	X	13.3	47.3
Chromium		7.7	X	0.055	0.19
Cobalt		9.1	X	0.095	0.95
Copper		17.7	X	0.21	0.95
Iron		24500	X	3.6	4.7
Lead		5.5		0.26	0.47
Magnesium		4410	X	3.5	18.9
Manganese		334	X	0.095	0.95
Molybdenum		0.32	B	0.25	1.9
Nickel		9.7	X	0.12	3.8
Potassium		1070		38.8	284
Selenium		0.81	U	0.81	0.95
Silicon		386		5.4	9.5
Silver		0.15	U	0.15	0.19
Sodium		452		55.8	113
Vanadium		68.6	X	0.089	1.9
Zinc		47.7	X	0.38	0.95

Analysis Method:	6010B	Analysis Batch:	280-130872	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-129649	Lab File ID:	26A1080212.asc
Dilution:	1.0			Initial Weight/Volume:	1.07 g
Analysis Date:	08/02/2012 1427			Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.65	C	0.36	0.57

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-130336	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-129700	Lab File ID:	120730aa.txt
Dilution:	1.0			Initial Weight/Volume:	0.68 g
Analysis Date:	07/30/2012 2246			Final Weight/Volume:	50 mL
Prep Date:	07/30/2012 1345				

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

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVT9**

Lab Sample ID: 280-31493-8
Client Matrix: Solid
% Moisture: 2.9

Date Sampled: 07/24/2012 0805
Date Received: 07/26/2012 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-130482	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-129649	Lab File ID:	26b073112.asc
Dilution:	1.0			Initial Weight/Volume:	1.00 g
Analysis Date:	07/31/2012 2209			Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8560	X	1.6	5.1
Arsenic		1.3		0.68	1.0
Barium		90.6	X	0.078	0.51
Beryllium		0.17	B	0.034	0.21
Boron		2.4		1.0	2.1
Cadmium		0.12	B	0.042	0.21
Calcium		6110	X	14.5	51.5
Chromium		9.9	X	0.060	0.21
Cobalt		9.2	X	0.10	1.0
Copper		15.3	X	0.22	1.0
Iron		24900	X	3.9	5.1
Lead		4.2		0.28	0.51
Magnesium		5020	X	3.8	20.6
Manganese		381	X	0.10	1.0
Molybdenum		0.27	U	0.27	2.1
Nickel		11.1	X	0.13	4.1
Potassium		1550		42.2	309
Selenium		0.89	U	0.89	1.0
Silicon		501		5.8	10.3
Silver		0.16	U	0.16	0.21
Sodium		305		60.8	124
Vanadium		60.6	X	0.097	2.1
Zinc		47.1	X	0.41	1.0

Analysis Method:	6010B	Analysis Batch:	280-130658	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-129649	Lab File ID:	26a080112.asc
Dilution:	1.0			Initial Weight/Volume:	1.00 g
Analysis Date:	08/01/2012 1416			Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.57	B C	0.39	0.62

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-130336	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-129700	Lab File ID:	120730aa.txt
Dilution:	1.0			Initial Weight/Volume:	0.55 g
Analysis Date:	07/30/2012 2248			Final Weight/Volume:	50 mL
Prep Date:	07/30/2012 1345				

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

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV0**

Lab Sample ID: 280-31493-9
Client Matrix: Solid
% Moisture: 1.1

Date Sampled: 07/24/2012 0900
Date Received: 07/26/2012 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-130482	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-129649	Lab File ID:	26b073112.asc
Dilution:	1.0			Initial Weight/Volume:	1.01 g
Analysis Date:	07/31/2012 2211			Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		7690	X	1.6	5.0
Arsenic		2.4		0.66	1.0
Barium		78.2	X	0.076	0.50
Beryllium		0.15	B	0.033	0.20
Boron		4.1		0.98	2.0
Cadmium		0.13	B	0.041	0.20
Calcium		7170	X	14.1	50.1
Chromium		10.0	X	0.058	0.20
Cobalt		8.9	X	0.10	1.0
Copper		15.4	X	0.22	1.0
Iron		23800	X	3.8	5.0
Lead		4.5		0.27	0.50
Magnesium		4950	X	3.7	20.0
Manganese		347	X	0.10	1.0
Molybdenum		0.26	U	0.26	2.0
Nickel		12.0	X	0.12	4.0
Potassium		1510		41.1	300
Selenium		0.86	U	0.86	1.0
Silicon		402		5.7	10.0
Silver		0.16	U	0.16	0.20
Sodium		322		59.1	120
Vanadium		60.2	X	0.094	2.0
Zinc		45.2	X	0.40	1.0

Analysis Method:	6010B	Analysis Batch:	280-130872	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-129649	Lab File ID:	26A1080212.asc
Dilution:	1.0			Initial Weight/Volume:	1.01 g
Analysis Date:	08/02/2012 1429			Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.38	U	0.38	0.60

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-130336	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-129700	Lab File ID:	120730aa.txt
Dilution:	1.0			Initial Weight/Volume:	0.57 g
Analysis Date:	07/30/2012 2251			Final Weight/Volume:	50 mL
Prep Date:	07/30/2012 1345				

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

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV1**

Lab Sample ID: 280-31493-10
Client Matrix: Solid
% Moisture: 2.7

Date Sampled: 07/24/2012 0810
Date Received: 07/26/2012 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-130482	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-129649	Lab File ID:	26b073112.asc
Dilution:	1.0			Initial Weight/Volume:	1.04 g
Analysis Date:	07/31/2012 2214			Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		7940	X	1.5	4.9
Arsenic		1.9		0.65	0.99
Barium		95.1	X	0.075	0.49
Beryllium		0.16	B	0.033	0.20
Boron		3.9		0.97	2.0
Cadmium		0.11	B	0.041	0.20
Calcium		6360	X	13.9	49.4
Chromium		9.1	X	0.057	0.20
Cobalt		9.1	X	0.099	0.99
Copper		15.5	X	0.21	0.99
Iron		24800	X	3.8	4.9
Lead		4.6		0.27	0.49
Magnesium		4790	X	3.7	19.8
Manganese		360	X	0.099	0.99
Molybdenum		0.26	U	0.26	2.0
Nickel		10.5	X	0.12	4.0
Potassium		1690		40.5	296
Selenium		0.85	U	0.85	0.99
Silicon		438		5.6	9.9
Silver		0.16	U	0.16	0.20
Sodium		298		58.3	119
Vanadium		64.1	X	0.093	2.0
Zinc		47.9	X	0.39	0.99

Analysis Method:	6010B	Analysis Batch:	280-130872	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-129649	Lab File ID:	26A1080212.asc
Dilution:	1.0			Initial Weight/Volume:	1.04 g
Analysis Date:	08/02/2012 1432			Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.38	B C	0.38	0.59

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-130336	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-129700	Lab File ID:	120730aa.txt
Dilution:	1.0			Initial Weight/Volume:	0.51 g
Analysis Date:	07/30/2012 2253			Final Weight/Volume:	50 mL
Prep Date:	07/30/2012 1345				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0067	U	0.0067	0.021

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV2**

Lab Sample ID: 280-31493-11
Client Matrix: Solid
% Moisture: 3.6

Date Sampled: 07/24/2012 0840
Date Received: 07/26/2012 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-130482	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-129649	Lab File ID:	26b073112.asc
Dilution:	1.0			Initial Weight/Volume:	1.01 g
Analysis Date:	07/31/2012 2216			Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		12900	X	1.6	5.1
Arsenic		3.8		0.68	1.0
Barium		717	X	0.078	0.51
Beryllium		0.84		0.034	0.21
Boron		52.4		1.0	2.1
Cadmium		0.14	B	0.042	0.21
Calcium		16800	X	14.5	51.4
Chromium		10	X	0.060	0.21
Cobalt		9.3	X	0.10	1.0
Copper		38.0	X	0.22	1.0
Iron		18000	X	3.9	5.1
Lead		6.0		0.28	0.51
Magnesium		4800	X	3.8	20.5
Manganese		290	X	0.10	1.0
Molybdenum		1.2	B	0.27	2.1
Nickel		16.3	X	0.13	4.1
Potassium		1050		42.1	308
Selenium		0.88	U	0.88	1.0
Silicon		281		5.8	10.3
Silver		0.16	U	0.16	0.21
Sodium		831		60.6	123
Vanadium		72.2	X	0.097	2.1
Zinc		35.3	X	0.41	1.0

Analysis Method:	6010B	Analysis Batch:	280-130872	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-129649	Lab File ID:	26A1080212.asc
Dilution:	1.0			Initial Weight/Volume:	1.01 g
Analysis Date:	08/02/2012 1434			Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.39	U	0.39	0.62

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-130336	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-129700	Lab File ID:	120730aa.txt
Dilution:	1.0			Initial Weight/Volume:	0.48 g
Analysis Date:	07/30/2012 2300			Final Weight/Volume:	50 mL
Prep Date:	07/30/2012 1345				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.039		0.0072	0.022

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV3**

Lab Sample ID: 280-31493-12
Client Matrix: Solid
% Moisture: 2.6

Date Sampled: 07/24/2012 0825
Date Received: 07/26/2012 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-130482	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-129649	Lab File ID:	26b073112.asc
Dilution:	1.0			Initial Weight/Volume:	1.08 g
Analysis Date:	07/31/2012 2219			Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8740	X	1.5	4.8
Arsenic		2.2		0.63	0.95
Barium		81.1	X	0.072	0.48
Beryllium		0.19		0.031	0.19
Boron		3.5		0.93	1.9
Cadmium		0.12	B	0.039	0.19
Calcium		4800	X	13.4	47.5
Chromium		10.7	X	0.055	0.19
Cobalt		8.6	X	0.095	0.95
Copper		13.4	X	0.21	0.95
Iron		23600	X	3.6	4.8
Lead		4.2		0.26	0.48
Magnesium		4580	X	3.5	19.0
Manganese		362	X	0.095	0.95
Molybdenum		0.25	U	0.25	1.9
Nickel		11.3	X	0.12	3.8
Potassium		1580		39.0	285
Selenium		0.82	U	0.82	0.95
Silicon		400		5.4	9.5
Silver		0.15	U	0.15	0.19
Sodium		283		56.1	114
Vanadium		59.8	X	0.089	1.9
Zinc		46.0	X	0.38	0.95

Analysis Method:	6010B	Analysis Batch:	280-130872	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-129649	Lab File ID:	26A1080212.asc
Dilution:	1.0			Initial Weight/Volume:	1.08 g
Analysis Date:	08/02/2012 1437			Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.36	U	0.36	0.57

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-130336	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-129700	Lab File ID:	120730aa.txt
Dilution:	1.0			Initial Weight/Volume:	0.55 g
Analysis Date:	07/30/2012 2302			Final Weight/Volume:	50 mL
Prep Date:	07/30/2012 1345				

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

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV4**

Lab Sample ID: 280-31493-13
Client Matrix: Solid
% Moisture: 3.6

Date Sampled: 07/24/2012 0820
Date Received: 07/26/2012 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-130482	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-129649	Lab File ID:	26b073112.asc
Dilution:	1.0			Initial Weight/Volume:	1.08 g
Analysis Date:	07/31/2012 2221			Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		6650	X	1.5	4.8
Arsenic		1.0		0.63	0.96
Barium		81.8	X	0.073	0.48
Beryllium		0.093	B	0.032	0.19
Boron		4.3		0.94	1.9
Cadmium		0.12	B	0.039	0.19
Calcium		6070	X	13.5	48.0
Chromium		8.0	X	0.056	0.19
Cobalt		9.6	X	0.096	0.96
Copper		15.1	X	0.21	0.96
Iron		26000	X	3.6	4.8
Lead		3.3		0.26	0.48
Magnesium		4690	X	3.6	19.2
Manganese		356	X	0.096	0.96
Molybdenum		0.26	B	0.25	1.9
Nickel		11.1	X	0.12	3.8
Potassium		1100		39.4	288
Selenium		0.83	U	0.83	0.96
Silicon		307		5.4	9.6
Silver		0.15	U	0.15	0.19
Sodium		394		56.7	115
Vanadium		70.9	X	0.090	1.9
Zinc		48.7	X	0.38	0.96

Analysis Method:	6010B	Analysis Batch:	280-130872	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-129649	Lab File ID:	26A1080212.asc
Dilution:	1.0			Initial Weight/Volume:	1.08 g
Analysis Date:	08/02/2012 1439			Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.36	U	0.36	0.58

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-130336	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-129700	Lab File ID:	120730aa.txt
Dilution:	1.0			Initial Weight/Volume:	0.64 g
Analysis Date:	07/30/2012 2305			Final Weight/Volume:	50 mL
Prep Date:	07/30/2012 1345				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0076	B	0.0054	0.017

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV5**

Lab Sample ID: 280-31493-14
Client Matrix: Solid
% Moisture: 2.7

Date Sampled: 07/24/2012 0845
Date Received: 07/26/2012 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-130482	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-129649	Lab File ID:	26b073112.asc
Dilution:	1.0			Initial Weight/Volume:	1.02 g
Analysis Date:	07/31/2012 2224			Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		7760	X	1.6	5.0
Arsenic		2.3		0.66	1.0
Barium		116	X	0.077	0.50
Beryllium		0.20		0.033	0.20
Boron		5.5		0.99	2.0
Cadmium		0.15	B	0.041	0.20
Calcium		6930	X	14.2	50.4
Chromium		10.0	X	0.058	0.20
Cobalt		9.0	X	0.10	1.0
Copper		25.7	X	0.22	1.0
Iron		24100	X	3.8	5.0
Lead		4.8		0.27	0.50
Magnesium		4700	X	3.7	20.1
Manganese		357	X	0.10	1.0
Molybdenum		0.26	U	0.26	2.0
Nickel		11.0	X	0.12	4.0
Potassium		1350		41.3	302
Silicon		357		5.7	10.1
Silver		0.16	U	0.16	0.20
Sodium		321		59.4	121
Vanadium		63.0	X	0.095	2.0
Zinc		54.5	X	0.40	1.0

Analysis Method:	6010B	Analysis Batch:	280-130658	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-129649	Lab File ID:	26a080112.asc
Dilution:	5.0			Initial Weight/Volume:	1.02 g
Analysis Date:	08/01/2012 1441			Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		1.9	U	1.9	3.0
Selenium		4.3	U	4.3	5.0

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-130336	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-129700	Lab File ID:	120730aa.txt
Dilution:	1.0			Initial Weight/Volume:	0.53 g
Analysis Date:	07/30/2012 2307			Final Weight/Volume:	50 mL
Prep Date:	07/30/2012 1345				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0064	U	0.0064	0.020

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV6**

Lab Sample ID: 280-31493-15
Client Matrix: Solid
% Moisture: 2.6

Date Sampled: 07/24/2012 0850
Date Received: 07/26/2012 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-130482	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-129649	Lab File ID:	26b073112.asc
Dilution:	1.0			Initial Weight/Volume:	1.09 g
Analysis Date:	07/31/2012 2227			Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8890	X	1.5	4.7
Arsenic		2.1		0.62	0.94
Barium		131	X	0.072	0.47
Beryllium		0.24		0.031	0.19
Boron		7.6		0.92	1.9
Cadmium		0.14	B	0.039	0.19
Calcium		7160	X	13.3	47.1
Chromium		12.2	X	0.055	0.19
Cobalt		8.8	X	0.094	0.94
Copper		16.7	X	0.20	0.94
Iron		23200	X	3.6	4.7
Lead		7.7		0.25	0.47
Magnesium		4760	X	3.5	18.8
Manganese		341	X	0.094	0.94
Molybdenum		0.24	U	0.24	1.9
Nickel		11.6	X	0.12	3.8
Potassium		1520		38.6	283
Selenium		0.81	U	0.81	0.94
Silicon		437		5.3	9.4
Silver		0.15	U	0.15	0.19
Sodium		409		55.6	113
Vanadium		59.1	X	0.089	1.9
Zinc		49.2	X	0.37	0.94

Analysis Method:	6010B	Analysis Batch:	280-130872	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-129649	Lab File ID:	26A1080212.asc
Dilution:	1.0			Initial Weight/Volume:	1.09 g
Analysis Date:	08/02/2012 1442			Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.36	U	0.36	0.57

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-130336	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-129700	Lab File ID:	120730aa.txt
Dilution:	1.0			Initial Weight/Volume:	0.61 g
Analysis Date:	07/30/2012 2309			Final Weight/Volume:	50 mL
Prep Date:	07/30/2012 1345				

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

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Client Sample ID: **J1PVV7**

Lab Sample ID: 280-31493-16
Client Matrix: Solid
% Moisture: 2.5

Date Sampled: 07/24/2012 0850
Date Received: 07/26/2012 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-130482	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-129649	Lab File ID:	26b073112.asc
Dilution:	1.0			Initial Weight/Volume:	1.12 g
Analysis Date:	07/31/2012 2229			Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8480	X	1.4	4.6
Arsenic		2.2		0.60	0.92
Barium		130	X	0.070	0.46
Beryllium		0.21		0.030	0.18
Boron		6.9		0.90	1.8
Cadmium		0.17	B	0.038	0.18
Calcium		6620	X	12.9	45.8
Chromium		13.7	X	0.053	0.18
Cobalt		8.9	X	0.092	0.92
Copper		16.5	X	0.20	0.92
Iron		24100	X	3.5	4.6
Lead		8.1		0.25	0.46
Magnesium		4910	X	3.4	18.3
Manganese		364	X	0.092	0.92
Molybdenum		0.25	B	0.24	1.8
Nickel		12.4	X	0.11	3.7
Potassium		1530		37.6	275
Selenium		0.79	U	0.79	0.92
Silicon		364		5.2	9.2
Silver		0.15	U	0.15	0.18
Sodium		362		54.0	110
Vanadium		59.8	X	0.086	1.8
Zinc		49.8	X	0.36	0.92

Analysis Method:	6010B	Analysis Batch:	280-130872	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-129649	Lab File ID:	26A1080212.asc
Dilution:	1.0			Initial Weight/Volume:	1.12 g
Analysis Date:	08/02/2012 1444			Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.35	U	0.35	0.55

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-130336	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-129700	Lab File ID:	120730aa.txt
Dilution:	1.0			Initial Weight/Volume:	0.69 g
Analysis Date:	07/30/2012 2312			Final Weight/Volume:	50 mL
Prep Date:	07/30/2012 1345				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.034		0.0049	0.015

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

General Chemistry

Client Sample ID: **J1PVT2**

Lab Sample ID: 280-31493-1
Client Matrix: Solid

Date Sampled: 07/24/2012 0730
Date Received: 07/26/2012 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	0.14		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-129842 Analysis Date: 07/27/2012 1311 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

General Chemistry

Client Sample ID: **J1PVT3**

Lab Sample ID: 280-31493-2
Client Matrix: Solid

Date Sampled: 07/24/2012 0745
Date Received: 07/26/2012 0930

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

Analysis Batch: 280-129842 Analysis Date: 07/27/2012 1311 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

General Chemistry

Client Sample ID: **J1PVT4**

Lab Sample ID: 280-31493-3
Client Matrix: Solid

Date Sampled: 07/24/2012 0750
Date Received: 07/26/2012 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	3.0		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-129842 Analysis Date: 07/27/2012 1311 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

General Chemistry

Client Sample ID: **J1PVT5**

Lab Sample ID: 280-31493-4
Client Matrix: Solid

Date Sampled: 07/24/2012 0830
Date Received: 07/26/2012 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	2.5		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-129842 Analysis Date: 07/27/2012 1311 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

General Chemistry

Client Sample ID: **J1PVT6**

Lab Sample ID: 280-31493-5
Client Matrix: Solid

Date Sampled: 07/24/2012 0755
Date Received: 07/26/2012 0930

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

Analysis Batch: 280-129842 Analysis Date: 07/27/2012 1311 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

General Chemistry

Client Sample ID: **J1PVT7**

Lab Sample ID: 280-31493-6
Client Matrix: Solid

Date Sampled: 07/24/2012 0835
Date Received: 07/26/2012 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	2.3		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-129842 Analysis Date: 07/27/2012 1311 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

General Chemistry

Client Sample ID: **J1PVT8**

Lab Sample ID: 280-31493-7
Client Matrix: Solid

Date Sampled: 07/24/2012 0800
Date Received: 07/26/2012 0930

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

Analysis Batch: 280-129842 Analysis Date: 07/27/2012 1311 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

General Chemistry

Client Sample ID: **J1PVT9**

Lab Sample ID: 280-31493-8
Client Matrix: Solid

Date Sampled: 07/24/2012 0805
Date Received: 07/26/2012 0930

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

Analysis Batch: 280-129842 Analysis Date: 07/27/2012 1311 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

General Chemistry

Client Sample ID: **J1PVV0**

Lab Sample ID: 280-31493-9
Client Matrix: Solid

Date Sampled: 07/24/2012 0900
Date Received: 07/26/2012 0930

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

Analysis Batch: 280-129842 Analysis Date: 07/27/2012 1311 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

General Chemistry

Client Sample ID: **J1PVV1**

Lab Sample ID: 280-31493-10
Client Matrix: Solid

Date Sampled: 07/24/2012 0810
Date Received: 07/26/2012 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	2.7		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-129842 Analysis Date: 07/27/2012 1311 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

General Chemistry

Client Sample ID: **J1PVV2**

Lab Sample ID: 280-31493-11
Client Matrix: Solid

Date Sampled: 07/24/2012 0840
Date Received: 07/26/2012 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	3.6		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-129842 Analysis Date: 07/27/2012 1311 DryWt Corrected: N

General Chemistry

Client Sample ID: **J1PVV3**

Lab Sample ID: 280-31493-12
Client Matrix: Solid

Date Sampled: 07/24/2012 0825
Date Received: 07/26/2012 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	2.6		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-129842 Analysis Date: 07/27/2012 1311 DryWt Corrected: N

General Chemistry

Client Sample ID: **J1PVV4**

Lab Sample ID: 280-31493-13
Client Matrix: Solid

Date Sampled: 07/24/2012 0820
Date Received: 07/26/2012 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	3.6		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-129842 Analysis Date: 07/27/2012 1311 DryWt Corrected: N

General Chemistry

Client Sample ID: **J1PVV5**

Lab Sample ID: 280-31493-14
Client Matrix: Solid

Date Sampled: 07/24/2012 0845
Date Received: 07/26/2012 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	2.7		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-129842 Analysis Date: 07/27/2012 1311 DryWt Corrected: N

General Chemistry

Client Sample ID: **J1PVV6**

Lab Sample ID: 280-31493-15
Client Matrix: Solid

Date Sampled: 07/24/2012 0850
Date Received: 07/26/2012 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	2.6		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-130099 Analysis Date: 07/30/2012 0954 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

General Chemistry

Client Sample ID: **J1PVV7**

Lab Sample ID: 280-31493-16
Client Matrix: Solid

Date Sampled: 07/24/2012 0850
Date Received: 07/26/2012 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	2.5		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-130099 Analysis Date: 07/30/2012 0954 DryWt Corrected: N

QUALITY CONTROL RESULTS

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Prep Batch: 280-129703					
LCS 280-129703/67-A	Lab Control Sample	T	Solid	5035	
MB 280-129703/1-A	Method Blank	T	Solid	5035	
280-31493-1	J1PVT2	T	Solid	5035	
280-31493-2	J1PVT3	T	Solid	5035	
280-31493-3	J1PVT4	T	Solid	5035	
280-31493-4	J1PVT5	T	Solid	5035	
280-31493-5	J1PVT6	T	Solid	5035	
280-31493-6	J1PVT7	T	Solid	5035	
280-31493-7	J1PVT8	T	Solid	5035	
280-31493-8	J1PVT9	T	Solid	5035	
280-31493-9	J1PVV0	T	Solid	5035	
280-31493-10	J1PVV1	T	Solid	5035	
280-31493-11	J1PVV2	T	Solid	5035	
280-31493-12	J1PVV3	T	Solid	5035	
280-31493-13	J1PVV4	T	Solid	5035	
280-31493-14	J1PVV5	T	Solid	5035	
280-31493-15	J1PVV6	T	Solid	5035	
280-31493-15MS	Matrix Spike	T	Solid	5035	
280-31493-15MSD	Matrix Spike Duplicate	T	Solid	5035	
280-31493-16	J1PVV7	T	Solid	5035	
Analysis Batch:280-129937					
LCS 280-129703/67-A	Lab Control Sample	T	Solid	8260B	280-129703
MB 280-129703/1-A	Method Blank	T	Solid	8260B	280-129703
280-31493-1	J1PVT2	T	Solid	8260B	280-129703
280-31493-2	J1PVT3	T	Solid	8260B	280-129703
280-31493-3	J1PVT4	T	Solid	8260B	280-129703
280-31493-4	J1PVT5	T	Solid	8260B	280-129703
280-31493-5	J1PVT6	T	Solid	8260B	280-129703
280-31493-6	J1PVT7	T	Solid	8260B	280-129703
280-31493-7	J1PVT8	T	Solid	8260B	280-129703
280-31493-8	J1PVT9	T	Solid	8260B	280-129703
280-31493-9	J1PVV0	T	Solid	8260B	280-129703
280-31493-10	J1PVV1	T	Solid	8260B	280-129703
280-31493-11	J1PVV2	T	Solid	8260B	280-129703
280-31493-12	J1PVV3	T	Solid	8260B	280-129703
280-31493-13	J1PVV4	T	Solid	8260B	280-129703
280-31493-14	J1PVV5	T	Solid	8260B	280-129703
280-31493-15	J1PVV6	T	Solid	8260B	280-129703
280-31493-15MS	Matrix Spike	T	Solid	8260B	280-129703
280-31493-15MSD	Matrix Spike Duplicate	T	Solid	8260B	280-129703
280-31493-16	J1PVV7	T	Solid	8260B	280-129703

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 280-129723					
LCS 280-129723/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-129723/1-A	Method Blank	T	Solid	3550C	
280-31493-2	J1PVT3	T	Solid	3550C	
280-31493-2MS	Matrix Spike	T	Solid	3550C	
280-31493-2MSD	Matrix Spike Duplicate	T	Solid	3550C	
280-31493-3	J1PVT4	T	Solid	3550C	
280-31493-4	J1PVT5	T	Solid	3550C	
280-31493-5	J1PVT6	T	Solid	3550C	
280-31493-6	J1PVT7	T	Solid	3550C	
280-31493-7	J1PVT8	T	Solid	3550C	
280-31493-8	J1PVT9	T	Solid	3550C	
280-31493-9	J1PVV0	T	Solid	3550C	
280-31493-10	J1PVV1	T	Solid	3550C	
280-31493-11	J1PVV2	T	Solid	3550C	
280-31493-12	J1PVV3	T	Solid	3550C	
280-31493-13	J1PVV4	T	Solid	3550C	
280-31493-14	J1PVV5	T	Solid	3550C	
280-31493-15	J1PVV6	T	Solid	3550C	
280-31493-16	J1PVV7	T	Solid	3550C	
Analysis Batch:280-131358					
LCS 280-129723/2-A	Lab Control Sample	T	Solid	8270C	280-129723
MB 280-129723/1-A	Method Blank	T	Solid	8270C	280-129723
280-31493-2	J1PVT3	T	Solid	8270C	280-129723
280-31493-2MS	Matrix Spike	T	Solid	8270C	280-129723
280-31493-2MSD	Matrix Spike Duplicate	T	Solid	8270C	280-129723
280-31493-3	J1PVT4	T	Solid	8270C	280-129723
280-31493-4	J1PVT5	T	Solid	8270C	280-129723
280-31493-5	J1PVT6	T	Solid	8270C	280-129723
280-31493-6	J1PVT7	T	Solid	8270C	280-129723
280-31493-7	J1PVT8	T	Solid	8270C	280-129723
280-31493-8	J1PVT9	T	Solid	8270C	280-129723
280-31493-9	J1PVV0	T	Solid	8270C	280-129723
280-31493-10	J1PVV1	T	Solid	8270C	280-129723
280-31493-11	J1PVV2	T	Solid	8270C	280-129723
280-31493-12	J1PVV3	T	Solid	8270C	280-129723
280-31493-13	J1PVV4	T	Solid	8270C	280-129723
280-31493-14	J1PVV5	T	Solid	8270C	280-129723
280-31493-15	J1PVV6	T	Solid	8270C	280-129723
280-31493-16	J1PVV7	T	Solid	8270C	280-129723

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-129649					
LCS 280-129649/2-A	Lab Control Sample	T	Solid	3050B	
MB 280-129649/1-A	Method Blank	T	Solid	3050B	
280-31493-2	J1PVT3	T	Solid	3050B	
280-31493-2DU	Duplicate	T	Solid	3050B	
280-31493-2MS	Matrix Spike	T	Solid	3050B	
280-31493-3	J1PVT4	T	Solid	3050B	
280-31493-4	J1PVT5	T	Solid	3050B	
280-31493-5	J1PVT6	T	Solid	3050B	
280-31493-6	J1PVT7	T	Solid	3050B	
280-31493-7	J1PVT8	T	Solid	3050B	
280-31493-8	J1PVT9	T	Solid	3050B	
280-31493-9	J1PVV0	T	Solid	3050B	
280-31493-10	J1PVV1	T	Solid	3050B	
280-31493-11	J1PVV2	T	Solid	3050B	
280-31493-12	J1PVV3	T	Solid	3050B	
280-31493-13	J1PVV4	T	Solid	3050B	
280-31493-14	J1PVV5	T	Solid	3050B	
280-31493-15	J1PVV6	T	Solid	3050B	
280-31493-16	J1PVV7	T	Solid	3050B	
Prep Batch: 280-129700					
LCS 280-129700/2-A	Lab Control Sample	T	Solid	7471A	
MB 280-129700/1-A	Method Blank	T	Solid	7471A	
280-31493-2	J1PVT3	T	Solid	7471A	
280-31493-2DU	Duplicate	T	Solid	7471A	
280-31493-2MS	Matrix Spike	T	Solid	7471A	
280-31493-3	J1PVT4	T	Solid	7471A	
280-31493-4	J1PVT5	T	Solid	7471A	
280-31493-5	J1PVT6	T	Solid	7471A	
280-31493-6	J1PVT7	T	Solid	7471A	
280-31493-7	J1PVT8	T	Solid	7471A	
280-31493-8	J1PVT9	T	Solid	7471A	
280-31493-9	J1PVV0	T	Solid	7471A	
280-31493-10	J1PVV1	T	Solid	7471A	
280-31493-11	J1PVV2	T	Solid	7471A	
280-31493-12	J1PVV3	T	Solid	7471A	
280-31493-13	J1PVV4	T	Solid	7471A	
280-31493-14	J1PVV5	T	Solid	7471A	
280-31493-15	J1PVV6	T	Solid	7471A	
280-31493-16	J1PVV7	T	Solid	7471A	

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:280-130336					
LCS 280-129700/2-A	Lab Control Sample	T	Solid	7471A	280-129700
MB 280-129700/1-A	Method Blank	T	Solid	7471A	280-129700
280-31493-2	J1PVT3	T	Solid	7471A	280-129700
280-31493-2DU	Duplicate	T	Solid	7471A	280-129700
280-31493-2MS	Matrix Spike	T	Solid	7471A	280-129700
280-31493-3	J1PVT4	T	Solid	7471A	280-129700
280-31493-4	J1PVT5	T	Solid	7471A	280-129700
280-31493-5	J1PVT6	T	Solid	7471A	280-129700
280-31493-6	J1PVT7	T	Solid	7471A	280-129700
280-31493-7	J1PVT8	T	Solid	7471A	280-129700
280-31493-8	J1PVT9	T	Solid	7471A	280-129700
280-31493-9	J1PVV0	T	Solid	7471A	280-129700
280-31493-10	J1PVV1	T	Solid	7471A	280-129700
280-31493-11	J1PVV2	T	Solid	7471A	280-129700
280-31493-12	J1PVV3	T	Solid	7471A	280-129700
280-31493-13	J1PVV4	T	Solid	7471A	280-129700
280-31493-14	J1PVV5	T	Solid	7471A	280-129700
280-31493-15	J1PVV6	T	Solid	7471A	280-129700
280-31493-16	J1PVV7	T	Solid	7471A	280-129700
Analysis Batch:280-130482					
LCS 280-129649/2-A	Lab Control Sample	T	Solid	6010B	280-129649
MB 280-129649/1-A	Method Blank	T	Solid	6010B	280-129649
280-31493-2	J1PVT3	T	Solid	6010B	280-129649
280-31493-2DU	Duplicate	T	Solid	6010B	280-129649
280-31493-2MS	Matrix Spike	T	Solid	6010B	280-129649
280-31493-3	J1PVT4	T	Solid	6010B	280-129649
280-31493-4	J1PVT5	T	Solid	6010B	280-129649
280-31493-5	J1PVT6	T	Solid	6010B	280-129649
280-31493-6	J1PVT7	T	Solid	6010B	280-129649
280-31493-7	J1PVT8	T	Solid	6010B	280-129649
280-31493-8	J1PVT9	T	Solid	6010B	280-129649
280-31493-9	J1PVV0	T	Solid	6010B	280-129649
280-31493-10	J1PVV1	T	Solid	6010B	280-129649
280-31493-11	J1PVV2	T	Solid	6010B	280-129649
280-31493-12	J1PVV3	T	Solid	6010B	280-129649
280-31493-13	J1PVV4	T	Solid	6010B	280-129649
280-31493-14	J1PVV5	T	Solid	6010B	280-129649
280-31493-15	J1PVV6	T	Solid	6010B	280-129649
280-31493-16	J1PVV7	T	Solid	6010B	280-129649

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:280-130658					
LCS 280-129649/2-A	Lab Control Sample	T	Solid	6010B	280-129649
MB 280-129649/1-A	Method Blank	T	Solid	6010B	280-129649
280-31493-2	J1PVT3	T	Solid	6010B	280-129649
280-31493-2DU	Duplicate	T	Solid	6010B	280-129649
280-31493-2MS	Matrix Spike	T	Solid	6010B	280-129649
280-31493-3	J1PVT4	T	Solid	6010B	280-129649
280-31493-4	J1PVT5	T	Solid	6010B	280-129649
280-31493-5	J1PVT6	T	Solid	6010B	280-129649
280-31493-6	J1PVT7	T	Solid	6010B	280-129649
280-31493-7	J1PVT8	T	Solid	6010B	280-129649
280-31493-8	J1PVT9	T	Solid	6010B	280-129649
280-31493-9	J1PVV0	T	Solid	6010B	280-129649
280-31493-10	J1PVV1	T	Solid	6010B	280-129649
280-31493-11	J1PVV2	T	Solid	6010B	280-129649
280-31493-12	J1PVV3	T	Solid	6010B	280-129649
280-31493-13	J1PVV4	T	Solid	6010B	280-129649
280-31493-14	J1PVV5	T	Solid	6010B	280-129649
280-31493-15	J1PVV6	T	Solid	6010B	280-129649
280-31493-16	J1PVV7	T	Solid	6010B	280-129649
Analysis Batch:280-130872					
280-31493-5	J1PVT6	T	Solid	6010B	280-129649
280-31493-7	J1PVT8	T	Solid	6010B	280-129649
280-31493-9	J1PVV0	T	Solid	6010B	280-129649
280-31493-10	J1PVV1	T	Solid	6010B	280-129649
280-31493-11	J1PVV2	T	Solid	6010B	280-129649
280-31493-12	J1PVV3	T	Solid	6010B	280-129649
280-31493-13	J1PVV4	T	Solid	6010B	280-129649
280-31493-15	J1PVV6	T	Solid	6010B	280-129649
280-31493-16	J1PVV7	T	Solid	6010B	280-129649

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-129842					
280-31493-1	J1PVT2	T	Solid	D-2216	
280-31493-2	J1PVT3	T	Solid	D-2216	
280-31493-2DU	Duplicate	T	Solid	D-2216	
280-31493-3	J1PVT4	T	Solid	D-2216	
280-31493-4	J1PVT5	T	Solid	D-2216	
280-31493-5	J1PVT6	T	Solid	D-2216	
280-31493-6	J1PVT7	T	Solid	D-2216	
280-31493-7	J1PVT8	T	Solid	D-2216	
280-31493-8	J1PVT9	T	Solid	D-2216	
280-31493-9	J1PVV0	T	Solid	D-2216	
280-31493-10	J1PVV1	T	Solid	D-2216	
280-31493-11	J1PVV2	T	Solid	D-2216	
280-31493-12	J1PVV3	T	Solid	D-2216	
280-31493-13	J1PVV4	T	Solid	D-2216	
280-31493-14	J1PVV5	T	Solid	D-2216	
Analysis Batch:280-130099					
280-31493-15	J1PVV6	T	Solid	D-2216	
280-31493-15DU	Duplicate	T	Solid	D-2216	
280-31493-16	J1PVV7	T	Solid	D-2216	

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Method Blank - Batch: 280-129703

Method: 8260B
Preparation: 5035

Lab Sample ID:	MB 280-129703/1-A	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Client Matrix:	Solid	Prep Batch:	280-129703	Lab File ID:	G2_9134.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5.02 g
Analysis Date:	07/26/2012 2232	Units:	ug/Kg	Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1741				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acetone	5.4	U	5.4	20
Benzene	0.47	U	0.47	5.0
Bromodichloromethane	0.22	U	0.22	5.0
Bromoform	0.23	U	0.23	5.0
Bromomethane	0.50	U	0.50	10
2-Butanone (MEK)	1.8	U	1.8	10
Carbon disulfide	0.42	U	0.42	5.0
Carbon tetrachloride	0.63	U	0.63	5.0
Chlorobenzene	0.54	U	0.54	5.0
Dibromochloromethane	0.57	U	0.57	5.0
Chloroethane	0.89	U	0.89	10
Chloroform	0.29	U	0.29	5.0
Chloromethane	0.77	U	0.77	10
1,1-Dichloroethane	0.21	U	0.21	5.0
1,2-Dichloroethane	0.70	U	0.70	5.0
1,1-Dichloroethene	0.59	U	0.59	5.0
1,2-Dichloroethene, Total	0.39	U	0.39	5.0
1,2-Dichloropropane	0.55	U	0.55	5.0
cis-1,3-Dichloropropene	1.3	U	1.3	5.0
trans-1,3-Dichloropropene	0.67	U	0.67	5.0
Ethylbenzene	0.67	U	0.67	5.0
2-Hexanone	4.9	U	4.9	20
Methylene Chloride	1.6	U	1.6	5.0
4-Methyl-2-pentanone (MIBK)	4.3	U	4.3	10
Styrene	0.63	U	0.63	5.0
1,1,2,2-Tetrachloroethane	0.61	U	0.61	5.0
Tetrachloroethene	0.59	U	0.59	5.0
Toluene	0.69	U	0.69	5.0
1,1,1-Trichloroethane	0.52	U	0.52	5.0
1,1,2-Trichloroethane	0.88	U	0.88	5.0
Trichloroethene	0.23	U	0.23	5.0
Vinyl chloride	1.3	U	1.3	5.0
Xylenes, Total	0.61	U	0.61	5.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	98	58 - 140
Toluene-d8 (Surr)	93	80 - 126
4-Bromofluorobenzene (Surr)	89	76 - 127
Dibromofluoromethane (Surr)	98	75 - 121

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Method Blank TICs- Batch: 280-129703

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

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Lab Control Sample - Batch: 280-129703

Method: 8260B
Preparation: 5035

Lab Sample ID:	LCS 280-129703/67-A	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Client Matrix:	Solid	Prep Batch:	280-129703	Lab File ID:	G2_9129.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 g
Analysis Date:	07/26/2012 2057	Units:	ug/Kg	Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1752				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	200	158	79	65 - 150	
Benzene	50.0	48.2	96	75 - 135	
Bromodichloromethane	50.0	50.5	101	73 - 135	
Bromoform	50.0	54.0	108	77 - 135	
Bromomethane	50.0	44.7	89	52 - 135	
2-Butanone (MEK)	200	203	102	45 - 177	
Carbon disulfide	50.0	38.2	76	45 - 150	
Carbon tetrachloride	50.0	56.1	112	69 - 138	
Chlorobenzene	50.0	49.4	99	78 - 135	
Dibromochloromethane	50.0	50.6	101	77 - 135	
Chloroethane	50.0	42.6	85	51 - 145	
Chloroform	50.0	49.8	100	73 - 123	
Chloromethane	50.0	44.8	90	41 - 138	
1,1-Dichloroethane	50.0	46.5	93	70 - 135	
1,2-Dichloroethane	50.0	48.8	98	69 - 135	
1,1-Dichloroethene	50.0	53.8	108	79 - 135	
1,2-Dichloroethene, Total	100	104	104	78 - 135	
1,2-Dichloropropane	50.0	43.7	87	72 - 121	
cis-1,3-Dichloropropene	50.0	50.1	100	71 - 135	
trans-1,3-Dichloropropene	50.0	51.4	103	71 - 135	
Ethylbenzene	50.0	49.5	99	73 - 125	
2-Hexanone	200	154	77	67 - 150	
Methylene Chloride	50.0	51.0	102	76 - 136	
4-Methyl-2-pentanone (MIBK)	200	173	86	69 - 150	
Styrene	50.0	50.6	101	76 - 135	
1,1,2,2-Tetrachloroethane	50.0	43.0	86	65 - 135	
Tetrachloroethene	50.0	53.2	106	76 - 135	
Toluene	50.0	50.3	101	77 - 122	
1,1,1-Trichloroethane	50.0	52.1	104	70 - 135	
1,1,2-Trichloroethane	50.0	52.8	106	78 - 135	
Trichloroethene	50.0	50.5	101	77 - 135	
Vinyl chloride	50.0	42.9	86	43 - 145	
Xylenes, Total	150	150	100	76 - 135	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	96	58 - 140
Toluene-d8 (Surr)	91	80 - 126
4-Bromofluorobenzene (Surr)	88	76 - 127
Dibromofluoromethane (Surr)	99	75 - 121

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-129703

Method: 8260B
Preparation: 5035

MS Lab Sample ID:	280-31493-15	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Client Matrix:	Solid	Prep Batch:	280-129703	Lab File ID:	G2_9136.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	4.788 g
Analysis Date:	07/26/2012 2310			Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1741				
Leach Date:	N/A				

MSD Lab Sample ID:	280-31493-15	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Client Matrix:	Solid	Prep Batch:	280-129703	Lab File ID:	G2_9137.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	4.352 g
Analysis Date:	07/26/2012 2329			Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1741				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acetone	79	78	65 - 150	8	28		
Benzene	87	83	75 - 135	4	20		
Bromodichloromethane	95	91	73 - 135	5	20		
Bromoform	99	94	77 - 135	4	20		
Bromomethane	80	71	52 - 135	2	22		
2-Butanone (MEK)	125	119	45 - 177	5	32		
Carbon disulfide	65	63	45 - 150	7	24		
Carbon tetrachloride	98	97	69 - 138	8	20		
Chlorobenzene	83	78	78 - 135	3	20		
Dibromochloromethane	97	93	77 - 135	5	20		
Chloroethane	73	72	51 - 145	8	22		
Chloroform	93	90	73 - 123	6	20		
Chloromethane	81	82	41 - 138	11	25		
1,1-Dichloroethane	88	85	70 - 135	6	20		
1,2-Dichloroethane	93	89	69 - 135	5	20		
1,1-Dichloroethene	96	96	79 - 135	10	20		
1,2-Dichloroethene, Total	94	91	78 - 135	6	20		
1,2-Dichloropropane	83	82	72 - 121	8	20		
cis-1,3-Dichloropropene	91	86	71 - 135	4	20		
trans-1,3-Dichloropropene	91	84	71 - 135	2	20		
Ethylbenzene	90	86	73 - 125	5	20		
2-Hexanone	76	73	67 - 150	4	29		
Methylene Chloride	94	93	76 - 136	8	21		
4-Methyl-2-pentanone (MIBK)	86	83	69 - 150	6	25		
Styrene	78	71	76 - 135	0	20		T
1,1,2,2-Tetrachloroethane	88	87	65 - 135	8	21		
Tetrachloroethene	99	95	76 - 135	6	20		
Toluene	89	84	77 - 122	4	20		
1,1,1-Trichloroethane	93	92	70 - 135	9	20		
1,1,2-Trichloroethane	99	95	78 - 135	6	20		
Trichloroethene	92	88	77 - 135	5	20		
Vinyl chloride	73	74	43 - 145	12	24		

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-129703

Method: 8260B
Preparation: 5035

MS Lab Sample ID:	280-31493-15	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Client Matrix:	Solid	Prep Batch:	280-129703	Lab File ID:	G2_9136.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	4.788 g
Analysis Date:	07/26/2012 2310			Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1741				
Leach Date:	N/A				

MSD Lab Sample ID:	280-31493-15	Analysis Batch:	280-129937	Instrument ID:	MSV_G2
Client Matrix:	Solid	Prep Batch:	280-129703	Lab File ID:	G2_9137.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	4.352 g
Analysis Date:	07/26/2012 2329			Final Weight/Volume:	5 g
Prep Date:	07/26/2012 1741				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Xylenes, Total	89	84	76 - 135	4	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	97	95	58 - 140
Toluene-d8 (Surr)	94	93	80 - 126
4-Bromofluorobenzene (Surr)	95	93	76 - 127
Dibromofluoromethane (Surr)	99	97	75 - 121

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Method Blank - Batch: 280-129723

Method: 8270C
Preparation: 3550C

Lab Sample ID:	MB 280-129723/1-A	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Client Matrix:	Solid	Prep Batch:	280-129723	Lab File ID:	Y9188.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.9 g
Analysis Date:	08/07/2012 0945	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			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	19	U	19	320
Benzo[a]pyrene	19	U	19	320
Benzo[b]fluoranthene	25	U	25	320
Benzo[ghi]perylene	16	U	16	320
Benzo[k]fluoranthene	39	U	39	320
Bis(2-chloroethoxy)methane	22	U	22	320
Bis(2-chloroethyl)ether	16	U	16	320
bis (2-chloroisopropyl) ether	22	U	22	320
Bis(2-ethylhexyl) phthalate	98.3	J	45	320
4-Bromophenyl phenyl ether	18	U	18	320
Butyl benzyl phthalate	42	U	42	320
Carbazole	35	U	35	320
4-Chloroaniline	80	U	80	320
4-Chloro-3-methylphenol	64	U	64	320
2-Chloronaphthalene	9.7	U	9.7	320
2-Chlorophenol	20	U	20	320
4-Chlorophenyl phenyl ether	20	U	20	320
Chrysene	26	U	26	320
Dibenz(a,h)anthracene	18	U	18	320
Dibenzofuran	19	U	19	320
1,2-Dichlorobenzene	21	U	21	320
1,3-Dichlorobenzene	12	U	12	320
1,4-Dichlorobenzene	13	U	13	320
3,3'-Dichlorobenzidine	87	U	87	640
2,4-Dichlorophenol	9.7	U	9.7	320
Diethyl phthalate	25	U	25	320
2,4-Dimethylphenol	64	U	64	320
Dimethyl phthalate	22	U	22	320
Di-n-butyl phthalate	28	U	28	320
4,6-Dinitro-2-methylphenol	320	U	320	640
2,4-Dinitrophenol	320	U	320	800
2,4-Dinitrotoluene	64	U	64	320
2,6-Dinitrotoluene	27	U	27	320
Di-n-octyl phthalate	14	U	14	320
Fluoranthene	35	U	35	320
Fluorene	17	U	17	320
Hexachlorobenzene	28	U	28	320
Hexachlorobutadiene	9.7	U	9.7	320
Hexachlorocyclopentadiene	49	U	49	320
Hexachloroethane	21	U	21	320
Indeno[1,2,3-cd]pyrene	21	U	21	320
Isophorone	17	U	17	320

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Method Blank - Batch: 280-129723

Method: 8270C
Preparation: 3550C

Lab Sample ID:	MB 280-129723/1-A	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Client Matrix:	Solid	Prep Batch:	280-129723	Lab File ID:	Y9188.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.9 g
Analysis Date:	08/07/2012 0945	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
2-Methylnaphthalene	18	U	18	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	71	U	71	320
4-Nitroaniline	70	U	70	320
Nitrobenzene	21	U	21	320
2-Nitrophenol	9.7	U	9.7	320
4-Nitrophenol	94	U	94	640
N-Nitrosodi-n-propylamine	30	U	30	320
N-Nitrosodiphenylamine	20	U	20	320
Pentachlorophenol	320	U	320	640
Phenanthrene	17	U	17	320
Phenol	17	U	17	320
Pyrene	12	U	12	320
1,2,4-Trichlorobenzene	27	U	27	320
2,4,5-Trichlorophenol	9.7	U	9.7	320
2,4,6-Trichlorophenol	9.7	U	9.7	320

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	82	50 - 120
2-Fluorophenol	86	53 - 120
Nitrobenzene-d5	84	50 - 120
Phenol-d5	88	52 - 120
Terphenyl-d14	111	55 - 120
2,4,6-Tribromophenol	86	51 - 120

Method Blank TICs- Batch: 280-129723

Cas Number	Analyte	RT	Est. Result	Qual
	Unknown	1.95	216	J N
	Unknown	3.22	2660	J N

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Lab Control Sample - Batch: 280-129723

Method: 8270C
Preparation: 3550C

Lab Sample ID:	LCS 280-129723/2-A	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Client Matrix:	Solid	Prep Batch:	280-129723	Lab File ID:	Y9189.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.1 g
Analysis Date:	08/07/2012 1006	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acenaphthene	2660	2180	82	60 - 120	
Acenaphthylene	2660	2370	89	64 - 120	
Anthracene	2660	2590	97	63 - 120	
Benzo[a]anthracene	2660	2590	97	65 - 120	
Benzo[a]pyrene	2660	2250	85	59 - 120	
Benzo[b]fluoranthene	2660	2310	87	47 - 129	
Benzo[ghi]perylene	2660	2690	101	55 - 126	
Benzo[k]fluoranthene	2660	2490	94	48 - 130	
Bis(2-chloroethoxy)methane	2660	2060	78	56 - 120	
Bis(2-chloroethyl)ether	2660	2040	77	51 - 120	
bis (2-chloroisopropyl) ether	2660	1990	75	49 - 120	
Bis(2-ethylhexyl) phthalate	2660	2740	103	65 - 120	
4-Bromophenyl phenyl ether	2660	2540	95	64 - 120	
Butyl benzyl phthalate	2660	2610	98	65 - 120	
Carbazole	2660	2560	96	64 - 120	
4-Chloroaniline	2660	1530	58	28 - 120	
4-Chloro-3-methylphenol	2660	2440	92	63 - 120	
2-Chloronaphthalene	2660	2160	81	59 - 120	
2-Chlorophenol	2660	2080	78	57 - 120	
4-Chlorophenyl phenyl ether	2660	2400	90	64 - 120	
Chrysene	2660	2470	93	64 - 120	
Dibenz(a,h)anthracene	2660	2050	77	50 - 133	
Dibenzofuran	2660	2330	88	61 - 120	
1,2-Dichlorobenzene	2660	1980	74	53 - 120	
1,3-Dichlorobenzene	2660	1970	74	52 - 120	
1,4-Dichlorobenzene	2660	1970	74	52 - 120	
3,3'-Dichlorobenzidine	2660	1690	64	30 - 120	
2,4-Dichlorophenol	2660	2200	83	60 - 120	
Diethyl phthalate	2660	2630	99	66 - 120	
2,4-Dimethylphenol	2660	2100	79	54 - 120	
Dimethyl phthalate	2660	2490	94	65 - 120	
Di-n-butyl phthalate	2660	2850	107	67 - 120	
4,6-Dinitro-2-methylphenol	2660	2330	88	57 - 120	
2,4-Dinitrophenol	2660	2110	80	46 - 120	
2,4-Dinitrotoluene	2660	2660	100	68 - 120	
2,6-Dinitrotoluene	2660	2500	94	64 - 120	
Di-n-octyl phthalate	2660	2760	104	66 - 120	
Fluoranthene	2660	2710	102	66 - 120	
Fluorene	2660	2390	90	64 - 120	
Hexachlorobenzene	2660	2550	96	62 - 120	
Hexachlorobutadiene	2660	2030	76	53 - 120	

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Lab Control Sample - Batch: 280-129723

Method: 8270C
Preparation: 3550C

Lab Sample ID:	LCS 280-129723/2-A	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Client Matrix:	Solid	Prep Batch:	280-129723	Lab File ID:	Y9189.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.1 g
Analysis Date:	08/07/2012 1006	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Hexachlorocyclopentadiene	2660	2110	79	47 - 120	
Hexachloroethane	2660	1990	75	51 - 120	
Indeno[1,2,3-cd]pyrene	2660	2670	100	63 - 120	
Isophorone	2660	2160	81	56 - 120	
2-Methylnaphthalene	2660	2060	78	57 - 120	
2-Methylphenol	2660	2110	79	56 - 120	
3 & 4 Methylphenol	5320	4380	82	53 - 120	
Naphthalene	2660	2070	78	57 - 120	
2-Nitroaniline	2660	2650	100	63 - 120	
3-Nitroaniline	2660	2070	78	47 - 120	
4-Nitroaniline	2660	2550	96	64 - 120	
Nitrobenzene	2660	2100	79	54 - 120	
2-Nitrophenol	2660	2180	82	56 - 120	
4-Nitrophenol	2660	2790	105	63 - 121	
N-Nitrosodi-n-propylamine	2660	2180	82	51 - 120	
N-Nitrosodiphenylamine	2270	2070	91	61 - 120	
Pentachlorophenol	2660	2320	87	56 - 120	
Phenanthrene	2660	2530	95	64 - 120	
Phenol	2660	2130	80	56 - 120	
Pyrene	2660	2570	97	64 - 120	
1,2,4-Trichlorobenzene	2660	2090	79	52 - 120	
2,4,5-Trichlorophenol	2660	2560	96	64 - 120	
2,4,6-Trichlorophenol	2660	2310	87	61 - 120	

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	85	50 - 120
2-Fluorophenol	84	53 - 120
Nitrobenzene-d5	84	50 - 120
Phenol-d5	87	52 - 120
Terphenyl-d14	108	55 - 120
2,4,6-Tribromophenol	101	51 - 120

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-129723

Method: 8270C
Preparation: 3550C

MS Lab Sample ID:	280-31493-2	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Client Matrix:	Solid	Prep Batch:	280-129723	Lab File ID:	Y9191.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.1 g
Analysis Date:	08/07/2012 1047			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-31493-2	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Client Matrix:	Solid	Prep Batch:	280-129723	Lab File ID:	Y9192.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.2 g
Analysis Date:	08/07/2012 1107			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acenaphthene	78	78	60 - 120	1	30		
Acenaphthylene	83	83	64 - 120	0	30		
Anthracene	92	91	63 - 120	1	30		
Benzo[a]anthracene	93	95	65 - 120	1	30		
Benzo[a]pyrene	78	79	59 - 120	1	30		
Benzo[b]fluoranthene	78	75	47 - 129	4	44		
Benzo[ghi]perylene	93	93	55 - 126	0	31		
Benzo[k]fluoranthene	89	95	48 - 130	6	30		
Bis(2-chloroethoxy)methane	76	74	56 - 120	3	30		
Bis(2-chloroethyl)ether	75	72	51 - 120	4	30		
bis (2-chloroisopropyl) ether	75	70	49 - 120	6	30		
Bis(2-ethylhexyl) phthalate	99	100	65 - 120	0	30		
4-Bromophenyl phenyl ether	89	89	64 - 120	1	30		
Butyl benzyl phthalate	95	97	65 - 120	2	30		
Carbazole	92	92	64 - 120	0	30		
4-Chloroaniline	61	63	28 - 120	2	30		
4-Chloro-3-methylphenol	86	86	63 - 120	0	30		
2-Chloronaphthalene	79	77	59 - 120	2	30		
2-Chlorophenol	78	75	57 - 120	5	30		
4-Chlorophenyl phenyl ether	84	84	64 - 120	0	30		
Chrysene	90	90	64 - 120	0	35		
Dibenz(a,h)anthracene	71	72	50 - 133	1	30		
Dibenzofuran	82	83	61 - 120	1	30		
1,2-Dichlorobenzene	74	71	53 - 120	5	30		
1,3-Dichlorobenzene	72	70	52 - 120	4	32		
1,4-Dichlorobenzene	73	70	52 - 120	5	30		
3,3'-Dichlorobenzidine	74	77	30 - 120	4	30		
2,4-Dichlorophenol	80	78	60 - 120	3	30		
Diethyl phthalate	93	93	66 - 120	1	30		
2,4-Dimethylphenol	77	74	54 - 120	4	30		
Dimethyl phthalate	87	87	65 - 120	1	30		
Di-n-butyl phthalate	101	101	67 - 120	0	30		

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-129723

Method: 8270C
Preparation: 3550C

MS Lab Sample ID:	280-31493-2	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Client Matrix:	Solid	Prep Batch:	280-129723	Lab File ID:	Y9191.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.1 g
Analysis Date:	08/07/2012 1047			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-31493-2	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Client Matrix:	Solid	Prep Batch:	280-129723	Lab File ID:	Y9192.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.2 g
Analysis Date:	08/07/2012 1107			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
4,6-Dinitro-2-methylphenol	49	53	57 - 120	7	30	T	T
2,4-Dinitrophenol	25	28	46 - 120	9	34	J T	J T
2,4-Dinitrotoluene	94	95	68 - 120	1	30		
2,6-Dinitrotoluene	87	90	64 - 120	3	30		
Di-n-octyl phthalate	102	104	66 - 120	1	30		
Fluoranthene	97	96	66 - 120	1	30		
Fluorene	84	84	64 - 120	1	30		
Hexachlorobenzene	88	89	62 - 120	1	30		
Hexachlorobutadiene	75	72	53 - 120	5	30		
Hexachlorocyclopentadiene	78	76	47 - 120	3	30		
Hexachloroethane	76	72	51 - 120	5	30		
Indeno[1,2,3-cd]pyrene	93	93	63 - 120	0	30		
Isophorone	79	78	56 - 120	2	30		
2-Methylnaphthalene	75	72	57 - 120	4	30		
2-Methylphenol	77	75	56 - 120	2	30		
3 & 4 Methylphenol	81	79	53 - 120	3	30		
Naphthalene	76	73	57 - 120	5	30		
2-Nitroaniline	92	94	63 - 120	1	30		
3-Nitroaniline	80	84	47 - 120	4	30		
4-Nitroaniline	92	93	64 - 120	1	30		
Nitrobenzene	79	75	54 - 120	5	30		
2-Nitrophenol	79	76	56 - 120	4	30		
4-Nitrophenol	96	98	63 - 121	2	30		
N-Nitrosodi-n-propylamine	80	78	51 - 120	3	30		
N-Nitrosodiphenylamine	86	87	61 - 120	1	36		
Pentachlorophenol	71	77	56 - 120	7	30		
Phenanthrene	89	90	64 - 120	1	30		
Phenol	77	75	56 - 120	3	30		
Pyrene	94	95	64 - 120	1	38		
1,2,4-Trichlorobenzene	77	74	52 - 120	4	30		
2,4,5-Trichlorophenol	89	89	64 - 120	0	30		
2,4,6-Trichlorophenol	82	82	61 - 120	1	30		

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-129723

Method: 8270C
Preparation: 3550C

MS Lab Sample ID:	280-31493-2	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Client Matrix:	Solid	Prep Batch:	280-129723	Lab File ID:	Y9191.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.1 g
Analysis Date:	08/07/2012 1047			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-31493-2	Analysis Batch:	280-131358	Instrument ID:	SMS_Y
Client Matrix:	Solid	Prep Batch:	280-129723	Lab File ID:	Y9192.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.2 g
Analysis Date:	08/07/2012 1107			Final Weight/Volume:	1000 uL
Prep Date:	07/26/2012 2205			Injection Volume:	0.5 uL
Leach Date:	N/A				

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

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
2-Fluorobiphenyl	81	79	50 - 120
2-Fluorophenol	82	79	53 - 120
Nitrobenzene-d5	82	78	50 - 120
Phenol-d5	84	82	52 - 120
Terphenyl-d14	102	102	55 - 120
2,4,6-Tribromophenol	95	94	51 - 120

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Method Blank - Batch: 280-129649

Method: 6010B
Preparation: 3050B

Lab Sample ID:	MB 280-129649/1-A	Analysis Batch:	280-130482	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-129649	Lab File ID:	26b073112.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	07/31/2012 2130	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Aluminum	1.6	U	1.6	5.0
Arsenic	0.66	U	0.66	1.0
Barium	0.076	U	0.076	0.50
Beryllium	0.033	U	0.033	0.20
Boron	0.98	U	0.98	2.0
Cadmium	0.041	U	0.041	0.20
Calcium	22.49	B	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	0.107	B	0.10	1.0
Molybdenum	0.26	U	0.26	2.0
Nickel	0.131	B	0.12	4.0
Potassium	41.0	U	41.0	300
Selenium	0.86	U	0.86	1.0
Silicon	5.7	U	5.7	10.0
Silver	0.16	U	0.16	0.20
Sodium	59.0	U	59.0	120
Vanadium	0.094	U	0.094	2.0
Zinc	0.728	B	0.40	1.0

Method Blank - Batch: 280-129649

Method: 6010B
Preparation: 3050B

Lab Sample ID:	MB 280-129649/1-A	Analysis Batch:	280-130658	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-129649	Lab File ID:	26a080112.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	08/01/2012 1338	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Antimony	0.400	B	0.38	0.60

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Lab Control Sample - Batch: 280-129649

Method: 6010B
Preparation: 3050B

Lab Sample ID:	LCS 280-129649/2-A	Analysis Batch:	280-130482	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-129649	Lab File ID:	26b073112.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	07/31/2012 2133	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	200	200.4	100	82 - 116	
Arsenic	100	102.3	102	85 - 110	
Barium	200	205.8	103	87 - 112	
Beryllium	5.00	5.02	100	84 - 114	
Boron	100	101.8	102	81 - 110	
Cadmium	10.0	10.48	105	87 - 110	
Calcium	5000	5057	101	82 - 114	
Chromium	20.0	20.86	104	84 - 114	
Cobalt	50.0	51.43	103	87 - 110	
Copper	25.0	25.90	104	88 - 110	
Iron	100	104.5	105	87 - 120	
Lead	50.0	51.24	102	86 - 110	
Magnesium	5000	5030	101	90 - 110	
Manganese	50.0	51.47	103	88 - 110	
Molybdenum	100	103.2	103	86 - 110	
Nickel	50.0	50.51	101	87 - 110	
Potassium	5000	5067	101	89 - 110	
Selenium	200	201.4	101	83 - 110	
Silicon	1000	143.7	14	10 - 70	
Silver	5.00	5.38	108	87 - 114	
Sodium	5000	5164	103	90 - 112	
Vanadium	50.0	53.32	107	88 - 110	
Zinc	50.0	51.21	102	76 - 114	

Lab Control Sample - Batch: 280-129649

Method: 6010B
Preparation: 3050B

Lab Sample ID:	LCS 280-129649/2-A	Analysis Batch:	280-130658	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-129649	Lab File ID:	26a080112.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	08/01/2012 1340	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Antimony	50.0	51.39	103	82 - 110	

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Matrix Spike - Batch: 280-129649

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-31493-2	Analysis Batch:	280-130482	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-129649	Lab File ID:	26b073112.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.03 g
Analysis Date:	07/31/2012 2143	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	9110		196	12060	1504	50 - 200	4
Arsenic	1.9		98.1	87.51	87	76 - 111	
Barium	334		196	509.8	90	52 - 159	
Beryllium	0.33		4.91	4.61	87	72 - 105	
Boron	25.3		98.1	109.4	86	75 - 107	
Cadmium	0.21		9.81	8.99	89	40 - 130	
Calcium	11600		4910	17530	121	43 - 165	
Chromium	9.1		19.6	28.69	100	70 - 200	
Cobalt	9.0		49.1	51.51	87	72 - 106	
Copper	20.5		24.5	42.90	91	37 - 187	
Iron	24200		98.1	24950	743	70 - 200	4
Lead	10.4		49.1	50.77	82	70 - 200	
Magnesium	5440		4910	10140	96	64 - 145	
Manganese	350		49.1	422.6	147	40 - 200	4
Molybdenum	0.77	B	98.1	83.81	85	75 - 103	
Nickel	12.5		49.1	54.30	85	61 - 126	
Potassium	1450		4910	6077	94	56 - 172	
Selenium	0.84	U	196	163.0	83	76 - 104	
Silicon	339		981	501.9	17	20 - 200	N
Silver	0.16	U	4.91	4.69	96	75 - 141	
Sodium	577		4910	5259	95	78 - 111	
Vanadium	61.6		49.1	114.7	108	50 - 169	
Zinc	53.3		49.1	96.86	89	70 - 200	

Matrix Spike - Batch: 280-129649

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-31493-2	Analysis Batch:	280-130658	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-129649	Lab File ID:	26a080112.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.03 g
Analysis Date:	08/01/2012 1350	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Antimony	1.2	49.1	22.98	44	20 - 200	

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Duplicate - Batch: 280-129649

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-31493-2	Analysis Batch:	280-130482	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-129649	Lab File ID:	26b073112.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.01 g
Analysis Date:	07/31/2012 2140	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Aluminum	9110		9249	2	40	
Arsenic	1.9		1.88	0.5	30	
Barium	334		331.0	0.9	30	
Beryllium	0.33		0.331	1	30	
Boron	25.3		20.59	21	30	
Cadmium	0.21		0.186	12	30	B
Calcium	11600		10950	6	30	
Chromium	9.1		11.54	24	40	
Cobalt	9.0		8.64	4	30	
Copper	20.5		19.93	3	30	
Iron	24200		23730	2	40	
Lead	10.4		9.57	8	40	
Magnesium	5440		5106	6	30	
Manganese	350		346.5	1	40	
Molybdenum	0.77	B	0.501	42	30	B M
Nickel	12.5		12.63	1	30	
Potassium	1450		1577	8	40	
Selenium	0.84	U	0.86	NC	30	U
Silicon	339		407.9	18	40	
Silver	0.16	U	0.16	NC	30	U
Sodium	577		511.4	12	30	
Vanadium	61.6		60.73	1	30	
Zinc	53.3		54.43	2	40	

Duplicate - Batch: 280-129649

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-31493-2	Analysis Batch:	280-130658	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-129649	Lab File ID:	26a080112.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.01 g
Analysis Date:	08/01/2012 1348	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	07/31/2012 1200				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Antimony	1.2	0.977	23	40	

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Method Blank - Batch: 280-129700

Method: 7471A
Preparation: 7471A

Lab Sample ID:	MB 280-129700/1-A	Analysis Batch:	280-130336	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-129700	Lab File ID:	120730aa.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.6 g
Analysis Date:	07/30/2012 2221	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	07/30/2012 1345				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	0.0055	U	0.0055	0.017

Lab Control Sample - Batch: 280-129700

Method: 7471A
Preparation: 7471A

Lab Sample ID:	LCS 280-129700/2-A	Analysis Batch:	280-130336	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-129700	Lab File ID:	120730aa.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.6 g
Analysis Date:	07/30/2012 2223	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	07/30/2012 1345				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.417	0.427	102	87 - 111	

Matrix Spike - Batch: 280-129700

Method: 7471A
Preparation: 7471A

Lab Sample ID:	280-31493-2	Analysis Batch:	280-130336	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-129700	Lab File ID:	120730aa.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.48 g
Analysis Date:	07/30/2012 2234	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	07/30/2012 1345				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.11	0.526	0.618	97	87 - 111	

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Duplicate - Batch: 280-129700

Method: 7471A
Preparation: 7471A

Lab Sample ID:	280-31493-2	Analysis Batch:	280-130336	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-129700	Lab File ID:	120730aa.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.58 g
Analysis Date:	07/30/2012 2232	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	07/30/2012 1345				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Mercury	0.11	0.127	17	20	

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Duplicate - Batch: 280-129842

Method: D-2216
Preparation: N/A

Lab Sample ID:	280-31493-2	Analysis Batch:	280-129842	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:	07/27/2012 1311	Units:	%	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Moisture	1.1	1.1	0.07	20	

Client: Washington Closure Hanford

Job Number: 280-31493-1
Sdg Number: J01571

Duplicate - Batch: 280-130099

Method: D-2216
Preparation: N/A

Lab Sample ID:	280-31493-15	Analysis Batch:	280-130099	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:	07/30/2012 0954	Units:	%	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Moisture	2.6	2.9	11	20	