SAF-RC-074
100-D/DR Burial Grounds & Remaining Sites – Soil In-Process
FINAL DATA PACKAGE

COMPLETE COPY OF DATA PACKAGE TO:

Kathy Wendt H4-21 KW 5/15/12
INITIAL/DATE

COMMENTS:

SDG JP0388 SAF RC-074

Rad only Chem only ☑ Rad & Chem

☑ Complete Partial

Waste Site: 100-D-66 Outfall AOHWM – Pre Var

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 67 *Pages*

Report No.: 51625

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.
JP0388	RC-074	J1P1V2	J2E030465-1	MTDMN1AA	9MTDMN10	2124173
		J1P1V2	J2E030465-1	MTDMN1AD	9MTDMN10	2125037
		J1P1V2	J2E030465-1	MTDMN1AC	9MTDMN10	2125038
		J1P1V2	J2E030465-1	MTDMN1AE	9MTDMN10	2125039
		J1P1V3	J2E030465-2	MTDMP1AA	9MTDMP10	2124173
		J1P1V3	J2E030465-2	MTDMP1AD	9MTDMP10	2125037
		J1P1V3	J2E030465-2	MTDMP1AC	9MTDMP10	2125038
		J1P1V3	J2E030465-2	MTDMP1AE	9MTDMP10	2125039
		J1P1V4	J2E030465-3	MTDMQ1AA	9MTDMQ10	2124173
		J1P1V4	J2E030465-3	MTDMQ1AD	9MTDMQ10	2125037
		J1P1V4	J2E030465-3	MTDMQ1AC	9MTDMQ10	2125038
		J1P1V4	J2E030465-3	MTDMQ1AE	9MTDMQ10	2125039
		J1P1V5	J2E030465-4	MTDMR1AA	9MTDMR10	2124173
		J1P1V5	J2E030465-4	MTDMR1AD	9MTDMR10	2125037
		J1P1V5	J2E030465-4	MTDMR1AC	9MTDMR10	2125038
		J1P1V5	J2E030465-4	MTDMR1AE	9MTDMR10	2125039
		J1P1V6	J2E030465-5	MTDMT1AA	9MTDMT10	2124173
		J1P1V6	J2E030465-5	MTDMT1AD	9MTDMT10	2125037
		J1P1V6	J2E030465-5	MTDMT1AC	9MTDMT10	2125038
		J1P1V6	J2E030465-5	MTDMT1AE	9MTDMT10	2125039
		J1P1V7	J2E030465-6	MTDMV1AA	9MTDMV10	2124173
		J1P1V7	J2E030465-6	MTDMV1AD	9MTDMV10	2125037
		J1P1V7	J2E030465-6	MTDMV1AC	9MTDMV10	2125038
		J1P1V7	J2E030465-6	MTDMV1AE	9MTDMV10	2125039
		J1P1V8	J2E030465-7	MTDMW1AA	9MTDMW10	2124173
		J1P1V8	J2E030465-7	MTDMW1AD	9MTDMW10	2125037

Report No.: 51625

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.
JP0388	RC-074	J1P1V8	J2E030465-7	MTDMW1AC	9MTDMW10	2125038
		J1P1V8	J2E030465-7	MTDMW1AE	9MTDMW10	2125039
		J1P1V9	J2E030465-8	MTDMX1AA	9MTDMX10	2124173
		J1P1V9	J2E030465-8	MTDMX1AD	9MTDMX10	2125037
		J1P1V9	J2E030465-8	MTDMX1AC	9MTDMX10	2125038
		J1P1V9	J2E030465-8	MTDMX1AE	9MTDMX10	2125039
		J1P1W0	J2E030465-9	MTDM01AA	9MTDM010	2124173
		J1P1W0	J2E030465-9	MTDM01AD	9MTDM010	2125037
		J1P1W0	J2E030465-9	MTDM01AC	9MTDM010	2125038
		J1P1W0	J2E030465-9	MTDM01AE	9MTDM010	2125039
		J1P1W1	J2E030465-10	MTDM11AA	9MTDM110	2124173
		J1P1W1	J2E030465-10	MTDM11AD	9MTDM110	2125037
		J1P1W1	J2E030465-10	MTDM11AC	9MTDM110	2125038
		J1P1W1	J2E030465-10	MTDM11AE	9MTDM110	2125039

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

Washington Hanford Closure
2620 Fermi Avenue
Richland, WA 99354

TestAmerica Laboratories, Inc.

May 10, 2012

Attention: Joan Kessner

SAF Number	:	RC-074
Date SDG Closed	:	May 3, 2012
Number of Samples	:	Ten (10)
Sample Type	:	Soil
SDG Number	:	JP0388
Data Deliverable	:	7– Day / Summary

CASE NARRATIVE

I. Introduction

On May 3, 2012, ten soil samples were received at TestAmerica for radiochemical and 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
J1P1V2	MTDMN	SOIL	5/03/12
J1P1V3	MTDMP	SOIL	5/03/12
J1P1V4	MTDMQ	SOIL	5/03/12
J1P1V5	MTDMR	SOIL	5/03/12
J1P1V6	MTDMT	SOIL	5/03/12
J1P1V7	MTDMV	SOIL	5/03/12
J1P1V8	MTDMW	SOIL	5/03/12
J1P1V9	MTDMX	SOIL	5/03/12
J1P1W0	MTDM0	SOIL	5/03/12
J1P1W1	MTDM1	SOIL	5/03/12

II. Sample Receipt

The sample was 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:

Gamma Spectroscopy
Gamma Spec by method RL-GAM-001
Liquid Scintillation Counting
Tritium by method RL-LSC-005
Carbon-14 by method RL-LSC-008
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

Gamma Spectroscopy
Gamma Spec by method RL-GAM-001:
The CRDL was not met for some of the analytes. Except as noted, the LCS, batch blank, sample and sample duplicate (J1P1V2) results are within contractual requirements.

Liquid Scintillation Counting
Tritium by method RL-LSC-005:
The LCS, batch blank, sample and sample duplicate (J1P1V2) results are within contractual requirements.

Carbon-14 by method RL-LSC-008:
The LCS, batch blank, sample and sample duplicate (J1P1V2) results are within contractual requirements.

Chemical Analysis
Hexavalent Chromium by EPA method 7196A
The LCS, batch blank, sample, sample duplicate (J1P1V2) and sample matrix spike (J1P1V2) 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.

Washington Closure Hanford
May 10, 2012

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: 10-May-12

Report No. : 51625

SDG No: JP0388

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDL	CRDL	RPD
2125037 GAMMA_GS									
J1P1V2									
	MTDMN1AD	AG-108M	-4.95E-03 +- 9.3E-03	U	pCi/g		1.53E-02		
		AMERICIUM 241	1.14E-03 +- 1.6E-02	U	pCi/g		2.75E-02		
		CO-60	-6.80E-03 +- 1.4E-02	U	pCi/g		2.40E-02	5.00E-02	
		CS-137	3.81E-02 +- 3.4E-02		pCi/g		2.29E-02	1.00E-01	
		EU-152	2.76E-02 +- 3.0E-02	U	pCi/g		5.27E-02	1.00E-01	
		EU-154	2.92E-02 +- 4.4E-02	U	pCi/g		8.14E-02	1.00E-01	
		EU-155	3.08E-04 +- 2.6E-02	U	pCi/g		4.37E-02	1.00E-01	
J1P1V2 DUP									
	MTDMN1AK	AG-108M	-5.36E-04 +- 8.4E-03	U	pCi/g		1.44E-02		-160.9
		AMERICIUM 241	-4.03E-03 +- 1.6E-02	U	pCi/g		2.70E-02		-357.2
		CO-60	1.37E-02 +- 1.3E-02	U	pCi/g		2.52E-02	5.00E-02	595.0
		CS-137	5.18E-02 +- 2.0E-02		pCi/g		2.05E-02	1.00E-01	30.5
		EU-152	6.86E-02 +- 5.7E-02		pCi/g		4.60E-02	1.00E-01	85.4
		EU-154	1.98E-02 +- 4.2E-02	U	pCi/g		7.71E-02	1.00E-01	38.5
		EU-155	2.37E-02 +- 2.5E-02	U	pCi/g		4.33E-02	1.00E-01	194.9
J1P1V3									
	MTDMP1AD	AG-108M	4.10E-03 +- 1.3E-02	U	pCi/g		2.28E-02		
		AMERICIUM 241	2.16E-02 +- 2.9E-02	U	pCi/g		4.94E-02		
		CO-60	2.64E-02 +- 1.8E-02	U	pCi/g		3.57E-02	5.00E-02	
		CS-137	4.75E-01 +- 7.3E-02		pCi/g		2.89E-02	1.00E-01	
		EU-152	4.04E-01 +- 7.8E-02	U	pCi/g		1.10E-01	1.00E-01	
		EU-154	-6.53E-04 +- 5.5E-02	U	pCi/g		9.66E-02	1.00E-01	
		EU-155	6.16E-02 +- 4.3E-02	U	pCi/g		7.33E-02	1.00E-01	
J1P1V4									
	MTDMQ1AD	AG-108M	-3.80E-03 +- 1.8E-02	U	pCi/g		3.05E-02		
		AMERICIUM 241	-1.73E-02 +- 4.1E-02	U	pCi/g		6.79E-02		
		CO-60	2.99E-03 +- 2.2E-02	U	pCi/g		3.97E-02	5.00E-02	
		CS-137	4.77E-02 +- 2.6E-02	U	pCi/g		4.76E-02	1.00E-01	
		EU-152	5.32E-02 +- 6.5E-02	U	pCi/g		1.01E-01	1.00E-01	
		EU-154	-1.12E-02 +- 6.4E-02	U	pCi/g		1.12E-01	1.00E-01	
		EU-155	6.33E-02 +- 5.6E-02	U	pCi/g		9.51E-02	1.00E-01	
J1P1V5									
	MTDMR1AD	AG-108M	-5.16E-03 +- 1.7E-02	U	pCi/g		2.81E-02		
		AMERICIUM 241	-1.22E-03 +- 9.0E-02	U	pCi/g		1.51E-01		
		CO-60	-1.28E-02 +- 1.6E-02	U	pCi/g		2.59E-02	5.00E-02	
		CS-137	1.67E-01 +- 3.8E-02		pCi/g		3.06E-02	1.00E-01	
		EU-152	-4.82E-02 +- 1.5E-01	U	pCi/g		9.59E-02	1.00E-01	

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.

Sample Results Summary

TestAmerica TARL

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

Date: 10-May-12

Report No. : 51625

SDG No: JP0388

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDL	CRDL	RPD
2125037	**GAMMA_GS**								
J1P1V5									
	MTDMR1AD	EU-154	6.03E-03 +- 6.0E-02	U	pCi/g		1.06E-01	1.00E-01	
		EU-155	-4.75E-02 +- 6.5E-02	U	pCi/g		1.07E-01	1.00E-01	
J1P1V6									
	MTDMT1AD	AG-108M	1.34E-04 +- 1.1E-02	U	pCi/g		1.81E-02		
		AMERICIUM 241	-3.74E-03 +- 2.4E-02	U	pCi/g		3.50E-02		
		CO-60	-1.24E-03 +- 1.4E-02	U	pCi/g		2.55E-02	5.00E-02	
		CS-137	1.18E-01 +- 3.3E-02		pCi/g		2.71E-02	1.00E-01	
		EU-152	6.12E-02 +- 5.0E-02	U	pCi/g		6.52E-02	1.00E-01	
		EU-154	1.36E-02 +- 5.1E-02	U	pCi/g		9.16E-02	1.00E-01	
		EU-155	4.58E-02 +- 4.1E-02	U	pCi/g		4.81E-02	1.00E-01	
J1P1V7									
	MTDMV1AD	AG-108M	7.18E-03 +- 1.4E-02	U	pCi/g		2.41E-02		
		AMERICIUM 241	1.45E-01 +- 1.7E-01	U	pCi/g		2.93E-01		
		CO-60	9.34E-03 +- 1.8E-02	U	pCi/g		3.26E-02	5.00E-02	
		CS-137	8.70E-01 +- 1.1E-01		pCi/g		3.01E-02	1.00E-01	
		EU-152	3.05E-01 +- 8.0E-02		pCi/g		7.67E-02	1.00E-01	
		EU-154	5.18E-02 +- 5.6E-02	U	pCi/g		1.04E-01	1.00E-01	
		EU-155	1.59E-02 +- 5.3E-02	U	pCi/g		8.88E-02	1.00E-01	
J1P1V8									
	MTDMW1A	AG-108M	5.82E-03 +- 1.3E-02	U	pCi/g		2.20E-02		
		AMERICIUM 241	-1.33E-03 +- 2.2E-02	U	pCi/g		3.69E-02		
		CO-60	1.58E-02 +- 1.8E-02	U	pCi/g		3.28E-02	5.00E-02	
		CS-137	1.68E+00 +- 2.2E-01		pCi/g		3.00E-02	1.00E-01	
		EU-152	1.73E-01 +- 7.8E-02		pCi/g		6.39E-02	1.00E-01	
		EU-154	2.20E-02 +- 5.5E-02	U	pCi/g		9.87E-02	1.00E-01	
		EU-155	7.17E-02 +- 3.5E-02	U	pCi/g		5.97E-02	1.00E-01	
J1P1V9									
	MTDMX1AD	AG-108M	1.75E-03 +- 1.2E-02	U	pCi/g		2.04E-02		
		AMERICIUM 241	-5.11E-03 +- 2.6E-02	U	pCi/g		4.40E-02		
		CO-60	-9.22E-03 +- 1.6E-02	U	pCi/g		2.69E-02	5.00E-02	
		CS-137	-3.04E-03 +- 1.7E-02	U	pCi/g		2.85E-02	1.00E-01	
		EU-152	-2.87E-02 +- 3.9E-02	U	pCi/g		6.51E-02	1.00E-01	
		EU-154	5.56E-02 +- 4.9E-02	U	pCi/g		9.33E-02	1.00E-01	
		EU-155	2.97E-02 +- 3.9E-02	U	pCi/g		6.67E-02	1.00E-01	
J1P1W0									
	MTDM01AD	AG-108M	4.33E-03 +- 2.1E-02	U	pCi/g		3.57E-02		
		AMERICIUM 241	3.10E-02 +- 5.2E-02	U	pCi/g		7.68E-02		

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.

Sample Results Summary

TestAmerica TARL

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

Date: 10-May-12

Report No. : 51625

SDG No: JP0388

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDL	CRDL	RPD
2125037 GAMMA_GS									
J1P1W0									
	MTDM01AD	CO-60	1.44E-02 +- 2.4E-02	U	pCi/g		4.51E-02	5.00E-02	
		CS-137	6.24E-03 +- 2.5E-02	U	pCi/g		4.49E-02	1.00E-01	
		EU-152	-1.70E-02 +- 7.4E-02	U	pCi/g		1.12E-01	1.00E-01	
		EU-154	8.04E-03 +- 7.4E-02	U	pCi/g		1.31E-01	1.00E-01	
		EU-155	1.61E-02 +- 6.6E-02	U	pCi/g		1.12E-01	1.00E-01	
J1P1W1									
	MTDM11AD	AG-108M	-5.06E-03 +- 1.5E-02	U	pCi/g		2.50E-02		
		AMERICIUM 241	-7.65E-04 +- 8.7E-02	U	pCi/g		1.47E-01		
		CO-60	-3.67E-03 +- 1.7E-02	U	pCi/g		2.86E-02	5.00E-02	
		CS-137	5.84E-03 +- 1.8E-02	U	pCi/g		3.12E-02	1.00E-01	
		EU-152	2.47E-02 +- 7.7E-02	U	pCi/g		7.98E-02	1.00E-01	
		EU-154	-6.68E-03 +- 5.6E-02	U	pCi/g		9.63E-02	1.00E-01	
		EU-155	-3.82E-02 +- 6.4E-02	U	pCi/g		1.04E-01	1.00E-01	
2124173 7196_CR6									
J1P1V2									
	MTDMN1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	MTDMN1AJ	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	3.50E-01	0.0
J1P1V3									
	MTDMP1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
J1P1V4									
	MTDMQ1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
J1P1V5									
	MTDMR1AA	HEXCHROME	2.19E-01 +- 0.0E+00		mg/kg	N/A	1.55E-01	1.55E-01	
J1P1V6									
	MTDMT1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
J1P1V7									
	MTDMV1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
J1P1V8									
	MTDMW1A	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
J1P1V9									
	MTDMX1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
J1P1W0									
	MTDM01AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
J1P1W1									
	MTDM11AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
2125038 906.0_H3_LSC									
J1P1V2									

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.

Sample Results Summary

TestAmerica TARL

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

Date: 10-May-12

Report No. : 51625

SDG No: JP0388

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDL	CRDL	RPD
2125038	906.0_H3_LSC								
	J1P1V2								
	MTDMN1AC	H-3	1.79E-03 +- 1.4E-02	U	pCi/g	100%	3.14E-02	4.00E+02	
	J1P1V2 DUP								
	MTDMN1AL	H-3	1.11E-03 +- 1.4E-02	U	pCi/g	100%	3.17E-02	4.00E+02	46.9
	J1P1V3								
	MTDMP1AC	H-3	3.97E-03 +- 1.4E-02	U	pCi/g	100%	3.17E-02	4.00E+02	
	J1P1V4								
	MTDMQ1AC	H-3	9.15E-03 +- 1.2E-02	U	pCi/g	100%	2.77E-02	4.00E+02	
	J1P1V5								
	MTDMR1AC	H-3	1.57E-02 +- 1.6E-02	U	pCi/g	100%	3.46E-02	4.00E+02	
	J1P1V6								
	MTDMT1AC	H-3	9.94E-03 +- 1.6E-02	U	pCi/g	100%	3.66E-02	4.00E+02	
	J1P1V7								
	MTDMV1AC	H-3	5.27E-03 +- 1.3E-02	U	pCi/g	100%	2.96E-02	4.00E+02	
	J1P1V8								
	MTDMW1A	H-3	4.67E-03 +- 1.5E-02	U	pCi/g	100%	3.36E-02	4.00E+02	
	J1P1V9								
	MTDMX1AC	H-3	4.81E-02 +- 1.4E-02		pCi/g	100%	2.81E-02	4.00E+02	
	J1P1W0								
	MTDM01AC	H-3	7.48E-03 +- 1.4E-02	U	pCi/g	100%	3.24E-02	4.00E+02	
	J1P1W1								
	MTDM11AC	H-3	-8.65E-05 +- 1.3E-02	U	pCi/g	100%	2.91E-02	4.00E+02	
2125039	C14_CHEM_LSC								
	J1P1V2								
	MTDMN1AE	C-14	2.87E-01 +- 1.6E-01	U	pCi/g	100%	3.14E-01	5.00E+01	
	J1P1V2 DUP								
	MTDMN1AM	C-14	-4.37E-02 +- 1.4E-01	U	pCi/g	100%	3.11E-01	5.00E+01	271.8
	J1P1V3								
	MTDMP1AE	C-14	1.01E-01 +- 1.5E-01	U	pCi/g	100%	3.12E-01	5.00E+01	
	J1P1V4								
	MTDMQ1AE	C-14	-7.44E-02 +- 1.4E-01	U	pCi/g	100%	3.13E-01	5.00E+01	
	J1P1V5								
	MTDMR1AE	C-14	9.67E-02 +- 1.5E-01	U	pCi/g	100%	3.14E-01	5.00E+01	
	J1P1V6								
	MTDMT1AE	C-14	1.20E-02 +- 1.5E-01	U	pCi/g	100%	3.12E-01	5.00E+01	
	J1P1V7								
	MTDMV1AE	C-14	-5.24E-02 +- 1.4E-01	U	pCi/g	100%	3.12E-01	5.00E+01	
	J1P1V8								
	MTDMW1A	C-14	-9.74E-02 +- 1.4E-01	U	pCi/g	100%	3.13E-01	5.00E+01	

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.

Sample Results Summary

TestAmerica TARL

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

Date: 10-May-12

Report No. : 51625

SDG No: JP0388

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDL	CRDL	RPD
2125039	C14_CHEM_LSC								
	J1P1V9								
	MTDMX1AE	C-14	-7.76E-02 +- 1.4E-01	U	pCi/g	100%	3.13E-01	5.00E+01	
	J1P1W0								
	MTDM01AE	C-14	3.41E-02 +- 1.5E-01	U	pCi/g	100%	3.13E-01	5.00E+01	
	J1P1W1								
	MTDM11AE	C-14	8.20E-02 +- 1.5E-01	U	pCi/g	100%	3.12E-01	5.00E+01	

No. of Results: 110

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: 10-May-12

Report No. : 51625

SDG No.: JP0388

Batch Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDL
GAMMA_GS								
2125037 BLANK QC,								
MTDRT1AA	AG-108M	-1.93E-03 +- 7.1E-03	U	pCi/g				1.23E-02
	AMERICIUM 241	5.91E-03 +- 8.1E-02	U	pCi/g				1.44E-01
	CO-60	4.50E-03 +- 9.8E-03	U	pCi/g				1.92E-02
	CS-137	3.34E-03 +- 9.1E-03	U	pCi/g				1.68E-02
	EU-152	-1.64E-03 +- 2.3E-02	U	pCi/g				4.04E-02
	EU-154	-8.14E-03 +- 2.9E-02	U	pCi/g				5.13E-02
	EU-155	7.14E-04 +- 2.3E-02	U	pCi/g				3.97E-02
2125037 LCS,								
MTDRT1AC	CS-137	1.10E+00 +- 1.5E-01		pCi/g		104%	0.0	2.51E-02
7196_CR6								
2124173 MATRIX SPIKE, J1P1V2								
MTDMN1AH	HEXCHROME	8.77E+00 +- 0.0E+00		mg/kg	N/A	85%	-0.2	1.55E-01
2124173 LCS,								
MTDNK1AC	HEXCHROME	1.93E+01 +- 0.0E+00		mg/kg	N/A	96%	0.0	1.55E-01
2124173 BLANK QC,								
MTDNK1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A			1.55E-01
906.0_H3_LSC								
2125038 BLANK QC,								
MTDRV1AA	H-3	-4.02E-03 +- 1.4E-02	U	pCi/g	100%			3.16E-02
2125038 LCS,								
MTDRV1AC	H-3	3.24E-01 +- 2.8E-02		pCi/g	100%	109%	0.1	3.76E-02
C14_CHEM_LSC								
2125039 BLANK QC,								
MTDRX1AA	C-14	-2.06E-03 +- 3.6E-03	U	pCi/g	100%			7.86E-03
2125039 LCS,								
MTDRX1AC	C-14	7.90E+00 +- 4.4E-01		pCi/g	100%	107%	0.1	3.15E-01

No. of Results: 15

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: 10-May-12

Lab Name:	**TestAmerica**	**SDG:**	JP0388	**Collection Date:**	5/3/2012 9:15:00 AM
Lot-Sample No.:	**J2E030465-1**	**Report No. :**	51625	**Received Date:**	5/3/2012 4:20:00 PM
Client Sample ID:	**J1P1V2**	**COC No. :**	RC-074-393	**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: 2124173	7196_CR6			**Work Order:** MTDMN1AA			**Report DB ID:** 9MTDMN10					
HEXCHROME	**1.55E-01**	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	5/4/12 08:00 a		2.5042	
							1.55E-01	*N/A*			g	
Batch: 2125037	GAMMA_GS			**Work Order:** MTDMN1AD			**Report DB ID:** 9MTDMN10					
AG-108M	**-4.95E-03**	U	9.3E-03	9.3E-03	1.53E-02	pCi/g		*-0.32*	5/8/12 06:10 a		370.3	GER19$1
								-(1.1)			g	
AMERICIUM 241	**1.14E-03**	U	1.6E-02	1.6E-02	2.75E-02	pCi/g		*0.04*	5/8/12 06:10 a		370.3	GER19$1
								0.14			g	
CO-60	**-6.80E-03**	U	1.4E-02	1.4E-02	2.40E-02	pCi/g		*-0.28*	5/8/12 06:10 a		370.3	GER19$1
							5.00E-02	*-0.96*			g	
CS-137	**3.81E-02**		3.4E-02	3.4E-02	2.29E-02	pCi/g		*(1.7)*	5/8/12 06:10 a		370.3	GER19$1
							1.00E-01	*(2.3)*			g	
EU-152	**2.76E-02**	U	3.0E-02	3.0E-02	5.27E-02	pCi/g		*0.52*	5/8/12 06:10 a		370.3	GER19$1
							1.00E-01	*(1.9)*			g	
EU-154	**2.92E-02**	U	4.4E-02	4.4E-02	8.14E-02	pCi/g		*0.36*	5/8/12 06:10 a		370.3	GER19$1
							1.00E-01	*(1.3)*			g	
EU-155	**3.08E-04**	U	2.6E-02	2.6E-02	4.37E-02	pCi/g		*0.01*	5/8/12 06:10 a		370.3	GER19$1
							1.00E-01	*0.02*			g	
Batch: 2125038	906.0_H3_LSC			**Work Order:** MTDMN1AC			**Report DB ID:** 9MTDMN10					
H-3	**1.79E-03**	U	1.3E-02	1.4E-02	3.14E-02	pCi/g	100%	*0.06*	5/9/12 02:39 p		87.33	LSC6
						1.49E-02	4.00E+02	*0.26*			g	
Batch: 2125039	C14_CHEM_LSC			**Work Order:** MTDMN1AE			**Report DB ID:** 9MTDMN10					

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: 10-May-12

Lab Name:	**TestAmerica**	**SDG:**	JP0388	**Collection Date:**	5/3/2012 9:15:00 AM
Lot-Sample No.:	**J2E030465-1**	**Report No. :**	51625	**Received Date:**	5/3/2012 4:20:00 PM
Client Sample ID:	**J1P1V2**	**COC No. :**	RC-074-393	**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
C-14	**2.87E-01**	U	1.4E-01	1.6E-01	3.14E-01	pCi/g	100%	*0.92*	5/9/12 02:48 a		5.007	LSC6
						1.50E-01	5.00E+01	*(3.6)*			g	

No. of Results: 10 **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: 10-May-12

Lab Name:	**TestAmerica**	**SDG:**	JP0388	**Collection Date:**	5/3/2012 9:27:00 AM
Lot-Sample No.:	**J2E030465-2**	**Report No. :**	51625	**Received Date:**	5/3/2012 4:20:00 PM
Client Sample ID:	**J1P1V3**	**COC No. :**	RC-074-393	**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: 2124173	7196_CR6			**Work Order:** MTDMP1AA			**Report DB ID:** 9MTDMP10					
HEXCHROME	**1.55E-01**	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	5/4/12 08:00 a		2.5025	
							1.55E-01	*N/A*			g	
Batch: 2125037	GAMMA_GS			**Work Order:** MTDMP1AD			**Report DB ID:** 9MTDMP10					
AG-108M	**4.10E-03**	U	1.3E-02	1.3E-02	2.28E-02	pCi/g		*0.18*	5/8/12 08:03 a		355.7	GER15$1
								0.63			g	
AMERICIUM 241	**2.16E-02**	U	2.9E-02	2.9E-02	4.94E-02	pCi/g		*0.44*	5/8/12 08:03 a		355.7	GER15$1
								(1.5)			g	
CO-60	**2.64E-02**	U	1.8E-02	1.8E-02	3.57E-02	pCi/g		*0.74*	5/8/12 08:03 a		355.7	GER15$1
							5.00E-02	*(2.9)*			g	
CS-137	**4.75E-01**		7.3E-02	7.3E-02	2.89E-02	pCi/g		*(16.4)*	5/8/12 08:03 a		355.7	GER15$1
							1.00E-01	*(13.)*			g	
EU-152	**4.04E-01**	U	7.8E-02	7.8E-02	1.10E-01	pCi/g		*(3.7)*	5/8/12 08:03 a		355.7	GER15$1
							1.00E-01	*(10.4)*			g	
EU-154	**-6.53E-04**	U	5.5E-02	5.5E-02	9.66E-02	pCi/g		*-0.01*	5/8/12 08:03 a		355.7	GER15$1
							1.00E-01	*-0.02*			g	
EU-155	**6.16E-02**	U	4.3E-02	4.3E-02	7.33E-02	pCi/g		*0.84*	5/8/12 08:03 a		355.7	GER15$1
							1.00E-01	*(2.9)*			g	
Batch: 2125038	906.0_H3_LSC			**Work Order:** MTDMP1AC			**Report DB ID:** 9MTDMP10					
H-3	**3.97E-03**	U	1.3E-02	1.4E-02	3.17E-02	pCi/g	100%	*0.13*	5/9/12 05:25 p		106.62	LSC6
						1.51E-02	4.00E+02	*0.56*			g	
Batch: 2125039	C14_CHEM_LSC			**Work Order:** MTDMP1AE			**Report DB ID:** 9MTDMP10					

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: 10-May-12

Lab Name: TestAmerica
Lot-Sample No.: J2E030465-2
Client Sample ID: J1P1V3

SDG: JP0388
Report No. : 51625
COC No. : RC-074-393

Collection Date: 5/3/2012 9:27:00 AM
Received Date: 5/3/2012 4:20:00 PM
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
C-14	1.01E-01	U	1.3E-01	1.5E-01	3.12E-01	pCi/g	100%	*0.32*	5/9/12 04:13 a		5.034	LSC6
						1.49E-01	5.00E+01	*(1.4)*			g	

No. of Results: 10 **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: 10-May-12

Lab Name:	**TestAmerica**	**SDG:**	JP0388	**Collection Date:**	5/3/2012 9:39:00 AM
Lot-Sample No.:	**J2E030465-3**	**Report No. :**	51625	**Received Date:**	5/3/2012 4:20:00 PM
Client Sample ID:	**J1P1V4**	**COC No. :**	RC-074-393	**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: 2124173	7196_CR6			**Work Order:**	MTDMQ1AA		**Report DB ID:**	9MTDMQ10				
HEXCHROME	**1.55E-01**	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	5/4/12 08:00 a		2.5024	
							1.55E-01	*N/A*			g	
Batch: 2125037	GAMMA_GS			**Work Order:**	MTDMQ1AD		**Report DB ID:**	9MTDMQ10				
AG-108M	**-3.80E-03**	U	1.8E-02	1.8E-02	3.05E-02	pCi/g		*-0.12*	5/8/12 08:06 a		369.7	GER14$1
								-0.42			g	
AMERICIUM 241	**-1.73E-02**	U	4.1E-02	4.1E-02	6.79E-02	pCi/g		*-0.26*	5/8/12 08:06 a		369.7	GER14$1
								-0.85			g	
CO-60	**2.99E-03**	U	2.2E-02	2.2E-02	3.97E-02	pCi/g		*0.08*	5/8/12 08:06 a		369.7	GER14$1
							5.00E-02	*0.27*			g	
CS-137	**4.77E-02**	U	2.6E-02	2.6E-02	4.76E-02	pCi/g		*(1.)*	5/8/12 08:06 a		369.7	GER14$1
							1.00E-01	*(3.7)*			g	
EU-152	**5.32E-02**	U	6.5E-02	6.5E-02	1.01E-01	pCi/g		*0.53*	5/8/12 08:06 a		369.7	GER14$1
							1.00E-01	*(1.6)*			g	
EU-154	**-1.12E-02**	U	6.4E-02	6.4E-02	1.12E-01	pCi/g		*-0.1*	5/8/12 08:06 a		369.7	GER14$1
							1.00E-01	*-0.35*			g	
EU-155	**6.33E-02**	U	5.6E-02	5.6E-02	9.51E-02	pCi/g		*0.67*	5/8/12 08:06 a		369.7	GER14$1
							1.00E-01	*(2.3)*			g	
Batch: 2125038	906.0_H3_LSC			**Work Order:**	MTDMQ1AC		**Report DB ID:**	9MTDMQ10				
H-3	**9.15E-03**	U	1.2E-02	1.2E-02	2.77E-02	pCi/g	100%	*0.33*	5/9/12 06:47 p		90.35	LSC6
						1.32E-02	4.00E+02	*(1.5)*			g	
Batch: 2125039	C14_CHEM_LSC			**Work Order:**	MTDMQ1AE		**Report DB ID:**	9MTDMQ10				

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: 10-May-12

Lab Name:	**TestAmerica**	**SDG:**	JP0388	**Collection Date:**	5/3/2012 9:39:00 AM
Lot-Sample No.:	**J2E030465-3**	**Report No. :**	51625	**Received Date:**	5/3/2012 4:20:00 PM
Client Sample ID:	**J1P1V4**	**COC No. :**	RC-074-393	**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
C-14	**-7.44E-02**	U	1.3E-01	1.4E-01	3.13E-01	pCi/g	100%	*-0.24*	5/9/12 04:56 a		5.02	LSC6
						1.50E-01	5.00E+01	*-(1.)*			g	

No. of Results: 10 **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: 10-May-12

Lab Name:	**TestAmerica**	**SDG:**	JP0388	**Collection Date:**	5/3/2012 9:51:00 AM
Lot-Sample No.:	**J2E030465-4**	**Report No. :**	51625	**Received Date:**	5/3/2012 4:20:00 PM
Client Sample ID:	**J1P1V5**	**COC No. :**	RC-074-393	**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: 2124173	7196_CR6			**Work Order:** MTDMR1AA			**Report DB ID:** 9MTDMR10					
HEXCHROME	**2.19E-01**			0.0E+00	1.55E-01	mg/kg	N/A	*(1.4)*	5/4/12 08:00 a		2.5033	
							1.55E-01	*N/A*			g	
Batch: 2125037	GAMMA_GS			**Work Order:** MTDMR1AD			**Report DB ID:** 9MTDMR10					
AG-108M	**-5.16E-03**	U	1.7E-02	1.7E-02	2.81E-02	pCi/g		*-0.18*	5/8/12 08:06 a		308.5	GER10$1
								-0.61			g	
AMERICIUM 241	**-1.22E-03**	U	9.0E-02	9.0E-02	1.51E-01	pCi/g		*-0.01*	5/8/12 08:06 a		308.5	GER10$1
								-0.03			g	
CO-60	**-1.28E-02**	U	1.6E-02	1.6E-02	2.59E-02	pCi/g		*-0.49*	5/8/12 08:06 a		308.5	GER10$1
							5.00E-02	*-(1.6)*			g	
CS-137	**1.67E-01**		3.8E-02	3.8E-02	3.06E-02	pCi/g		*(5.4)*	5/8/12 08:06 a		308.5	GER10$1
							1.00E-01	*(8.8)*			g	
EU-152	**-4.82E-02**	U	1.5E-01	1.5E-01	9.59E-02	pCi/g		*-0.5*	5/8/12 08:06 a		308.5	GER10$1
							1.00E-01	*-0.63*			g	
EU-154	**6.03E-03**	U	6.0E-02	6.0E-02	1.06E-01	pCi/g		*0.06*	5/8/12 08:06 a		308.5	GER10$1
							1.00E-01	*0.2*			g	
EU-155	**-4.75E-02**	U	6.5E-02	6.5E-02	1.07E-01	pCi/g		*-0.45*	5/8/12 08:06 a		308.5	GER10$1
							1.00E-01	*-(1.5)*			g	
Batch: 2125038	906.0_H3_LSC			**Work Order:** MTDMR1AC			**Report DB ID:** 9MTDMR10					
H-3	**1.57E-02**	U	1.5E-02	1.6E-02	3.46E-02	pCi/g	100%	*0.45*	5/9/12 08:10 p		91.22	LSC6
						1.64E-02	4.00E+02	*(2.)*			g	
Batch: 2125039	C14_CHEM_LSC			**Work Order:** MTDMR1AE			**Report DB ID:** 9MTDMR10					

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: 10-May-12

Lab Name:	**TestAmerica**	**SDG:**	JP0388	**Collection Date:**	5/3/2012 9:51:00 AM
Lot-Sample No.:	**J2E030465-4**	**Report No. :**	51625	**Received Date:**	5/3/2012 4:20:00 PM
Client Sample ID:	**J1P1V5**	**COC No. :**	RC-074-393	**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
C-14	**9.67E-02**	U	1.3E-01	1.5E-01	3.14E-01	pCi/g	100%	*0.31*	5/9/12 05:38 a		5.004	LSC6
						1.50E-01	5.00E+01	*(1.3)*			g	

No. of Results: 10 **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: 10-May-12

Lab Name:	**TestAmerica**	**SDG:**	JP0388	**Collection Date:**	5/3/2012 10:03:00 AM
Lot-Sample No.:	**J2E030465-5**	**Report No. :**	51625	**Received Date:**	5/3/2012 4:20:00 PM
Client Sample ID:	**J1P1V6**	**COC No. :**	RC-074-393	**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: 2124173	7196_CR6			**Work Order:**	MTDMT1AA		**Report DB ID:**	9MTDMT10				
HEXCHROME	**1.55E-01**	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	5/4/12 08:00 a		2.5073	
							1.55E-01	*N/A*			g	
Batch: 2125037	GAMMA_GS			**Work Order:**	MTDMT1AD		**Report DB ID:**	9MTDMT10				
AG-108M	**1.34E-04**	U	1.1E-02	1.1E-02	1.81E-02	pCi/g		*0.01*	5/8/12 08:08 a		345.0	GER17$1
								0.03			g	
AMERICIUM 241	**-3.74E-03**	U	2.4E-02	2.4E-02	3.50E-02	pCi/g		*-0.11*	5/8/12 08:08 a		345.0	GER17$1
								-0.31			g	
CO-60	**-1.24E-03**	U	1.4E-02	1.4E-02	2.55E-02	pCi/g		*-0.05*	5/8/12 08:08 a		345.0	GER17$1
							5.00E-02	*-0.17*			g	
CS-137	**1.18E-01**		3.3E-02	3.3E-02	2.71E-02	pCi/g		*(4.4)*	5/8/12 08:08 a		345.0	GER17$1
							1.00E-01	*(7.1)*			g	
EU-152	**6.12E-02**	U	5.0E-02	5.0E-02	6.52E-02	pCi/g		*0.94*	5/8/12 08:08 a		345.0	GER17$1
							1.00E-01	*(2.5)*			g	
EU-154	**1.36E-02**	U	5.1E-02	5.1E-02	9.16E-02	pCi/g		*0.15*	5/8/12 08:08 a		345.0	GER17$1
							1.00E-01	*0.54*			g	
EU-155	**4.58E-02**	U	4.1E-02	4.1E-02	4.81E-02	pCi/g		*0.95*	5/8/12 08:08 a		345.0	GER17$1
							1.00E-01	*(2.3)*			g	
Batch: 2125038	906.0_H3_LSC			**Work Order:**	MTDMT1AC		**Report DB ID:**	9MTDMT10				
H-3	**9.94E-03**	U	1.5E-02	1.6E-02	3.66E-02	pCi/g	100%	*0.27*	5/9/12 09:33 p		85.12	LSC6
						1.74E-02	4.00E+02	*(1.2)*			g	
Batch: 2125039	C14_CHEM_LSC			**Work Order:**	MTDMT1AE		**Report DB ID:**	9MTDMT10				

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.
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FORM I

SAMPLE RESULTS

Date: 10-May-12

Lab Name:	**TestAmerica**	**SDG:**	JP0388	**Collection Date:**	5/3/2012 10:03:00 AM
Lot-Sample No.:	**J2E030465-5**	**Report No. :**	51625	**Received Date:**	5/3/2012 4:20:00 PM
Client Sample ID:	**J1P1V6**	**COC No. :**	RC-074-393	**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
C-14	**1.20E-02**	U	1.3E-01	1.5E-01	3.12E-01	pCi/g	100%	*0.04*	5/9/12 06:21 a		5.03	LSC6
						1.49E-01	5.00E+01	*0.17*			g	

No. of Results: 10 **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.
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FORM I

SAMPLE RESULTS

Date: 10-May-12

Lab Name:	**TestAmerica**	**SDG:**	JP0388	**Collection Date:**	5/3/2012 10:15:00 AM
Lot-Sample No.:	**J2E030465-6**	**Report No. :**	51625	**Received Date:**	5/3/2012 4:20:00 PM
Client Sample ID:	**J1P1V7**	**COC No. :**	RC-074-393	**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: 2124173	7196_CR6			**Work Order:** MTDMV1AA			**Report DB ID:** 9MTDMV10					
HEXCHROME	**1.55E-01**	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	5/4/12 08:00 a		2.5028	
							1.55E-01	*N/A*			g	
Batch: 2125037	GAMMA_GS			**Work Order:** MTDMV1AD			**Report DB ID:** 9MTDMV10					
AG-108M	**7.18E-03**	U	1.4E-02	1.4E-02	2.41E-02	pCi/g		*0.3*	5/8/12 09:34 a		365.2	GER13$1
								(1.)			g	
AMERICIUM 241	**1.45E-01**	U	1.7E-01	1.7E-01	2.93E-01	pCi/g		*0.49*	5/8/12 09:34 a		365.2	GER13$1
								(1.7)			g	
CO-60	**9.34E-03**	U	1.8E-02	1.8E-02	3.26E-02	pCi/g		*0.29*	5/8/12 09:34 a		365.2	GER13$1
							5.00E-02	*(1.)*			g	
CS-137	**8.70E-01**		1.1E-01	1.1E-01	3.01E-02	pCi/g		*(28.9)*	5/8/12 09:34 a		365.2	GER13$1
							1.00E-01	*(16.)*			g	
EU-152	**3.05E-01**		8.0E-02	8.0E-02	7.67E-02	pCi/g		*(4.)*	5/8/12 09:34 a		365.2	GER13$1
							1.00E-01	*(7.7)*			g	
EU-154	**5.18E-02**	U	5.6E-02	5.6E-02	1.04E-01	pCi/g		*0.5*	5/8/12 09:34 a		365.2	GER13$1
							1.00E-01	*(1.8)*			g	
EU-155	**1.59E-02**	U	5.3E-02	5.3E-02	8.88E-02	pCi/g		*0.18*	5/8/12 09:34 a		365.2	GER13$1
							1.00E-01	*0.6*			g	
Batch: 2125038	906.0_H3_LSC			**Work Order:** MTDMV1AC			**Report DB ID:** 9MTDMV10					
H-3	**5.27E-03**	U	1.2E-02	1.3E-02	2.96E-02	pCi/g	100%	*0.18*	5/9/12 10:56 p		92.88	LSC6
						1.41E-02	4.00E+02	*0.8*			g	
Batch: 2125039	C14_CHEM_LSC			**Work Order:** MTDMV1AE			**Report DB ID:** 9MTDMV10					

TestAmerica
rptSTLRchSample
V5.2.20 A2002

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FORM I

SAMPLE RESULTS

Date: 10-May-12

Lab Name:	TestAmerica	**SDG:**	JP0388	**Collection Date:**	5/3/2012 10:15:00 AM
Lot-Sample No.:	J2E030465-6	**Report No. :**	51625	**Received Date:**	5/3/2012 4:20:00 PM
Client Sample ID:	J1P1V7	**COC No. :**	RC-074-393	**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
C-14	**-5.24E-02**	U	1.3E-01	1.4E-01	3.12E-01	pCi/g	100%	*-0.17*	5/9/12 07:04 a		5.029	LSC6
						1.50E-01	5.00E+01	*-0.73*			g	

No. of Results: 10 **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.
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FORM I

SAMPLE RESULTS

Date: 10-May-12

Lab Name:	**TestAmerica**	**SDG:**	JP0388	**Collection Date:**	5/3/2012 10:27:00 AM
Lot-Sample No.:	**J2E030465-7**	**Report No. :**	51625	**Received Date:**	5/3/2012 4:20:00 PM
Client Sample ID:	**J1P1V8**	**COC No. :**	RC-074-393	**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: 2124173	7196_CR6			**Work Order:** MTDMW1AA			**Report DB ID:** 9MTDMW10					
HEXCHROME	**1.55E-01**	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	5/4/12 08:00 a		2.5035	
							1.55E-01	*N/A*			g	
Batch: 2125037	GAMMA_GS			**Work Order:** MTDMW1AD			**Report DB ID:** 9MTDMW10					
AG-108M	**5.82E-03**	U	1.3E-02	1.3E-02	2.20E-02	pCi/g		*0.26*	5/8/12 09:35 a		361.4	GER19$1
								0.91			g	
AMERICIUM 241	**-1.33E-03**	U	2.2E-02	2.2E-02	3.69E-02	pCi/g		*-0.04*	5/8/12 09:35 a		361.4	GER19$1
								-0.12			g	
CO-60	**1.58E-02**	U	1.8E-02	1.8E-02	3.28E-02	pCi/g		*0.48*	5/8/12 09:35 a		361.4	GER19$1
							5.00E-02	*(1.8)*			g	
CS-137	**1.68E+00**		2.2E-01	2.2E-01	3.00E-02	pCi/g		*(56.2)*	5/8/12 09:35 a		361.4	GER19$1
							1.00E-01	*(15.)*			g	
EU-152	**1.73E-01**		7.8E-02	7.8E-02	6.39E-02	pCi/g		*(2.7)*	5/8/12 09:35 a		361.4	GER19$1
							1.00E-01	*(4.4)*			g	
EU-154	**2.20E-02**	U	5.5E-02	5.5E-02	9.87E-02	pCi/g		*0.22*	5/8/12 09:35 a		361.4	GER19$1
							1.00E-01	*0.8*			g	
EU-155	**7.17E-02**	U	3.5E-02	3.5E-02	5.97E-02	pCi/g		*(1.2)*	5/8/12 09:35 a		361.4	GER19$1
							1.00E-01	*(4.1)*			g	
Batch: 2125038	906.0_H3_LSC			**Work Order:** MTDMW1AC			**Report DB ID:** 9MTDMW10					
H-3	**4.67E-03**	U	1.4E-02	1.5E-02	3.36E-02	pCi/g	100%	*0.14*	5/10/12 12:19 a		94.57	LSC6
						1.59E-02	4.00E+02	*0.63*			g	
Batch: 2125039	C14_CHEM_LSC			**Work Order:** MTDMW1AE			**Report DB ID:** 9MTDMW10					

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.
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FORM I

SAMPLE RESULTS

Date: 10-May-12

Lab Name:	**TestAmerica**	**SDG:**	JP0388	**Collection Date:**	5/3/2012 10:27:00 AM
Lot-Sample No.:	**J2E030465-7**	**Report No. :**	51625	**Received Date:**	5/3/2012 4:20:00 PM
Client Sample ID:	**J1P1V8**	**COC No. :**	RC-074-393	**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
C-14	**-9.74E-02**	U	1.3E-01	1.4E-01	3.13E-01	pCi/g	100%	*-0.31*	5/9/12 07:46 a		5.011	LSC6
						1.50E-01	5.00E+01	*-(1.4)*			g	

No. of Results: 10 **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: 10-May-12

Lab Name:	**TestAmerica**	**SDG:**	JP0388	**Collection Date:**	5/3/2012 10:39:00 AM
Lot-Sample No.:	**J2E030465-8**	**Report No. :**	51625	**Received Date:**	5/3/2012 4:20:00 PM
Client Sample ID:	**J1P1V9**	**COC No. :**	RC-074-393	**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: 2124173	7196_CR6			**Work Order:** MTDMX1AA			**Report DB ID:** 9MTDMX10					
HEXCHROME	**1.55E-01**	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	5/4/12 08:00 a		2.5028	
							1.55E-01	*N/A*			g	
Batch: 2125037	GAMMA_GS			**Work Order:** MTDMX1AD			**Report DB ID:** 9MTDMX10					
AG-108M	**1.75E-03**	U	1.2E-02	1.2E-02	2.04E-02	pCi/g		*0.09*	5/8/12 11:41 a		370.6	GER15$1
								0.3			g	
AMERICIUM 241	**-5.11E-03**	U	2.6E-02	2.6E-02	4.40E-02	pCi/g		*-0.12*	5/8/12 11:41 a		370.6	GER15$1
								-0.39			g	
CO-60	**-9.22E-03**	U	1.6E-02	1.6E-02	2.69E-02	pCi/g		*-0.34*	5/8/12 11:41 a		370.6	GER15$1
							5.00E-02	*-(1.2)*			g	
CS-137	**-3.04E-03**	U	1.7E-02	1.7E-02	2.85E-02	pCi/g		*-0.11*	5/8/12 11:41 a		370.6	GER15$1
							1.00E-01	*-0.36*			g	
EU-152	**-2.87E-02**	U	3.9E-02	3.9E-02	6.51E-02	pCi/g		*-0.44*	5/8/12 11:41 a		370.6	GER15$1
							1.00E-01	*-(1.5)*			g	
EU-154	**5.56E-02**	U	4.9E-02	4.9E-02	9.33E-02	pCi/g		*0.6*	5/8/12 11:41 a		370.6	GER15$1
							1.00E-01	*(2.3)*			g	
EU-155	**2.97E-02**	U	3.9E-02	3.9E-02	6.67E-02	pCi/g		*0.44*	5/8/12 11:41 a		370.6	GER15$1
							1.00E-01	*(1.5)*			g	
Batch: 2125038	906.0_H3_LSC			**Work Order:** MTDMX1AC			**Report DB ID:** 9MTDMX10					
H-3	**4.81E-02**		1.3E-02	1.4E-02	2.81E-02	pCi/g	100%	*(1.7)*	5/10/12 01:42 a		102.76	LSC6
						1.33E-02	4.00E+02	*(6.7)*			g	
Batch: 2125039	C14_CHEM_LSC			**Work Order:** MTDMX1AE			**Report DB ID:** 9MTDMX10					

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: 10-May-12

Lab Name:	**TestAmerica**	**SDG:**	JP0388	**Collection Date:**	5/3/2012 10:39:00 AM
Lot-Sample No.:	**J2E030465-8**	**Report No. :**	51625	**Received Date:**	5/3/2012 4:20:00 PM
Client Sample ID:	**J1P1V9**	**COC No. :**	RC-074-393	**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
C-14	**-7.76E-02**	U	1.3E-01	1.4E-01	3.13E-01	pCi/g	100%	*-0.25*	5/9/12 08:29 a		5.022	LSC6
						1.50E-01	5.00E+01	*-(1.1)*			g	

No. of Results: 10 **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: 10-May-12

Lab Name:	**TestAmerica**	**SDG:**	JP0388	**Collection Date:**	5/3/2012 10:51:00 AM
Lot-Sample No.:	**J2E030465-9**	**Report No. :**	51625	**Received Date:**	5/3/2012 4:20:00 PM
Client Sample ID:	**J1P1W0**	**COC No. :**	RC-074-393	**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: 2124173	7196_CR6			**Work Order:** MTDM01AA			**Report DB ID:** 9MTDM010					
HEXCHROME	**1.55E-01**	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	5/4/12 08:00 a		2.5054	
							1.55E-01	*N/A*			g	
Batch: 2125037	GAMMA_GS			**Work Order:** MTDM01AD			**Report DB ID:** 9MTDM010					
AG-108M	**4.33E-03**	U	2.1E-02	2.1E-02	3.57E-02	pCi/g		*0.12*	5/8/12 11:42 a		331.8	GER14$1
								0.42			g	
AMERICIUM 241	**3.10E-02**	U	5.2E-02	5.2E-02	7.68E-02	pCi/g		*0.4*	5/8/12 11:42 a		331.8	GER14$1
								(1.2)			g	
CO-60	**1.44E-02**	U	2.4E-02	2.4E-02	4.51E-02	pCi/g		*0.32*	5/8/12 11:42 a		331.8	GER14$1
							5.00E-02	*(1.2)*			g	
CS-137	**6.24E-03**	U	2.5E-02	2.5E-02	4.49E-02	pCi/g		*0.14*	5/8/12 11:42 a		331.8	GER14$1
							1.00E-01	*0.49*			g	
EU-152	**-1.70E-02**	U	7.4E-02	7.4E-02	1.12E-01	pCi/g		*-0.15*	5/8/12 11:42 a		331.8	GER14$1
							1.00E-01	*-0.46*			g	
EU-154	**8.04E-03**	U	7.4E-02	7.4E-02	1.31E-01	pCi/g		*0.06*	5/8/12 11:42 a		331.8	GER14$1
							1.00E-01	*0.22*			g	
EU-155	**1.61E-02**	U	6.6E-02	6.6E-02	1.12E-01	pCi/g		*0.14*	5/8/12 11:42 a		331.8	GER14$1
							1.00E-01	*0.48*			g	
Batch: 2125038	906.0_H3_LSC			**Work Order:** MTDM01AC			**Report DB ID:** 9MTDM010					
H-3	**7.48E-03**	U	1.4E-02	1.4E-02	3.24E-02	pCi/g	100%	*0.23*	5/10/12 03:05 a		90.16	LSC6
						1.54E-02	4.00E+02	*(1.)*			g	
Batch: 2125039	C14_CHEM_LSC			**Work Order:** MTDM01AE			**Report DB ID:** 9MTDM010					

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: 10-May-12

Lab Name:	**TestAmerica**	**SDG:**	JP0388	**Collection Date:**	5/3/2012 10:51:00 AM
Lot-Sample No.:	**J2E030465-9**	**Report No. :**	51625	**Received Date:**	5/3/2012 4:20:00 PM
Client Sample ID:	**J1P1W0**	**COC No. :**	RC-074-393	**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
C-14	**3.41E-02**	U	1.3E-01	1.5E-01	3.13E-01	pCi/g	100%	*0.11*	5/9/12 09:12 a		5.023	LSC6
						1.50E-01	5.00E+01	*0.46*			g	

No. of Results: 10 **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: 10-May-12

Lab Name:	**TestAmerica**	**SDG:**	JP0388	**Collection Date:**	5/3/2012 11:03:00 AM
Lot-Sample No.:	**J2E030465-10**	**Report No. :**	51625	**Received Date:**	5/3/2012 4:20:00 PM
Client Sample ID:	**J1P1W1**	**COC No. :**	RC-074-393	**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: 2124173	7196_CR6			**Work Order:** MTDM11AA			**Report DB ID:** 9MTDM110					
HEXCHROME	**1.55E-01**	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	5/4/12 08:00 a		2.5034	
							1.55E-01	*N/A*			g	
Batch: 2125037	GAMMA_GS			**Work Order:** MTDM11AD			**Report DB ID:** 9MTDM110					
AG-108M	**-5.06E-03**	U	1.5E-02	1.5E-02	2.50E-02	pCi/g		*-0.2*	5/8/12 11:43 a		337.0	GER10$1
								-0.67			g	
AMERICIUM 241	**-7.65E-04**	U	8.7E-02	8.7E-02	1.47E-01	pCi/g		*-0.01*	5/8/12 11:43 a		337.0	GER10$1
								-0.02			g	
CO-60	**-3.67E-03**	U	1.7E-02	1.7E-02	2.86E-02	pCi/g		*-0.13*	5/8/12 11:43 a		337.0	GER10$1
							5.00E-02	*-0.44*			g	
CS-137	**5.84E-03**	U	1.8E-02	1.8E-02	3.12E-02	pCi/g		*0.19*	5/8/12 11:43 a		337.0	GER10$1
							1.00E-01	*0.65*			g	
EU-152	**2.47E-02**	U	7.7E-02	7.7E-02	7.98E-02	pCi/g		*0.31*	5/8/12 11:43 a		337.0	GER10$1
							1.00E-01	*0.64*			g	
EU-154	**-6.68E-03**	U	5.6E-02	5.6E-02	9.63E-02	pCi/g		*-0.07*	5/8/12 11:43 a		337.0	GER10$1
							1.00E-01	*-0.24*			g	
EU-155	**-3.82E-02**	U	6.4E-02	6.4E-02	1.04E-01	pCi/g		*-0.37*	5/8/12 11:43 a		337.0	GER10$1
							1.00E-01	*-(1.2)*			g	
Batch: 2125038	906.0_H3_LSC			**Work Order:** MTDM11AC			**Report DB ID:** 9MTDM110					
H-3	**-8.65E-05**	U	1.2E-02	1.3E-02	2.91E-02	pCi/g	100%	*0.*	5/10/12 04:28 a		105.33	LSC6
						1.38E-02	4.00E+02	*-0.01*			g	
Batch: 2125039	C14_CHEM_LSC			**Work Order:** MTDM11AE			**Report DB ID:** 9MTDM110					

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.
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FORM I

SAMPLE RESULTS

Date: 10-May-12

Lab Name:	**TestAmerica**	**SDG:**	JP0388	**Collection Date:**	5/3/2012 11:03:00 AM
Lot-Sample No.:	**J2E030465-10**	**Report No. :**	51625	**Received Date:**	5/3/2012 4:20:00 PM
Client Sample ID:	**J1P1W1**	**COC No. :**	RC-074-393	**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
C-14	**8.20E-02**	U	1.3E-01	1.5E-01	3.12E-01	pCi/g	100%	*0.26*	5/9/12 09:54 a		5.043	LSC6
						1.49E-01	5.00E+01	*(1.1)*			g	

No. of Results: 10 **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: 10-May-12

DUPLICATE RESULTS

Lab Name:	TestAmerica	**SDG:**	JP0388	**Collection Date:**	5/3/2012 9:15:00 AM
Lot-Sample No.:	J2E030465-1	**Report No. :**	51625	**Received Date:**	5/3/2012 4:20:00 PM
Client Sample ID:	J1P1V2	**COC No. :**	RC-074-393	**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: 2124173	7196_CR6			**Work Order:** MTDMN1AJ		**Report DB ID:** MTDMN1ER			**Orig Sa DB ID:** 9MTDMN10			
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	1.	5/4/12 08:00 a		2.5088	
	1.55E-01	U	**RPD**	**0.0**		3.50E-01		N/A			g	

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

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

Date: 10-May-12

DUPLICATE RESULTS

Lab Name:	**TestAmerica**	**SDG:**	JP0388	**Collection Date:**	5/3/2012 9:15:00 AM
Lot-Sample No.:	**J2E030465-1**	**Report No. :**	51625	**Received Date:**	5/3/2012 4:20:00 PM
Client Sample ID:	**J1P1V2 DUP**	**COC No. :**	RC-074-393	**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: 2125037	GAMMA_GS			**Work Order:**	MTDMN1AK	**Report DB ID:**	MTDMN1KR		**Orig Sa DB ID:** 9MTDMN10			
AG-108M	-5.36E-04	U	8.4E-03	8.4E-03	1.44E-02	pCi/g		-0.04	5/8/12 11:39 a		370.3	GER17$1
	-4.95E-03	U	**RPD**	**-160.9**				-0.13			g	
AMERICIUM 241	-4.03E-03	U	1.6E-02	1.6E-02	2.70E-02	pCi/g		-0.15	5/8/12 11:39 a		370.3	GER17$1
	1.14E-03	U	**RPD**	**-357.2**				-0.49			g	
CO-60	1.37E-02	U	1.3E-02	1.3E-02	2.52E-02	pCi/g		0.54	5/8/12 11:39 a		370.3	GER17$1
	-6.80E-03	U	**RPD**	**595.0**		5.00E-02		(2.1)			g	
CS-137	5.18E-02		2.0E-02	2.0E-02	2.05E-02	pCi/g		(2.5)	5/8/12 11:39 a		370.3	GER17$1
	3.81E-02		**RPD**	**30.5**		1.00E-01		(5.1)			g	
EU-152	6.86E-02		5.7E-02	5.7E-02	4.60E-02	pCi/g		(1.5)	5/8/12 11:39 a		370.3	GER17$1
	2.76E-02	U	**RPD**	**85.4**		1.00E-01		(2.4)			g	
EU-154	1.98E-02	U	4.2E-02	4.2E-02	7.71E-02	pCi/g		0.26	5/8/12 11:39 a		370.3	GER17$1
	2.92E-02	U	**RPD**	**38.5**		1.00E-01		0.95			g	
EU-155	2.37E-02	U	2.5E-02	2.5E-02	4.33E-02	pCi/g		0.55	5/8/12 11:39 a		370.3	GER17$1
	3.08E-04	U	**RPD**	**194.9**		1.00E-01		(1.9)			g	
Batch: 2125038	906.0_H3_LSC			**Work Order:**	MTDMN1AL	**Report DB ID:**	MTDMN1LR		**Orig Sa DB ID:** 9MTDMN10			
H-3	1.11E-03	U	1.3E-02	1.4E-02	3.17E-02	pCi/g	100%	0.04	5/9/12 04:02 p		89.99	LSC6
	1.79E-03	U	**RPD**	**46.9**		4.00E+02		0.16			g	
Batch: 2125039	C14_CHEM_LSC			**Work Order:**	MTDMN1AM	**Report DB ID:**	MTDMN1MR		**Orig Sa DB ID:** 9MTDMN10			
C-14	-4.37E-02	U	1.3E-01	1.4E-01	3.11E-01	pCi/g	100%	-0.14	5/9/12 03:31 a		5.044	LSC6
	2.87E-01	U	**RPD**	**271.8**		5.00E+01		-0.61			g	

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

Date: 10-May-12

DUPLICATE RESULTS

Lab Name:	**TestAmerica**	**SDG:**	JP0388	**Collection Date:**	5/3/2012 9:15:00 AM
Lot-Sample No.:	**J2E030465-1**	**Report No. :**	51625	**Received Date:**	5/3/2012 4:20:00 PM
Client Sample ID:	**J1P1V2 DUP**	**COC No. :**	RC-074-393	**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

No. of Results: 9 **Comments:**

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.

FORM II

BLANK RESULTS

Date: 10-May-12

Lab Name: TestAmerica

Matrix: SOIL

SDG: JP0388

Report No. : 51625

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: 2124173	7196_CR6			**Work Order:**	MTDNK1AA		**Report DB ID:**	MTDNK1AB				
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	1.	5/4/12 08:00 a		2.5	
						1.55E-01		N/A			g	
Batch: 2125039	C14_CHEM_LSC			**Work Order:**	MTDRX1AA		**Report DB ID:**	MTDRX1AB				
C-14	-2.06E-03	U	3.2E-03	3.6E-03	7.86E-03	pCi/g	100%	-0.26	5/9/12 11:20 a		200.0	LSC6
					3.76E-03	5.00E+01		-(1.2)			g	
Batch: 2125038	906.0_H3_LSC			**Work Order:**	MTDRV1AA		**Report DB ID:**	MTDRV1AB				
H-3	-4.02E-03	U	1.3E-02	1.4E-02	3.16E-02	pCi/g	100%	-0.13	5/10/12 07:14 a		109.21	LSC6
					1.50E-02	4.00E+02		-0.59			g	
Batch: 2125037	GAMMA_GS			**Work Order:**	MTDRT1AA		**Report DB ID:**	MTDRT1AB				
AG-108M	-1.93E-03	U	7.1E-03	7.1E-03	1.23E-02	pCi/g		-0.16	5/8/12 01:06 p		348.0	GER13$1
								-0.54			g	
AMERICIUM 241	5.91E-03	U	8.1E-02	8.1E-02	1.44E-01	pCi/g		0.04	5/8/12 01:06 p		348.0	GER13$1
								0.15			g	
CO-60	4.50E-03	U	9.8E-03	9.8E-03	1.92E-02	pCi/g		0.23	5/8/12 01:06 p		348.0	GER13$1
						5.00E-02		0.92			g	
CS-137	3.34E-03	U	9.1E-03	9.1E-03	1.68E-02	pCi/g		0.2	5/8/12 01:06 p		348.0	GER13$1
						1.00E-01		0.73			g	
EU-152	-1.64E-03	U	2.3E-02	2.3E-02	4.04E-02	pCi/g		-0.04	5/8/12 01:06 p		348.0	GER13$1
						1.00E-01		-0.14			g	
EU-154	-8.14E-03	U	2.9E-02	2.9E-02	5.13E-02	pCi/g		-0.16	5/8/12 01:06 p		348.0	GER13$1
						1.00E-01		-0.57			g	
EU-155	7.14E-04	U	2.3E-02	2.3E-02	3.97E-02	pCi/g		0.02	5/8/12 01:06 p		348.0	GER13$1
						1.00E-01		0.06			g	

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

BLANK RESULTS

Date: 10-May-12

Lab Name: TestAmerica

SDG: JP0388

Matrix: SOIL

Report No. : 51625

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

No. of Results: 10 Comments:

TestAmerica MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.

rptSTLRchBlank
V5.2.20 A2002

FORM II

LCS RESULTS

Date: 10-May-12

Lab Name: TestAmerica

Matrix: SOIL

SDG: JP0388

Report No. : 51625

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: 2124173	7196_CR6			**Work Order:**	MTDNK1AC		**Report DB ID:**	MTDNK1AS					
HEXCHROME	1.93E+01			0.0E+00	1.55E-01	mg/kg	N/A	2.00E+01		96%	5/4/12 08:00 a	2.5	
							Rec Limits:	80	120	0.0		g	
Batch: 2125039	C14_CHEM_LSC			**Work Order:**	MTDRX1AC		**Report DB ID:**	MTDRX1CS					
C-14	7.90E+00		3.1E-01	4.4E-01	3.15E-01	pCi/g	100%	7.38E+00	1.2E-01	107%	5/9/12 12:02 p	5.0	LSC6
							Rec Limits:	70	130	0.1		g	
Batch: 2125038	906.0_H3_LSC			**Work Order:**	MTDRV1AC		**Report DB ID:**	MTDRV1CS					
H-3	3.24E-01		2.6E-02	2.8E-02	3.76E-02	pCi/g	100%	2.98E-01	9.0E-03	109%	5/10/12 08:37 a	91.79	LSC6
							Rec Limits:	70	130	0.1		g	
Batch: 2125037	GAMMA_GS			**Work Order:**	MTDRT1AC		**Report DB ID:**	MTDRT1CS					
CS-137	1.10E+00		1.5E-01	1.5E-01	2.51E-02	pCi/g		1.06E+00	1.1E-02	104%	5/8/12 01:07 p	350.1	GER19$1
							Rec Limits:	70	130	0.0		g	

No. of Results: 4 **Comments:**

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

rptSTLRchLcs
V5.2.20 A2002

FORM II

MATRIX SPIKE RESULTS

Date: 10-May-12

Lab Name: TestAmerica **SDG:** JP0388

Lot-Sample No.: J2E030465-1, J1P1V2 **Report No. :** 51625 **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: 2124173	**Work Order:** MTDMN1AH			**Report DB ID:** MTDMN1CW			**Orig Sa DB ID:** 9MTDMN10					
HEXCHROME	8.77E+00			0.0E+00	1.55E-01	mg/kg	N/A	84.68%	1.04E+01	5/4/12 08:00 a	2.5024	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

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

5/9/2012 2:53:05 PM

Lot No., Due Date: J2E030465; 05/10/2012
Client, Site: 127642; S00X235B00 HANFORD
QC Batch No., Method Test: 2125037; RGAMMA Gamma by GER
SDG, Matrix: JP0388; SOIL

1.0 COC			
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	Yes ✓	No	N/A
2.0 QC Batch			
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	Yes ✓	No	N/A
2.2 Are the QC appropriate for the analysis included in the batch?	Yes ✓	No	N/A
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	Yes ✓	No	N/A
2.4 Does the Worksheets include a Tracer Vial label for each sample?	Yes	No	N/A ✓
3.0 QC & Samples			
3.1 Is the blank results, yield, and MDA within contract limits?	Yes ✓	No	N/A
3.2 Is the LCS result, yield, and MDA within contract limits?	Yes ✓	No	N/A
3.3 Are the MS/MSD results, yields, and MDA within contract limits?	Yes	No	N/A ✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	Yes ✓	No	N/A
3.5 Are the sample yields and MDAs within contract limits?	Yes	No ✓	N/A
4.0 Raw Data			
4.1 Were results calculated in the correct units?	Yes ✓	No	N/A
4.2 Were analysis volumes entered correctly?	Yes ✓	No	N/A
4.3 Were Yields entered correctly?	Yes ✓	No	N/A
4.4 Were spectra reviewed/meet contractual requirements?	Yes ✓	No	N/A
4.5 Were raw counts reviewed for anomalies?	Yes ✓	No	N/A
5.0 Other			
5.1 Are all nonconformances included and noted?	Yes ✓	No	N/A
5.2 Are all required forms filled out?	Yes ✓	No	N/A
5.3 Was the correct methodology used?	Yes ✓	No	N/A
5.4 Was transcription checked?	Yes ✓	No	N/A
5.5 Were all calculations checked at a minimum frequency?	Yes	No	N/A ✓
5.6 Are worksheet entries complete and correct?	Yes ✓	No	N/A

6.0 Comments on any No response:
Please see NCM #10-20972

First Level [signature] **Date** 5-9-12

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 2125037

Review Item	Yes (√)	No (√)	NA (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?			✓
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓	✓	
3. Are the correct isotopes reported?	✓		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery within contract acceptance criteria?	✓		
6. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
7. Do the MS/MSD results and yields meet acceptance criteria?			✓
8. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other 1. Are all Non-conformances included and noted?	✓		
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: CRDL = 0.1 pci/g
See NCM # 10-20972

Second Level Review: [signature] Date: 5/10/12

LS-038B, Rev. 10, 9/07

Clouseau
Nonconformance Memo

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

NCM #: **10-20972**
NCM Initiated By: John Norton
Date Opened: 05/09/2012
Date Closed:

Classification: **Anomaly**
Status: **PMREVIEW**
Production Area: Counting
Tests: Gamma by GER
Lot #'s (Sample #'s): J2E030465 (1,10,2,3,4,5,6,7,8,9), J2E040000 (37),
QC Batches: 2125037,

Nonconformance: MDA not met
Subcategory: Data accepted

Problem Description / Root Cause

Name	Date	Description
John Norton	05/09/2012	Some of these samples did not meet the CRDL for some of the elements of interest.

Corrective Action

Name	Date	Corrective Action
John Norton	05/09/2012	Due to the priority nature of the samples the data will be presented to the client, the samples can be re-counted for a longer time frame at client request.

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: 5/9/2012

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

5/10/2012 10:30:23 AM

Lot No., Due Date: J2E030465; 05/10/2012
Client, Site: 127642; S00X235B00 HANFORD
QC Batch No., Method Test: 2125038; RTRITIUM H-3 by LSC
SDG, Matrix: JP0388; SOIL

1.0 COC			
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	Yes ✓	No	N/A
2.0 QC Batch			
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	Yes ✓	No	N/A
2.2 Are the QC appropriate for the analysis included in the batch?	Yes ✓	No	N/A
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	Yes ✓	No	N/A
2.4 Does the Worksheets include a Tracer Vial label for each sample?	Yes	No	N/A ✓
3.0 QC & Samples			
3.1 Is the blank results, yield, and MDA within contract limits?	Yes ✓	No	N/A
3.2 Is the LCS result, yield, and MDA within contract limits?	Yes ✓	No	N/A
3.3 Are the MS/MSD results, yields, and MDA within contract limits?	Yes	No	N/A ✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	Yes ✓	No	N/A
3.5 Are the sample yields and MDAs within contract limits?	Yes ✓	No	N/A
4.0 Raw Data			
4.1 Were results calculated in the correct units?	Yes ✓	No	N/A
4.2 Were analysis volumes entered correctly?	Yes ✓	No	N/A
4.3 Were Yields entered correctly?	Yes ✓	No	N/A
4.4 Were spectra reviewed/meet contractual requirements?	Yes	No	N/A ✓
4.5 Were raw counts reviewed for anomalies?	Yes ✓	No	N/A
5.0 Other			
5.1 Are all nonconformances included and noted?	Yes	No	N/A ✓
5.2 Are all required forms filled out?	Yes ✓	No	N/A
5.3 Was the correct methodology used?	Yes ✓	No	N/A
5.4 Was transcription checked?	Yes ✓	No	N/A
5.5 Were all calculations checked at a minimum frequency?	Yes	No	N/A ✓
5.6 Are worksheet entries complete and correct?	Yes ✓	No	N/A

6.0 Comments on any No response:

First Level [signature] **Date** 5-10-12

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 2125038

Review Item	Yes (√)	No (√)	NA (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?			✓
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery within contract acceptance criteria?	✓		
6. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
7. Do the MS/MSD results and yields meet acceptance criteria?			✓
8. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other 1. Are all Non-conformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: CRDL = 10.0 pCi/g

Second Level Review: [signature] Date: 5/10/12

LS-038B, Rev. 10, 9/07

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

5/10/2012 10:33:52 AM

Lot No., Due Date: J2E030465; 05/10/2012
Client, Site: 127642; S00X235B00 HANFORD
QC Batch No., Method Test: 2125039; RC14 C-14 by LSC
SDG, Matrix: JP0388; SOIL

1.0 COC			
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	Yes ✓	No	N/A
2.0 QC Batch			
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	Yes ✓	No	N/A
2.2 Are the QC appropriate for the analysis included in the batch?	Yes ✓	No	N/A
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	Yes ✓	No	N/A
2.4 Does the Worksheets include a Tracer Vial label for each sample?	Yes	No	N/A ✓
3.0 QC & Samples			
3.1 Is the blank results, yield, and MDA within contract limits?	Yes ✓	No	N/A
3.2 Is the LCS result, yield, and MDA within contract limits?	Yes ✓	No	N/A
3.3 Are the MS/MSD results, yields, and MDA within contract limits?	Yes	No	N/A ✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	Yes ✓	No	N/A
3.5 Are the sample yields and MDAs within contract limits?	Yes ✓	No	N/A
4.0 Raw Data			
4.1 Were results calculated in the correct units?	Yes ✓	No	N/A
4.2 Were analysis volumes entered correctly?	Yes ✓	No	N/A
4.3 Were Yields entered correctly?	Yes ✓	No	N/A
4.4 Were spectra reviewed/meet contractual requirements?	Yes	No	N/A ✓
4.5 Were raw counts reviewed for anomalies?	Yes ✓	No	N/A
5.0 Other			
5.1 Are all nonconformances included and noted?	Yes	No	N/A ✓
5.2 Are all required forms filled out?	Yes ✓	No	N/A
5.3 Was the correct methodology used?	Yes ✓	No	N/A
5.4 Was transcription checked?	Yes ✓	No	N/A
5.5 Were all calculations checked at a minimum frequency?	Yes	No	N/A ✓
5.6 Are worksheet entries complete and correct?	Yes ✓	No	N/A

6.0 Comments on any No response:

First Level John Ploetz **Date** 5-10-12

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 2125039

Review Item	Yes (√)	No (√)	NA (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?			✓
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery within contract acceptance criteria?	✓		
6. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
7. Do the MS/MSD results and yields meet acceptance criteria?			✓
8. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other 1. Are all Non-conformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: CRDL = 1.0pCi/g

Second Level Review: [signature] Date: 5/10/12

LS-038B, Rev. 10, 9/07

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Richland Laboratory
Data Review Check List
Hexavalent Chromium

Batch Number(s):	2124173	Lab Sample Numbers or SDG:	JP0388
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:

Analyst H. Rahavi Date 5/5/12 2nd Review [signature] Date 5/6/12

CG-231 Rev 0, 2/12

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-074-393	Page 1 of 2

Collector: H Weber	Company Contact: Joan Kessner	Telephone No.: 509-375-4688	Project Coordinator: KESSNER, JH
Price Code: 8L	Data Turnaround: ~~21~~ Days 7 mo 5/3/12		
Project Designation: 100-D/DR Burial Grounds & Remaining Sites - Soil In-Proce	Sampling Location: 100-D-66 Outfall AOHWM- Pre Var		SAF No.: RC-074
Ice Chest No.: NA	Field Logbook No.: EL-1662-01	COA: 000D662600	Method of Shipment: Hand deliver
Shipped To: TestAmerica Incorporated, Richland	Offsite Property No.: NA		Bill of Lading/Air Bill No.: NA

POSSIBLE SAMPLE HAZARDS/REMARKS

None

Special Handling and/or St

Cool 4 Deg C

J2E030465

J2E030465
SDG - JP0388
Due 5-10-12

SAMPLE ANALYSIS

Preservation	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	None	None			
Type of Container	G/P	G/P	aG	aG	aG	G/P	G/P			
No. of Container(s)	1	1	1	1	1	1	1			
Volume	125mL	125mL	125mL	125mL	125mL	500g	125mL			
	See item (1) in Special Instructions.	Chromium Hex - 7196	Semi-VOA - 8270A (TCL)	PAHs - 8310	Pesticides - 8081	See item (2) in Special Instructions	Carbon-14, Tritium - H3 Low Level Soil			
Sample No.	Matrix *	Sample Date	Sample Time								
J1P1V2 MTDMN	SOIL	5-3-12	0915		X				X	X	
J1P1V3 MTDMP	SOIL		0927		X				X	X	
J1P1V4 MTDMQ	SOIL		0939		X				X	X	
J1P1V5 MTDMR	SOIL		0951		X				X	X	
J1P1V6 MTDMT	SOIL		1003		X				X	X	

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

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Heather Weber / Heather Weber	5-3-12 1245	MZ MStankovich	5-3-12 1245
MZ MStankovich	5-3-12 1545	Cindy Bingham	5-3-12 1545
Cindy Bingham	WCH 5-3-12 1620	J. Bock / Bock TALE	5-3-12 1620

SPECIAL INSTRUCTIONS

(1) ICP Metals - 6010TR (Client List) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Molybdenum, Nickel, Potassium, Selenium, Silicon, Silver, Sodium, Vanadium, Zinc}; Mercury - 471 - (CV)
(2) Gamma Spec (Client List) {Americium-241, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155, Silver-108 metastable}

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

REVIEWED BY AJ DATE 5-3-12

JP0388

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-074-393	Page 2 of 2
Collector: H Weber	Company Contact: Joan Kessner; Telephone No.: 509-375-4688	Project Coordinator: KESSNER, JH	Price Code: 8L; Data Turnaround: ~~21~~ Days 7 mo 5/3/12
Project Designation: 100-D/DR Burial Grounds & Remaining Sites - Soil In-Proce	Sampling Location: 100-D-66 Outfall AOHWM- Pre Var	SAF No.: RC-074	
Ice Chest No.: NA	Field Logbook No.: EL-1662-01; COA: 000D662600	Method of Shipment: Hand deliver	
Shipped To: TestAmerica Incorporated, Richland	Offsite Property No.: NA	Bill of Lading/Air Bill No.: NA ~~See OSPC~~ 5-3-12 CMB	

POSSIBLE SAMPLE HAZARDS/REMARKS

None

Special Handling and/or Storage

Cool 4 Deg C

J2E030465

SDG-JP0388
Due 5-10-12

SAMPLE ANALYSIS

mo 5/3/12

Preservation	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	None	None			
Type of Container	G/P	G/P	aG	aG	aG	G/P	G/P			
No. of Container(s)	1	1	1	1	1	1	1			
Volume	125mL	125mL	125mL	125mL	125mL	500g	125mL			
	See item (1) in Special Instructions. mo 5/3/12	Chromium Hex - 7196	Semi-VOA - 8270A (TCL)	PAHs - 8310 mo 5/3/12	Pesticides - 8081	See item (2) in Special Instructions	Carbon-14, Tritium - H3 Low Level Soil			

Sample No.	Matrix *	Sample Date	Sample Time									
J1P1V7 mTDMV	SOIL	5-3-12	1015		X				X	X		
J1P1V8 mTDMW	SOIL	↓	1027		X				X	X		
J1P1V9 mTDMX	SOIL		1039		X				X	X		
J1P1W0 mTDMO	SOIL		1045		X				X	X		
J1P1W1 mTDM1	SOIL	↓	1103		X				X	X		

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

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Heather Weber/Heather Weber	5-3-12 1245	mzw mstankovich	5/3/12 1245
Relinquished By/Removed From: mzw mstankovich	5/3/12 1545	Received By/Stored In: CM Bingham	5-3-12 1545
Relinquished By/Removed From: CM WCH	5-3-12 1620	Received By/Stored In: J.Bock J.Bock TALL	5-3-12 1620
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

(1) ICP Metals - 6010TR (Client List) {Aluminum, Antimony, Arsenic, Barium, Bryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Molybdenum, Nickel, Potassium, Selenium, Silicon, Silver, Sodium, Vanadium, Zinc}; Mercury - 7471 - (CV)
(2) Gamma Spec (Client List) {Americium-241, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155, Silver-108 metastable}

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

REVIEWED BY AT
DATE 5-3-12

JP0388

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: 5-3-12 / 1620 Container GM Screen Result: (Airlock) .06 Initials [JB]
Sample GM Screen Result (Sample Receiving) .02 Initials [JB]

Client: WCH SDG #: JP0388 NA [ ] SAF #: RC-014 NA [ ]

Lot Number: J2E030

Chain of Custody # RC-014-393

Shipping Container ID: hand deliv. NA [ ] Air Bill Number: NA [JB]

Samples received inside shipping container/cooler/box Yes [JB] 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 [JB]

2. Custody Seals dated and signed? Yes [ ] No [ ] No Custody Seal [JB]

3. Cooler temperature: 4 °C on ice NA [ ]

4. Vermiculite/packing materials is NA [JB] Wet [ ] Dry [ ]

Item 5 through 16 for samples. Initial appropriate response.

5. Chain of Custody record present? Yes [JB] No [ ]

6. Number of samples received (Each sample may contain multiple bottles): 10

7. Containers received: 20 x 125mLp; 10 x 500mLp

8. Sample holding times exceeded? NA [ ] Yes [ ] No [JB]

9. Samples have:
   ____ tape
   JB custody seals
   ____ hazard labels
   JB appropriate sample labels

10. Matrix:
    ____ A (FLT, Wipe, Solid, Soil)
    ____ S (Air, Niosh 7400)
    ____ I (Water)
    ____ T (Biological, Ni-63)

11. Samples:
    JB are in good condition
    ____ are broken
    ____ are leaking
    ____ have air bubbles (Only for samples requiring no head space)
    ____ Other

12. Sample pH appropriate for analysis requested Yes [ ] No [ ] NA [JB]
    (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 [JB]

14. Description of anomalies (include sample numbers): NA [JB]

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: Julie Bell Date: 5-3-12

Client Informed on _____ by _____ Person contacted _____

[✓] No action necessary; process as is

Project Manager [signature] Date 5/4/12

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

JBell 5-3-12

JBell 5-3-12

J2E030465 [signature] 5/4/12

LS-023, Rev. 15, 07/11

See over for additional information.

BHI TRLSP.NLB

5/7/2012 4:54:21 AM

Sample Preparation/Analysis

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

AX Gamma Prp PRP003/GAM001
TA Gamma by HPGE
5I CLIENT: HANFORD

PRIORITY

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

AnalyDueDate: 05/10/2012 JP0388

Batch: 2125037 SOIL pCi/g PM, Quote: RW2, 27038

SEQ Batch, Test: None All Tests: 2124172 ATS6, 2124173 DWEA, 2125037 AXTA, 2125038 ATS6, 2125039 5SS3,

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 MTDMN-1-AD J2E030465-1-SAMP 05/03/2012 09:15			370.30g,in	370.30g				S200	200	G19	0930	5/8/12	
			AmtRec: 2X125P;1X500MLP	#Containers: 3						Scr:	Alpha:		Beta:
2 MTDMN-1-AK-X J2E030465-1-DUP 05/03/2012 09:15			ISV							G17	1459	5/8/12 CJH	
			AmtRec: 2X125P;1X500MLP	#Containers: 3						Scr:	Alpha:		Beta:
3 MTDMP-1-AD J2E030465-2-SAMP 05/03/2012 09:27			355.70g,in	355.70g				S200	200	G15	1123	5/8/12	
			AmtRec: 2X125P;1X500MLP	#Containers: 3						Scr:	Alpha:		Beta:
4 MTDMQ-1-AD J2E030465-3-SAMP 05/03/2012 09:39			369.70g,in	369.70g						G14	1126		
			AmtRec: 2X125P;1X500MLP	#Containers: 3						Scr:	Alpha:		Beta:
5 MTDMR-1-AD J2E030465-4-SAMP 05/03/2012 09:51			308.50g,in	308.50g						G10	1126		
			AmtRec: 2X125P;1X500MLP	#Containers: 3						Scr:	Alpha:		Beta:
6 MTDMT-1-AD J2E030465-5-SAMP 05/03/2012 10:03			345.00g,in	345.00g						G17	1128		
			AmtRec: 2X125P;1X500MLP	#Containers: 3						Scr:	Alpha:		Beta:
7 MTDMV-1-AD J2E030465-6-SAMP 05/03/2012 10:15			365.20g,in	365.20g						G13	1254	5/8/12	
			AmtRec: 2X125P;1X500MLP	#Containers: 3						Scr:	Alpha:		Beta:

TestAmerica Richland Wa. Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 pd - Prep Dt, dc - Date Chg, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added Page 1 ISV - Insufficient Volume for Analysis WO Cnt: 7 Prep_SamplePrep v4.8.59

5/7/2012 4:54:24 AM

Sample Preparation/Analysis

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

AX Gamma Prp PRP003/GAM001
TA Gamma by HPGE
5I CLIENT: HANFORD

AnalyDueDate: 05/10/2012

Batch: 2125037 **SOIL** **pCi/g** **PM, Quote: RW2, 27038**
SEQ Batch, Test: None

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

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 MTDMW-1-AD J2E030465-7-SAMP 05/03/2012 10:27			361.40g,in	361.40g	AmtRec: 2X125P;1X500MLP #Containers: 3			5200	200	G19	1255	5/8/12 m	Scr: Alpha: Beta:
9 MTDMX-1-AD J2E030465-8-SAMP 05/03/2012 10:39			370.60g,in	370.60g	AmtRec: 2X125P;1X500MLP #Containers: 3					G15	1501	5/8/12 CJH	Scr: Alpha: Beta:
10 MTDM0-1-AD J2E030465-9-SAMP 05/03/2012 10:51			331.80g,in	331.80g	AmtRec: 2X125P;1X500MLP #Containers: 3					G14	1502	5/8/12 CJH	Scr: Alpha: Beta:
11 MTDM1-1-AD J2E030465-10-SAMP 05/03/2012 11:03			337.00g,in	337.00g	AmtRec: 2X125P;1X500MLP #Containers: 3					G10	1503	5/8/12 CJH	Scr: Alpha: Beta:
12 MTDRT-1-AA-B J2E040000-37-BLK 05/04/2012 10:30 pd			348.00g,in	348.00g	OSBK AmtRec: #Containers: 1					G13	1626	5/8/12 CJH	Scr: Alpha: Beta:
13 MTDRT-1-AC-C J2E040000-37-LCS 05/04/2012 10:30 pd			350.10g,in	350.10g	QC20009 08/04/09,pd 09/01/09,r AmtRec: #Containers: 1					G19	1627	5/8/12 CJH	Scr: Alpha: Beta:

TestAmerica Laboratories, Inc.

5/7/2012 4:54:25 AM

Sample Preparation/Analysis

AX Gamma Prp PRP003/GAM001
TA Gamma by HPGE
5I CLIENT: HANFORD

AnalyDueDate: 05/10/2012

Batch: 2125037 pCi/g
SEQ Batch, Test: None

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

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:

Comments: Not enough sample for a duplicate, please recount on a seperate detector JJW 5/7/12

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

MTDMN1AD-SAMP Constituent List:

Co-60	RDL:5.00E-02	pCi/g	LCL:	UCL:	RPD:	Cs-137	RDL:1.00E-01	pCi/g	LCL:70	UCL:130	RPD:35
Cs-137DA	RDL:1.00E-01	pCi/g	LCL:70	UCL:130	RPD:35	Eu-152	RDL:1.00E-01	pCi/g	LCL:	UCL:	RPD:
Eu-154	RDL:1.00E-01	pCi/g	LCL:	UCL:	RPD:	Eu-155	RDL:1.00E-01	pCi/g	LCL:	UCL:	RPD:

MTDRT1AA-BLK:

Co-60	RDL:5.00E-02	pCi/g	LCL:	UCL:	RPD:	Cs-137	RDL:1.00E-01	pCi/g	LCL:	UCL:	RPD:
Cs-137DA	RDL:1.00E-01	pCi/g	LCL:	UCL:	RPD:	Eu-152	RDL:1.00E-01	pCi/g	LCL:	UCL:	RPD:
Eu-154	RDL:1.00E-01	pCi/g	LCL:	UCL:	RPD:	Eu-155	RDL:1.00E-01	pCi/g	LCL:	UCL:	RPD:

MTDRT1AC-LCS:

Cs-137	RDL:0.1	pCi/g	LCL:70	UCL:130	RPD:35	Cs-137DA	RDL:0.1	pCi/g	LCL:70	UCL:130	RPD:35
K-40	RDL:--	pCi/g	LCL:70	UCL:130	RPD:35	Ra-226	RDL:0.1	pCi/g	LCL:70	UCL:130	RPD:35
RA-228	RDL:0.2	pCi/g	LCL:70	UCL:130	RPD:35	RA-228DA	RDL:0.2	pCi/g	LCL:70	UCL:130	RPD:35
U-238	RDL:	pCi/g	LCL:70	UCL:130	RPD:35						

MTDMN1AD-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MTDRT1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MTDRT1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

5/9/2012 2:51:44 PM

ICOC Fraction Transfer/Status Report

ByDate: 5/10/2011, 5/14/2012, Batch: '2125037', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
2125037						
AC		**Rev1C**	**SannohS**	5/4/2012 10:46:59		
SC			WagarR	IsBatched	5/4/2012 10:32:29 AM	ICOC_RADCALC v4.8.49
SC			SannohS	InPrep	5/4/2012 10:46:59 AM	RL-GAM-001 REV. 2
SC			WoodT	InPrep	5/7/2012 4:23:32 AM	RL-PRP-003 Revision 2
SC			WoodT	Prep1C	5/7/2012 4:54:37 AM	RL-PRP-003 REVISION 2
SC			WoodT	InPrep2	5/7/2012 4:54:47 AM	RL-GAM-001 REVISION 2
SC			WoodT	Prep2C	5/7/2012 4:54:58 AM	RL-GAM-001 REVISION 2
SC			ClarkR	InCnt1	5/7/2012 5:41:37 AM	RL-CI-007 REV. 2
SC			DawkinsO	CalcC	5/8/2012 8:01:10 PM	RL-CI-007 REV. 2
SC			nortonj	Rev1C	5/9/2012 2:50:04 PM	RL-DR-001 Rev 2
AC			**WoodT**	5/7/2012 4:23:32 AM		
AC			**WoodT**	5/7/2012 4:54:37 AM		
AC			**WoodT**	5/7/2012 4:54:47 AM		
AC			**WoodT**	5/7/2012 4:54:58 AM		
AC			**ClarkR**	5/7/2012 5:41:37 AM		
AC			**DawkinsO**	5/8/2012 8:01:10 PM		
AC			**nortonj**	5/9/2012 2:50:04 PM		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Grp Rec Cnt: 8

ICOCFractions v4.8.44

5/4/2012 10:30:07 AM

Sample Preparation/Analysis

127642, Washington Closure Hanford LLC
Bechtel Hanford, Inc.

AT H-3 Prp/Sep LSC002
S6 Tritium by Liquid Scint
5I CLIENT: HANFORD

PRIORITY

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

AnalyDueDate: 05/10/2012 JP0388

Batch: 2125038 SOIL pCi/g PM, Quote: RW2, 27038
SEQ Batch, Test: None

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 MTDMN-1-AC													
2 J2E030465-1-SAMP													
05/03/2012 09:15			AmtRec: 2X125P;1X500MLP		#Containers: 3				Scr:		Alpha:		Beta:
2 MTDMN-1-AL-X													
3 J2E030465-1-DUP													
05/03/2012 09:15			AmtRec: 2X125P;1X500MLP		#Containers: 3				Scr:		Alpha:		Beta:
3 MTDMP-1-AC													
4 J2E030465-2-SAMP													
57 05/03/2012 09:27			AmtRec: 2X125P;1X500MLP		#Containers: 3				Scr:		Alpha:		Beta:
4 MTDMQ-1-AC													
5 J2E030465-3-SAMP													
05/03/2012 09:39			AmtRec: 2X125P;1X500MLP		#Containers: 3				Scr:		Alpha:		Beta:
5 MTDMR-1-AC													
6 J2E030465-4-SAMP													
05/03/2012 09:51			AmtRec: 2X125P;1X500MLP		#Containers: 3				Scr:		Alpha:		Beta:
6 MTDMT-1-AC													
7 J2E030465-5-SAMP													
05/03/2012 10:03			AmtRec: 2X125P;1X500MLP		#Containers: 3				Scr:		Alpha:		Beta:
7 MTDMV-1-AC													
8 J2E030465-6-SAMP													
05/03/2012 10:15			AmtRec: 2X125P;1X500MLP		#Containers: 3				Scr:		Alpha:		Beta:

TestAmerica Laboratories, Inc.

5/4/2012 10:30:07 AM

Sample Preparation/Analysis

127642, Washington Closure Hanford LLC
Bechtel Hanford, Inc.

AT H-3 Prp/Sep LSC002
S6 Tritium by Liquid Scint
5I CLIENT: HANFORD

PRIORITY

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

AnalyDueDate: 05/10/2012

Batch: 2125038 SOIL pCi/g PM, Quote: RW2, 27038
SEQ Batch, Test: None

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 MTDMW-1-AC J2E030465-7-SAMP 05/03/2012 10:27			AmtRec: 2X125P;1X500MLP		#Containers: 3				Scr:		Alpha:		Beta:
9 MTDMX-1-AC J2E030465-8-SAMP 05/03/2012 10:39			AmtRec: 2X125P;1X500MLP		#Containers: 3				Scr:		Alpha:		Beta:
10 MTDM0-1-AC J2E030465-9-SAMP 05/03/2012 10:51			AmtRec: 2X125P;1X500MLP		#Containers: 3				Scr:		Alpha:		Beta:
11 MTDM1-1-AC J2E030465-10-SAMP 05/03/2012 11:03			AmtRec: 2X125P;1X500MLP		#Containers: 3				Scr:		Alpha:		Beta:
12 MTDRV-1-AA-B J2E040000-38-BLK 05/04/2012 10:30 pd			AmtRec:		#Containers: 1				Scr:		Alpha:		Beta:
13 MTDRV-1-AC-C J2E040000-38-LCS 05/04/2012 10:30 pd			AmtRec:		#Containers: 1				Scr:		Alpha:		Beta:
14 MTDRV-1-AD-B J2E040000-38-BLK 05/04/2012 10:30 pd			AmtRec:		#Containers: 1				Scr:		Alpha:		Beta:

5/4/2012 10:30:07 AM

Sample Preparation/Analysis

AT H-3 Prp/Sep LSC002
S6 Tritium by Liquid Scint
5I CLIENT: HANFORD

PRIORITY

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

AnalyDueDate: 05/10/2012

Batch: 2125038 pCi/g
SEQ Batch, Test: None

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 MTDRV-1-AE-B													
J2E040000-38-BLK													
05/04/2012 10:30 pd			AmtRec:		#Containers: 1					Scr:	Alpha:		Beta:

Comments:

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

MTDMN1AC-SAMP Constituent List:
H-3 RDL:400 pCi/g LCL:70 UCL:130 RPD:35
MTDRV1AA-BLK:

MTDRV1AC-LCS:

MTDRV1AD-BLK:

MTDRV1AE-BLK:

MTDMN1AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MTDRV1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MTDRV1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MTDRV1AD-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MTDRV1AE-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

TestAmerica Laboratories, Inc.

5/10/2012 10:28:59 AM

ICOC Fraction Transfer/Status Report

ByDate: 5/11/2011, 5/15/2012, Batch: '2125038', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
2125038						
AC		**Rev1C**	**NortonP**	5/7/2012 9:18:03 AM		
SC			WagarR	IsBatched	5/4/2012 10:32:29 AM	ICOC_RADCALC v4.8.49
SC			NortonP	Sep1C	5/7/2012 9:18:03 AM	RL-LSC-002 REV. 2
SC			DawkinsO	InCnt1	5/8/2012 5:14:34 PM	RL-CI-005 REV. 2
SC			HiattC	CalcC	5/10/2012 9:54:17 AM	RL-CI-005 REV. 2
SC			nortonj	Rev1C	5/10/2012 10:28:37 AM	RL-DR-001 Rev 2
AC			**DawkinsO**	5/8/2012 5:14:34 PM		
AC			**HiattC**	5/10/2012 9:54:17		
AC			**nortonj**	5/10/2012 10:28:37		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Grp Rec Cnt: 4

ICOCFractions v4.8.44

28/53

5/4/2012 10:30:07 AM

Sample Preparation/Analysis

127642, Washington Closure Hanford LLC
Bechtel Hanford, Inc.

AnalyDueDate: 05/10/2012 JP0388

5S C-14 Prp/Sep LSC008
S3 Carbon-14 by Liquid Scint
5I CLIENT: HANFORD

PRIORITY

Batch: 2125039 SOIL pCi/g
SEQ Batch, Test: None

PM, Quote: RW2, 27038

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

TestAmerica Laboratories, Inc.

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 MTDMN-1-AE J2E030465-1-SAMP 05/03/2012 09:15	AmtRec: 2X125P;1X500MLP	#Containers: 3							Scr:	Alpha:		Beta:	
2 MTDMN-1-AM-X J2E030465-1-DUP 05/03/2012 09:15	AmtRec: 2X125P;1X500MLP	#Containers: 3							Scr:	Alpha:		Beta:	
3 MTDMP-1-AE J2E030465-2-SAMP 05/03/2012 09:27	AmtRec: 2X125P;1X500MLP	#Containers: 3							Scr:	Alpha:		Beta:	
4 MTDMQ-1-AE J2E030465-3-SAMP 05/03/2012 09:39	AmtRec: 2X125P;1X500MLP	#Containers: 3							Scr:	Alpha:		Beta:	
5 MTDMR-1-AE J2E030465-4-SAMP 05/03/2012 09:51	AmtRec: 2X125P;1X500MLP	#Containers: 3							Scr:	Alpha:		Beta:	
6 MTDMT-1-AE J2E030465-5-SAMP 05/03/2012 10:03	AmtRec: 2X125P;1X500MLP	#Containers: 3							Scr:	Alpha:		Beta:	
7 MTDMV-1-AE J2E030465-6-SAMP 05/03/2012 10:15	AmtRec: 2X125P;1X500MLP	#Containers: 3							Scr:	Alpha:		Beta:	

TestAmerica Laboratories, Inc.

5/4/2012 10:30:08 AM

Sample Preparation/Analysis

127642, Washington Closure Hanford LLC
Bechtel Hanford, Inc.

AnalyDueDate: 05/10/2012

5S C-14 Prp/Sep LSC008
S3 Carbon-14 by Liquid Scint
5I CLIENT: HANFORD

PRIORITY

Batch: 2125039 **SOIL** **pCi/g** **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 MTDMW-1-AE													
9 J2E030465-7-SAMP													
05/03/2012 10:27			AmtRec: 2X125P;1X500MLP		#Containers: 3				Scr:		Alpha:		Beta:
9 MTDMX-1-AE													
10 J2E030465-8-SAMP													
05/03/2012 10:39			AmtRec: 2X125P;1X500MLP		#Containers: 3				Scr:		Alpha:		Beta:
10 MTDM0-1-AE													
11 J2E030465-9-SAMP													
62 05/03/2012 10:51			AmtRec: 2X125P;1X500MLP		#Containers: 3				Scr:		Alpha:		Beta:
11 MTDM1-1-AE													
12 J2E030465-10-SAMP													
05/03/2012 11:03			AmtRec: 2X125P;1X500MLP		#Containers: 3				Scr:		Alpha:		Beta:
12 MTDRX-1-AA-B													
14 J2E040000-39-BLK													
05/04/2012 10:30 pd			AmtRec:		#Containers: 1				Scr:		Alpha:		Beta:
13 MTDRX-1-AC-C													
15 J2E040000-39-LCS													
05/04/2012 10:30 pd			AmtRec:		#Containers: 1				Scr:		Alpha:		Beta:
14 MTDRX-1-AD-B													
i J2E040000-39-BLK													
05/04/2012 10:30 pd			AmtRec:		#Containers: 1				Scr:		Alpha:		Beta:

5/4/2012 10:30:08 AM

Sample Preparation/Analysis

5S C-14 Prp/Sep LSC008
S3 Carbon-14 by Liquid Scint
5I CLIENT: HANFORD

PRIORITY

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

AnalyDueDate: 05/10/2012

Batch: 2125039 pCi/g
SEQ Batch, Test: None

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 MTDRX-1-AE-B													
13 J2E040000-39-BLK													
05/04/2012 10:30 pd			AmtRec:		#Containers: 1					Scr:	Alpha:		Beta:

Comments:

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

63

MTDMN1AE-SAMP Constituent List:
C-14 RDL:50 pCi/g LCL:70 UCL:130 RPD:35
MTDRX1AA-BLK:

MTDRX1AC-LCS:

MTDRX1AD-BLK:

MTDRX1AE-BLK:

MTDMN1AE-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MTDRX1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MTDRX1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MTDRX1AD-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MTDRX1AE-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

TestAmerica Laboratories, Inc.

5/10/2012 10:31:32 AM

ICOC Fraction Transfer/Status Report

ByDate: 5/11/2011, 5/15/2012, Batch: '2125039', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
2125039						
AC		**Rev1C**	**NortonP**	5/7/2012 9:17:55 AM		
SC			WagarR	IsBatched	5/4/2012 10:32:29 AM	ICOC_RADCALC v4.8.49
SC			NortonP	Sep1C	5/7/2012 9:17:55 AM	RL-LSC-008 REV. 2
SC			DawkinsO	InCnt1	5/8/2012 5:14:39 PM	RL-CI-005 REV. 2
SC			DawkinsO	CalcC	5/10/2012 2:04:00 AM	RL-CI-005 REV. 2
SC			nortonj	Rev1C	5/10/2012 10:30:59 AM	RL-DR-001 Rev 2
AC			**DawkinsO**	5/8/2012 5:14:39 PM		
AC			**DawkinsO**	5/10/2012 2:04:00		
AC			**nortonj**	5/10/2012 10:30:59		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Grp Rec Cnt: 4

ICOCFractions v4.8.44

a1.7

5/4/2012 10:08:19 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: 05/10/2012

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

Batch: 2124173 SOIL mg/kg PM, Quote: RW2, 27038
SEQ Batch, Test: None All Tests: 5SS3, ATS6, AXTA, 2124172 ATS6, 2124173 DWEA, 2125037 AXTA, 2125038 ATS6, 2125039 5SS3,

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 MTDMN-1-AA													
J2E030465-1-SAMP													
05/03/2012 09:15			AmtRec: 2X125P;1X500MLP		#Containers: 3				Scr:		Alpha:		Beta:
2 MTDMN-1-AH-S													
J2E030465-1-MS													
05/03/2012 09:15			AmtRec: 2X125P;1X500MLP		#Containers: 3				Scr:		Alpha:		Beta:
3 MTDMN-1-AJ-X													
J2E030465-1-DUP													
05/03/2012 09:15			AmtRec: 2X125P;1X500MLP		#Containers: 3				Scr:		Alpha:		Beta:
4 MTDMP-1-AA													
J2E030465-2-SAMP													
05/03/2012 09:27			AmtRec: 2X125P;1X500MLP		#Containers: 3				Scr:		Alpha:		Beta:
5 MTDMQ-1-AA													
J2E030465-3-SAMP													
05/03/2012 09:39			AmtRec: 2X125P;1X500MLP		#Containers: 3				Scr:		Alpha:		Beta:
6 MTDMR-1-AA													
J2E030465-4-SAMP													
05/03/2012 09:51			AmtRec: 2X125P;1X500MLP		#Containers: 3				Scr:		Alpha:		Beta:
7 MTDMT-1-AA													
J2E030465-5-SAMP													
05/03/2012 10:03			AmtRec: 2X125P;1X500MLP		#Containers: 3				Scr:		Alpha:		Beta:

5/4/2012 10:08:19 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: 05/10/2012

Batch: 2124173 **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 MTDMV-1-AA													
J2E030465-6-SAMP													
05/03/2012 10:15			AmtRec: 2X125P;1X500MLP		#Containers: 3				Scr:		Alpha:		Beta:
9 MTDMW-1-AA													
J2E030465-7-SAMP													
05/03/2012 10:27			AmtRec: 2X125P;1X500MLP		#Containers: 3				Scr:		Alpha:		Beta:
10 MTDMX-1-AA													
J2E030465-8-SAMP													
05/03/2012 10:39			AmtRec: 2X125P;1X500MLP		#Containers: 3				Scr:		Alpha:		Beta:
11 MTDM0-1-AA													
J2E030465-9-SAMP													
05/03/2012 10:51			AmtRec: 2X125P;1X500MLP		#Containers: 3				Scr:		Alpha:		Beta:
12 MTDM1-1-AA													
J2E030465-10-SAMP													
05/03/2012 11:03			AmtRec: 2X125P;1X500MLP		#Containers: 3				Scr:		Alpha:		Beta:
13 MTDNK-1-AA-B													
J2E030000-173-BLK													
05/04/2012 10:08 pd			AmtRec:		#Containers: 1				Scr:		Alpha:		Beta:
14 MTDNK-1-AC-C													
J2E030000-173-LCS													
05/04/2012 10:08 pd			AmtRec:		#Containers: 1				Scr:		Alpha:		Beta:

5/4/2012 10:08:20 AM

Sample Preparation/Analysis

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

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

AnalyDueDate: 05/10/2012

Batch: 2124173 **mg/kg**
SEQ Batch, Test: None

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:

Comments:

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

MTDMN1AA-SAMP Constituent List:
  HEXCHROME   RDL:0.1548      mg/kg     LCL:80      UCL:120     RPD:20
MTDMN1AH-MS Constituent List:

MTDNK1AA-BLK:

MTDNK1AC-LCS:

MTDMN1AA-SAMP Calc Info:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
MTDMN1AH-MS Calc Info:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
MTDNK1AA-BLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
MTDNK1AC-LCS:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
```

ANALYTICAL REPORT

Job Number: 280-28595-1

SDG Number: JP0388

Job Description: SAF# RC-074

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

Attention: Joan H Kessner

Approved for release.
Kae E Yoder
Project Manager II
5/15/2012 10:16 AM

Kae E Yoder
Project Manager II
kae.yoder@testamericainc.com
05/15/2012

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: 280-28595-1

SDG #: JP0388
SAF#: RC-074

Date SDG Closed: May 8, 2012
Data Deliverable: 7 Day / Summary

CLIENT ID	LAB ID	ANALYSES REQUESTED	ANALYSES PERFORMED
J1P1V2	280-28595-1	6010/7471/8270A/8310/8081	6010B/7471A/8270C/8310/8081A
J1P1V3	280-28595-2	6010/7471/8270A/8310/8081	6010B/7471A/8270C/8310/8081A
J1P1V4	280-28595-3	6010/7471/8270A/8310/8081	6010B/7471A/8270C/8310/8081A
J1P1V5	280-28595-4	6010/7471/8270A/8310/8081	6010B/7471A/8270C/8310/8081A
J1P1V6	280-28595-5	6010/7471/8270A/8310/8081	6010B/7471A/8270C/8310/8081A
J1P1V7	280-28595-6	6010/7471/8270A/8310/8081	6010B/7471A/8270C/8310/8081A
J1P1V8	280-28595-7	6010/7471/8270A/8310/8081	6010B/7471A/8270C/8310/8081A
J1P1V9	280-28595-8	6010/7471/8270A/8310/8081	6010B/7471A/8270C/8310/8081A
J1P1W0	280-28595-9	6010/7471/8270A/8310/8081	6010B/7471A/8270C/8310/8081A
J1P1W1	280-28595-10	6010/7471/8270A/8310/8081	6010B/7471A/8270C/8310/8081A

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

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

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

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

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

RECEIPT
The samples were received on 5/8/2012 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.0º C.

GC/MS SEMIVOLATILES - SW846 8270C
The MS/MSD performed on sample J1P1V6 exhibited the percent recovery outside the control limits for 2,4-Dinitrophenol, 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 SEMIVOLATILES - SW846 8081A - PESTICIDEs
No anomalies were encountered.

HPLC - SW846 8310 - PAHs
The RPD between the primary and confirmation columns exceeded 40% for Benzo[a]anthracene in sample J1P1V7. The lower of the two values has been reported, as matrix interference is evident on both columns. The result has been flagged with an "X".

No other anomalies were encountered.

TOTAL METALS - SW846 6010B/7471A

Serial dilution of a digestate in batch 280-118875 indicates that physical and chemical interferences are present for Chromium, Cobalt, Nickel and Zinc. 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 J1P1V5 required a 5X dilution prior to the analysis of 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.

Silicon was recovered outside the control limits, biased low, in the LCS associated with batch 280-118875 and in the Matrix Spike performed on sample J1P1V2 in batch 280-118875. The associated sample results have been flagged “N”. Silicon is a poor performer and has a history of reacting inconsistently. Data are reported as is.

It can be noted that the sample amount was greater than four times the spike amount for Aluminum, Iron and Manganese in the Matrix Spike performed on sample J1P1V2; therefore, control limits are not applicable.

No other anomalies were encountered.

DATA REPORTING QUALIFIERS

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Lab Section	Qualifier	Description
GC/MS Semi 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.
GC Semi VOA		
	U	Analyzed for but not detected.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
Metals		
	U	Analyzed for but not detected.
	B	Estimated result. Result is less than the RL, but greater than MDL
	4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
	N	Recovery exceeds upper or lower control limits
	X	Serial dilution in the analytical batch indicates that physical and chemical interferences are present.
HPLC/IC		
	U	Analyzed for but not detected.
	X	More than 40% difference between columns, lower result reported.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

METHOD SUMMARY

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Semivolatile Organic Compounds (GC/MS)	TAL DEN	SW846 8270C	
Ultrasonic Extraction	TAL DEN		SW846 3550C
Organochlorine Pesticides (GC)	TAL DEN	SW846 8081A	
Ultrasonic Extraction	TAL DEN		SW846 3550C
PAHs (HPLC)	TAL DEN	SW846 8310	
Ultrasonic Extraction	TAL DEN		SW846 3550C
Metals (ICP)	TAL DEN	SW846 6010B	
Preparation, Metals	TAL DEN		SW846 3050B
Mercury (CVAA)	TAL DEN	SW846 7471A	
Preparation, Mercury	TAL DEN		SW846 7471A
ASTM D-2216	TAL DEN	ASTM D-2216	

Lab References:

TAL DEN = TestAmerica Denver

Method References:

ASTM = ASTM International

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

METHOD / ANALYST SUMMARY

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Method	Analyst	Analyst ID
SW846 8270C	Kiekel, Daniel C	DCK
SW846 8081A	Wells, David	DW
SW846 6010B	Harre, John K	JKH
SW846 7471A	Rawlings, Brendon L	BLR
ASTM D-2216	Blythe, Scott	SB
SW846 8310	Fiedler, Heather K	HKF

SAMPLE SUMMARY

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-28595-1	J1P1V2	Solid	05/03/2012 0915	05/08/2012 0900
280-28595-2	J1P1V3	Solid	05/03/2012 0927	05/08/2012 0900
280-28595-3	J1P1V4	Solid	05/03/2012 0939	05/08/2012 0900
280-28595-4	J1P1V5	Solid	05/03/2012 0951	05/08/2012 0900
280-28595-5	J1P1V6	Solid	05/03/2012 1003	05/08/2012 0900
280-28595-6	J1P1V7	Solid	05/03/2012 1015	05/08/2012 0900
280-28595-7	J1P1V8	Solid	05/03/2012 1027	05/08/2012 0900
280-28595-8	J1P1V9	Solid	05/03/2012 1039	05/08/2012 0900
280-28595-9	J1P1W0	Solid	05/03/2012 0951	05/08/2012 0900
280-28595-10	J1P1W1	Solid	05/03/2012 1103	05/08/2012 0900

SAMPLE RESULTS

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V2**

Lab Sample ID: 280-28595-1
Client Matrix: Solid
% Moisture: 3.7

Date Sampled: 05/03/2012 0915
Date Received: 05/08/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Prep Method:	3550C	Prep Batch:	280-118868	Lab File ID:	K5040.D
Dilution:	1.0			Initial Weight/Volume:	30.8 g
Analysis Date:	05/10/2012 2108			Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			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		47	U	47	330
4-Bromophenyl phenyl ether		19	U	19	330
Butyl benzyl phthalate		44	U	44	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: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V2**

Lab Sample ID: 280-28595-1
Client Matrix: Solid
% Moisture: 3.7

Date Sampled: 05/03/2012 0915
Date Received: 05/08/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Prep Method:	3550C	Prep Batch:	280-118868	Lab File ID:	K5040.D
Dilution:	1.0			Initial Weight/Volume:	30.8 g
Analysis Date:	05/10/2012 2108			Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			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	84		50 - 120
2-Fluorophenol	85		53 - 120
Nitrobenzene-d5	85		50 - 120
Phenol-d5	86		52 - 120
Terphenyl-d14	88		55 - 120
2,4,6-Tribromophenol	77		51 - 120

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V2**

Lab Sample ID: 280-28595-1
Client Matrix: Solid
% Moisture: 3.7

Date Sampled: 05/03/2012 0915
Date Received: 05/08/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Prep Method:	3550C	Prep Batch:	280-118868	Lab File ID:	K5040.D
Dilution:	1.0			Initial Weight/Volume:	30.8 g
Analysis Date:	05/10/2012 2108			Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	2.82	2500	N J

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V3**

Lab Sample ID: 280-28595-2
Client Matrix: Solid
% Moisture: 5.4

Date Sampled: 05/03/2012 0927
Date Received: 05/08/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Prep Method:	3550C	Prep Batch:	280-118868	Lab File ID:	K5041.D
Dilution:	1.0			Initial Weight/Volume:	32.4 g
Analysis Date:	05/10/2012 2128			Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			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		23	U	23	320
Bis(2-chloroethyl)ether		16	U	16	320
bis (2-chloroisopropyl) ether		23	U	23	320
Bis(2-ethylhexyl) phthalate		45	U	45	320
4-Bromophenyl phenyl ether		19	U	19	320
Butyl benzyl phthalate		42	U	42	320
Carbazole		35	U	35	320
4-Chloroaniline		80	U	80	320
4-Chloro-3-methylphenol		65	U	65	320
2-Chloronaphthalene		9.8	U	9.8	320
2-Chlorophenol		21	U	21	320
4-Chlorophenyl phenyl ether		21	U	21	320
Chrysene		26	U	26	320
Dibenz(a,h)anthracene		19	U	19	320
Dibenzofuran		20	U	20	320
1,2-Dichlorobenzene		22	U	22	320
1,3-Dichlorobenzene		12	U	12	320
1,4-Dichlorobenzene		13	U	13	320
3,3'-Dichlorobenzidine		88	U	88	650
2,4-Dichlorophenol		9.8	U	9.8	320
Diethyl phthalate		25	U	25	320
2,4-Dimethylphenol		65	U	65	320
Dimethyl phthalate		23	U	23	320
Di-n-butyl phthalate		28	U	28	320
4,6-Dinitro-2-methylphenol		320	U	320	650
2,4-Dinitrophenol		330	U	330	810
2,4-Dinitrotoluene		65	U	65	320
2,6-Dinitrotoluene		27	U	27	320
Di-n-octyl phthalate		14	U	14	320
Fluoranthene		35	U	35	320
Fluorene		18	U	18	320
Hexachlorobenzene		28	U	28	320
Hexachlorobutadiene		9.8	U	9.8	320
Hexachlorocyclopentadiene		49	U	49	320
Hexachloroethane		21	U	21	320
Indeno[1,2,3-cd]pyrene		22	U	22	320
Isophorone		17	U	17	320
2-Methylnaphthalene		19	U	19	320

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V3**

Lab Sample ID: 280-28595-2
Client Matrix: Solid
% Moisture: 5.4

Date Sampled: 05/03/2012 0927
Date Received: 05/08/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Prep Method:	3550C	Prep Batch:	280-118868	Lab File ID:	K5041.D
Dilution:	1.0			Initial Weight/Volume:	32.4 g
Analysis Date:	05/10/2012 2128			Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2-Methylphenol		13	U	13	320
3 & 4 Methylphenol		32	U	32	320
Naphthalene		30	U	30	320
2-Nitroaniline		49	U	49	320
3-Nitroaniline		71	U	71	320
4-Nitroaniline		71	U	71	320
Nitrobenzene		22	U	22	320
2-Nitrophenol		9.8	U	9.8	320
4-Nitrophenol		95	U	95	650
N-Nitrosodi-n-propylamine		30	U	30	320
N-Nitrosodiphenylamine		21	U	21	320
Pentachlorophenol		320	U	320	650
Phenanthrene		17	U	17	320
Phenol		18	U	18	320
Pyrene		12	U	12	320
1,2,4-Trichlorobenzene		27	U	27	320
2,4,5-Trichlorophenol		9.8	U	9.8	320
2,4,6-Trichlorophenol		9.8	U	9.8	320

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	80		50 - 120
2-Fluorophenol	80		53 - 120
Nitrobenzene-d5	80		50 - 120
Phenol-d5	82		52 - 120
Terphenyl-d14	84		55 - 120
2,4,6-Tribromophenol	72		51 - 120

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V3**

Lab Sample ID: 280-28595-2
Client Matrix: Solid
% Moisture: 5.4

Date Sampled: 05/03/2012 0927
Date Received: 05/08/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Prep Method:	3550C	Prep Batch:	280-118868	Lab File ID:	K5041.D
Dilution:	1.0			Initial Weight/Volume:	32.4 g
Analysis Date:	05/10/2012 2128			Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	2.82	2100	N J

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V4**

Lab Sample ID: 280-28595-3
Client Matrix: Solid
% Moisture: 3.0

Date Sampled: 05/03/2012 0939
Date Received: 05/08/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Prep Method:	3550C	Prep Batch:	280-118868	Lab File ID:	K5042.D
Dilution:	1.0			Initial Weight/Volume:	31.1 g
Analysis Date:	05/10/2012 2149			Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	330
Acenaphthylene		17	U	17	330
Anthracene		17	U	17	330
Benzo[a]anthracene		20	U	20	330
Benzo[a]pyrene		20	U	20	330
Benzo[b]fluoranthene		26	U	26	330
Benzo[ghi]perylene		16	U	16	330
Benzo[k]fluoranthene		40	U	40	330
Bis(2-chloroethoxy)methane		23	U	23	330
Bis(2-chloroethyl)ether		17	U	17	330
bis (2-chloroisopropyl) ether		23	U	23	330
Bis(2-ethylhexyl) phthalate		46	U	46	330
4-Bromophenyl phenyl ether		19	U	19	330
Butyl benzyl phthalate		43	U	43	330
Carbazole		36	U	36	330
4-Chloroaniline		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: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V4**

Lab Sample ID: 280-28595-3
Client Matrix: Solid
% Moisture: 3.0

Date Sampled: 05/03/2012 0939
Date Received: 05/08/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Prep Method:	3550C	Prep Batch:	280-118868	Lab File ID:	K5042.D
Dilution:	1.0			Initial Weight/Volume:	31.1 g
Analysis Date:	05/10/2012 2149			Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2-Methylphenol		13	U	13	330
3 & 4 Methylphenol		33	U	33	330
Naphthalene		31	U	31	330
2-Nitroaniline		50	U	50	330
3-Nitroaniline		73	U	73	330
4-Nitroaniline		72	U	72	330
Nitrobenzene		22	U	22	330
2-Nitrophenol		9.9	U	9.9	330
4-Nitrophenol		96	U	96	660
N-Nitrosodi-n-propylamine		31	U	31	330
N-Nitrosodiphenylamine		21	U	21	330
Pentachlorophenol		330	U	330	660
Phenanthrene		17	U	17	330
Phenol		18	U	18	330
Pyrene		12	U	12	330
1,2,4-Trichlorobenzene		28	U	28	330
2,4,5-Trichlorophenol		9.9	U	9.9	330
2,4,6-Trichlorophenol		9.9	U	9.9	330

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	81		50 - 120
2-Fluorophenol	84		53 - 120
Nitrobenzene-d5	81		50 - 120
Phenol-d5	83		52 - 120
Terphenyl-d14	86		55 - 120
2,4,6-Tribromophenol	78		51 - 120

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V4**

Lab Sample ID: 280-28595-3
Client Matrix: Solid
% Moisture: 3.0

Date Sampled: 05/03/2012 0939
Date Received: 05/08/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Prep Method:	3550C	Prep Batch:	280-118868	Lab File ID:	K5042.D
Dilution:	1.0			Initial Weight/Volume:	31.1 g
Analysis Date:	05/10/2012 2149			Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	1.65	200	N J
	Unknown	2.82	2600	N J

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V5**

Lab Sample ID: 280-28595-4
Client Matrix: Solid
% Moisture: 5.1

Date Sampled: 05/03/2012 0951
Date Received: 05/08/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Prep Method:	3550C	Prep Batch:	280-118868	Lab File ID:	K5043.D
Dilution:	1.0			Initial Weight/Volume:	30.2 g
Analysis Date:	05/10/2012 2210			Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		11	U	11	350
Acenaphthylene		18	U	18	350
Anthracene		18	U	18	350
Benzo[a]anthracene		21	U	21	350
Benzo[a]pyrene		21	U	21	350
Benzo[b]fluoranthene		27	U	27	350
Benzo[ghi]perylene		17	U	17	350
Benzo[k]fluoranthene		42	U	42	350
Bis(2-chloroethoxy)methane		24	U	24	350
Bis(2-chloroethyl)ether		17	U	17	350
bis (2-chloroisopropyl) ether		24	U	24	350
Bis(2-ethylhexyl) phthalate		48	U	48	350
4-Bromophenyl phenyl ether		20	U	20	350
Butyl benzyl phthalate		45	U	45	350
Carbazole		38	U	38	350
4-Chloroaniline		86	U	86	350
4-Chloro-3-methylphenol		69	U	69	350
2-Chloronaphthalene		10	U	10	350
2-Chlorophenol		22	U	22	350
4-Chlorophenyl phenyl ether		22	U	22	350
Chrysene		28	U	28	350
Dibenz(a,h)anthracene		20	U	20	350
Dibenzofuran		21	U	21	350
1,2-Dichlorobenzene		23	U	23	350
1,3-Dichlorobenzene		13	U	13	350
1,4-Dichlorobenzene		14	U	14	350
3,3'-Dichlorobenzidine		94	U	94	690
2,4-Dichlorophenol		10	U	10	350
Diethyl phthalate		27	U	27	350
2,4-Dimethylphenol		69	U	69	350
Dimethyl phthalate		24	U	24	350
Di-n-butyl phthalate		30	U	30	350
4,6-Dinitro-2-methylphenol		350	U	350	690
2,4-Dinitrophenol		350	U	350	860
2,4-Dinitrotoluene		69	U	69	350
2,6-Dinitrotoluene		29	U	29	350
Di-n-octyl phthalate		15	U	15	350
Fluoranthene		38	U	38	350
Fluorene		19	U	19	350
Hexachlorobenzene		30	U	30	350
Hexachlorobutadiene		10	U	10	350
Hexachlorocyclopentadiene		52	U	52	350
Hexachloroethane		22	U	22	350
Indeno[1,2,3-cd]pyrene		23	U	23	350
Isophorone		18	U	18	350
2-Methylnaphthalene		20	U	20	350

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V5**

Lab Sample ID: 280-28595-4
Client Matrix: Solid
% Moisture: 5.1

Date Sampled: 05/03/2012 0951
Date Received: 05/08/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Prep Method:	3550C	Prep Batch:	280-118868	Lab File ID:	K5043.D
Dilution:	1.0			Initial Weight/Volume:	30.2 g
Analysis Date:	05/10/2012 2210			Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2-Methylphenol		14	U	14	350
3 & 4 Methylphenol		35	U	35	350
Naphthalene		32	U	32	350
2-Nitroaniline		52	U	52	350
3-Nitroaniline		76	U	76	350
4-Nitroaniline		76	U	76	350
Nitrobenzene		23	U	23	350
2-Nitrophenol		10	U	10	350
4-Nitrophenol		100	U	100	690
N-Nitrosodi-n-propylamine		32	U	32	350
N-Nitrosodiphenylamine		22	U	22	350
Pentachlorophenol		350	U	350	690
Phenanthrene		18	U	18	350
Phenol		19	U	19	350
Pyrene		13	U	13	350
1,2,4-Trichlorobenzene		29	U	29	350
2,4,5-Trichlorophenol		10	U	10	350
2,4,6-Trichlorophenol		10	U	10	350

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	83		50 - 120
2-Fluorophenol	86		53 - 120
Nitrobenzene-d5	85		50 - 120
Phenol-d5	86		52 - 120
Terphenyl-d14	90		55 - 120
2,4,6-Tribromophenol	77		51 - 120

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V5**

Lab Sample ID: 280-28595-4
Client Matrix: Solid
% Moisture: 5.1

Date Sampled: 05/03/2012 0951
Date Received: 05/08/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Prep Method:	3550C	Prep Batch:	280-118868	Lab File ID:	K5043.D
Dilution:	1.0			Initial Weight/Volume:	30.2 g
Analysis Date:	05/10/2012 2210			Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	2.82	2700	N J

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V6**

Lab Sample ID: 280-28595-5
Client Matrix: Solid
% Moisture: 3.9

Date Sampled: 05/03/2012 1003
Date Received: 05/08/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Prep Method:	3550C	Prep Batch:	280-118868	Lab File ID:	K5044.D
Dilution:	1.0			Initial Weight/Volume:	30.5 g
Analysis Date:	05/10/2012 2230			Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		11	U	11	340
Acenaphthylene		17	U	17	340
Anthracene		17	U	17	340
Benzo[a]anthracene		20	U	20	340
Benzo[a]pyrene		20	U	20	340
Benzo[b]fluoranthene		27	U	27	340
Benzo[ghi]perylene		16	U	16	340
Benzo[k]fluoranthene		41	U	41	340
Bis(2-chloroethoxy)methane		24	U	24	340
Bis(2-chloroethyl)ether		17	U	17	340
bis (2-chloroisopropyl) ether		24	U	24	340
Bis(2-ethylhexyl) phthalate		47	U	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		21	U	21	340
4-Chlorophenyl phenyl ether		21	U	21	340
Chrysene		28	U	28	340
Dibenz(a,h)anthracene		19	U	19	340
Dibenzofuran		20	U	20	340
1,2-Dichlorobenzene		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 T	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: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V6**

Lab Sample ID: 280-28595-5
Client Matrix: Solid
% Moisture: 3.9

Date Sampled: 05/03/2012 1003
Date Received: 05/08/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Prep Method:	3550C	Prep Batch:	280-118868	Lab File ID:	K5044.D
Dilution:	1.0			Initial Weight/Volume:	30.5 g
Analysis Date:	05/10/2012 2230			Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			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		21	U	21	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	82		50 - 120
2-Fluorophenol	83		53 - 120
Nitrobenzene-d5	80		50 - 120
Phenol-d5	83		52 - 120
Terphenyl-d14	87		55 - 120
2,4,6-Tribromophenol	75		51 - 120

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V6**

Lab Sample ID: 280-28595-5
Client Matrix: Solid
% Moisture: 3.9

Date Sampled: 05/03/2012 1003
Date Received: 05/08/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Prep Method:	3550C	Prep Batch:	280-118868	Lab File ID:	K5044.D
Dilution:	1.0			Initial Weight/Volume:	30.5 g
Analysis Date:	05/10/2012 2230			Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	2.82	2300	N J

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V7**

Lab Sample ID: 280-28595-6
Client Matrix: Solid
% Moisture: 4.0

Date Sampled: 05/03/2012 1015
Date Received: 05/08/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Prep Method:	3550C	Prep Batch:	280-118868	Lab File ID:	K5047.D
Dilution:	1.0			Initial Weight/Volume:	30.9 g
Analysis Date:	05/10/2012 2332			Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	330
Acenaphthylene		17	U	17	330
Anthracene		17	U	17	330
Benzo[a]anthracene		20	U	20	330
Benzo[a]pyrene		20	U	20	330
Benzo[b]fluoranthene		26	U	26	330
Benzo[ghi]perylene		16	U	16	330
Benzo[k]fluoranthene		40	U	40	330
Bis(2-chloroethoxy)methane		23	U	23	330
Bis(2-chloroethyl)ether		17	U	17	330
bis (2-chloroisopropyl) ether		23	U	23	330
Bis(2-ethylhexyl) phthalate		46	U	46	330
4-Bromophenyl phenyl ether		19	U	19	330
Butyl benzyl phthalate		43	U	43	330
Carbazole		36	U	36	330
4-Chloroaniline		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: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V7**

Lab Sample ID: 280-28595-6
Client Matrix: Solid
% Moisture: 4.0

Date Sampled: 05/03/2012 1015
Date Received: 05/08/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Prep Method:	3550C	Prep Batch:	280-118868	Lab File ID:	K5047.D
Dilution:	1.0			Initial Weight/Volume:	30.9 g
Analysis Date:	05/10/2012 2332			Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			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	78		50 - 120
2-Fluorophenol	82		53 - 120
Nitrobenzene-d5	80		50 - 120
Phenol-d5	83		52 - 120
Terphenyl-d14	86		55 - 120
2,4,6-Tribromophenol	75		51 - 120

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V7**

Lab Sample ID: 280-28595-6
Client Matrix: Solid
% Moisture: 4.0

Date Sampled: 05/03/2012 1015
Date Received: 05/08/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Prep Method:	3550C	Prep Batch:	280-118868	Lab File ID:	K5047.D
Dilution:	1.0			Initial Weight/Volume:	30.9 g
Analysis Date:	05/10/2012 2332			Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	2.82	2200	N J

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V8**

Lab Sample ID: 280-28595-7
Client Matrix: Solid
% Moisture: 4.8

Date Sampled: 05/03/2012 1027
Date Received: 05/08/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Prep Method:	3550C	Prep Batch:	280-118868	Lab File ID:	K5048.D
Dilution:	1.0			Initial Weight/Volume:	30.4 g
Analysis Date:	05/10/2012 2353			Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		11	U	11	340
Acenaphthylene		18	U	18	340
Anthracene		18	U	18	340
Benzo[a]anthracene		21	U	21	340
Benzo[a]pyrene		21	U	21	340
Benzo[b]fluoranthene		27	U	27	340
Benzo[ghi]perylene		17	U	17	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		48	U	48	340
4-Bromophenyl phenyl ether		20	U	20	340
Butyl benzyl phthalate		45	U	45	340
Carbazole		37	U	37	340
4-Chloroaniline		85	U	85	340
4-Chloro-3-methylphenol		68	U	68	340
2-Chloronaphthalene		10	U	10	340
2-Chlorophenol		22	U	22	340
4-Chlorophenyl phenyl ether		22	U	22	340
Chrysene		28	U	28	340
Dibenz(a,h)anthracene		20	U	20	340
Dibenzofuran		21	U	21	340
1,2-Dichlorobenzene		23	U	23	340
1,3-Dichlorobenzene		12	U	12	340
1,4-Dichlorobenzene		14	U	14	340
3,3'-Dichlorobenzidine		93	U	93	680
2,4-Dichlorophenol		10	U	10	340
Diethyl phthalate		27	U	27	340
2,4-Dimethylphenol		68	U	68	340
Dimethyl phthalate		24	U	24	340
Di-n-butyl phthalate		30	U	30	340
4,6-Dinitro-2-methylphenol		340	U	340	680
2,4-Dinitrophenol		350	U	350	860
2,4-Dinitrotoluene		68	U	68	340
2,6-Dinitrotoluene		29	U	29	340
Di-n-octyl phthalate		15	U	15	340
Fluoranthene		37	U	37	340
Fluorene		19	U	19	340
Hexachlorobenzene		30	U	30	340
Hexachlorobutadiene		10	U	10	340
Hexachlorocyclopentadiene		52	U	52	340
Hexachloroethane		22	U	22	340
Indeno[1,2,3-cd]pyrene		23	U	23	340
Isophorone		18	U	18	340
2-Methylnaphthalene		20	U	20	340

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V8**

Lab Sample ID: 280-28595-7
Client Matrix: Solid
% Moisture: 4.8

Date Sampled: 05/03/2012 1027
Date Received: 05/08/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Prep Method:	3550C	Prep Batch:	280-118868	Lab File ID:	K5048.D
Dilution:	1.0			Initial Weight/Volume:	30.4 g
Analysis Date:	05/10/2012 2353			Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			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		52	U	52	340
3-Nitroaniline		76	U	76	340
4-Nitroaniline		75	U	75	340
Nitrobenzene		23	U	23	340
2-Nitrophenol		10	U	10	340
4-Nitrophenol		100	U	100	680
N-Nitrosodi-n-propylamine		32	U	32	340
N-Nitrosodiphenylamine		22	U	22	340
Pentachlorophenol		340	U	340	680
Phenanthrene		18	U	18	340
Phenol		19	U	19	340
Pyrene		13	U	13	340
1,2,4-Trichlorobenzene		29	U	29	340
2,4,5-Trichlorophenol		10	U	10	340
2,4,6-Trichlorophenol		10	U	10	340

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	79		50 - 120
2-Fluorophenol	81		53 - 120
Nitrobenzene-d5	79		50 - 120
Phenol-d5	83		52 - 120
Terphenyl-d14	86		55 - 120
2,4,6-Tribromophenol	73		51 - 120

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V8**

Lab Sample ID: 280-28595-7
Client Matrix: Solid
% Moisture: 4.8

Date Sampled: 05/03/2012 1027
Date Received: 05/08/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Prep Method:	3550C	Prep Batch:	280-118868	Lab File ID:	K5048.D
Dilution:	1.0			Initial Weight/Volume:	30.4 g
Analysis Date:	05/10/2012 2353			Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	2.82	2500	N J

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V9**

Lab Sample ID: 280-28595-8
Client Matrix: Solid
% Moisture: 4.4

Date Sampled: 05/03/2012 1039
Date Received: 05/08/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Prep Method:	3550C	Prep Batch:	280-118868	Lab File ID:	K5049.D
Dilution:	1.0			Initial Weight/Volume:	31.7 g
Analysis Date:	05/11/2012 0014			Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			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		46	U	46	330
4-Bromophenyl phenyl ether		19	U	19	330
Butyl benzyl phthalate		43	U	43	330
Carbazole		36	U	36	330
4-Chloroaniline		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: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V9**

Lab Sample ID: 280-28595-8
Client Matrix: Solid
% Moisture: 4.4

Date Sampled: 05/03/2012 1039
Date Received: 05/08/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Prep Method:	3550C	Prep Batch:	280-118868	Lab File ID:	K5049.D
Dilution:	1.0			Initial Weight/Volume:	31.7 g
Analysis Date:	05/11/2012 0014			Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			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	87		50 - 120
2-Fluorophenol	87		53 - 120
Nitrobenzene-d5	85		50 - 120
Phenol-d5	88		52 - 120
Terphenyl-d14	93		55 - 120
2,4,6-Tribromophenol	80		51 - 120

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V9**

Lab Sample ID: 280-28595-8
Client Matrix: Solid
% Moisture: 4.4

Date Sampled: 05/03/2012 1039
Date Received: 05/08/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Prep Method:	3550C	Prep Batch:	280-118868	Lab File ID:	K5049.D
Dilution:	1.0			Initial Weight/Volume:	31.7 g
Analysis Date:	05/11/2012 0014			Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	2.82	2500	N J

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1W0**

Lab Sample ID: 280-28595-9
Client Matrix: Solid
% Moisture: 4.7

Date Sampled: 05/03/2012 0951
Date Received: 05/08/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Prep Method:	3550C	Prep Batch:	280-118868	Lab File ID:	K5050.D
Dilution:	1.0			Initial Weight/Volume:	32.2 g
Analysis Date:	05/11/2012 0034			Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			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		45	U	45	320
4-Bromophenyl phenyl ether		19	U	19	320
Butyl benzyl phthalate		42	U	42	320
Carbazole		35	U	35	320
4-Chloroaniline		80	U	80	320
4-Chloro-3-methylphenol		65	U	65	320
2-Chloronaphthalene		9.8	U	9.8	320
2-Chlorophenol		21	U	21	320
4-Chlorophenyl phenyl ether		21	U	21	320
Chrysene		26	U	26	320
Dibenz(a,h)anthracene		19	U	19	320
Dibenzofuran		20	U	20	320
1,2-Dichlorobenzene		22	U	22	320
1,3-Dichlorobenzene		12	U	12	320
1,4-Dichlorobenzene		13	U	13	320
3,3'-Dichlorobenzidine		88	U	88	650
2,4-Dichlorophenol		9.8	U	9.8	320
Diethyl phthalate		25	U	25	320
2,4-Dimethylphenol		65	U	65	320
Dimethyl phthalate		22	U	22	320
Di-n-butyl phthalate		28	U	28	320
4,6-Dinitro-2-methylphenol		320	U	320	650
2,4-Dinitrophenol		330	U	330	810
2,4-Dinitrotoluene		65	U	65	320
2,6-Dinitrotoluene		27	U	27	320
Di-n-octyl phthalate		14	U	14	320
Fluoranthene		35	U	35	320
Fluorene		18	U	18	320
Hexachlorobenzene		28	U	28	320
Hexachlorobutadiene		9.8	U	9.8	320
Hexachlorocyclopentadiene		49	U	49	320
Hexachloroethane		21	U	21	320
Indeno[1,2,3-cd]pyrene		22	U	22	320
Isophorone		17	U	17	320
2-Methylnaphthalene		19	U	19	320

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1W0**

Lab Sample ID: 280-28595-9
Client Matrix: Solid
% Moisture: 4.7

Date Sampled: 05/03/2012 0951
Date Received: 05/08/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Prep Method:	3550C	Prep Batch:	280-118868	Lab File ID:	K5050.D
Dilution:	1.0			Initial Weight/Volume:	32.2 g
Analysis Date:	05/11/2012 0034			Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2-Methylphenol		13	U	13	320
3 & 4 Methylphenol		32	U	32	320
Naphthalene		30	U	30	320
2-Nitroaniline		49	U	49	320
3-Nitroaniline		71	U	71	320
4-Nitroaniline		71	U	71	320
Nitrobenzene		22	U	22	320
2-Nitrophenol		9.8	U	9.8	320
4-Nitrophenol		95	U	95	650
N-Nitrosodi-n-propylamine		30	U	30	320
N-Nitrosodiphenylamine		21	U	21	320
Pentachlorophenol		320	U	320	650
Phenanthrene		17	U	17	320
Phenol		18	U	18	320
Pyrene		12	U	12	320
1,2,4-Trichlorobenzene		27	U	27	320
2,4,5-Trichlorophenol		9.8	U	9.8	320
2,4,6-Trichlorophenol		9.8	U	9.8	320

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	85		50 - 120
2-Fluorophenol	85		53 - 120
Nitrobenzene-d5	87		50 - 120
Phenol-d5	88		52 - 120
Terphenyl-d14	91		55 - 120
2,4,6-Tribromophenol	79		51 - 120

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1W0**

Lab Sample ID: 280-28595-9
Client Matrix: Solid
% Moisture: 4.7

Date Sampled: 05/03/2012 0951
Date Received: 05/08/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Prep Method:	3550C	Prep Batch:	280-118868	Lab File ID:	K5050.D
Dilution:	1.0			Initial Weight/Volume:	32.2 g
Analysis Date:	05/11/2012 0034			Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	2.82	2500	N J

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1W1**

Lab Sample ID: 280-28595-10
Client Matrix: Solid
% Moisture: 4.8

Date Sampled: 05/03/2012 1103
Date Received: 05/08/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Prep Method:	3550C	Prep Batch:	280-118868	Lab File ID:	K5051.D
Dilution:	1.0			Initial Weight/Volume:	31.5 g
Analysis Date:	05/11/2012 0055			Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			Injection Volume:	0.5 uL

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

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1W1**

Lab Sample ID: 280-28595-10
Client Matrix: Solid
% Moisture: 4.8

Date Sampled: 05/03/2012 1103
Date Received: 05/08/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Prep Method:	3550C	Prep Batch:	280-118868	Lab File ID:	K5051.D
Dilution:	1.0			Initial Weight/Volume:	31.5 g
Analysis Date:	05/11/2012 0055			Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			Injection Volume:	0.5 uL

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

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	81		50 - 120
2-Fluorophenol	83		53 - 120
Nitrobenzene-d5	81		50 - 120
Phenol-d5	84		52 - 120
Terphenyl-d14	86		55 - 120
2,4,6-Tribromophenol	76		51 - 120

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1W1**

Lab Sample ID: 280-28595-10
Client Matrix: Solid
% Moisture: 4.8

Date Sampled: 05/03/2012 1103
Date Received: 05/08/2012 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Prep Method:	3550C	Prep Batch:	280-118868	Lab File ID:	K5051.D
Dilution:	1.0			Initial Weight/Volume:	31.5 g
Analysis Date:	05/11/2012 0055			Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	2.82	2400	N J

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V2**

Lab Sample ID: 280-28595-1
Client Matrix: Solid
% Moisture: 3.7

Date Sampled: 05/03/2012 0915
Date Received: 05/08/2012 0900

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-119369	Instrument ID:	GCS_P1
Prep Method:	3550C	Prep Batch:	280-118883	Initial Weight/Volume:	31.5 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	05/10/2012 2022			Injection Volume:	1 uL
Prep Date:	05/08/2012 1750			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.54	U	0.54	1.7
4,4'-DDE		0.24	U	0.24	1.7
4,4'-DDT		0.58	U	0.58	1.7
Aldrin		0.25	U	0.25	1.6
alpha-BHC		0.21	U	0.21	1.6
beta-BHC		0.66	U	0.66	1.6
delta-BHC		0.40	U	0.40	1.6
gamma-BHC (Lindane)		0.46	U	0.46	1.6
Heptachlor		0.21	U	0.21	1.6
Heptachlor epoxide		0.42	U	0.42	1.6
Endosulfan I		0.17	U	0.17	1.6
Endosulfan II		0.28	U	0.28	1.7
Endosulfan sulfate		0.27	U	0.27	1.7
Endrin		0.30	U	0.30	1.7
Endrin aldehyde		0.17	U	0.17	1.7
Endrin ketone		0.48	U	0.48	1.7
gamma-Chlordane		0.26	U	0.26	1.7
Methoxychlor		0.45	U	0.45	3.3
alpha-Chlordane		0.32	U	0.32	1.7
Dieldrin		0.21	U	0.21	1.7
Toxaphene		16	U	16	160

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	93		59 - 115
Decachlorobiphenyl	105		63 - 124

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V3**

Lab Sample ID: 280-28595-2
Client Matrix: Solid
% Moisture: 5.4

Date Sampled: 05/03/2012 0927
Date Received: 05/08/2012 0900

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-119369	Instrument ID:	GCS_P1
Prep Method:	3550C	Prep Batch:	280-118883	Initial Weight/Volume:	32.4 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	05/10/2012 2039			Injection Volume:	1 uL
Prep Date:	05/08/2012 1750			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.53	U	0.53	1.7
4,4'-DDE		0.23	U	0.23	1.7
4,4'-DDT		0.58	U	0.58	1.7
Aldrin		0.25	U	0.25	1.6
alpha-BHC		0.21	U	0.21	1.6
beta-BHC		0.65	U	0.65	1.6
delta-BHC		0.39	U	0.39	1.6
gamma-BHC (Lindane)		0.45	U	0.45	1.6
Heptachlor		0.21	U	0.21	1.6
Heptachlor epoxide		0.42	U	0.42	1.6
Endosulfan I		0.17	U	0.17	1.6
Endosulfan II		0.28	U	0.28	1.7
Endosulfan sulfate		0.27	U	0.27	1.7
Endrin		0.30	U	0.30	1.7
Endrin aldehyde		0.17	U	0.17	1.7
Endrin ketone		0.48	U	0.48	1.7
gamma-Chlordane		0.26	U	0.26	1.7
Methoxychlor		0.44	U	0.44	3.2
alpha-Chlordane		0.32	U	0.32	1.7
Dieldrin		0.21	U	0.21	1.7
Toxaphene		15	U	15	160

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	92		59 - 115
Decachlorobiphenyl	105		63 - 124

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V4**

Lab Sample ID: 280-28595-3
Client Matrix: Solid
% Moisture: 3.0

Date Sampled: 05/03/2012 0939
Date Received: 05/08/2012 0900

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-119369	Instrument ID:	GCS_P1
Prep Method:	3550C	Prep Batch:	280-118883	Initial Weight/Volume:	30.5 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	05/10/2012 2056			Injection Volume:	1 uL
Prep Date:	05/08/2012 1750			Result Type:	PRIMARY

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

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	94		59 - 115
Decachlorobiphenyl	105		63 - 124

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V5**

Lab Sample ID: 280-28595-4
Client Matrix: Solid
% Moisture: 5.1

Date Sampled: 05/03/2012 0951
Date Received: 05/08/2012 0900

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-119369	Instrument ID:	GCS_P1
Prep Method:	3550C	Prep Batch:	280-118883	Initial Weight/Volume:	30.0 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	05/10/2012 2113			Injection Volume:	1 uL
Prep Date:	05/08/2012 1750			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.58	U	0.58	1.8
4,4'-DDE		0.25	U	0.25	1.8
4,4'-DDT		0.62	U	0.62	1.8
Aldrin		0.26	U	0.26	1.7
alpha-BHC		0.23	U	0.23	1.7
beta-BHC		0.70	U	0.70	1.7
delta-BHC		0.42	U	0.42	1.7
gamma-BHC (Lindane)		0.49	U	0.49	1.7
Heptachlor		0.23	U	0.23	1.7
Heptachlor epoxide		0.45	U	0.45	1.7
Endosulfan I		0.19	U	0.19	1.7
Endosulfan II		0.30	U	0.30	1.8
Endosulfan sulfate		0.29	U	0.29	1.8
Endrin		0.32	U	0.32	1.8
Endrin aldehyde		0.18	U	0.18	1.8
Endrin ketone		0.52	U	0.52	1.8
gamma-Chlordane		0.28	U	0.28	1.8
Methoxychlor		0.47	U	0.47	3.5
alpha-Chlordane		0.34	U	0.34	1.8
Dieldrin		0.22	U	0.22	1.8
Toxaphene		17	U	17	170

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	94		59 - 115
Decachlorobiphenyl	105		63 - 124

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V6**

Lab Sample ID: 280-28595-5
Client Matrix: Solid
% Moisture: 3.9

Date Sampled: 05/03/2012 1003
Date Received: 05/08/2012 0900

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-119369	Instrument ID:	GCS_P1
Prep Method:	3550C	Prep Batch:	280-118883	Initial Weight/Volume:	31.5 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	05/10/2012 2131			Injection Volume:	1 uL
Prep Date:	05/08/2012 1750			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.54	U	0.54	1.7
4,4'-DDE		0.51	J	0.24	1.7
4,4'-DDT		0.58	U	0.58	1.7
Aldrin		0.25	U	0.25	1.6
alpha-BHC		0.21	U	0.21	1.6
beta-BHC		0.66	U	0.66	1.6
delta-BHC		0.40	U	0.40	1.6
gamma-BHC (Lindane)		0.46	U	0.46	1.6
Heptachlor		0.21	U	0.21	1.6
Heptachlor epoxide		0.42	U	0.42	1.6
Endosulfan I		0.17	U	0.17	1.6
Endosulfan II		0.28	U	0.28	1.7
Endosulfan sulfate		0.27	U	0.27	1.7
Endrin		0.30	U	0.30	1.7
Endrin aldehyde		0.17	U	0.17	1.7
Endrin ketone		0.48	U	0.48	1.7
gamma-Chlordane		0.26	U	0.26	1.7
Methoxychlor		0.45	U	0.45	3.3
alpha-Chlordane		0.32	U	0.32	1.7
Dieldrin		0.21	U	0.21	1.7
Toxaphene		16	U	16	160

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	91		59 - 115
Decachlorobiphenyl	105		63 - 124

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V7**

Lab Sample ID: 280-28595-6
Client Matrix: Solid
% Moisture: 4.0

Date Sampled: 05/03/2012 1015
Date Received: 05/08/2012 0900

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-119369	Instrument ID:	GCS_P1
Prep Method:	3550C	Prep Batch:	280-118883	Initial Weight/Volume:	31.6 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	05/10/2012 2239			Injection Volume:	1 uL
Prep Date:	05/08/2012 1750			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.54	U	0.54	1.7
4,4'-DDE		0.24	U	0.24	1.7
4,4'-DDT		0.58	U	0.58	1.7
Aldrin		0.25	U	0.25	1.6
alpha-BHC		0.21	U	0.21	1.6
beta-BHC		0.66	U	0.66	1.6
delta-BHC		0.40	U	0.40	1.6
gamma-BHC (Lindane)		0.46	U	0.46	1.6
Heptachlor		0.21	U	0.21	1.6
Heptachlor epoxide		0.42	U	0.42	1.6
Endosulfan I		0.17	U	0.17	1.6
Endosulfan II		0.28	U	0.28	1.7
Endosulfan sulfate		0.27	U	0.27	1.7
Endrin		0.30	U	0.30	1.7
Endrin aldehyde		0.17	U	0.17	1.7
Endrin ketone		0.48	U	0.48	1.7
gamma-Chlordane		0.26	U	0.26	1.7
Methoxychlor		0.44	U	0.44	3.3
alpha-Chlordane		0.32	U	0.32	1.7
Dieldrin		0.21	U	0.21	1.7
Toxaphene		16	U	16	160

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	91		59 - 115
Decachlorobiphenyl	99		63 - 124

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V8**

Lab Sample ID: 280-28595-7
Client Matrix: Solid
% Moisture: 4.8

Date Sampled: 05/03/2012 1027
Date Received: 05/08/2012 0900

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-119369	Instrument ID:	GCS_P1
Prep Method:	3550C	Prep Batch:	280-118883	Initial Weight/Volume:	30.1 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	05/10/2012 2257			Injection Volume:	1 uL
Prep Date:	05/08/2012 1750			Result Type:	PRIMARY

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

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	87		59 - 115
Decachlorobiphenyl	105		63 - 124

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V9**

Lab Sample ID: 280-28595-8
Client Matrix: Solid
% Moisture: 4.4

Date Sampled: 05/03/2012 1039
Date Received: 05/08/2012 0900

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-119369	Instrument ID:	GCS_P1
Prep Method:	3550C	Prep Batch:	280-118883	Initial Weight/Volume:	31.3 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	05/10/2012 2314			Injection Volume:	1 uL
Prep Date:	05/08/2012 1750			Result Type:	PRIMARY

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

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	93		59 - 115
Decachlorobiphenyl	107		63 - 124

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1W0**

Lab Sample ID: 280-28595-9
Client Matrix: Solid
% Moisture: 4.7

Date Sampled: 05/03/2012 0951
Date Received: 05/08/2012 0900

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-119369	Instrument ID:	GCS_P1
Prep Method:	3550C	Prep Batch:	280-118883	Initial Weight/Volume:	31.9 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	05/10/2012 2331			Injection Volume:	1 uL
Prep Date:	05/08/2012 1750			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.54	U	0.54	1.7
4,4'-DDE		0.23	U	0.23	1.7
4,4'-DDT		0.58	U	0.58	1.7
Aldrin		0.25	U	0.25	1.6
alpha-BHC		0.21	U	0.21	1.6
beta-BHC		0.66	U	0.66	1.6
delta-BHC		0.40	U	0.40	1.6
gamma-BHC (Lindane)		0.46	U	0.46	1.6
Heptachlor		0.21	U	0.21	1.6
Heptachlor epoxide		0.42	U	0.42	1.6
Endosulfan I		0.17	U	0.17	1.6
Endosulfan II		0.28	U	0.28	1.7
Endosulfan sulfate		0.27	U	0.27	1.7
Endrin		0.30	U	0.30	1.7
Endrin aldehyde		0.17	U	0.17	1.7
Endrin ketone		0.48	U	0.48	1.7
gamma-Chlordane		0.26	U	0.26	1.7
Methoxychlor		0.44	U	0.44	3.3
alpha-Chlordane		0.32	U	0.32	1.7
Dieldrin		0.21	U	0.21	1.7
Toxaphene		16	U	16	160

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	88		59 - 115
Decachlorobiphenyl	103		63 - 124

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1W1**

Lab Sample ID: 280-28595-10
Client Matrix: Solid
% Moisture: 4.8

Date Sampled: 05/03/2012 1103
Date Received: 05/08/2012 0900

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-119369	Instrument ID:	GCS_P1
Prep Method:	3550C	Prep Batch:	280-118883	Initial Weight/Volume:	31.2 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	05/10/2012 2348			Injection Volume:	1 uL
Prep Date:	05/08/2012 1750			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.55	U	0.55	1.7
4,4'-DDE		0.24	U	0.24	1.7
4,4'-DDT		0.60	U	0.60	1.7
Aldrin		0.25	U	0.25	1.7
alpha-BHC		0.22	U	0.22	1.7
beta-BHC		0.67	U	0.67	1.7
delta-BHC		0.41	U	0.41	1.7
gamma-BHC (Lindane)		0.47	U	0.47	1.7
Heptachlor		0.22	U	0.22	1.7
Heptachlor epoxide		0.43	U	0.43	1.7
Endosulfan I		0.18	U	0.18	1.7
Endosulfan II		0.29	U	0.29	1.7
Endosulfan sulfate		0.28	U	0.28	1.7
Endrin		0.31	U	0.31	1.7
Endrin aldehyde		0.17	U	0.17	1.7
Endrin ketone		0.49	U	0.49	1.7
gamma-Chlordane		0.27	U	0.27	1.7
Methoxychlor		0.45	U	0.45	3.3
alpha-Chlordane		0.33	U	0.33	1.7
Dieldrin		0.21	U	0.21	1.7
Toxaphene		16	U	16	170

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	92		59 - 115
Decachlorobiphenyl	103		63 - 124

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V2**

Lab Sample ID: 280-28595-1
Client Matrix: Solid
% Moisture: 3.7

Date Sampled: 05/03/2012 0915
Date Received: 05/08/2012 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-119266	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-118878	Initial Weight/Volume:	30.9 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	05/10/2012 1816			Injection Volume:	20 uL
Prep Date:	05/08/2012 1650			Result Type:	PRIMARY

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

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

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V3**

Lab Sample ID: 280-28595-2
Client Matrix: Solid
% Moisture: 5.4

Date Sampled: 05/03/2012 0927
Date Received: 05/08/2012 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-119266	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-118878	Initial Weight/Volume:	31.8 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	05/10/2012 1846			Injection Volume:	20 uL
Prep Date:	05/08/2012 1650			Result Type:	PRIMARY

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

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

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V4**

Lab Sample ID: 280-28595-3
Client Matrix: Solid
% Moisture: 3.0

Date Sampled: 05/03/2012 0939
Date Received: 05/08/2012 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-119266	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-118878	Initial Weight/Volume:	31.1 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	05/10/2012 1917			Injection Volume:	20 uL
Prep Date:	05/08/2012 1650			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		9.9	U	9.9	99
Acenaphthylene		9.0	U	9.0	99
Anthracene		3.0	U	3.0	20
Benzo[a]anthracene		3.2	U	3.2	15
Benzo[a]pyrene		6.4	U	6.4	15
Benzo[b]fluoranthene		4.2	U	4.2	15
Benzo[g,h,i]perylene		7.2	U	7.2	30
Benzo[k]fluoranthene		3.9	U	3.9	15
Chrysene		4.8	U	4.8	40
Dibenzo(a,h)anthracene		11	U	11	30
Fluoranthene		13	U	13	40
Fluorene		5.3	U	5.3	30
Indeno[1,2,3-cd]pyrene		12	U	12	30
Naphthalene		12	U	12	99
Phenanthrene		12	U	12	40
Pyrene		12	U	12	40

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

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V5**

Lab Sample ID: 280-28595-4
Client Matrix: Solid
% Moisture: 5.1

Date Sampled: 05/03/2012 0951
Date Received: 05/08/2012 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-119266	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-118878	Initial Weight/Volume:	31.1 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	05/10/2012 1947			Injection Volume:	20 uL
Prep Date:	05/08/2012 1650			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	100
Acenaphthylene		9.1	U	9.1	100
Anthracene		3.1	U	3.1	20
Benzo[a]anthracene		3.2	U	3.2	15
Benzo[a]pyrene		6.5	U	6.5	15
Benzo[b]fluoranthene		4.3	U	4.3	15
Benzo[g,h,i]perylene		7.3	U	7.3	30
Benzo[k]fluoranthene		4.0	U	4.0	15
Chrysene		4.9	U	4.9	41
Dibenzo(a,h)anthracene		11	U	11	30
Fluoranthene		13	U	13	41
Fluorene		5.4	U	5.4	30
Indeno[1,2,3-cd]pyrene		12	U	12	30
Naphthalene		12	U	12	100
Phenanthrene		12	U	12	41
Pyrene		12	U	12	41

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

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V6**

Lab Sample ID: 280-28595-5
Client Matrix: Solid
% Moisture: 3.9

Date Sampled: 05/03/2012 1003
Date Received: 05/08/2012 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-119266	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-118878	Initial Weight/Volume:	30.3 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	05/10/2012 2018			Injection Volume:	20 uL
Prep Date:	05/08/2012 1650			Result Type:	PRIMARY

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

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

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V7**

Lab Sample ID: 280-28595-6
Client Matrix: Solid
% Moisture: 4.0

Date Sampled: 05/03/2012 1015
Date Received: 05/08/2012 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-119266	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-118878	Initial Weight/Volume:	31.3 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	05/10/2012 2048			Injection Volume:	20 uL
Prep Date:	05/08/2012 1650			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	100
Acenaphthylene		9.0	U	9.0	100
Anthracene		3.0	U	3.0	20
Benzo[a]anthracene		10	J X	3.2	15
Benzo[a]pyrene		6.4	J	6.4	15
Benzo[b]fluoranthene		9.5	J	4.2	15
Benzo[g,h,i]perylene		7.2	U	7.2	30
Benzo[k]fluoranthene		3.9	U	3.9	15
Chrysene		19	J	4.8	40
Dibenzo(a,h)anthracene		11	U	11	30
Fluoranthene		20	J	13	40
Fluorene		5.3	U	5.3	30
Indeno[1,2,3-cd]pyrene		12	U	12	30
Naphthalene		12	U	12	100
Phenanthrene		12	U	12	40
Pyrene		27	J	12	40

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

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V8**

Lab Sample ID: 280-28595-7
Client Matrix: Solid
% Moisture: 4.8

Date Sampled: 05/03/2012 1027
Date Received: 05/08/2012 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-119266	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-118878	Initial Weight/Volume:	30.2 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	05/10/2012 2119			Injection Volume:	20 uL
Prep Date:	05/08/2012 1650			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	100
Acenaphthylene		9.4	U	9.4	100
Anthracene		3.2	U	3.2	21
Benzo[a]anthracene		3.3	U	3.3	16
Benzo[a]pyrene		6.7	U	6.7	16
Benzo[b]fluoranthene		4.4	U	4.4	16
Benzo[g,h,i]perylene		7.5	U	7.5	31
Benzo[k]fluoranthene		4.1	U	4.1	16
Chrysene		5.1	U	5.1	42
Dibenzo(a,h)anthracene		11	U	11	31
Fluoranthene		14	U	14	42
Fluorene		5.5	U	5.5	31
Indeno[1,2,3-cd]pyrene		13	U	13	31
Naphthalene		13	U	13	100
Phenanthrene		13	U	13	42
Pyrene		13	U	13	42

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

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V9**

Lab Sample ID: 280-28595-8
Client Matrix: Solid
% Moisture: 4.4

Date Sampled: 05/03/2012 1039
Date Received: 05/08/2012 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-119266	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-118878	Initial Weight/Volume:	32.5 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	05/10/2012 2149			Injection Volume:	20 uL
Prep Date:	05/08/2012 1650			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		9.7	U	9.7	97
Acenaphthylene		8.7	U	8.7	97
Anthracene		2.9	U	2.9	19
Benzo[a]anthracene		3.1	U	3.1	14
Benzo[a]pyrene		6.2	U	6.2	14
Benzo[b]fluoranthene		4.1	U	4.1	14
Benzo[g,h,i]perylene		7.0	U	7.0	29
Benzo[k]fluoranthene		3.8	U	3.8	14
Chrysene		4.7	U	4.7	39
Dibenzo(a,h)anthracene		11	U	11	29
Fluoranthene		13	U	13	39
Fluorene		5.1	U	5.1	29
Indeno[1,2,3-cd]pyrene		12	U	12	29
Naphthalene		12	U	12	97
Phenanthrene		12	U	12	39
Pyrene		12	U	12	39

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	86		72 - 115

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1W0**

Lab Sample ID: 280-28595-9
Client Matrix: Solid
% Moisture: 4.7

Date Sampled: 05/03/2012 0951
Date Received: 05/08/2012 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-119266	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-118878	Initial Weight/Volume:	31.0 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	05/10/2012 2250			Injection Volume:	20 uL
Prep Date:	05/08/2012 1650			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	100
Acenaphthylene		9.1	U	9.1	100
Anthracene		3.1	U	3.1	20
Benzo[a]anthracene		3.2	U	3.2	15
Benzo[a]pyrene		6.5	U	6.5	15
Benzo[b]fluoranthene		4.3	U	4.3	15
Benzo[g,h,i]perylene		7.3	U	7.3	30
Benzo[k]fluoranthene		4.0	U	4.0	15
Chrysene		4.9	U	4.9	41
Dibenzo(a,h)anthracene		11	U	11	30
Fluoranthene		13	U	13	41
Fluorene		5.4	U	5.4	30
Indeno[1,2,3-cd]pyrene		12	U	12	30
Naphthalene		12	U	12	100
Phenanthrene		12	U	12	41
Pyrene		12	U	12	41

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

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1W1**

Lab Sample ID: 280-28595-10
Client Matrix: Solid
% Moisture: 4.8

Date Sampled: 05/03/2012 1103
Date Received: 05/08/2012 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-119266	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-118878	Initial Weight/Volume:	31.3 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	05/11/2012 0022			Injection Volume:	20 uL
Prep Date:	05/08/2012 1650			Result Type:	PRIMARY

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

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

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V2**

Lab Sample ID: 280-28595-1
Client Matrix: Solid
% Moisture: 3.7

Date Sampled: 05/03/2012 0915
Date Received: 05/08/2012 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-119155	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-118875	Lab File ID:	25A1050912.asc
Dilution:	1.0			Initial Weight/Volume:	1.10 g
Analysis Date:	05/09/2012 1358			Final Weight/Volume:	100 mL
Prep Date:	05/09/2012 0700				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		5860		1.5	4.7
Antimony		0.50	B	0.36	0.57
Arsenic		2.9		0.62	0.94
Barium		72.1		0.072	0.47
Beryllium		0.64		0.031	0.19
Boron		0.93	U	0.93	1.9
Cadmium		0.039	U	0.039	0.19
Calcium		5830		13.3	47.2
Chromium		10.1	X	0.055	0.19
Cobalt		8.1	X	0.094	0.94
Copper		15.5		0.20	0.94
Iron		22200		3.6	4.7
Lead		2.9		0.26	0.47
Magnesium		4780		3.5	18.9
Manganese		305		0.094	0.94
Molybdenum		0.29	B	0.25	1.9
Nickel		13.5	X	0.12	3.8
Potassium		763		38.7	283
Selenium		0.94		0.81	0.94
Silicon		244	N	5.3	9.4
Silver		0.15	U	0.15	0.19
Sodium		284		55.7	113
Vanadium		56.9		0.089	1.9
Zinc		40.0	X	0.38	0.94

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-119638	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-119320	Lab File ID:	120511taa.txt
Dilution:	1.0			Initial Weight/Volume:	0.53 g
Analysis Date:	05/11/2012 1739			Final Weight/Volume:	50 mL
Prep Date:	05/11/2012 1345				

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

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V3**

Lab Sample ID: 280-28595-2
Client Matrix: Solid
% Moisture: 5.4

Date Sampled: 05/03/2012 0927
Date Received: 05/08/2012 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-119155	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-118875	Lab File ID:	25A1050912.asc
Dilution:	1.0			Initial Weight/Volume:	1.01 g
Analysis Date:	05/09/2012 1407			Final Weight/Volume:	100 mL
Prep Date:	05/09/2012 0700				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8230		1.6	5.2
Antimony		0.40	U	0.40	0.63
Arsenic		3.4		0.69	1.0
Barium		82.8		0.080	0.52
Beryllium		0.53		0.035	0.21
Boron		1.0	U	1.0	2.1
Cadmium		0.056	B	0.043	0.21
Calcium		3660		14.8	52.3
Chromium		14.3	X	0.061	0.21
Cobalt		5.8	X	0.10	1.0
Copper		15.2		0.23	1.0
Iron		16500		4.0	5.2
Lead		3.7		0.28	0.52
Magnesium		4080		3.9	20.9
Manganese		315		0.10	1.0
Molybdenum		0.27	U	0.27	2.1
Nickel		12.1	X	0.13	4.2
Potassium		708		42.9	314
Selenium		0.90	U	0.90	1.0
Silicon		263	N	5.9	10.5
Silver		0.17	U	0.17	0.21
Sodium		224		61.7	126
Vanadium		34.7		0.098	2.1
Zinc		32.2	X	0.42	1.0

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-119638	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-119320	Lab File ID:	120511taa.txt
Dilution:	1.0			Initial Weight/Volume:	0.67 g
Analysis Date:	05/11/2012 1751			Final Weight/Volume:	50 mL
Prep Date:	05/11/2012 1345				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.018		0.0052	0.016

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V4**

Lab Sample ID: 280-28595-3
Client Matrix: Solid
% Moisture: 3.0

Date Sampled: 05/03/2012 0939
Date Received: 05/08/2012 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-119155	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-118875	Lab File ID:	25A1050912.asc
Dilution:	1.0			Initial Weight/Volume:	1.12 g
Analysis Date:	05/09/2012 1419			Final Weight/Volume:	100 mL
Prep Date:	05/09/2012 0700				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		6740		1.4	4.6
Antimony		0.35	U	0.35	0.55
Arsenic		2.6		0.61	0.92
Barium		60.9		0.070	0.46
Beryllium		0.51		0.030	0.18
Boron		0.90	U	0.90	1.8
Cadmium		0.038	U	0.038	0.18
Calcium		3150		13.0	46.0
Chromium		15.7	X	0.053	0.18
Cobalt		5.0	X	0.092	0.92
Copper		13.8		0.20	0.92
Iron		15000		3.5	4.6
Lead		3.1		0.25	0.46
Magnesium		3550		3.4	18.4
Manganese		214		0.092	0.92
Molybdenum		0.24	U	0.24	1.8
Nickel		11.8	X	0.11	3.7
Potassium		466		37.7	276
Selenium		0.79	U	0.79	0.92
Silicon		156	N	5.2	9.2
Silver		0.15	U	0.15	0.18
Sodium		220		54.3	110
Vanadium		35.8		0.087	1.8
Zinc		26.5	X	0.37	0.92

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-119638	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-119320	Lab File ID:	120511taa.txt
Dilution:	1.0			Initial Weight/Volume:	0.65 g
Analysis Date:	05/11/2012 1753			Final Weight/Volume:	50 mL
Prep Date:	05/11/2012 1345				

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

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V5**

Lab Sample ID: 280-28595-4
Client Matrix: Solid
% Moisture: 5.1

Date Sampled: 05/03/2012 0951
Date Received: 05/08/2012 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-119364	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-118875	Lab File ID:	25A1051012.asc
Dilution:	1.0			Initial Weight/Volume:	1.11 g
Analysis Date:	05/10/2012 1544			Final Weight/Volume:	100 mL
Prep Date:	05/09/2012 0700				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		9100		1.5	4.7
Antimony		0.36	U	0.36	0.57
Arsenic		3.6		0.63	0.95
Barium		132		0.072	0.47
Boron		0.93	U	0.93	1.9
Cadmium		0.039	U	0.039	0.19
Calcium		6030		13.4	47.5
Chromium		24.7	X	0.055	0.19
Iron		26700		3.6	4.7
Magnesium		5090		3.5	19.0
Manganese		350		0.095	0.95
Molybdenum		0.25	U	0.25	1.9
Nickel		10.4	X	0.12	3.8
Potassium		668		38.9	285
Selenium		1.3		0.82	0.95
Silicon		181	N	5.4	9.5
Silver		0.15	U	0.15	0.19
Sodium		261		56.0	114
Zinc		51.5	X	0.38	0.95

Analysis Method:	6010B	Analysis Batch:	280-119364	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-118875	Lab File ID:	25A1051012.asc
Dilution:	5.0			Initial Weight/Volume:	1.11 g
Analysis Date:	05/10/2012 1546			Final Weight/Volume:	100 mL
Prep Date:	05/09/2012 0700				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Beryllium		1.4		0.16	0.95
Cobalt		10	X	0.47	4.7
Copper		20.7		1.0	4.7
Lead		4.8		1.3	2.4
Vanadium		87.1		0.45	9.5

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-119638	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-119320	Lab File ID:	120511taa.txt
Dilution:	1.0			Initial Weight/Volume:	0.72 g
Analysis Date:	05/11/2012 1755			Final Weight/Volume:	50 mL
Prep Date:	05/11/2012 1345				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.012	B	0.0049	0.015

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V6**

Lab Sample ID: 280-28595-5
Client Matrix: Solid
% Moisture: 3.9

Date Sampled: 05/03/2012 1003
Date Received: 05/08/2012 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-119155	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-118875	Lab File ID:	25A1050912.asc
Dilution:	1.0			Initial Weight/Volume:	1.09 g
Analysis Date:	05/09/2012 1424			Final Weight/Volume:	100 mL
Prep Date:	05/09/2012 0700				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		9600		1.5	4.8
Antimony		0.36	U	0.36	0.57
Arsenic		3.6		0.63	0.95
Barium		81.3		0.073	0.48
Beryllium		0.71		0.032	0.19
Boron		0.94	U	0.94	1.9
Cadmium		0.039	U	0.039	0.19
Calcium		5770		13.5	47.7
Chromium		11.7	X	0.055	0.19
Cobalt		7.5	X	0.095	0.95
Copper		16.1		0.21	0.95
Iron		22100		3.6	4.8
Lead		4.8		0.26	0.48
Magnesium		5570		3.5	19.1
Manganese		274		0.095	0.95
Molybdenum		0.25	U	0.25	1.9
Nickel		11.9	X	0.12	3.8
Potassium		1190		39.1	286
Selenium		0.89	B	0.82	0.95
Silicon		377	N	5.4	9.5
Silver		0.15	U	0.15	0.19
Sodium		235		56.3	115
Vanadium		45.9		0.090	1.9
Zinc		42.7	X	0.38	0.95

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-119638	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-119320	Lab File ID:	120511taa.txt
Dilution:	1.0			Initial Weight/Volume:	0.61 g
Analysis Date:	05/11/2012 1758			Final Weight/Volume:	50 mL
Prep Date:	05/11/2012 1345				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.013	B	0.0057	0.017

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V7**

Lab Sample ID: 280-28595-6
Client Matrix: Solid
% Moisture: 4.0

Date Sampled: 05/03/2012 1015
Date Received: 05/08/2012 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-119155	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-118875	Lab File ID:	25A1050912.asc
Dilution:	1.0			Initial Weight/Volume:	1.13 g
Analysis Date:	05/09/2012 1426			Final Weight/Volume:	100 mL
Prep Date:	05/09/2012 0700				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8020		1.4	4.6
Antimony		0.35	U	0.35	0.55
Arsenic		4.0		0.61	0.92
Barium		60.7		0.070	0.46
Beryllium		0.58		0.030	0.18
Boron		0.90	U	0.90	1.8
Cadmium		0.045	B	0.038	0.18
Calcium		4850		13.0	46.1
Chromium		16.8	X	0.053	0.18
Cobalt		5.6	X	0.092	0.92
Copper		14.1		0.20	0.92
Iron		18400		3.5	4.6
Lead		4.1		0.25	0.46
Magnesium		5510		3.4	18.4
Manganese		261		0.092	0.92
Molybdenum		0.24	U	0.24	1.8
Nickel		10.2	X	0.11	3.7
Potassium		1000		37.8	276
Selenium		0.89	B	0.79	0.92
Silicon		249	N	5.2	9.2
Silver		0.15	U	0.15	0.18
Sodium		229		54.4	111
Vanadium		37.6		0.087	1.8
Zinc		35.8	X	0.37	0.92

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-119638	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-119320	Lab File ID:	120511taa.txt
Dilution:	1.0			Initial Weight/Volume:	0.66 g
Analysis Date:	05/11/2012 1800			Final Weight/Volume:	50 mL
Prep Date:	05/11/2012 1345				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.021		0.0052	0.016

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V8**

Lab Sample ID: 280-28595-7
Client Matrix: Solid
% Moisture: 4.8

Date Sampled: 05/03/2012 1027
Date Received: 05/08/2012 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-119155	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-118875	Lab File ID:	25A1050912.asc
Dilution:	1.0			Initial Weight/Volume:	1.10 g
Analysis Date:	05/09/2012 1428			Final Weight/Volume:	100 mL
Prep Date:	05/09/2012 0700				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8410		1.5	4.8
Antimony		0.36	U	0.36	0.57
Arsenic		3.9		0.63	0.95
Barium		59.3		0.073	0.48
Beryllium		0.50		0.032	0.19
Boron		0.94	U	0.94	1.9
Cadmium		0.039	U	0.039	0.19
Calcium		4130		13.5	47.7
Chromium		19.1	X	0.055	0.19
Cobalt		5.1	X	0.095	0.95
Copper		13.5		0.21	0.95
Iron		15600		3.6	4.8
Lead		4.1		0.26	0.48
Magnesium		5790		3.5	19.1
Manganese		247		0.095	0.95
Molybdenum		0.25	U	0.25	1.9
Nickel		10.9	X	0.12	3.8
Potassium		944		39.2	286
Selenium		0.82	U	0.82	0.95
Silicon		264	N	5.4	9.5
Silver		0.15	U	0.15	0.19
Sodium		218		56.3	115
Vanadium		28.5		0.090	1.9
Zinc		31.7	X	0.38	0.95

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-119638	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-119320	Lab File ID:	120511taa.txt
Dilution:	1.0			Initial Weight/Volume:	0.58 g
Analysis Date:	05/11/2012 1802			Final Weight/Volume:	50 mL
Prep Date:	05/11/2012 1345				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.015	B	0.0060	0.018

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1V9**

Lab Sample ID: 280-28595-8
Client Matrix: Solid
% Moisture: 4.4

Date Sampled: 05/03/2012 1039
Date Received: 05/08/2012 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-119155	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-118875	Lab File ID:	25A1050912.asc
Dilution:	1.0			Initial Weight/Volume:	1.00 g
Analysis Date:	05/09/2012 1431			Final Weight/Volume:	100 mL
Prep Date:	05/09/2012 0700				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		6800		1.6	5.2
Antimony		0.40	U	0.40	0.63
Arsenic		3.8		0.69	1.0
Barium		62.6		0.080	0.52
Beryllium		0.64		0.035	0.21
Boron		1.0	U	1.0	2.1
Cadmium		0.043	U	0.043	0.21
Calcium		7570		14.8	52.3
Chromium		10.4	X	0.061	0.21
Cobalt		7.1	X	0.10	1.0
Copper		17.0		0.23	1.0
Iron		21500		4.0	5.2
Lead		3.6		0.28	0.52
Magnesium		4970		3.9	20.9
Manganese		277		0.10	1.0
Molybdenum		0.27	U	0.27	2.1
Nickel		11.0	X	0.13	4.2
Potassium		1030		42.9	314
Selenium		0.90	U	0.90	1.0
Silicon		257	N	5.9	10.5
Silver		0.17	U	0.17	0.21
Sodium		332		61.7	126
Vanadium		49.4		0.098	2.1
Zinc		41.4	X	0.42	1.0

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-119638	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-119320	Lab File ID:	120511taa.txt
Dilution:	1.0			Initial Weight/Volume:	0.64 g
Analysis Date:	05/11/2012 1805			Final Weight/Volume:	50 mL
Prep Date:	05/11/2012 1345				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.015	B	0.0054	0.017

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1W0**

Lab Sample ID: 280-28595-9
Client Matrix: Solid
% Moisture: 4.7

Date Sampled: 05/03/2012 0951
Date Received: 05/08/2012 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-119155	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-118875	Lab File ID:	25A1050912.asc
Dilution:	1.0			Initial Weight/Volume:	1.02 g
Analysis Date:	05/09/2012 1433			Final Weight/Volume:	100 mL
Prep Date:	05/09/2012 0700				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		7070		1.6	5.1
Antimony		0.39	U	0.39	0.62
Arsenic		3.9		0.68	1.0
Barium		63.9		0.078	0.51
Beryllium		0.67		0.034	0.21
Boron		1.0	U	1.0	2.1
Cadmium		0.072	B	0.042	0.21
Calcium		8550		14.5	51.5
Chromium		10.3	X	0.060	0.21
Cobalt		8.8	X	0.10	1.0
Copper		19.7		0.22	1.0
Iron		24100		3.9	5.1
Lead		4.0		0.28	0.51
Magnesium		5320		3.8	20.6
Manganese		317		0.10	1.0
Molybdenum		0.27	U	0.27	2.1
Nickel		12.2	X	0.13	4.1
Potassium		1110		42.2	309
Selenium		0.89	U	0.89	1.0
Silicon		398	N	5.8	10.3
Silver		0.16	U	0.16	0.21
Sodium		320		60.7	124
Vanadium		53.4		0.097	2.1
Zinc		43.7	X	0.41	1.0

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-119638	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-119320	Lab File ID:	120511taa.txt
Dilution:	1.0			Initial Weight/Volume:	0.53 g
Analysis Date:	05/11/2012 1807			Final Weight/Volume:	50 mL
Prep Date:	05/11/2012 1345				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.011	B	0.0066	0.020

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Client Sample ID: **J1P1W1**

Lab Sample ID: 280-28595-10
Client Matrix: Solid
% Moisture: 4.8

Date Sampled: 05/03/2012 1103
Date Received: 05/08/2012 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-119155	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-118875	Lab File ID:	25A1050912.asc
Dilution:	1.0			Initial Weight/Volume:	1.13 g
Analysis Date:	05/09/2012 1435			Final Weight/Volume:	100 mL
Prep Date:	05/09/2012 0700				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8100		1.4	4.6
Antimony		0.35	U	0.35	0.56
Arsenic		3.5		0.61	0.93
Barium		67.8		0.071	0.46
Beryllium		0.68		0.031	0.19
Boron		0.91	U	0.91	1.9
Cadmium		0.038	U	0.038	0.19
Calcium		7300		13.1	46.5
Chromium		10.1	X	0.054	0.19
Cobalt		7.8	X	0.093	0.93
Copper		17.8		0.20	0.93
Iron		22400		3.5	4.6
Lead		4.1		0.25	0.46
Magnesium		4660		3.4	18.6
Manganese		289		0.093	0.93
Molybdenum		0.24	U	0.24	1.9
Nickel		11.3	X	0.11	3.7
Potassium		1220		38.1	279
Selenium		0.80	U	0.80	0.93
Silicon		347	N	5.3	9.3
Silver		0.15	U	0.15	0.19
Sodium		310		54.9	112
Vanadium		51.6		0.087	1.9
Zinc		42.6	X	0.37	0.93

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-119638	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-119320	Lab File ID:	120511taa.txt
Dilution:	1.0			Initial Weight/Volume:	0.49 g
Analysis Date:	05/11/2012 1809			Final Weight/Volume:	50 mL
Prep Date:	05/11/2012 1345				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0071	U	0.0071	0.022

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

General Chemistry

Client Sample ID: **J1P1V2**

Lab Sample ID: 280-28595-1
Client Matrix: Solid

Date Sampled: 05/03/2012 0915
Date Received: 05/08/2012 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	3.7		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-119015 Analysis Date: 05/09/2012 1038 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

General Chemistry

Client Sample ID: **J1P1V3**

Lab Sample ID: 280-28595-2
Client Matrix: Solid

Date Sampled: 05/03/2012 0927
Date Received: 05/08/2012 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	5.4		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-119015 Analysis Date: 05/09/2012 1038 DryWt Corrected: N

General Chemistry

Client Sample ID: **J1P1V4**

Lab Sample ID: 280-28595-3
Client Matrix: Solid

Date Sampled: 05/03/2012 0939
Date Received: 05/08/2012 0900

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

Analysis Batch: 280-119015 Analysis Date: 05/09/2012 1038 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

General Chemistry

Client Sample ID: **J1P1V5**

Lab Sample ID: 280-28595-4
Client Matrix: Solid

Date Sampled: 05/03/2012 0951
Date Received: 05/08/2012 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	5.1		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-119015 Analysis Date: 05/09/2012 1038 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

General Chemistry

Client Sample ID: **J1P1V6**

Lab Sample ID: 280-28595-5
Client Matrix: Solid

Date Sampled: 05/03/2012 1003
Date Received: 05/08/2012 0900

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

Analysis Batch: 280-119015 Analysis Date: 05/09/2012 1038 DryWt Corrected: N

General Chemistry

Client Sample ID: **J1P1V7**

Lab Sample ID: 280-28595-6
Client Matrix: Solid

Date Sampled: 05/03/2012 1015
Date Received: 05/08/2012 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	4.0		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-119015 Analysis Date: 05/09/2012 1038 DryWt Corrected: N

General Chemistry

Client Sample ID: **J1P1V8**

Lab Sample ID: 280-28595-7
Client Matrix: Solid

Date Sampled: 05/03/2012 1027
Date Received: 05/08/2012 0900

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

Analysis Batch: 280-119015 Analysis Date: 05/09/2012 1038 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

General Chemistry

Client Sample ID: **J1P1V9**

Lab Sample ID: 280-28595-8
Client Matrix: Solid

Date Sampled: 05/03/2012 1039
Date Received: 05/08/2012 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	4.4		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-119015 Analysis Date: 05/09/2012 1038 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

General Chemistry

Client Sample ID: **J1P1W0**

Lab Sample ID: 280-28595-9
Client Matrix: Solid

Date Sampled: 05/03/2012 0951
Date Received: 05/08/2012 0900

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

Analysis Batch: 280-119015 Analysis Date: 05/09/2012 1038 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

General Chemistry

Client Sample ID: **J1P1W1**

Lab Sample ID: 280-28595-10
Client Matrix: Solid

Date Sampled: 05/03/2012 1103
Date Received: 05/08/2012 0900

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

Analysis Batch: 280-119015 Analysis Date: 05/09/2012 1038 DryWt Corrected: N

QUALITY CONTROL RESULTS

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 280-118868					
LCS 280-118868/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-118868/1-A	Method Blank	T	Solid	3550C	
280-28595-1	J1P1V2	T	Solid	3550C	
280-28595-2	J1P1V3	T	Solid	3550C	
280-28595-3	J1P1V4	T	Solid	3550C	
280-28595-4	J1P1V5	T	Solid	3550C	
280-28595-5	J1P1V6	T	Solid	3550C	
280-28595-5MS	Matrix Spike	T	Solid	3550C	
280-28595-5MSD	Matrix Spike Duplicate	T	Solid	3550C	
280-28595-6	J1P1V7	T	Solid	3550C	
280-28595-7	J1P1V8	T	Solid	3550C	
280-28595-8	J1P1V9	T	Solid	3550C	
280-28595-9	J1P1W0	T	Solid	3550C	
280-28595-10	J1P1W1	T	Solid	3550C	
Analysis Batch:280-119284					
LCS 280-118868/2-A	Lab Control Sample	T	Solid	8270C	280-118868
MB 280-118868/1-A	Method Blank	T	Solid	8270C	280-118868
280-28595-1	J1P1V2	T	Solid	8270C	280-118868
280-28595-2	J1P1V3	T	Solid	8270C	280-118868
280-28595-3	J1P1V4	T	Solid	8270C	280-118868
280-28595-4	J1P1V5	T	Solid	8270C	280-118868
280-28595-5	J1P1V6	T	Solid	8270C	280-118868
280-28595-5MS	Matrix Spike	T	Solid	8270C	280-118868
280-28595-5MSD	Matrix Spike Duplicate	T	Solid	8270C	280-118868
280-28595-6	J1P1V7	T	Solid	8270C	280-118868
280-28595-7	J1P1V8	T	Solid	8270C	280-118868
280-28595-8	J1P1V9	T	Solid	8270C	280-118868
280-28595-9	J1P1W0	T	Solid	8270C	280-118868
280-28595-10	J1P1W1	T	Solid	8270C	280-118868

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 280-118883					
LCS 280-118883/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-118883/1-A	Method Blank	T	Solid	3550C	
280-28595-1	J1P1V2	T	Solid	3550C	
280-28595-2	J1P1V3	T	Solid	3550C	
280-28595-3	J1P1V4	T	Solid	3550C	
280-28595-4	J1P1V5	T	Solid	3550C	
280-28595-5	J1P1V6	T	Solid	3550C	
280-28595-6	J1P1V7	T	Solid	3550C	
280-28595-7	J1P1V8	T	Solid	3550C	
280-28595-8	J1P1V9	T	Solid	3550C	
280-28595-9	J1P1W0	T	Solid	3550C	
280-28595-10	J1P1W1	T	Solid	3550C	
280-28595-10MS	Matrix Spike	T	Solid	3550C	
280-28595-10MSD	Matrix Spike Duplicate	T	Solid	3550C	
Analysis Batch:280-119369					
LCS 280-118883/2-A	Lab Control Sample	T	Solid	8081A	280-118883
MB 280-118883/1-A	Method Blank	T	Solid	8081A	280-118883
280-28595-1	J1P1V2	T	Solid	8081A	280-118883
280-28595-2	J1P1V3	T	Solid	8081A	280-118883
280-28595-3	J1P1V4	T	Solid	8081A	280-118883
280-28595-4	J1P1V5	T	Solid	8081A	280-118883
280-28595-5	J1P1V6	T	Solid	8081A	280-118883
280-28595-6	J1P1V7	T	Solid	8081A	280-118883
280-28595-7	J1P1V8	T	Solid	8081A	280-118883
280-28595-8	J1P1V9	T	Solid	8081A	280-118883
280-28595-9	J1P1W0	T	Solid	8081A	280-118883
280-28595-10	J1P1W1	T	Solid	8081A	280-118883
280-28595-10MS	Matrix Spike	T	Solid	8081A	280-118883
280-28595-10MSD	Matrix Spike Duplicate	T	Solid	8081A	280-118883

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-118875					
LCS 280-118875/2-A	Lab Control Sample	T	Solid	3050B	
MB 280-118875/1-A	Method Blank	T	Solid	3050B	
280-28595-1	J1P1V2	T	Solid	3050B	
280-28595-1DU	Duplicate	T	Solid	3050B	
280-28595-1MS	Matrix Spike	T	Solid	3050B	
280-28595-2	J1P1V3	T	Solid	3050B	
280-28595-3	J1P1V4	T	Solid	3050B	
280-28595-4	J1P1V5	T	Solid	3050B	
280-28595-5	J1P1V6	T	Solid	3050B	
280-28595-6	J1P1V7	T	Solid	3050B	
280-28595-7	J1P1V8	T	Solid	3050B	
280-28595-8	J1P1V9	T	Solid	3050B	
280-28595-9	J1P1W0	T	Solid	3050B	
280-28595-10	J1P1W1	T	Solid	3050B	
Analysis Batch:280-119155					
LCS 280-118875/2-A	Lab Control Sample	T	Solid	6010B	280-118875
MB 280-118875/1-A	Method Blank	T	Solid	6010B	280-118875
280-28595-1	J1P1V2	T	Solid	6010B	280-118875
280-28595-1DU	Duplicate	T	Solid	6010B	280-118875
280-28595-1MS	Matrix Spike	T	Solid	6010B	280-118875
280-28595-2	J1P1V3	T	Solid	6010B	280-118875
280-28595-3	J1P1V4	T	Solid	6010B	280-118875
280-28595-5	J1P1V6	T	Solid	6010B	280-118875
280-28595-6	J1P1V7	T	Solid	6010B	280-118875
280-28595-7	J1P1V8	T	Solid	6010B	280-118875
280-28595-8	J1P1V9	T	Solid	6010B	280-118875
280-28595-9	J1P1W0	T	Solid	6010B	280-118875
280-28595-10	J1P1W1	T	Solid	6010B	280-118875
Prep Batch: 280-119320					
LCS 280-119320/2-A	Lab Control Sample	T	Solid	7471A	
MB 280-119320/1-A	Method Blank	T	Solid	7471A	
280-28595-1	J1P1V2	T	Solid	7471A	
280-28595-1DU	Duplicate	T	Solid	7471A	
280-28595-1MS	Matrix Spike	T	Solid	7471A	
280-28595-2	J1P1V3	T	Solid	7471A	
280-28595-3	J1P1V4	T	Solid	7471A	
280-28595-4	J1P1V5	T	Solid	7471A	
280-28595-5	J1P1V6	T	Solid	7471A	
280-28595-6	J1P1V7	T	Solid	7471A	
280-28595-7	J1P1V8	T	Solid	7471A	
280-28595-8	J1P1V9	T	Solid	7471A	
280-28595-9	J1P1W0	T	Solid	7471A	
280-28595-10	J1P1W1	T	Solid	7471A	

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:280-119364					
280-28595-4	J1P1V5	T	Solid	6010B	280-118875
Analysis Batch:280-119638					
LCS 280-119320/2-A	Lab Control Sample	T	Solid	7471A	280-119320
MB 280-119320/1-A	Method Blank	T	Solid	7471A	280-119320
280-28595-1	J1P1V2	T	Solid	7471A	280-119320
280-28595-1DU	Duplicate	T	Solid	7471A	280-119320
280-28595-1MS	Matrix Spike	T	Solid	7471A	280-119320
280-28595-2	J1P1V3	T	Solid	7471A	280-119320
280-28595-3	J1P1V4	T	Solid	7471A	280-119320
280-28595-4	J1P1V5	T	Solid	7471A	280-119320
280-28595-5	J1P1V6	T	Solid	7471A	280-119320
280-28595-6	J1P1V7	T	Solid	7471A	280-119320
280-28595-7	J1P1V8	T	Solid	7471A	280-119320
280-28595-8	J1P1V9	T	Solid	7471A	280-119320
280-28595-9	J1P1W0	T	Solid	7471A	280-119320
280-28595-10	J1P1W1	T	Solid	7471A	280-119320

Report Basis
T = Total

General Chemistry

Analysis Batch:280-119015				
280-28595-1	J1P1V2	T	Solid	D-2216
280-28595-1DU	Duplicate	T	Solid	D-2216
280-28595-2	J1P1V3	T	Solid	D-2216
280-28595-3	J1P1V4	T	Solid	D-2216
280-28595-4	J1P1V5	T	Solid	D-2216
280-28595-5	J1P1V6	T	Solid	D-2216
280-28595-6	J1P1V7	T	Solid	D-2216
280-28595-7	J1P1V8	T	Solid	D-2216
280-28595-8	J1P1V9	T	Solid	D-2216
280-28595-9	J1P1W0	T	Solid	D-2216
280-28595-10	J1P1W1	T	Solid	D-2216
280-28595-10DU	Duplicate	T	Solid	D-2216

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
HPLC/IC					
Prep Batch: 280-118878					
LCS 280-118878/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-118878/1-A	Method Blank	T	Solid	3550C	
280-28595-1	J1P1V2	T	Solid	3550C	
280-28595-2	J1P1V3	T	Solid	3550C	
280-28595-3	J1P1V4	T	Solid	3550C	
280-28595-4	J1P1V5	T	Solid	3550C	
280-28595-5	J1P1V6	T	Solid	3550C	
280-28595-6	J1P1V7	T	Solid	3550C	
280-28595-7	J1P1V8	T	Solid	3550C	
280-28595-8	J1P1V9	T	Solid	3550C	
280-28595-9	J1P1W0	T	Solid	3550C	
280-28595-9MS	Matrix Spike	T	Solid	3550C	
280-28595-9MSD	Matrix Spike Duplicate	T	Solid	3550C	
280-28595-10	J1P1W1	T	Solid	3550C	
Analysis Batch:280-119266					
LCS 280-118878/2-A	Lab Control Sample	T	Solid	8310	280-118878
MB 280-118878/1-A	Method Blank	T	Solid	8310	280-118878
280-28595-1	J1P1V2	T	Solid	8310	280-118878
280-28595-2	J1P1V3	T	Solid	8310	280-118878
280-28595-3	J1P1V4	T	Solid	8310	280-118878
280-28595-4	J1P1V5	T	Solid	8310	280-118878
280-28595-5	J1P1V6	T	Solid	8310	280-118878
280-28595-6	J1P1V7	T	Solid	8310	280-118878
280-28595-7	J1P1V8	T	Solid	8310	280-118878
280-28595-8	J1P1V9	T	Solid	8310	280-118878
280-28595-9	J1P1W0	T	Solid	8310	280-118878
280-28595-9MS	Matrix Spike	T	Solid	8310	280-118878
280-28595-9MSD	Matrix Spike Duplicate	T	Solid	8310	280-118878
280-28595-10	J1P1W1	T	Solid	8310	280-118878

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Method Blank - Batch: 280-118868

Method: 8270C
Preparation: 3550C

Lab Sample ID:	MB 280-118868/1-A	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Client Matrix:	Solid	Prep Batch:	280-118868	Lab File ID:	K5031.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.7 g
Analysis Date:	05/10/2012 1501	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acenaphthene	9.7	U	9.7	310
Acenaphthylene	16	U	16	310
Anthracene	16	U	16	310
Benzo[a]anthracene	19	U	19	310
Benzo[a]pyrene	19	U	19	310
Benzo[b]fluoranthene	25	U	25	310
Benzo[ghi]perylene	15	U	15	310
Benzo[k]fluoranthene	38	U	38	310
Bis(2-chloroethoxy)methane	22	U	22	310
Bis(2-chloroethyl)ether	16	U	16	310
bis (2-chloroisopropyl) ether	22	U	22	310
Bis(2-ethylhexyl) phthalate	44	U	44	310
4-Bromophenyl phenyl ether	18	U	18	310
Butyl benzyl phthalate	41	U	41	310
Carbazole	34	U	34	310
4-Chloroaniline	78	U	78	310
4-Chloro-3-methylphenol	62	U	62	310
2-Chloronaphthalene	9.5	U	9.5	310
2-Chlorophenol	20	U	20	310
4-Chlorophenyl phenyl ether	20	U	20	310
Chrysene	26	U	26	310
Dibenz(a,h)anthracene	18	U	18	310
Dibenzofuran	19	U	19	310
1,2-Dichlorobenzene	21	U	21	310
1,3-Dichlorobenzene	11	U	11	310
1,4-Dichlorobenzene	13	U	13	310
3,3'-Dichlorobenzidine	85	U	85	620
2,4-Dichlorophenol	9.5	U	9.5	310
Diethyl phthalate	25	U	25	310
2,4-Dimethylphenol	62	U	62	310
Dimethyl phthalate	22	U	22	310
Di-n-butyl phthalate	27	U	27	310
4,6-Dinitro-2-methylphenol	310	U	310	620
2,4-Dinitrophenol	320	U	320	780
2,4-Dinitrotoluene	62	U	62	310
2,6-Dinitrotoluene	26	U	26	310
Di-n-octyl phthalate	14	U	14	310
Fluoranthene	34	U	34	310
Fluorene	17	U	17	310
Hexachlorobenzene	27	U	27	310
Hexachlorobutadiene	9.5	U	9.5	310
Hexachlorocyclopentadiene	47	U	47	310
Hexachloroethane	20	U	20	310
Indeno[1,2,3-cd]pyrene	21	U	21	310
Isophorone	16	U	16	310

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Method Blank - Batch: 280-118868

Method: 8270C
Preparation: 3550C

Lab Sample ID:	MB 280-118868/1-A	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Client Matrix:	Solid	Prep Batch:	280-118868	Lab File ID:	K5031.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.7 g
Analysis Date:	05/10/2012 1501	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
2-Methylnaphthalene	18	U	18	310
2-Methylphenol	12	U	12	310
3 & 4 Methylphenol	31	U	31	310
Naphthalene	29	U	29	310
2-Nitroaniline	47	U	47	310
3-Nitroaniline	69	U	69	310
4-Nitroaniline	69	U	69	310
Nitrobenzene	21	U	21	310
2-Nitrophenol	9.5	U	9.5	310
4-Nitrophenol	92	U	92	620
N-Nitrosodi-n-propylamine	29	U	29	310
N-Nitrosodiphenylamine	20	U	20	310
Pentachlorophenol	310	U	310	620
Phenanthrene	16	U	16	310
Phenol	17	U	17	310
Pyrene	11	U	11	310
1,2,4-Trichlorobenzene	26	U	26	310
2,4,5-Trichlorophenol	9.5	U	9.5	310
2,4,6-Trichlorophenol	9.5	U	9.5	310

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	83	50 - 120
2-Fluorophenol	85	53 - 120
Nitrobenzene-d5	84	50 - 120
Phenol-d5	85	52 - 120
Terphenyl-d14	87	55 - 120
2,4,6-Tribromophenol	80	51 - 120

Method Blank TICs- Batch: 280-118868

Cas Number	Analyte	RT	Est. Result	Qual
	Unknown	2.82	2440	N J

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Lab Control Sample - Batch: 280-118868

Method: 8270C
Preparation: 3550C

Lab Sample ID:	LCS 280-118868/2-A	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Client Matrix:	Solid	Prep Batch:	280-118868	Lab File ID:	K5032.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	32.6 g
Analysis Date:	05/10/2012 1521	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acenaphthene	2450	2050	84	60 - 120	
Acenaphthylene	2450	2080	85	64 - 120	
Anthracene	2450	2140	87	63 - 120	
Benzo[a]anthracene	2450	2140	87	65 - 120	
Benzo[a]pyrene	2450	2010	82	59 - 120	
Benzo[b]fluoranthene	2450	2090	85	47 - 129	
Benzo[ghi]perylene	2450	2230	91	55 - 126	
Benzo[k]fluoranthene	2450	2200	90	48 - 130	
Bis(2-chloroethoxy)methane	2450	2030	83	56 - 120	
Bis(2-chloroethyl)ether	2450	2050	83	51 - 120	
bis (2-chloroisopropyl) ether	2450	1810	74	49 - 120	
Bis(2-ethylhexyl) phthalate	2450	2340	95	65 - 120	
4-Bromophenyl phenyl ether	2450	2130	87	64 - 120	
Butyl benzyl phthalate	2450	2320	94	65 - 120	
Carbazole	2450	2170	88	64 - 120	
4-Chloroaniline	2450	1390	56	28 - 120	
4-Chloro-3-methylphenol	2450	2170	89	63 - 120	
2-Chloronaphthalene	2450	2020	82	59 - 120	
2-Chlorophenol	2450	2190	89	57 - 120	
4-Chlorophenyl phenyl ether	2450	2050	84	64 - 120	
Chrysene	2450	2140	87	64 - 120	
Dibenz(a,h)anthracene	2450	1830	74	50 - 133	
Dibenzofuran	2450	2060	84	61 - 120	
1,2-Dichlorobenzene	2450	2010	82	53 - 120	
1,3-Dichlorobenzene	2450	1960	80	52 - 120	
1,4-Dichlorobenzene	2450	1980	81	52 - 120	
3,3'-Dichlorobenzidine	2450	1180	48	30 - 120	
2,4-Dichlorophenol	2450	2120	86	60 - 120	
Diethyl phthalate	2450	2170	88	66 - 120	
2,4-Dimethylphenol	2450	1940	79	54 - 120	
Dimethyl phthalate	2450	2130	87	65 - 120	
Di-n-butyl phthalate	2450	2290	93	67 - 120	
4,6-Dinitro-2-methylphenol	2450	2190	89	57 - 120	
2,4-Dinitrophenol	2450	1810	74	46 - 120	
2,4-Dinitrotoluene	2450	2260	92	68 - 120	
2,6-Dinitrotoluene	2450	2160	88	64 - 120	
Di-n-octyl phthalate	2450	2410	98	66 - 120	
Fluoranthene	2450	2150	88	66 - 120	
Fluorene	2450	2050	84	64 - 120	
Hexachlorobenzene	2450	2090	85	62 - 120	
Hexachlorobutadiene	2450	1930	79	53 - 120	

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Lab Control Sample - Batch: 280-118868

Method: 8270C
Preparation: 3550C

Lab Sample ID:	LCS 280-118868/2-A	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Client Matrix:	Solid	Prep Batch:	280-118868	Lab File ID:	K5032.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	32.6 g
Analysis Date:	05/10/2012 1521	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Hexachlorocyclopentadiene	2450	1930	79	47 - 120	
Hexachloroethane	2450	1940	79	51 - 120	
Indeno[1,2,3-cd]pyrene	2450	2080	85	63 - 120	
Isophorone	2450	1950	80	56 - 120	
2-Methylnaphthalene	2450	1950	79	57 - 120	
2-Methylphenol	2450	2040	83	56 - 120	
3 & 4 Methylphenol	4910	4140	84	53 - 120	
Naphthalene	2450	2010	82	57 - 120	
2-Nitroaniline	2450	2280	93	63 - 120	
3-Nitroaniline	2450	1670	68	47 - 120	
4-Nitroaniline	2450	2050	84	64 - 120	
Nitrobenzene	2450	2060	84	54 - 120	
2-Nitrophenol	2450	2140	87	56 - 120	
4-Nitrophenol	2450	2170	88	63 - 121	
N-Nitrosodi-n-propylamine	2450	2000	82	51 - 120	
N-Nitrosodiphenylamine	2090	1860	89	61 - 120	
Pentachlorophenol	2450	1900	77	56 - 120	
Phenanthrene	2450	2150	88	64 - 120	
Phenol	2450	2120	86	56 - 120	
Pyrene	2450	2210	90	64 - 120	
1,2,4-Trichlorobenzene	2450	2070	85	52 - 120	
2,4,5-Trichlorophenol	2450	2200	90	64 - 120	
2,4,6-Trichlorophenol	2450	2120	86	61 - 120	

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	84	50 - 120
2-Fluorophenol	86	53 - 120
Nitrobenzene-d5	84	50 - 120
Phenol-d5	86	52 - 120
Terphenyl-d14	92	55 - 120
2,4,6-Tribromophenol	88	51 - 120

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-118868

Method: 8270C
Preparation: 3550C

MS Lab Sample ID:	280-28595-5	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Client Matrix:	Solid	Prep Batch:	280-118868	Lab File ID:	K5045.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.3 g
Analysis Date:	05/10/2012 2251			Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			Injection Volume:	0.5 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-28595-5	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Client Matrix:	Solid	Prep Batch:	280-118868	Lab File ID:	K5046.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.7 g
Analysis Date:	05/10/2012 2312			Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			Injection Volume:	0.5 uL
Leach Date:	N/A				

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

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-118868

Method: 8270C
Preparation: 3550C

MS Lab Sample ID:	280-28595-5	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Client Matrix:	Solid	Prep Batch:	280-118868	Lab File ID:	K5045.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.3 g
Analysis Date:	05/10/2012 2251			Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			Injection Volume:	0.5 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-28595-5	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Client Matrix:	Solid	Prep Batch:	280-118868	Lab File ID:	K5046.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.7 g
Analysis Date:	05/10/2012 2312			Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			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	63	66	57 - 120	4	30		
2,4-Dinitrophenol	38	42	46 - 120	8	34	T	T
2,4-Dinitrotoluene	88	89	68 - 120	0	30		
2,6-Dinitrotoluene	85	83	64 - 120	3	30		
Di-n-octyl phthalate	92	92	66 - 120	1	30		
Fluoranthene	81	83	66 - 120	1	30		
Fluorene	80	80	64 - 120	1	30		
Hexachlorobenzene	80	83	62 - 120	2	30		
Hexachlorobutadiene	75	78	53 - 120	2	30		
Hexachlorocyclopentadiene	75	78	47 - 120	4	30		
Hexachloroethane	75	77	51 - 120	1	30		
Indeno[1,2,3-cd]pyrene	78	78	63 - 120	2	30		
Isophorone	76	78	56 - 120	1	30		
2-Methylnaphthalene	76	78	57 - 120	1	30		
2-Methylphenol	79	81	56 - 120	2	30		
3 & 4 Methylphenol	83	84	53 - 120	0	30		
Naphthalene	78	80	57 - 120	2	30		
2-Nitroaniline	88	88	63 - 120	1	30		
3-Nitroaniline	78	78	47 - 120	1	30		
4-Nitroaniline	86	86	64 - 120	0	30		
Nitrobenzene	79	81	54 - 120	1	30		
2-Nitrophenol	85	86	56 - 120	1	30		
4-Nitrophenol	86	88	63 - 121	1	30		
N-Nitrosodi-n-propylamine	78	80	51 - 120	1	30		
N-Nitrosodiphenylamine	83	85	61 - 120	2	36		
Pentachlorophenol	60	60	56 - 120	1	30		
Phenanthrene	81	83	64 - 120	1	30		
Phenol	83	83	56 - 120	1	30		
Pyrene	83	85	64 - 120	1	38		
1,2,4-Trichlorobenzene	81	82	52 - 120	0	30		
2,4,5-Trichlorophenol	85	87	64 - 120	1	30		
2,4,6-Trichlorophenol	81	82	61 - 120	1	30		

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-118868

Method: 8270C
Preparation: 3550C

MS Lab Sample ID:	280-28595-5	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Client Matrix:	Solid	Prep Batch:	280-118868	Lab File ID:	K5045.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.3 g
Analysis Date:	05/10/2012 2251			Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			Injection Volume:	0.5 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-28595-5	Analysis Batch:	280-119284	Instrument ID:	MSS_K
Client Matrix:	Solid	Prep Batch:	280-118868	Lab File ID:	K5046.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.7 g
Analysis Date:	05/10/2012 2312			Final Weight/Volume:	1000 uL
Prep Date:	05/08/2012 1513			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	80	50 - 120
2-Fluorophenol	83	85	53 - 120
Nitrobenzene-d5	82	83	50 - 120
Phenol-d5	83	84	52 - 120
Terphenyl-d14	87	88	55 - 120
2,4,6-Tribromophenol	83	84	51 - 120

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Method Blank - Batch: 280-118883

Method: 8081A
Preparation: 3550C

Lab Sample ID:	MB 280-118883/1-A	Analysis Batch:	280-119369	Instrument ID:	GCS_P1
Client Matrix:	Solid	Prep Batch:	280-118883	Lab File ID:	05100035.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.7 g
Analysis Date:	05/10/2012 1947	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	05/08/2012 1750			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
4,4'-DDD	0.53	U	0.53	1.7
4,4'-DDE	0.23	U	0.23	1.7
4,4'-DDT	0.58	U	0.58	1.7
Aldrin	0.25	U	0.25	1.6
alpha-BHC	0.21	U	0.21	1.6
beta-BHC	0.65	U	0.65	1.6
delta-BHC	0.39	U	0.39	1.6
gamma-BHC (Lindane)	0.45	U	0.45	1.6
Heptachlor	0.21	U	0.21	1.6
Heptachlor epoxide	0.42	U	0.42	1.6
Endosulfan I	0.17	U	0.17	1.6
Endosulfan II	0.28	U	0.28	1.7
Endosulfan sulfate	0.27	U	0.27	1.7
Endrin	0.30	U	0.30	1.7
Endrin aldehyde	0.17	U	0.17	1.7
Endrin ketone	0.48	U	0.48	1.7
gamma-Chlordane	0.26	U	0.26	1.7
Methoxychlor	0.44	U	0.44	3.2
alpha-Chlordane	0.32	U	0.32	1.7
Dieldrin	0.21	U	0.21	1.7
Toxaphene	15	U	15	160

Surrogate	% Rec	Acceptance Limits
Tetrachloro-m-xylene	87	59 - 115
Decachlorobiphenyl	97	63 - 124

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Lab Control Sample - Batch: 280-118883

Method: 8081A
Preparation: 3550C

Lab Sample ID:	LCS 280-118883/2-A	Analysis Batch:	280-119369	Instrument ID:	GCS_P1
Client Matrix:	Solid	Prep Batch:	280-118883	Lab File ID:	05100036.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	33.0 g
Analysis Date:	05/10/2012 2005	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	05/08/2012 1750			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
4,4'-DDD	15.2	13.3	88	54 - 130	
4,4'-DDE	15.2	14.7	97	58 - 121	
4,4'-DDT	15.2	15.4	102	57 - 133	
Aldrin	15.2	13.4	88	63 - 115	
alpha-BHC	15.2	13.6	90	64 - 116	
beta-BHC	15.2	13.8	91	67 - 115	
delta-BHC	15.2	14.4	95	67 - 115	
gamma-BHC (Lindane)	15.2	13.6	90	63 - 118	
Heptachlor	15.2	14.0	92	68 - 115	
Heptachlor epoxide	15.2	14.2	94	66 - 117	
Endosulfan I	15.2	13.8	91	65 - 118	
Endosulfan II	15.2	14.3	94	71 - 118	
Endosulfan sulfate	15.2	14.9	98	67 - 123	
Endrin	15.2	17.4	115	77 - 134	
Endrin aldehyde	15.2	12.9	85	47 - 115	
Endrin ketone	15.2	14.6	96	62 - 115	
gamma-Chlordane	15.2	14.4	95	65 - 117	
Methoxychlor	15.2	15.8	104	67 - 130	
alpha-Chlordane	15.2	14.6	96	63 - 120	
Dieldrin	15.2	14.6	96	65 - 127	

Surrogate	% Rec	Acceptance Limits
Tetrachloro-m-xylene	89	59 - 115
Decachlorobiphenyl	107	63 - 124

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-118883

Method: 8081A
Preparation: 3550C

MS Lab Sample ID:	280-28595-10	Analysis Batch:	280-119369	Instrument ID:	GCS_P1
Client Matrix:	Solid	Prep Batch:	280-118883	Lab File ID:	05100050.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.7 g
Analysis Date:	05/11/2012 0005			Final Weight/Volume:	10000 uL
Prep Date:	05/08/2012 1750			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-28595-10	Analysis Batch:	280-119369	Instrument ID:	GCS_P1
Client Matrix:	Solid	Prep Batch:	280-118883	Lab File ID:	05100051.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.4 g
Analysis Date:	05/11/2012 0023			Final Weight/Volume:	10000 uL
Prep Date:	05/08/2012 1750			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
4,4'-DDD	81	81	54 - 130	1	20		
4,4'-DDE	91	91	58 - 121	1	15		
4,4'-DDT	94	96	57 - 133	2	29		
Aldrin	86	86	63 - 115	1	50		
alpha-BHC	85	86	64 - 116	2	17		
beta-BHC	86	86	67 - 115	1	17		
delta-BHC	88	88	67 - 115	1	19		
gamma-BHC (Lindane)	85	86	63 - 118	2	24		
Heptachlor	88	87	68 - 115	1	18		
Heptachlor epoxide	86	87	66 - 117	2	18		
Endosulfan I	86	85	65 - 118	0	26		
Endosulfan II	87	86	71 - 118	0	20		
Endosulfan sulfate	92	92	67 - 123	1	22		
Endrin	108	107	77 - 134	0	30		
Endrin aldehyde	77	76	47 - 115	1	29		
Endrin ketone	90	91	62 - 115	1	20		
gamma-Chlordane	87	88	65 - 117	2	21		
Methoxychlor	95	97	67 - 130	4	23		
alpha-Chlordane	88	89	63 - 120	2	18		
Dieldrin	90	89	65 - 127	0	25		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Tetrachloro-m-xylene	89	89	59 - 115
Decachlorobiphenyl	113	117	63 - 124

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Method Blank - Batch: 280-118878

Method: 8310
Preparation: 3550C

Lab Sample ID:	MB 280-118878/1-A	Analysis Batch:	280-119266	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-118878	Lab File ID:	G0510008.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.3 g
Analysis Date:	05/10/2012 1714	Units:	ug/Kg	Final Weight/Volume:	4000 uL
Prep Date:	05/08/2012 1650			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

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

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

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Lab Control Sample - Batch: 280-118878

Method: 8310
Preparation: 3550C

Lab Sample ID:	LCS 280-118878/2-A	Analysis Batch:	280-119266	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-118878	Lab File ID:	G0510009.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.0 g
Analysis Date:	05/10/2012 1745	Units:	ug/Kg	Final Weight/Volume:	4000 uL
Prep Date:	05/08/2012 1650			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acenaphthene	1940	1960	101	78 - 116	
Acenaphthylene	1940	1870	97	76 - 115	
Anthracene	1940	1910	98	74 - 115	
Benzo[a]anthracene	1940	2070	107	85 - 120	
Benzo[a]pyrene	1940	1940	100	74 - 121	
Benzo[b]fluoranthene	1940	2100	108	85 - 115	
Benzo[g,h,i]perylene	1940	2110	109	85 - 120	
Benzo[k]fluoranthene	1940	2020	104	85 - 115	
Chrysene	1940	2060	106	83 - 115	
Dibenzo(a,h)anthracene	1940	2040	105	83 - 115	
Fluoranthene	1940	2050	106	83 - 115	
Fluorene	1940	1970	102	80 - 115	
Indeno[1,2,3-cd]pyrene	1940	2170	112	85 - 123	
Naphthalene	1940	1870	97	80 - 121	
Phenanthrene	1940	1980	102	80 - 115	
Pyrene	1940	2020	104	75 - 116	

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

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-118878

Method: 8310
Preparation: 3550C

MS Lab Sample ID:	280-28595-9	Analysis Batch:	280-119266	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-118878	Lab File ID:	G0510020.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0 g
Analysis Date:	05/10/2012 2321			Final Weight/Volume:	4000 uL
Prep Date:	05/08/2012 1650			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-28595-9	Analysis Batch:	280-119266	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-118878	Lab File ID:	G0510021.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	32.9 g
Analysis Date:	05/10/2012 2351			Final Weight/Volume:	4000 uL
Prep Date:	05/08/2012 1650			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acenaphthene	104	99	78 - 116	14	20		
Acenaphthylene	100	95	76 - 115	14	21		
Anthracene	100	96	74 - 115	14	20		
Benzo[a]anthracene	107	103	85 - 120	13	20		
Benzo[a]pyrene	99	95	74 - 121	13	20		
Benzo[b]fluoranthene	108	104	85 - 115	13	20		
Benzo[g,h,i]perylene	107	103	85 - 120	13	20		
Benzo[k]fluoranthene	104	100	85 - 115	13	20		
Chrysene	105	101	83 - 115	13	20		
Dibenzo(a,h)anthracene	105	102	83 - 115	13	20		
Fluoranthene	106	102	83 - 115	13	20		
Fluorene	103	99	80 - 115	13	20		
Indeno[1,2,3-cd]pyrene	110	106	85 - 123	13	20		
Naphthalene	99	95	80 - 121	13	20		
Phenanthrene	103	99	80 - 115	13	20		
Pyrene	105	101	75 - 116	13	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Terphenyl-d14 (SUR)	89	86	72 - 115

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Method Blank - Batch: 280-118875

Method: 6010B
Preparation: 3050B

Lab Sample ID:	MB 280-118875/1-A	Analysis Batch:	280-119155	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-118875	Lab File ID:	25A1050912.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	05/09/2012 1353	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	05/09/2012 0700				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Aluminum	1.6	U	1.6	5.0
Antimony	0.38	U	0.38	0.60
Arsenic	0.66	U	0.66	1.0
Barium	0.076	U	0.076	0.50
Beryllium	0.033	U	0.033	0.20
Boron	0.98	U	0.98	2.0
Cadmium	0.041	U	0.041	0.20
Calcium	14.1	U	14.1	50.0
Chromium	0.058	U	0.058	0.20
Cobalt	0.10	U	0.10	1.0
Copper	0.22	U	0.22	1.0
Iron	3.8	U	3.8	5.0
Lead	0.27	U	0.27	0.50
Magnesium	3.7	U	3.7	20.0
Manganese	0.10	U	0.10	1.0
Molybdenum	0.26	U	0.26	2.0
Nickel	0.12	U	0.12	4.0
Potassium	41.0	U	41.0	300
Selenium	0.86	U	0.86	1.0
Silicon	5.7	U	5.7	10.0
Silver	0.16	U	0.16	0.20
Sodium	59.0	U	59.0	120
Vanadium	0.094	U	0.094	2.0
Zinc	0.40	U	0.40	1.0

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Lab Control Sample - Batch: 280-118875

Method: 6010B
Preparation: 3050B

Lab Sample ID:	LCS 280-118875/2-A	Analysis Batch:	280-119155	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-118875	Lab File ID:	25A1050912.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	05/09/2012 1355	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	05/09/2012 0700				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	200	194.7	97	82 - 116	
Antimony	50.0	48.26	97	82 - 110	
Arsenic	100	102.0	102	85 - 110	
Barium	200	197.6	99	87 - 112	
Beryllium	5.00	4.89	98	84 - 114	
Boron	100	101.2	101	81 - 110	
Cadmium	10.0	10.22	102	87 - 110	
Calcium	5000	4797	96	82 - 114	
Chromium	20.0	20.09	100	84 - 114	
Cobalt	50.0	49.88	100	87 - 110	
Copper	25.0	25.15	101	88 - 110	
Iron	100	101.4	101	87 - 120	
Lead	50.0	50.77	102	86 - 110	
Magnesium	5000	4825	96	90 - 110	
Manganese	50.0	49.12	98	88 - 110	
Molybdenum	100	100.8	101	86 - 110	
Nickel	50.0	50.06	100	87 - 110	
Potassium	5000	4968	99	89 - 110	
Selenium	200	210.9	105	83 - 110	
Silicon	1000	81.44	8	10 - 70	N
Silver	5.00	5.00	100	87 - 114	
Sodium	5000	5227	105	90 - 112	
Vanadium	50.0	49.54	99	88 - 110	
Zinc	50.0	47.98	96	76 - 114	

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Matrix Spike - Batch: 280-118875

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-28595-1	Analysis Batch:	280-119155	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-118875	Lab File ID:	25A1050912.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.16 g
Analysis Date:	05/09/2012 1405	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	05/09/2012 0700				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	5860		179	7447	889	50 - 200	4
Antimony	0.50	B	44.8	19.67	43	20 - 200	
Arsenic	2.9		89.6	75.02	81	76 - 111	
Barium	72.1		179	227.3	87	52 - 159	
Beryllium	0.64		4.48	4.31	82	72 - 105	
Boron	0.93	U	89.6	73.52	82	75 - 107	
Cadmium	0.039	U	8.96	8.00	89	40 - 130	
Calcium	5830		4480	10310	100	43 - 165	
Chromium	10.1		17.9	25.10	84	70 - 200	
Cobalt	8.1		44.8	45.61	84	72 - 106	
Copper	15.5		22.4	34.78	86	37 - 187	
Iron	22200		89.6	22130	-32	70 - 200	4
Lead	2.9		44.8	40.95	85	70 - 200	
Magnesium	4780		4480	9081	96	64 - 145	
Manganese	305		44.8	371.3	147	40 - 200	4
Molybdenum	0.29	B	89.6	74.65	83	75 - 103	
Nickel	13.5		44.8	49.41	80	61 - 126	
Potassium	763		4480	4782	90	56 - 172	
Selenium	0.94		179	157.0	87	76 - 104	
Silicon	244		896	307.3	7	20 - 200	N
Silver	0.15	U	4.48	3.97	89	75 - 141	
Sodium	284		4480	4513	94	78 - 111	
Vanadium	56.9		44.8	96.73	89	50 - 169	
Zinc	40.0		44.8	78.10	85	70 - 200	

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Duplicate - Batch: 280-118875

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-28595-1	Analysis Batch:	280-119155	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-118875	Lab File ID:	25A1050912.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.11 g
Analysis Date:	05/09/2012 1402	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	05/09/2012 0700				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Aluminum	5860		5875	0.3	40	
Antimony	0.50	B	0.36	NC	40	U
Arsenic	2.9		2.32	21	30	
Barium	72.1		74.73	4	30	
Beryllium	0.64		0.649	1	30	
Boron	0.93	U	0.92	NC	30	U
Cadmium	0.039	U	0.038	NC	30	U
Calcium	5830		5668	3	30	
Chromium	10.1		8.88	12	40	
Cobalt	8.1		7.64	6	30	
Copper	15.5		15.34	0.9	30	
Iron	22200		21490	3	40	
Lead	2.9		2.81	4	40	
Magnesium	4780		4779	0.09	30	
Manganese	305		309.9	1	40	
Molybdenum	0.29	B	0.24	NC	30	U
Nickel	13.5		10.64	24	30	
Potassium	763		794.8	4	40	
Selenium	0.94		0.80	NC	30	U
Silicon	244		279.4	13	40	N
Silver	0.15	U	0.15	NC	30	U
Sodium	284		278.4	2	30	
Vanadium	56.9		54.44	4	30	
Zinc	40.0		41.03	3	40	

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Method Blank - Batch: 280-119320

Method: 7471A
Preparation: 7471A

Lab Sample ID:	MB 280-119320/1-A	Analysis Batch:	280-119638	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-119320	Lab File ID:	120511taa.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.6 g
Analysis Date:	05/11/2012 1735	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	05/11/2012 1345				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	0.0055	U	0.0055	0.017

Lab Control Sample - Batch: 280-119320

Method: 7471A
Preparation: 7471A

Lab Sample ID:	LCS 280-119320/2-A	Analysis Batch:	280-119638	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-119320	Lab File ID:	120511taa.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.6 g
Analysis Date:	05/11/2012 1737	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	05/11/2012 1345				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.417	0.419	101	87 - 111	

Matrix Spike - Batch: 280-119320

Method: 7471A
Preparation: 7471A

Lab Sample ID:	280-28595-1	Analysis Batch:	280-119638	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-119320	Lab File ID:	120511taa.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.68 g
Analysis Date:	05/11/2012 1748	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	05/11/2012 1345				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.0065	U	0.382	0.409	107	87 - 111	

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Duplicate - Batch: 280-119320

Method: 7471A
Preparation: 7471A

Lab Sample ID:	280-28595-1	Analysis Batch:	280-119638	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-119320	Lab File ID:	120511taa.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.61 g
Analysis Date:	05/11/2012 1741	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	05/11/2012 1345				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Mercury	0.0065	U	0.0057	NC	20	U

Client: Washington Closure Hanford

Job Number: 280-28595-1
Sdg Number: JP0388

Duplicate - Batch: 280-119015

Method: D-2216
Preparation: N/A

Lab Sample ID:	280-28595-1	Analysis Batch:	280-119015	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:	05/09/2012 1038	Units:	%	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Moisture	3.7	3.8	2	20	

Duplicate - Batch: 280-119015

Method: D-2216
Preparation: N/A

Lab Sample ID:	280-28595-10	Analysis Batch:	280-119015	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:	05/09/2012 1038	Units:	%	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Moisture	4.8	4.8	0.3	20	