0096171

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 5/6/11
INITIAL/DATE

COMMENTS:

SDG JP0172 SAF RC-074

Rad only Chem only ☑ Rad & Chem

☑ Complete Partial

Waste Site: 118-D-3:1 Excavation Area Re-Verification

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MAY 11 2011
EDMC

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 93 *Pages*

Report No.: 46458

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.
JP0172	RC-074	J1HK84	J1D280423-1	MHLLP1AF	9MHLLP10	1118152
		J1HK84	J1D280423-1	MHLLP1AC	9MHLLP10	1118153
		J1HK84	J1D280423-1	MHLLP1AJ	9MHLLP10	1118154
		J1HK84	J1D280423-1	MHLLP1AG	9MHLLP10	1118155
		J1HK84	J1D280423-1	MHLLP1AE	9MHLLP10	1118156
		J1HK84	J1D280423-1	MHLLP1AH	9MHLLP10	1118157
		J1HK84	J1D280423-1	MHLLP1AD	9MHLLP10	1118158
		J1HK84	J1D280423-1	MHLLP1AA	9MHLLP10	1118341
		J1HK85	J1D280423-2	MHLL01AF	9MHLL010	1118152
		J1HK85	J1D280423-2	MHLL01AC	9MHLL010	1118153
		J1HK85	J1D280423-2	MHLL01AJ	9MHLL010	1118154
		J1HK85	J1D280423-2	MHLL01AG	9MHLL010	1118155
		J1HK85	J1D280423-2	MHLL01AE	9MHLL010	1118156
		J1HK85	J1D280423-2	MHLL01AH	9MHLL010	1118157
		J1HK85	J1D280423-2	MHLL01AD	9MHLL010	1118158
		J1HK85	J1D280423-2	MHLL01AA	9MHLL010	1118341
		J1HK86	J1D280423-3	MHLL51AF	9MHLL510	1118152
		J1HK86	J1D280423-3	MHLL51AC	9MHLL510	1118153
		J1HK86	J1D280423-3	MHLL51AJ	9MHLL510	1118154
		J1HK86	J1D280423-3	MHLL51AG	9MHLL510	1118155
		J1HK86	J1D280423-3	MHLL51AE	9MHLL510	1118156
		J1HK86	J1D280423-3	MHLL51AH	9MHLL510	1118157
		J1HK86	J1D280423-3	MHLL51AD	9MHLL510	1118158
		J1HK86	J1D280423-3	MHLL51AA	9MHLL510	1118341
		J1HK87	J1D280423-4	MHLL71AF	9MHLL710	1118152
		J1HK87	J1D280423-4	MHLL71AC	9MHLL710	1118153

Report No.: 46458

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.
JP0172	RC-074	J1HK87	J1D280423-4	MHLL71AJ	9MHLL710	1118154
		J1HK87	J1D280423-4	MHLL71AG	9MHLL710	1118155
		J1HK87	J1D280423-4	MHLL71AE	9MHLL710	1118156
		J1HK87	J1D280423-4	MHLL71AH	9MHLL710	1118157
		J1HK87	J1D280423-4	MHLL71AD	9MHLL710	1118158
		J1HK87	J1D280423-4	MHLL71AA	9MHLL710	1118341
		J1HK88	J1D280423-5	MHLMA1AF	9MHLMA10	1118152
		J1HK88	J1D280423-5	MHLMA1AC	9MHLMA10	1118153
		J1HK88	J1D280423-5	MHLMA1AJ	9MHLMA10	1118154
		J1HK88	J1D280423-5	MHLMA1AG	9MHLMA10	1118155
		J1HK88	J1D280423-5	MHLMA1AE	9MHLMA10	1118156
		J1HK88	J1D280423-5	MHLMA1AH	9MHLMA10	1118157
		J1HK88	J1D280423-5	MHLMA1AD	9MHLMA10	1118158
		J1HK88	J1D280423-5	MHLMA1AA	9MHLMA10	1118341
		J1HK89	J1D280423-6	MHLMJ1AF	9MHLMJ10	1118152
		J1HK89	J1D280423-6	MHLMJ1AC	9MHLMJ10	1118153
		J1HK89	J1D280423-6	MHLMJ1AJ	9MHLMJ10	1118154
		J1HK89	J1D280423-6	MHLMJ1AG	9MHLMJ10	1118155
		J1HK89	J1D280423-6	MHLMJ1AE	9MHLMJ10	1118156
		J1HK89	J1D280423-6	MHLMJ1AH	9MHLMJ10	1118157
		J1HK89	J1D280423-6	MHLMJ1AD	9MHLMJ10	1118158
		J1HK89	J1D280423-6	MHLMJ1AA	9MHLMJ10	1118341
		J1HK91	J1D280423-7	MHLML1AF	9MHLML10	1118152
		J1HK91	J1D280423-7	MHLML1AC	9MHLML10	1118153
		J1HK91	J1D280423-7	MHLML1AJ	9MHLML10	1118154
		J1HK91	J1D280423-7	MHLML1AG	9MHLML10	1118155
		J1HK91	J1D280423-7	MHLML1AE	9MHLML10	1118156
		J1HK91	J1D280423-7	MHLML1AH	9MHLML10	1118157
		J1HK91	J1D280423-7	MHLML1AD	9MHLML10	1118158
		J1HK91	J1D280423-7	MHLML1AA	9MHLML10	1118341

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

Washington Hanford Closure
2620 Fermi Avenue
Richland, WA 99354

TestAmerica Laboratories, Inc.

May 4, 2011

Attention: Joan Kessner

SAF Number	:	RC-074
Date SDG Closed	:	April 27, 2011
Number of Samples	:	Seven (7)
Sample Type	:	Soil
SDG Number	:	JP0172
Data Deliverable	:	7– Day / Summary

CASE NARRATIVE

I. Introduction

On April 27, 2011, seven soil samples were received at TestAmerica for radiochemical analysis. Upon receipt, the samples were assigned the following laboratory ID number to correspond with the Washington Closure Hanford (WCH) specific ID:

WCH ID#	TARL ID#	MATRIX	DATE OF RECEIPT
J1HK84	MHLLP	SOIL	4/27/11
J1HK85	MHLL0	SOIL	4/27/11
J1HK86	MHLL5	SOIL	4/27/11
J1HK87	MHLL7	SOIL	4/27/11
J1HK88	MHLMA	SOIL	4/27/11
J1HK89	MHLMJ	SOIL	4/27/11
J1HK91	MHLML	SOIL	4/27/11

II. Sample Receipt

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

III. Analytical Results/Methodology

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

The requested analyses were:

Alpha Spectroscopy
Plutonium-238, -239/240 by method RL-ALP-002
Uranium 234, 235 and 238 by method RL-ALP-015
Gas Proportional Counting
Strontium-90 by method RL-GPC-003
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
Nickel-63 by method RL-LCS-017
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

Alpha Spectroscopy
Plutonium-238, -239/240 by method RL-ALP-002:
The LCS, batch blank, samples and sample duplicate (J1HK84) results are within contractual requirements.

Uranium 234, 235 and 238 by method RL-ALP-015:
The LCS, batch blank, samples and sample duplicate (J1HK85) results are within contractual requirements.

Gas Proportional Counting
Strontium-90 by method RL-GPC-003:
The LCS, batch blank, samples and sample duplicate (J1HK89) results are within contractual requirements.

Gamma Spectroscopy
Gamma Spec by method RL-GAM-001:
The CRDL was not met on some analytes. Except as noted, the LCS, batch blank, samples and sample duplicate (J1HK88) results are within contractual requirements.

Liquid Scintillation Counting
Tritium by method RL-LSC-005:
The LCS, batch blank, samples and sample duplicate (J1HK86) results are within contractual requirements.

Carbon-14 by method RL-LSC-008:
The LCS, batch blank, samples and sample duplicate (J1HK86) results are within contractual requirements.

Nickel-63 by method RL-LCS-017:
The LCS, batch blank, samples and sample duplicate (J1HK87) results are within contractual requirements.

Chemical Analysis
Hexavalent Chromium by EPA method 7196A
The LCS, batch blank, samples, sample duplicate (J1HK84) and sample matrix spike (J1HK84) results are within contractual requirements.

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

Reviewed and approved:

Rhonda Wagar
Project Manager

Drinking Water Method Cross References

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

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

Uncertainty Estimation

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

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

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

Report Definitions

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

Sample Results Summary

Date: 04-May-11

TestAmerica TARL

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

Report No. : 46458

SDG No: JP0172

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDC or MDA	CRDL	RPD
1118152 PUISO_PLATE_AEA									
J1HK84									
	MHLLP1AF	PU-238	0.00E+00 +- 5.7E-02	U	pCi/g	100%	1.07E-01	1.00E+00	
		PU239/40	0.00E+00 +- 5.7E-02	U	pCi/g	100%	1.07E-01	1.00E+00	
J1HK84 DUP									
	MHLLP1AK	PU-238	0.00E+00 +- 6.9E-02	U	pCi/g	91%	1.30E-01	1.00E+00	
		PU239/40	0.00E+00 +- 6.9E-02	U	pCi/g	91%	1.30E-01	1.00E+00	
J1HK85									
	MHLL01AF	PU-238	-1.59E-03 +- 6.3E-02	U	pCi/g	100%	1.19E-01	1.00E+00	
		PU239/40	-4.76E-03 +- 6.3E-02	U	pCi/g	100%	1.43E-01	1.00E+00	
J1HK86									
	MHLL51AF	PU-238	-5.59E-03 +- 5.6E-02	U	pCi/g	97%	1.34E-01	1.00E+00	
		PU239/40	-5.59E-03 +- 5.6E-02	U	pCi/g	97%	1.34E-01	1.00E+00	
J1HK87									
	MHLL71AF	PU-238	-3.52E-03 +- 7.0E-02	U	pCi/g	93%	1.47E-01	1.00E+00	
		PU239/40	-1.76E-03 +- 7.0E-02	U	pCi/g	93%	1.32E-01	1.00E+00	
J1HK88									
	MHLMA1AF	PU-238	1.95E-01 +- 1.5E-01		pCi/g	100%	1.05E-01	1.00E+00	
		PU239/40	2.32E+00 +- 6.9E-01		pCi/g	100%	1.05E-01	1.00E+00	
J1HK89									
	MHLMJ1AF	PU-238	3.48E-02 +- 7.0E-02	U	pCi/g	96%	1.31E-01	1.00E+00	
		PU239/40	0.00E+00 +- 7.0E-02	U	pCi/g	96%	1.31E-01	1.00E+00	
J1HK91									
	MHLML1AF	PU-238	-1.63E-03 +- 6.5E-02	U	pCi/g	100%	1.22E-01	1.00E+00	
		PU239/40	0.00E+00 +- 6.5E-02	U	pCi/g	100%	1.22E-01	1.00E+00	
1118153 UISO_IE_PLATE_AEA									
J1HK84									
	MHLLP1AC	U-234	6.84E-02 +- 9.3E-02	U	pCi/g	92%	1.49E-01	1.00E+00	
		U-235	-3.95E-03 +- 5.3E-02	U	pCi/g	92%	1.19E-01	1.00E+00	
		U-238	1.46E-01 +- 1.3E-01	U	pCi/g	92%	1.53E-01	1.00E+00	
J1HK85									
	MHLL01AC	U-234	3.89E-01 +- 2.3E-01		pCi/g	83%	1.73E-01	1.00E+00	
		U-235	2.30E-02 +- 5.8E-02	U	pCi/g	83%	1.38E-01	1.00E+00	
		U-238	1.02E-01 +- 1.2E-01	U	pCi/g	83%	1.68E-01	1.00E+00	
J1HK85 DUP									
	MHLL01AK	U-234	1.05E-01 +- 1.6E-01	U	pCi/g	41%	2.03E-01	1.00E+00	114.7
		U-235	-8.12E-03 +- 1.1E-01	U	pCi/g	41%	2.44E-01	1.00E+00	417.9
		U-238	1.08E-01 +- 1.6E-01	U	pCi/g	41%	2.03E-01	1.00E+00	5.6
J1HK86									

TestAmerica

rptSTLRchSaSummary2 V5.2.12 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

Date: 04-May-11

TestAmerica TARL

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

Report No. : 46458

SDG No: JP0172

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDC or MDA	CRDL	RPD
1118153 UISO_IE_PLATE_AEA									
J1HK86									
	MHLL51AC	U-234	3.56E-01 +- 2.3E-01		pCi/g	68%	1.22E-01	1.00E+00	
		U-235	-1.63E-03 +- 6.5E-02	U	pCi/g	68%	1.22E-01	1.00E+00	
		U-238	1.88E-01 +- 1.6E-01		pCi/g	68%	1.55E-01	1.00E+00	
J1HK87									
	MHLL71AC	U-234	4.05E-02 +- 8.2E-02	U	pCi/g	56%	1.52E-01	1.00E+00	
		U-235	0.00E+00 +- 8.1E-02	U	pCi/g	56%	1.52E-01	1.00E+00	
		U-238	-6.08E-03 +- 8.1E-02	U	pCi/g	56%	1.83E-01	1.00E+00	
J1HK88									
	MHLMA1AC	U-234	4.25E-01 +- 2.6E-01		pCi/g	68%	1.44E-01	1.00E+00	
		U-235	-2.86E-03 +- 7.1E-02	U	pCi/g	68%	1.44E-01	1.00E+00	
		U-238	2.10E-01 +- 1.8E-01		pCi/g	68%	1.54E-01	1.00E+00	
J1HK89									
	MHLMJ1AC	U-234	-3.17E-03 +- 7.9E-02	U	pCi/g	69%	1.59E-01	1.00E+00	
		U-235	3.80E-02 +- 8.0E-02	U	pCi/g	69%	1.44E-01	1.00E+00	
		U-238	1.14E-01 +- 1.4E-01	U	pCi/g	69%	1.71E-01	1.00E+00	
J1HK91									
	MHLML1AC	U-234	5.21E-02 +- 9.0E-02	U	pCi/g	76%	1.73E-01	1.00E+00	
		U-235	-4.74E-03 +- 6.3E-02	U	pCi/g	76%	1.42E-01	1.00E+00	
		U-238	2.08E-01 +- 1.7E-01		pCi/g	76%	1.79E-01	1.00E+00	
1118157 GAMMA_GS									
J1HK84									
	MHLLP1AH	AMERICIUM 241	-4.95E-02 +- 6.4E-02	U	pCi/g		1.05E-01		
		CO-60	-1.38E-03 +- 1.4E-02	U	pCi/g		2.38E-02	5.00E-02	
		CS-137	-5.71E-03 +- 1.5E-02	U	pCi/g		2.56E-02	1.00E-01	
		EU-152	-8.86E-02 +- 5.4E-02	U	pCi/g		7.01E-02	1.00E-01	
		EU-154	-4.46E-02 +- 4.3E-02	U	pCi/g		6.82E-02	1.00E-01	
		EU-155	7.88E-03 +- 4.8E-02	U	pCi/g		8.12E-02	1.00E-01	
J1HK85									
	MHLL01AH	AMERICIUM 241	-2.10E-03 +- 8.7E-02	U	pCi/g		1.45E-01		
		CO-60	1.43E-03 +- 1.3E-02	U	pCi/g		2.37E-02	5.00E-02	
		CS-137	9.55E-04 +- 1.3E-02	U	pCi/g		2.25E-02	1.00E-01	
		EU-152	1.83E-02 +- 3.3E-02	U	pCi/g		5.66E-02	1.00E-01	
		EU-154	-2.64E-02 +- 4.5E-02	U	pCi/g		7.52E-02	1.00E-01	
		EU-155	4.79E-02 +- 6.0E-02	U	pCi/g		6.16E-02	1.00E-01	
J1HK86									
	MHLL51AH	AMERICIUM 241	1.70E-02 +- 7.4E-02	U	pCi/g		1.24E-01		
		CO-60	-1.60E-02 +- 2.1E-02	U	pCi/g		3.46E-02	5.00E-02	

TestAmerica

rptSTLRchSaSummary2 V5.2.12 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

Date: 04-May-11

TestAmerica TARL

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

Report No. : 46458

SDG No: JP0172

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDC or MDA	CRDL	RPD
1118157 GAMMA_GS									
J1HK86									
	MHLL51AH	CS-137	1.32E+00 +- 1.8E-01		pCi/g		4.20E-02	1.00E-01	
		EU-152	1.94E-02 +- 6.2E-02	U	pCi/g		1.06E-01	1.00E-01	
		EU-154	1.13E-02 +- 6.4E-02	U	pCi/g		1.16E-01	1.00E-01	
		EU-155	2.03E-02 +- 5.6E-02	U	pCi/g		9.75E-02	1.00E-01	
J1HK87									
	MHLL71AH	AMERICIUM 241	-1.23E-01 +- 8.9E-02	U	pCi/g		1.43E-01		
		CO-60	5.42E-03 +- 1.8E-02	U	pCi/g		3.15E-02	5.00E-02	
		CS-137	9.02E-04 +- 1.9E-02	U	pCi/g		3.20E-02	1.00E-01	
		EU-152	-6.55E-02 +- 9.4E-02	U	pCi/g		8.80E-02	1.00E-01	
		EU-154	3.52E-02 +- 5.8E-02	U	pCi/g		1.04E-01	1.00E-01	
		EU-155	5.44E-02 +- 6.5E-02	U	pCi/g		1.09E-01	1.00E-01	
J1HK88									
	MHLMA1AH	AMERICIUM 241	1.67E-01 +- 5.8E-02		pCi/g		6.87E-02		
		CO-60	1.64E-01 +- 4.2E-02		pCi/g		3.11E-02	5.00E-02	
		CS-137	3.02E+00 +- 4.1E-01		pCi/g		3.61E-02	1.00E-01	
		EU-152	4.05E-02 +- 7.4E-02	U	pCi/g		1.14E-01	1.00E-01	
		EU-154	-1.80E-02 +- 6.5E-02	U	pCi/g		1.11E-01	1.00E-01	
		EU-155	3.33E-02 +- 5.9E-02	U	pCi/g		9.92E-02	1.00E-01	
J1HK88 DUP									
	MHLMA1AK	AMERICIUM 241	1.90E-01 +- 1.4E-01		pCi/g		1.58E-01		13.0
		CO-60	1.51E-01 +- 3.3E-02		pCi/g		2.06E-02	5.00E-02	8.2
		CS-137	3.01E+00 +- 3.8E-01		pCi/g		2.19E-02	1.00E-01	0.4
		EU-152	1.33E-02 +- 4.0E-02	U	pCi/g		6.69E-02	1.00E-01	101.3
		EU-154	1.14E-01 +- 4.3E-02	U	pCi/g		8.50E-02	1.00E-01	275.2
		EU-155	2.34E-02 +- 4.1E-02	U	pCi/g		7.07E-02	1.00E-01	35.0
J1HK89									
	MHLMJ1AH	AMERICIUM 241	-3.98E-02 +- 3.5E-02	U	pCi/g		5.56E-02		
		CO-60	1.43E-02 +- 2.0E-02	U	pCi/g		3.82E-02	5.00E-02	
		CS-137	2.73E-03 +- 2.2E-02	U	pCi/g		3.77E-02	1.00E-01	
		EU-152	1.78E-02 +- 6.3E-02	U	pCi/g		8.84E-02	1.00E-01	
		EU-154	2.90E-02 +- 6.3E-02	U	pCi/g		1.15E-01	1.00E-01	
		EU-155	9.02E-03 +- 5.1E-02	U	pCi/g		8.58E-02	1.00E-01	
J1HK91									
	MHLML1AH	AMERICIUM 241	-8.25E-03 +- 5.8E-02	U	pCi/g		9.69E-02		
		CO-60	1.27E-02 +- 1.9E-02	U	pCi/g		3.59E-02	5.00E-02	
		CS-137	1.95E-02 +- 1.9E-02	U	pCi/g		3.53E-02	1.00E-01	
		EU-152	2.43E-02 +- 5.1E-02	U	pCi/g		8.19E-02	1.00E-01	

TestAmerica

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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

Date: 04-May-11

TestAmerica TARL

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

Report No. : 46458

SDG No: JP0172

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDC or MDA	CRDL	RPD
1118157 GAMMA_GS									
J1HK91									
	MHLML1AH	EU-154	-4.62E-02 +- 5.8E-02	U	pCi/g		9.56E-02	1.00E-01	
		EU-155	-2.50E-03 +- 4.6E-02	U	pCi/g		7.91E-02	1.00E-01	
1118158 SRTOT_SEP_PRECIP_GPC									
J1HK84									
	MHLLP1AD	STRONTIUM	-3.89E-02 +- 6.4E-02	U	pCi/g	64%	1.63E-01		
J1HK85									
	MHLL01AD	STRONTIUM	-1.45E-02 +- 5.8E-02	U	pCi/g	73%	1.43E-01		
J1HK86									
	MHLL51AD	STRONTIUM	-5.87E-03 +- 6.3E-02	U	pCi/g	72%	1.51E-01		
J1HK87									
	MHLL71AD	STRONTIUM	5.67E-02 +- 6.6E-02	U	pCi/g	76%	1.36E-01		
J1HK88									
	MHLMA1AD	STRONTIUM	2.76E+01 +- 7.2E+00		pCi/g	72%	1.42E-01		
J1HK89									
	MHLMJ1AD	STRONTIUM	1.96E-01 +- 1.0E-01		pCi/g	68%	1.63E-01		
J1HK89 DUP									
	MHLMJ1AK	STRONTIUM	1.69E-01 +- 9.5E-02		pCi/g	66%	1.57E-01		15.1
J1HK91									
	MHLML1AD	STRONTIUM	1.05E-01 +- 8.4E-02	U	pCi/g	62%	1.62E-01		
1118154 C14_CHEM_LSC									
J1HK84									
	MHLLP1AJ	C-14	-5.24E-02 +- 2.1E-01	U	pCi/g	100%	4.53E-01	5.00E+01	
J1HK85									
	MHLL01AJ	C-14	1.40E-02 +- 2.1E-01	U	pCi/g	100%	4.55E-01	5.00E+01	
J1HK86									
	MHLL51AJ	C-14	1.02E-01 +- 2.2E-01	U	pCi/g	100%	4.54E-01	5.00E+01	
J1HK86 DUP									
	MHLL51AK	C-14	1.71E-01 +- 2.2E-01	U	pCi/g	100%	4.53E-01	5.00E+01	50.6
J1HK87									
	MHLL71AJ	C-14	2.31E-01 +- 2.2E-01	U	pCi/g	100%	4.52E-01	5.00E+01	
J1HK88									
	MHLMA1AJ	C-14	1.32E-01 +- 2.2E-01	U	pCi/g	100%	4.54E-01	5.00E+01	
J1HK89									
	MHLMJ1AJ	C-14	-3.41E-02 +- 2.1E-01	U	pCi/g	100%	4.54E-01	5.00E+01	
J1HK91									
	MHLML1AJ	C-14	1.19E-01 +- 2.2E-01	U	pCi/g	100%	4.56E-01	5.00E+01	
1118155 906.0_H3_LSC									
J1HK84									

TestAmerica
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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

Date: 04-May-11

TestAmerica TARL

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

Report No. : 46458

SDG No: JP0172

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDC or MDA	CRDL	RPD
1118155 906.0_H3_LSC									
J1HK84									
	MHLLP1AG	H-3	7.86E-03 +- 4.9E-03	U	pCi/g	100%	1.01E-02	4.00E+02	
J1HK85									
	MHLL01AG	H-3	1.78E-02 +- 6.7E-03		pCi/g	100%	1.30E-02	4.00E+02	
J1HK86									
	MHLL51AG	H-3	1.26E-02 +- 9.0E-03	U	pCi/g	100%	1.85E-02	4.00E+02	
J1HK86 DUP									
	MHLL51AL	H-3	1.56E-02 +- 1.2E-02	U	pCi/g	100%	2.40E-02	4.00E+02	21.1
J1HK87									
	MHLL71AG	H-3	4.13E-03 +- 1.2E-02	U	pCi/g	100%	2.56E-02	4.00E+02	
J1HK88									
	MHLMA1AG	H-3	4.16E-01 +- 1.9E-02		pCi/g	100%	1.17E-02	4.00E+02	
J1HK89									
	MHLMJ1AG	H-3	1.89E-02 +- 5.9E-03		pCi/g	100%	1.13E-02	4.00E+02	
J1HK91									
	MHLML1AG	H-3	9.43E-03 +- 5.2E-03	U	pCi/g	100%	1.06E-02	4.00E+02	
1118156 NI63_LSC									
J1HK84									
	MHLLP1AE	NI-63	-7.32E+00 +- 6.5E+00	U	pCi/g	91%	1.43E+01	3.00E+01	
J1HK85									
	MHLL01AE	NI-63	1.19E+00 +- 6.5E+00	U	pCi/g	100%	1.34E+01	3.00E+01	
J1HK86									
	MHLL51AE	NI-63	-2.37E+00 +- 6.3E+00	U	pCi/g	100%	1.34E+01	3.00E+01	
J1HK87									
	MHLL71AE	NI-63	-7.85E+00 +- 6.1E+00	U	pCi/g	97%	1.41E+01	3.00E+01	
J1HK87 DUP									
	MHLL71AK	NI-63	2.32E+00 +- 6.9E+00	U	pCi/g	95%	1.42E+01	3.00E+01	-367.9
J1HK88									
	MHLMA1AE	NI-63	-4.11E+00 +- 6.2E+00	U	pCi/g	98%	1.37E+01	3.00E+01	
J1HK89									
	MHLMJ1AE	NI-63	-7.01E-01 +- 6.4E+00	U	pCi/g	100%	1.36E+01	3.00E+01	
J1HK91									
	MHLML1AE	NI-63	6.61E-01 +- 6.4E+00	U	pCi/g	96%	1.33E+01	3.00E+01	
1118341 7196_CR6									
J1HK84									
	MHLLP1AA	HEXCHROME	1.54E-01 +- 0.0E+00	U	mg/kg	N/A	1.54E-01	1.55E-01	
	MHLLP1AM	HEXCHROME	1.54E-01 +- 0.0E+00	U	mg/kg	N/A	1.54E-01	3.50E-01	0.0
J1HK85									
	MHLL01AA	HEXCHROME	1.54E-01 +- 0.0E+00	U	mg/kg	N/A	1.54E-01	1.55E-01	

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RPD - Relative Percent Difference.

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Sample Results Summary

TestAmerica TARL

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

Date: 04-May-11

Report No. : 46458

SDG No: JP0172

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDC or MDA	CRDL	RPD
1118341	7196_CR6								
	J1HK86								
	MHLL51AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	J1HK87								
	MHLL71AA	HEXCHROME	1.54E-01 +- 0.0E+00	U	mg/kg	N/A	1.54E-01	1.55E-01	
	J1HK88								
	MHLMA1AA	HEXCHROME	1.54E-01 +- 0.0E+00	U	mg/kg	N/A	1.54E-01	1.55E-01	
	J1HK89								
	MHLMJ1AA	HEXCHROME	1.54E-01 +- 0.0E+00	U	mg/kg	N/A	1.54E-01	1.55E-01	
	J1HK91								
	MHLML1AA	HEXCHROME	1.54E-01 +- 0.0E+00	U	mg/kg	N/A	1.54E-01	1.55E-01	

No. of Results: 128

TestAmerica

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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: 04-May-11

Report No. : 46458

SDG No.: JP0172

Batch Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDC|MDA
PUISO_PLATE_AEA								
1118152 BLANK QC,								
MHLQ31AA	PU-238	0.00E+00 +- 1.0E-01	U	pCi/g	69%			1.89E-01
	PU239/40	5.03E-02 +- 1.0E-01	U	pCi/g	69%			1.89E-01
1118152 LCS,								
MHLQ31AC	PU239/40	6.75E+00 +- 1.8E+00		pCi/g	95%	98%	0.0	1.32E-01
UISO_IE_PLATE_AEA								
1118153 BLANK QC,								
MHLQ61AA	U-234	-1.89E-02 +- 7.6E-02	U	pCi/g	63%			2.26E-01
	U-235	-7.56E-03 +- 7.6E-02	U	pCi/g	63%			1.80E-01
	U-238	-1.70E-02 +- 7.6E-02	U	pCi/g	63%			2.20E-01
1118153 LCS,								
MHLQ61AC	U-234	2.70E+00 +- 7.7E-01		pCi/g	86%	84%	-0.2	9.84E-02
	U-238	4.12E+00 +- 1.1E+00		pCi/g	86%	122%	0.2	9.84E-02
GAMMA_GS								
1118157 BLANK QC,								
MHLRR1AA	AMERICIUM 241	-2.31E-02 +- 4.4E-02	U	pCi/g				7.39E-02
	CO-60	-7.50E-04 +- 1.0E-02	U	pCi/g				1.83E-02
	CS-137	-4.08E-04 +- 1.1E-02	U	pCi/g				1.97E-02
	EU-152	-2.85E-02 +- 3.7E-02	U	pCi/g				5.23E-02
	EU-154	-4.09E-03 +- 3.0E-02	U	pCi/g				5.44E-02
	EU-155	-3.46E-02 +- 3.1E-02	U	pCi/g				4.84E-02
1118157 LCS,								
MHLRR1AC	CS-137	1.02E+00 +- 1.5E-01		pCi/g		94%	-0.1	4.35E-02
SRTOT_SEP_PRECIP_GPC								
1118158 BLANK QC,								
MHLRX1AA	STRONTIUM	8.03E-03 +- 5.3E-02	U	pCi/g	90%			1.24E-01
1118158 LCS,								
MHLRX1AC	STRONTIUM	1.05E+00 +- 3.0E-01		pCi/g	92%	93%	-0.1	1.15E-01
C14_CHEM_LSC								
1118154 BLANK QC,								
MHLRC1AA	C-14	-2.06E-03 +- 5.2E-03	U	pCi/g	100%			1.14E-02
1118154 LCS,								
MHLRC1AC	C-14	7.55E+00 +- 5.4E-01		pCi/g	100%	100%	0.0	4.58E-01
906.0_H3_LSC								
1118155 BLANK QC,								
MHLRJ1AA	H-3	1.58E-02 +- 1.8E-02	U	pCi/g	100%			3.70E-02
1118155 LCS,								
MHLRJ1AC	H-3	3.39E-01 +- 2.9E-02		pCi/g	100%	103%	0.0	3.79E-02
NI63_LSC								
1118156 BLANK QC,								
MHLRN1AA	NI-63	-3.80E+00 +- 6.4E+00	U	pCi/g	97%			1.38E+01
1118156 LCS,								

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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.

QC Results Summary

TestAmerica TARL

Ordered by Method, Batch No, QC Type,.

Date: 04-May-11

Report No. : 46458

SDG No.: JP0172

Batch Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDC|MDA
MHLRN1AC	NI-63	4.44E+02 +- 4.3E+01		pCi/g	94%	79%	-0.2	1.35E+01
7196_CR6								
1118341 MATRIX SPIKE, J1HK84								
MHLLP1AL	HEXCHROME	8.53E+00 +- 0.0E+00		mg/kg	N/A	85%	-0.2	1.53E-01
1118341 LCS,								
MHM1E1AC	HEXCHROME	1.85E+01 +- 0.0E+00		mg/kg	N/A	92%	-0.1	1.55E-01
1118341 BLANK QC,								
MHM1E1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A			1.55E-01

No. of Results: 26

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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: 04-May-11

Lab Name:	TestAmerica	**SDG:**	JP0172	**Collection Date:**	4/26/2011 12:50:00 PM
Lot-Sample No.:	J1D280423-1	**Report No. :**	46458	**Received Date:**	4/27/2011 5:05:00 PM
Client Sample ID:	J1HK84	**COC No. :**	RC-075-237	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1118152	PUISO_PLATE_AEA			**Work Order:**	MHLLP1AF		**Report DB ID:**	9MHLLP10				
PU-238	***0.00E+00***	U	0.0E+00	5.7E-02	1.07E-01	pCi/g	100%	*0.*	5/3/11 03:50 p		1.0	ALP38
						1.49E-02	1.00E+00	*0.*			g	
PU239/40	***0.00E+00***	U	0.0E+00	5.7E-02	1.07E-01	pCi/g	100%	*0.*	5/3/11 03:50 p		1.0	ALP38
						1.49E-02	1.00E+00	*0.*			g	
Batch: 1118153	UISO_IE_PLATE_AEA			**Work Order:**	MHLLP1AC		**Report DB ID:**	9MHLLP10				
U-234	***6.84E-02***	U	9.1E-02	9.3E-02	1.49E-01	pCi/g	92%	*0.46*	5/3/11 12:26 p		1.01	ALP3
						3.87E-02	1.00E+00	*(1.5)*			g	
U-235	***-3.95E-03***	U	5.3E-02	5.3E-02	1.19E-01	pCi/g	92%	*-0.03*	5/3/11 12:26 p		1.01	ALP3
						2.37E-02	1.00E+00	*-0.15*			g	
U-238	***1.46E-01***	U	1.3E-01	1.3E-01	1.53E-01	pCi/g	92%	*0.95*	5/3/11 12:26 p		1.01	ALP3
						4.11E-02	1.00E+00	*(2.2)*			g	
							Ratio U-234/238 = 0.5					
Batch: 1118154	C14_CHEM_LSC			**Work Order:**	MHLLP1AJ		**Report DB ID:**	9MHLLP10				
C-14	***-5.24E-02***	U	1.8E-01	2.1E-01	4.53E-01	pCi/g	100%	*-0.12*	4/30/11 02:59 p		5.039	LSC3
						2.13E-01	5.00E+01	*-0.5*			g	
Batch: 1118155	906.0_H3_LSC			**Work Order:**	MHLLP1AG		**Report DB ID:**	9MHLLP10				
H-3	***7.86E-03***	U	4.4E-03	4.9E-03	1.01E-02	pCi/g	100%	*0.78*	4/30/11 08:15 p		155.0	LSC4
						4.78E-03	4.00E+02	*(3.2)*			g	
Batch: 1118156	NI63_LSC			**Work Order:**	MHLLP1AE		**Report DB ID:**	9MHLLP10				
NI-63	***-7.32E+00***	U	5.3E+00	6.5E+00	1.43E+01	pCi/g	91%	*-0.51*	5/3/11 07:09 p		0.25	LSC3
						6.70E+00	3.00E+01	*-(2.2)*			g	

TestAmerica
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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: 04-May-11

Lab Name:	TestAmerica	**SDG:**	JP0172	**Collection Date:**	4/26/2011 12:50:00 PM
Lot-Sample No.:	J1D280423-1	**Report No. :**	46458	**Received Date:**	4/27/2011 5:05:00 PM
Client Sample ID:	J1HK84	**COC No. :**	RC-075-237	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1118157	GAMMA_GS			**Work Order:**	MHLLP1AH		**Report DB ID:**	9MHLLP10				
AMERICIUM 241	***-4.95E-02***	U	6.4E-02	6.4E-02	1.05E-01	pCi/g		*-0.47*	4/29/11 11:17 a		378.2	GER10$1
								-(1.5)			g	
CO-60	***-1.38E-03***	U	1.4E-02	1.4E-02	2.38E-02	pCi/g		*-0.06*	4/29/11 11:17 a		378.2	GER10$1
							5.00E-02	*-0.2*			g	
CS-137	***-5.71E-03***	U	1.5E-02	1.5E-02	2.56E-02	pCi/g		*-0.22*	4/29/11 11:17 a		378.2	GER10$1
							1.00E-01	*-0.75*			g	
EU-152	***-8.86E-02***	U	5.4E-02	5.4E-02	7.01E-02	pCi/g		*-(1.3)*	4/29/11 11:17 a		378.2	GER10$1
							1.00E-01	*-(3.3)*			g	
EU-154	***-4.46E-02***	U	4.3E-02	4.3E-02	6.82E-02	pCi/g		*-0.65*	4/29/11 11:17 a		378.2	GER10$1
							1.00E-01	*-(2.1)*			g	
EU-155	***7.88E-03***	U	4.8E-02	4.8E-02	8.12E-02	pCi/g		*0.1*	4/29/11 11:17 a		378.2	GER10$1
							1.00E-01	*0.33*			g	
Batch: 1118158	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MHLLP1AD		**Report DB ID:**	9MHLLP10				
STRONTIUM	***-3.89E-02***	U	6.3E-02	6.4E-02	1.63E-01	pCi/g	64%	*-0.24*	5/4/11 05:34 a		6.02	GPC31A
						7.58E-02		*-(1.2)*			g	
Batch: 1118341	7196_CR6			**Work Order:**	MHLLP1AA		**Report DB ID:**	9MHLLP10				
HEXCHROME	***1.54E-01***	U		0.0E+00	1.54E-01	mg/kg	N/A	*(1.)*	5/3/11 12:30 p		2.5	
							1.55E-01	*N/A*			g	

No. of Results: 16 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.12 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: 04-May-11

Lab Name:	TestAmerica	**SDG:**	JP0172	**Collection Date:**	4/26/2011 12:55:00 PM
Lot-Sample No.:	J1D280423-2	**Report No. :**	46458	**Received Date:**	4/27/2011 5:05:00 PM
Client Sample ID:	J1HK85	**COC No. :**	RC-075-237	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1118152	PUISO_PLATE_AEA			**Work Order:** MHLL01AF			**Report DB ID:** 9MHLL010					
PU-238	***-1.59E-03***	U	6.3E-02	6.3E-02	1.19E-01	pCi/g	100%	*-0.01*	5/3/11 03:51 p		1.01	ALP40
						1.65E-02	1.00E+00	*-0.05*			g	
PU239/40	***-4.76E-03***	U	6.3E-02	6.3E-02	1.43E-01	pCi/g	100%	*-0.03*	5/3/11 03:51 p		1.01	ALP40
						2.85E-02	1.00E+00	*-0.15*			g	
Batch: 1118153	UISO_IE_PLATE_AEA			**Work Order:** MHLL01AC			**Report DB ID:** 9MHLL010					
U-234	***3.89E-01***		2.2E-01	2.3E-01	1.73E-01	pCi/g	83%	*(2.2)*	5/3/11 12:26 p		1.01	ALP4
						4.75E-02	1.00E+00	*(3.4)*			g	
U-235	***2.30E-02***	U	5.8E-02	5.8E-02	1.38E-01	pCi/g	83%	*0.17*	5/3/11 12:26 p		1.01	ALP4
						3.00E-02	1.00E+00	*0.79*			g	
U-238	***1.02E-01***	U	1.2E-01	1.2E-01	1.68E-01	pCi/g	83%	*0.61*	5/3/11 12:26 p		1.01	ALP4
						4.50E-02	1.00E+00	*(1.7)*			g	
							Ratio U-234/238 = 3.8					
Batch: 1118154	C14_CHEM_LSC			**Work Order:** MHLL01AJ			**Report DB ID:** 9MHLL010					
C-14	***1.40E-02***	U	1.9E-01	2.1E-01	4.55E-01	pCi/g	100%	*0.03*	4/30/11 03:22 p		5.016	LSC3
						2.14E-01	5.00E+01	*0.13*			g	
Batch: 1118155	906.0_H3_LSC			**Work Order:** MHLL01AG			**Report DB ID:** 9MHLL010					
H-3	***1.78E-02***		6.1E-03	6.7E-03	1.30E-02	pCi/g	100%	*(1.4)*	4/30/11 09:38 p		121.5	LSC4
						6.19E-03	4.00E+02	*(5.3)*			g	
Batch: 1118156	NI63_LSC			**Work Order:** MHLL01AE			**Report DB ID:** 9MHLL010					
NI-63	***1.19E+00***	U	5.4E+00	6.5E+00	1.34E+01	pCi/g	100%	*0.09*	5/3/11 07:32 p		0.25	LSC3
						6.26E+00	3.00E+01	*0.37*			g	

TestAmerica
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V5.2.12 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: 04-May-11

Lab Name:	TestAmerica	**SDG:**	JP0172	**Collection Date:**	4/26/2011 12:55:00 PM
Lot-Sample No.:	J1D280423-2	**Report No. :**	46458	**Received Date:**	4/27/2011 5:05:00 PM
Client Sample ID:	J1HK85	**COC No. :**	RC-075-237	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1118157	GAMMA_GS			**Work Order:** MHLL01AH			**Report DB ID:** 9MHLL010					
AMERICIUM 241	***-2.10E-03***	U	8.7E-02	8.7E-02	1.45E-01	pCi/g		*-0.01*	4/29/11 02:43 p		400.9	GER11$1
								-0.05			g	
CO-60	***1.43E-03***	U	1.3E-02	1.3E-02	2.37E-02	pCi/g		*0.06*	4/29/11 02:43 p		400.9	GER11$1
							5.00E-02	*0.22*			g	
CS-137	***9.55E-04***	U	1.3E-02	1.3E-02	2.25E-02	pCi/g		*0.04*	4/29/11 02:43 p		400.9	GER11$1
							1.00E-01	*0.15*			g	
EU-152	***1.83E-02***	U	3.3E-02	3.3E-02	5.66E-02	pCi/g		*0.32*	4/29/11 02:43 p		400.9	GER11$1
							1.00E-01	*(1.1)*			g	
EU-154	***-2.64E-02***	U	4.5E-02	4.5E-02	7.52E-02	pCi/g		*-0.35*	4/29/11 02:43 p		400.9	GER11$1
							1.00E-01	*-(1.2)*			g	
EU-155	***4.79E-02***	U	6.0E-02	6.0E-02	6.16E-02	pCi/g		*0.78*	4/29/11 02:43 p		400.9	GER11$1
							1.00E-01	*(1.6)*			g	
Batch: 1118158	SRTOT_SEP_PRECIP_GPC			**Work Order:** MHLL01AD			**Report DB ID:** 9MHLL010					
STRONTIUM	***-1.45E-02***	U	5.8E-02	5.8E-02	1.43E-01	pCi/g	73%	*-0.1*	5/4/11 05:34 a		5.99	GPC31B
						6.63E-02		*-0.5*			g	
Batch: 1118341	7196_CR6			**Work Order:** MHLL01AA			**Report DB ID:** 9MHLL010					
HEXCHROME	***1.54E-01***	U		0.0E+00	1.54E-01	mg/kg	N/A	*(1.)*	5/3/11 12:30 p		2.5	
							1.55E-01	*N/A*			g	

No. of Results: 16 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.12 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: 04-May-11

Lab Name:	TestAmerica	**SDG:**	JP0172	**Collection Date:**	4/26/2011 1:00:00 PM
Lot-Sample No.:	J1D280423-3	**Report No. :**	46458	**Received Date:**	4/27/2011 5:05:00 PM
Client Sample ID:	J1HK86	**COC No. :**	RC-075-237	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1118152	PUISO_PLATE_AEA			**Work Order:**	MHLL51AF		**Report DB ID:**	9MHLL510				
PU-238	***-5.59E-03***	U	5.6E-02	5.6E-02	1.34E-01	pCi/g	97%	*-0.04*	5/3/11 03:51 p		1.01	ALP41
						2.91E-02	1.00E+00	*-0.2*			g	
PU239/40	***-5.59E-03***	U	5.6E-02	5.6E-02	1.34E-01	pCi/g	97%	*-0.04*	5/3/11 03:51 p		1.01	ALP41
						2.91E-02	1.00E+00	*-0.2*			g	
Batch: 1118153	UISO_IE_PLATE_AEA			**Work Order:**	MHLL51AC		**Report DB ID:**	9MHLL510				
U-234	***3.56E-01***		2.1E-01	2.3E-01	1.22E-01	pCi/g	68%	*(2.9)*	5/3/11 12:26 p		1.0	ALP11
						1.69E-02	1.00E+00	*(3.1)*			g	
U-235	***-1.63E-03***	U	6.5E-02	6.5E-02	1.22E-01	pCi/g	68%	*-0.01*	5/3/11 12:26 p		1.0	ALP11
						1.69E-02	1.00E+00	*-0.05*			g	
U-238	***1.88E-01***		1.6E-01	1.6E-01	1.55E-01	pCi/g	68%	*(1.2)*	5/3/11 12:26 p		1.0	ALP11
						3.38E-02	1.00E+00	*(2.3)*			g	
							Ratio U-234/238 = 1.9					
Batch: 1118154	C14_CHEM_LSC			**Work Order:**	MHLL51AJ		**Report DB ID:**	9MHLL510				
C-14	***1.02E-01***	U	1.9E-01	2.2E-01	4.54E-01	pCi/g	100%	*0.22*	4/30/11 03:45 p		5.031	LSC3
						2.14E-01	5.00E+01	*0.93*			g	
Batch: 1118155	906.0_H3_LSC			**Work Order:**	MHLL51AG		**Report DB ID:**	9MHLL510				
H-3	***1.26E-02***	U	8.1E-03	9.0E-03	1.85E-02	pCi/g	100%	*0.68*	4/30/11 11:01 p		83.9	LSC4
						8.81E-03	4.00E+02	*(2.8)*			g	
Batch: 1118156	NI63_LSC			**Work Order:**	MHLL51AE		**Report DB ID:**	9MHLL510				
NI-63	***-2.37E+00***	U	5.1E+00	6.3E+00	1.34E+01	pCi/g	100%	*-0.18*	5/3/11 07:55 p		0.25	LSC3
						6.26E+00	3.00E+01	*-0.76*			g	

TestAmerica
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V5.2.12 A2002

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FORM I

SAMPLE RESULTS

Date: 04-May-11

Lab Name:	TestAmerica	**SDG:**	JP0172	**Collection Date:**	4/26/2011 1:00:00 PM
Lot-Sample No.:	J1D280423-3	**Report No. :**	46458	**Received Date:**	4/27/2011 5:05:00 PM
Client Sample ID:	J1HK86	**COC No. :**	RC-075-237	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1118157	GAMMA_GS			**Work Order:**	MHLL51AH		**Report DB ID:**	9MHLL510				
AMERICIUM 241	***1.70E-02***	U	7.4E-02	7.4E-02	1.24E-01	pCi/g		*0.14*	4/29/11 02:44 p		356.9	GER7$1
								0.46			g	
CO-60	***-1.60E-02***	U	2.1E-02	2.1E-02	3.46E-02	pCi/g		*-0.46*	4/29/11 02:44 p		356.9	GER7$1
							5.00E-02	*-(1.5)*			g	
CS-137	***1.32E+00***		1.8E-01	1.8E-01	4.20E-02	pCi/g		*(31.4)*	4/29/11 02:44 p		356.9	GER7$1
							1.00E-01	*(14.8)*			g	
EU-152	***1.94E-02***	U	6.2E-02	6.2E-02	1.06E-01	pCi/g		*0.18*	4/29/11 02:44 p		356.9	GER7$1
							1.00E-01	*0.63*			g	
EU-154	***1.13E-02***	U	6.4E-02	6.4E-02	1.16E-01	pCi/g		*0.1*	4/29/11 02:44 p		356.9	GER7$1
							1.00E-01	*0.35*			g	
EU-155	***2.03E-02***	U	5.6E-02	5.6E-02	9.75E-02	pCi/g		*0.21*	4/29/11 02:44 p		356.9	GER7$1
							1.00E-01	*0.72*			g	
Batch: 1118158	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MHLL51AD		**Report DB ID:**	9MHLL510				
STRONTIUM	***-5.87E-03***	U	6.3E-02	6.3E-02	1.51E-01	pCi/g	72%	*-0.04*	5/4/11 05:34 a		5.99	GPC31D
						7.03E-02		*-0.19*			g	
Batch: 1118341	7196_CR6			**Work Order:**	MHLL51AA		**Report DB ID:**	9MHLL510				
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	5/3/11 12:30 p		2.5	
							1.55E-01	*N/A*			g	

No. of Results: 16 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.12 A2002

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FORM I

SAMPLE RESULTS

Date: 04-May-11

Lab Name:	TestAmerica	**SDG:**	JP0172	**Collection Date:**	4/26/2011 2:00:00 PM
Lot-Sample No.:	J1D280423-4	**Report No. :**	46458	**Received Date:**	4/27/2011 5:05:00 PM
Client Sample ID:	J1HK87	**COC No. :**	RC-075-237	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1118152	PUISO_PLATE_AEA			**Work Order:** MHLL71AF			**Report DB ID:** 9MHLL710					
PU-238	***-3.52E-03***	U	7.0E-02	7.0E-02	1.47E-01	pCi/g	93%	*-0.02*	5/3/11 03:51 p		1.01	ALP42
						2.59E-02	1.00E+00	*-0.1*			g	
PU239/40	***-1.76E-03***	U	7.0E-02	7.0E-02	1.32E-01	pCi/g	93%	*-0.01*	5/3/11 03:51 p		1.01	ALP42
						1.83E-02	1.00E+00	*-0.05*			g	
Batch: 1118153	UISO_IE_PLATE_AEA			**Work Order:** MHLL71AC			**Report DB ID:** 9MHLL710					
U-234	***4.05E-02***	U	8.1E-02	8.2E-02	1.52E-01	pCi/g	56%	*0.27*	5/3/11 12:26 p		1.01	ALP12
						2.11E-02	1.00E+00	*0.99*			g	
U-235	***0.00E+00***	U	0.0E+00	8.1E-02	1.52E-01	pCi/g	56%	*0.*	5/3/11 12:26 p		1.01	ALP12
						2.11E-02	1.00E+00	*0.*			g	
U-238	***-6.08E-03***	U	8.1E-02	8.1E-02	1.83E-01	pCi/g	56%	*-0.03*	5/3/11 12:26 p		1.01	ALP12
						3.65E-02	1.00E+00	*-0.15*			g	
							Ratio U-234/238 = -6.7					
Batch: 1118154	C14_CHEM_LSC			**Work Order:** MHLL71AJ			**Report DB ID:** 9MHLL710					
C-14	***2.31E-01***	U	2.0E-01	2.2E-01	4.52E-01	pCi/g	100%	*0.51*	4/30/11 04:31 p		5.047	LSC3
						2.13E-01	5.00E+01	*(2.1)*			g	
Batch: 1118155	906.0_H3_LSC			**Work Order:** MHLL71AG			**Report DB ID:** 9MHLL710					
H-3	***4.13E-03***	U	1.1E-02	1.2E-02	2.56E-02	pCi/g	100%	*0.16*	5/1/11 01:47 a		98.1	LSC4
						1.22E-02	4.00E+02	*0.69*			g	
Batch: 1118156	NI63_LSC			**Work Order:** MHLL71AE			**Report DB ID:** 9MHLL710					
NI-63	***-7.85E+00***	U	5.0E+00	6.1E+00	1.41E+01	pCi/g	97%	*-0.56*	5/3/11 08:18 p		0.25	LSC3
						6.59E+00	3.00E+01	*-(2.6)*			g	

TestAmerica
rptSTLRchSample
V5.2.12 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: 04-May-11

Lab Name:	TestAmerica	**SDG:**	JP0172	**Collection Date:**	4/26/2011 2:00:00 PM
Lot-Sample No.:	J1D280423-4	**Report No. :**	46458	**Received Date:**	4/27/2011 5:05:00 PM
Client Sample ID:	J1HK87	**COC No. :**	RC-075-237	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1118157	GAMMA_GS			**Work Order:** MHLL71AH			**Report DB ID:** 9MHLL710					
AMERICIUM 241	***-1.23E-01***	U	8.9E-02	8.9E-02	1.43E-01	pCi/g		*-0.86*	4/29/11 02:44 p		365.3	GER10$1
								-(2.8)			g	
CO-60	***5.42E-03***	U	1.8E-02	1.8E-02	3.15E-02	pCi/g		*0.17*	4/29/11 02:44 p		365.3	GER10$1
							5.00E-02	*0.62*			g	
CS-137	***9.02E-04***	U	1.9E-02	1.9E-02	3.20E-02	pCi/g		*0.03*	4/29/11 02:44 p		365.3	GER10$1
							1.00E-01	*0.1*			g	
EU-152	***-6.55E-02***	U	9.4E-02	9.4E-02	8.80E-02	pCi/g		*-0.74*	4/29/11 02:44 p		365.3	GER10$1
							1.00E-01	*-(1.4)*			g	
EU-154	***3.52E-02***	U	5.8E-02	5.8E-02	1.04E-01	pCi/g		*0.34*	4/29/11 02:44 p		365.3	GER10$1
							1.00E-01	*(1.2)*			g	
EU-155	***5.44E-02***	U	6.5E-02	6.5E-02	1.09E-01	pCi/g		*0.5*	4/29/11 02:44 p		365.3	GER10$1
							1.00E-01	*(1.7)*			g	
Batch: 1118158	SRTOT_SEP_PRECIP_GPC			**Work Order:** MHLL71AD			**Report DB ID:** 9MHLL710					
STRONTIUM	***5.67E-02***	U	6.4E-02	6.6E-02	1.36E-01	pCi/g	76%	*0.42*	5/4/11 05:34 a		6.01	GPC32B
						6.30E-02		*(1.7)*			g	
Batch: 1118341	7196_CR6			**Work Order:** MHLL71AA			**Report DB ID:** 9MHLL710					
HEXCHROME	***1.54E-01***	U		0.0E+00	1.54E-01	mg/kg	N/A	*(1.)*	5/3/11 12:30 p		2.5	
							1.55E-01	*N/A*			g	

No. of Results: 16 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.12 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: 04-May-11

Lab Name:	TestAmerica	**SDG:**	JP0172	**Collection Date:**	4/26/2011 1:05:00 PM
Lot-Sample No.:	J1D280423-5	**Report No. :**	46458	**Received Date:**	4/27/2011 5:05:00 PM
Client Sample ID:	J1HK88	**COC No. :**	RC-075-237	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1118152	PUISO_PLATE_AEA			**Work Order:**	MHLMA1AF		**Report DB ID:**	9MHLMA10				
PU-238	***1.95E-01***		1.5E-01	1.5E-01	1.05E-01	pCi/g	100%	*(1.9)*	5/3/11 03:51 p		1.02	ALP43
						1.45E-02	1.00E+00	*(2.6)*			g	
PU239/40	***2.32E+00***		5.1E-01	6.9E-01	1.05E-01	pCi/g	100%	*(22.1)*	5/3/11 03:51 p		1.02	ALP43
						1.45E-02	1.00E+00	*(6.7)*			g	
Batch: 1118153	UISO_IE_PLATE_AEA			**Work Order:**	MHLMA1AC		**Report DB ID:**	9MHLMA10				
U-234	***4.25E-01***		2.5E-01	2.6E-01	1.44E-01	pCi/g	68%	*(3.)*	5/3/11 12:27 p		1.0	ALP71
						2.35E-02	1.00E+00	*(3.2)*			g	
U-235	***-2.86E-03***	U	7.1E-02	7.1E-02	1.44E-01	pCi/g	68%	*-0.02*	5/3/11 12:27 p		1.0	ALP71
						2.35E-02	1.00E+00	*-0.08*			g	
U-238	***2.10E-01***		1.7E-01	1.8E-01	1.54E-01	pCi/g	68%	*(1.4)*	5/3/11 12:27 p		1.0	ALP71
						2.88E-02	1.00E+00	*(2.3)*			g	
							Ratio U-234/238 = 2.0					
Batch: 1118154	C14_CHEM_LSC			**Work Order:**	MHLMA1AJ		**Report DB ID:**	9MHLMA10				
C-14	***1.32E-01***	U	1.9E-01	2.2E-01	4.54E-01	pCi/g	100%	*0.29*	4/30/11 04:54 p		5.028	LSC3
						2.14E-01	5.00E+01	*(1.2)*			g	
Batch: 1118155	906.0_H3_LSC			**Work Order:**	MHLMA1AG		**Report DB ID:**	9MHLMA10				
H-3	***4.16E-01***		1.4E-02	1.9E-02	1.17E-02	pCi/g	100%	*(35.6)*	5/1/11 03:10 a		131.9	LSC4
						5.57E-03	4.00E+02	*(44.6)*			g	
Batch: 1118156	NI63_LSC			**Work Order:**	MHLMA1AE		**Report DB ID:**	9MHLMA10				
NI-63	***-4.11E+00***	U	5.1E+00	6.2E+00	1.37E+01	pCi/g	98%	*-0.3*	5/3/11 09:04 p		0.25	LSC3
						6.40E+00	3.00E+01	*-(1.3)*			g	

TestAmerica
rptSTLRchSample
V5.2.12 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: 04-May-11

Lab Name:	TestAmerica	**SDG:**	JP0172	**Collection Date:**	4/26/2011 1:05:00 PM
Lot-Sample No.:	J1D280423-5	**Report No. :**	46458	**Received Date:**	4/27/2011 5:05:00 PM
Client Sample ID:	J1HK88	**COC No. :**	RC-075-237	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1118157	GAMMA_GS			**Work Order:**	MHLMA1AH		**Report DB ID:**	9MHLMA10				
AMERICIUM 241	***1.67E-01***		5.8E-02	5.8E-02	6.87E-02	pCi/g		*(2.4)*	4/29/11 02:45 p		437.4	GER14$1
								(5.8)			g	
CO-60	***1.64E-01***		4.2E-02	4.2E-02	3.11E-02	pCi/g		*(5.3)*	4/29/11 02:45 p		437.4	GER14$1
							5.00E-02	*(7.9)*			g	
CS-137	***3.02E+00***		4.1E-01	4.1E-01	3.61E-02	pCi/g		*(83.6)*	4/29/11 02:45 p		437.4	GER14$1
							1.00E-01	*(14.5)*			g	
EU-152	***4.05E-02***	U	7.4E-02	7.4E-02	1.14E-01	pCi/g		*0.36*	4/29/11 02:45 p		437.4	GER14$1
							1.00E-01	*(1.1)*			g	
EU-154	***-1.80E-02***	U	6.5E-02	6.5E-02	1.11E-01	pCi/g		*-0.16*	4/29/11 02:45 p		437.4	GER14$1
							1.00E-01	*-0.55*			g	
EU-155	***3.33E-02***	U	5.9E-02	5.9E-02	9.92E-02	pCi/g		*0.34*	4/29/11 02:45 p		437.4	GER14$1
							1.00E-01	*(1.1)*			g	
Batch: 1118158	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MHLMA1AD		**Report DB ID:**	9MHLMA10				
STRONTIUM	***2.76E+01***		6.6E-01	7.2E+00	1.42E-01	pCi/g	72%	*(194.4)*	5/4/11 05:34 a		6.0	GPC32C
						6.56E-02		*(7.7)*			g	
Batch: 1118341	7196_CR6			**Work Order:**	MHLMA1AA		**Report DB ID:**	9MHLMA10				
HEXCHROME	***1.54E-01***	U		0.0E+00	1.54E-01	mg/kg	N/A	*(1.)*	5/3/11 12:30 p		2.5	
							1.55E-01	*N/A*			g	

No. of Results: 16 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.12 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: 04-May-11

Lab Name:	**TestAmerica**	**SDG:**	JP0172	**Collection Date:**	4/26/2011 1:10:00 PM
Lot-Sample No.:	**J1D280423-6**	**Report No. :**	46458	**Received Date:**	4/27/2011 5:05:00 PM
Client Sample ID:	**J1HK89**	**COC No. :**	RC-075-237	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1118152	PUISO_PLATE_AEA			**Work Order:**	MHLMJ1AF		**Report DB ID:**	9MHLMJ10				
PU-238	***3.48E-02***	U	7.0E-02	7.0E-02	1.31E-01	pCi/g	96%	*0.27*	5/3/11 03:51 p		1.01	ALP44
						1.81E-02	1.00E+00	*0.99*			g	
PU239/40	***0.00E+00***	U	0.0E+00	7.0E-02	1.31E-01	pCi/g	96%	*0.*	5/3/11 03:51 p		1.01	ALP44
						1.81E-02	1.00E+00	*0.*			g	
Batch: 1118153	UISO_IE_PLATE_AEA			**Work Order:**	MHLMJ1AC		**Report DB ID:**	9MHLMJ10				
U-234	***-3.17E-03***	U	7.9E-02	7.9E-02	1.59E-01	pCi/g	69%	*-0.02*	5/3/11 12:27 p		1.02	ALP84
						2.60E-02	1.00E+00	*-0.08*			g	
U-235	***3.80E-02***	U	7.9E-02	8.0E-02	1.44E-01	pCi/g	69%	*0.26*	5/3/11 12:27 p		1.02	ALP84
						1.84E-02	1.00E+00	*0.95*			g	
U-238	***1.14E-01***	U	1.4E-01	1.4E-01	1.71E-01	pCi/g	69%	*0.67*	5/3/11 12:27 p		1.02	ALP84
						3.19E-02	1.00E+00	*(1.6)*			g	
							Ratio U-234/238 = 0.0					
Batch: 1118154	C14_CHEM_LSC			**Work Order:**	MHLMJ1AJ		**Report DB ID:**	9MHLMJ10				
C-14	***-3.41E-02***	U	1.8E-01	2.1E-01	4.54E-01	pCi/g	100%	*-0.08*	4/30/11 05:16 p		5.026	LSC3
						2.14E-01	5.00E+01	*-0.32*			g	
Batch: 1118155	906.0_H3_LSC			**Work Order:**	MHLMJ1AG		**Report DB ID:**	9MHLMJ10				
H-3	***1.89E-02***		5.4E-03	5.9E-03	1.13E-02	pCi/g	100%	*(1.7)*	5/1/11 04:33 a		137.7	LSC4
						5.39E-03	4.00E+02	*(6.4)*			g	
Batch: 1118156	NI63_LSC			**Work Order:**	MHLMJ1AE		**Report DB ID:**	9MHLMJ10				
NI-63	***-7.01E-01***	U	5.3E+00	6.4E+00	1.36E+01	pCi/g	100%	*-0.05*	5/3/11 09:27 p		0.25	LSC3
						6.35E+00	3.00E+01	*-0.22*			g	

TestAmerica
rptSTLRchSample
V5.2.12 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: 04-May-11

Lab Name:	TestAmerica	**SDG:**	JP0172	**Collection Date:**	4/26/2011 1:10:00 PM
Lot-Sample No.:	J1D280423-6	**Report No. :**	46458	**Received Date:**	4/27/2011 5:05:00 PM
Client Sample ID:	J1HK89	**COC No. :**	RC-075-237	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1118157	GAMMA_GS			**Work Order:**	MHLMJ1AH		**Report DB ID:**	9MHLMJ10				
AMERICIUM 241	***-3.98E-02***	U	3.5E-02	3.5E-02	5.56E-02	pCi/g		*-0.72*	4/29/11 06:09 p		385.9	GER14$1
								-(2.3)			g	
CO-60	***1.43E-02***	U	2.0E-02	2.0E-02	3.82E-02	pCi/g		*0.37*	4/29/11 06:09 p		385.9	GER14$1
							5.00E-02	*(1.4)*			g	
CS-137	***2.73E-03***	U	2.2E-02	2.2E-02	3.77E-02	pCi/g		*0.07*	4/29/11 06:09 p		385.9	GER14$1
							1.00E-01	*0.25*			g	
EU-152	***1.78E-02***	U	6.3E-02	6.3E-02	8.84E-02	pCi/g		*0.2*	4/29/11 06:09 p		385.9	GER14$1
							1.00E-01	*0.56*			g	
EU-154	***2.90E-02***	U	6.3E-02	6.3E-02	1.15E-01	pCi/g		*0.25*	4/29/11 06:09 p		385.9	GER14$1
							1.00E-01	*0.92*			g	
EU-155	***9.02E-03***	U	5.1E-02	5.1E-02	8.58E-02	pCi/g		*0.11*	4/29/11 06:09 p		385.9	GER14$1
							1.00E-01	*0.35*			g	
Batch: 1118158	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MHLMJ1AD		**Report DB ID:**	9MHLMJ10				
STRONTIUM	***1.96E-01***		8.9E-02	1.0E-01	1.63E-01	pCi/g	68%	*(1.2)*	5/4/11 05:34 a		6.02	GPC32D
						7.61E-02		*(3.8)*			g	
Batch: 1118341	7196_CR6			**Work Order:**	MHLMJ1AA		**Report DB ID:**	9MHLMJ10				
HEXCHROME	***1.54E-01***	U		0.0E+00	1.54E-01	mg/kg	N/A	*(1.)*	5/3/11 12:30 p		2.5	
							1.55E-01	*N/A*			g	

No. of Results: 16 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.12 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: 04-May-11

Lab Name:	TestAmerica	SDG:	JP0172	Collection Date:	4/26/2011 12:45:00 PM
Lot-Sample No.:	J1D280423-7	Report No. :	46458	Received Date:	4/27/2011 5:05:00 PM
Client Sample ID:	J1HK91	COC No. :	RC-075-237	Matrix:	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1118152	PUISO_PLATE_AEA			Work Order:	MHLML1AF		Report DB ID: 9MHLML10					
PU-238	***-1.63E-03***	U	6.5E-02	6.5E-02	1.22E-01	pCi/g	100%	*-0.01*	5/3/11 03:51 p		1.02	ALP46
						1.70E-02	1.00E+00	*-0.05*			g	
PU239/40	***0.00E+00***	U	0.0E+00	6.5E-02	1.22E-01	pCi/g	100%	*0.*	5/3/11 03:51 p		1.02	ALP46
						1.70E-02	1.00E+00	*0.*			g	
Batch: 1118153	UISO_IE_PLATE_AEA			Work Order:	MHLML1AC		Report DB ID: 9MHLML10					
U-234	***5.21E-02***	U	9.0E-02	9.0E-02	1.73E-01	pCi/g	76%	*0.3*	5/3/11 01:40 p		1.02	ALP3
						4.35E-02	1.00E+00	*(1.2)*			g	
U-235	***-4.74E-03***	U	6.3E-02	6.3E-02	1.42E-01	pCi/g	76%	*-0.03*	5/3/11 01:40 p		1.02	ALP3
						2.85E-02	1.00E+00	*-0.15*			g	
U-238	***2.08E-01***		1.7E-01	1.7E-01	1.79E-01	pCi/g	76%	*(1.2)*	5/3/11 01:40 p		1.02	ALP3
						4.65E-02	1.00E+00	*(2.4)*			g	
							Ratio U-234/238 = 0.2					
Batch: 1118154	C14_CHEM_LSC			Work Order:	MHLML1AJ		Report DB ID: 9MHLML10					
C-14	***1.19E-01***	U	1.9E-01	2.2E-01	4.56E-01	pCi/g	100%	*0.26*	4/30/11 05:39 p		5.005	LSC3
						2.15E-01	5.00E+01	*(1.1)*			g	
Batch: 1118155	906.0_H3_LSC			Work Order:	MHLML1AG		Report DB ID: 9MHLML10					
H-3	***9.43E-03***	U	4.7E-03	5.2E-03	1.06E-02	pCi/g	100%	*0.89*	5/1/11 05:55 a		147.7	LSC4
						5.02E-03	4.00E+02	*(3.6)*			g	
Batch: 1118156	NI63_LSC			Work Order:	MHLML1AE		Report DB ID: 9MHLML10					
NI-63	***6.61E-01***	U	5.3E+00	6.4E+00	1.33E+01	pCi/g	96%	*0.05*	5/3/11 09:49 p		0.26	LSC3
						6.20E+00	3.00E+01	*0.21*			g	

TestAmerica
rptSTLRchSample
V5.2.12 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: 04-May-11

Lab Name:	TestAmerica	**SDG:**	JP0172	**Collection Date:**	4/26/2011 12:45:00 PM
Lot-Sample No.:	J1D280423-7	**Report No. :**	46458	**Received Date:**	4/27/2011 5:05:00 PM
Client Sample ID:	J1HK91	**COC No. :**	RC-075-237	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1118157	GAMMA_GS			**Work Order:** MHLML1AH			**Report DB ID:** 9MHLML10					
AMERICIUM 241	***-8.25E-03***	U	5.8E-02	5.8E-02	9.69E-02	pCi/g		*-0.09*	4/29/11 06:09 p		395.1	GER7$1
								-0.28			g	
CO-60	***1.27E-02***	U	1.9E-02	1.9E-02	3.59E-02	pCi/g		*0.35*	4/29/11 06:09 p		395.1	GER7$1
							5.00E-02	*(1.4)*			g	
CS-137	***1.95E-02***	U	1.9E-02	1.9E-02	3.53E-02	pCi/g		*0.55*	4/29/11 06:09 p		395.1	GER7$1
							1.00E-01	*(2.)*			g	
EU-152	***2.43E-02***	U	5.1E-02	5.1E-02	8.19E-02	pCi/g		*0.3*	4/29/11 06:09 p		395.1	GER7$1
							1.00E-01	*0.95*			g	
EU-154	***-4.62E-02***	U	5.8E-02	5.8E-02	9.56E-02	pCi/g		*-0.48*	4/29/11 06:09 p		395.1	GER7$1
							1.00E-01	*-(1.6)*			g	
EU-155	***-2.50E-03***	U	4.6E-02	4.6E-02	7.91E-02	pCi/g		*-0.03*	4/29/11 06:09 p		395.1	GER7$1
							1.00E-01	*-0.11*			g	
Batch: 1118158	SRTOT_SEP_PRECIP_GPC			**Work Order:** MHLML1AD			**Report DB ID:** 9MHLML10					
STRONTIUM	***1.05E-01***	U	8.0E-02	8.4E-02	1.62E-01	pCi/g	62%	*0.65*	5/4/11 06:27 a		6.0	GPC31B
						7.51E-02		*(2.5)*			g	
Batch: 1118341	7196_CR6			**Work Order:** MHLML1AA			**Report DB ID:** 9MHLML10					
HEXCHROME	***1.54E-01***	U		0.0E+00	1.54E-01	mg/kg	N/A	*(1.)*	5/3/11 12:30 p		2.5	
							1.55E-01	*N/A*			g	

No. of Results: 16 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.12 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: 04-May-11

DUPLICATE RESULTS

Lab Name:	TestAmerica	**SDG:**	JP0172	**Collection Date:**	4/26/2011 12:50:00 PM
Lot-Sample No.:	J1D280423-1	**Report No. :**	46458	**Received Date:**	4/27/2011 5:05:00 PM
Client Sample ID:	J1HK84	**COC No. :**	RC-075-237	**Matrix:**	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1118341	7196_CR6			Work Order: MHLLP1AM		Report DB ID: MHLLP1ER			Orig Sa DB ID: 9MHLLP10			
HEXCHROME	1.54E-01	U		0.0E+00	1.54E-01	mg/kg	N/A	(1.)	5/3/11 12:30 p		2.5	
	1.54E-01	U	RPD 0.0			3.50E-01		N/A			g	

No. of Results: 1 Comments:

TestAmerica RPD - Relative Percent Difference.

rptSTLRchDupV5.2 .12 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: 04-May-11

DUPLICATE RESULTS

Lab Name:	TestAmerica	**SDG:**	JP0172	**Collection Date:**	4/26/2011 12:50:00 PM
Lot-Sample No.:	J1D280423-1	**Report No. :**	46458	**Received Date:**	4/27/2011 5:05:00 PM
Client Sample ID:	J1HK84 DUP	**COC No. :**	RC-075-237	**Matrix:**	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1118152	PUISO_PLATE_AEA			**Work Order:** MHLLP1AK		**Report DB ID:** MHLLP1KR			**Orig Sa DB ID:** 9MHLLP10			
PU-238	0.00E+00	U	0.0E+00	6.9E-02	1.30E-01	pCi/g	91%	0.	5/3/11 03:51 p		0.99	ALP39
	0.00E+00	U	**RPD**			1.00E+00		0.			g	
PU239/40	0.00E+00	U	0.0E+00	6.9E-02	1.30E-01	pCi/g	91%	0.	5/3/11 03:51 p		0.99	ALP39
	0.00E+00	U	**RPD**			1.00E+00		0.			g	

No. of Results: 2 Comments:

TestAmerica
rptSTLRchDupV5.2
.12 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: 04-May-11

DUPLICATE RESULTS

Lab Name:	TestAmerica	SDG:	JP0172	Collection Date:	4/26/2011 12:55:00 PM
Lot-Sample No.:	J1D280423-2	Report No. :	46458	Received Date:	4/27/2011 5:05:00 PM
Client Sample ID:	J1HK85 DUP	COC No. :	RC-075-237	Matrix:	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1118153	UISO_IE_PLATE_AEA			Work Order: MHLL01AK		Report DB ID: MHLL01KR			Orig Sa DB ID: 9MHLL010			
U-234	1.05E-01	U	1.5E-01	1.6E-01	2.03E-01	pCi/g	41%	0.52	5/3/11 12:26 p		1.02	ALP9
	3.89E-01		RPD	114.7		1.00E+00		(1.4)			g	
U-235	-8.12E-03	U	1.1E-01	1.1E-01	2.44E-01	pCi/g	41%	-0.03	5/3/11 12:26 p		1.02	ALP9
	2.30E-02	U	RPD	417.9		1.00E+00		-0.15			g	
U-238	1.08E-01	U	1.5E-01	1.6E-01	2.03E-01	pCi/g	41%	0.53	5/3/11 12:26 p		1.02	ALP9
	1.02E-01	U	RPD	5.6		1.00E+00		(1.4)			g	

Ratio U-234/238 = 1.0 *Alpha Spec Result Sum = 2.1E-01*

No. of Results: 3 Comments:

TestAmerica
rptSTLRchDupV5.2
.12 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: 04-May-11

DUPLICATE RESULTS

Lab Name:	**TestAmerica**	**SDG:**	JP0172	**Collection Date:**	4/26/2011 1:00:00 PM
Lot-Sample No.:	**J1D280423-3**	**Report No. :**	46458	**Received Date:**	4/27/2011 5:05:00 PM
Client Sample ID:	**J1HK86 DUP**	**COC No. :**	RC-075-237	**Matrix:**	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1118154	C14_CHEM_LSC			**Work Order:** MHLL51AK		**Report DB ID:** MHLL51KR			**Orig Sa DB ID:** 9MHLL510			
C-14	1.71E-01	U	1.9E-01	2.2E-01	4.53E-01	pCi/g	100%	0.38	4/30/11 04:08 p		5.036	LSC3
	1.02E-01	U	**RPD**	**50.6**		5.00E+01		(1.5)			g	
Batch: 1118155	906.0_H3_LSC			**Work Order:** MHLL51AL		**Report DB ID:** MHLL51LR			**Orig Sa DB ID:** 9MHLL510			
H-3	1.56E-02	U	1.0E-02	1.2E-02	2.40E-02	pCi/g	100%	0.65	5/1/11 12:24 a		64.8	LSC4
	1.26E-02	U	**RPD**	**21.1**		4.00E+02		(2.7)			g	

No. of Results: 2 **Comments:**

TestAmerica
rptSTLRchDupV5.2
.12 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: 04-May-11

DUPLICATE RESULTS

Lab Name:	TestAmerica	**SDG:**	JP0172	**Collection Date:**	4/26/2011 2:00:00 PM
Lot-Sample No.:	J1D280423-4	**Report No. :**	46458	**Received Date:**	4/27/2011 5:05:00 PM
Client Sample ID:	J1HK87 DUP	**COC No. :**	RC-075-237	**Matrix:**	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1118156	NI63_LSC			**Work Order:** MHLL71AK		**Report DB ID:** MHLL71KR			**Orig Sa DB ID:** 9MHLL710			
NI-63	2.32E+00	U	5.7E+00	6.9E+00	1.42E+01	pCi/g	95%	0.16	5/3/11 08:41 p		0.25	LSC3
	-7.85E+00	U	**RPD**	**-367.9**		3.00E+01		0.67			g	

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

TestAmerica
rptSTLRchDupV5.2
.12 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: 04-May-11

DUPLICATE RESULTS

Lab Name:	**TestAmerica**	**SDG:**	JP0172	**Collection Date:**	4/26/2011 1:05:00 PM
Lot-Sample No.:	**J1D280423-5**	**Report No. :**	46458	**Received Date:**	4/27/2011 5:05:00 PM
Client Sample ID:	**J1HK88 DUP**	**COC No. :**	RC-075-237	**Matrix:**	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1118157	GAMMA_GS			**Work Order:**	MHLMA1AK	**Report DB ID:**		MHLMA1KR	**Orig Sa DB ID:**		9MHLMA10	
AMERICIUM 241	1.90E-01		1.4E-01	1.4E-01	1.58E-01	pCi/g		(1.2)	4/29/11 06:08 p		437.4	GER11$1
	1.67E-01		**RPD**	**13.0**				(2.7)			g	
CO-60	1.51E-01		3.3E-02	3.3E-02	2.06E-02	pCi/g		(7.4)	4/29/11 06:08 p		437.4	GER11$1
	1.64E-01		**RPD**	**8.2**		5.00E-02		(9.2)			g	
CS-137	3.01E+00		3.8E-01	3.8E-01	2.19E-02	pCi/g		(137.6)	4/29/11 06:08 p		437.4	GER11$1
	3.02E+00		**RPD**	**0.4**		1.00E-01		(15.8)			g	
EU-152	1.33E-02	U	4.0E-02	4.0E-02	6.69E-02	pCi/g		0.2	4/29/11 06:08 p		437.4	GER11$1
	4.05E-02	U	**RPD**	**101.3**		1.00E-01		0.67			g	
EU-154	1.14E-01	U	4.3E-02	4.3E-02	8.50E-02	pCi/g		(1.3)	4/29/11 06:08 p		437.4	GER11$1
	-1.80E-02	U	**RPD**	**275.2**		1.00E-01		(5.3)			g	
EU-155	2.34E-02	U	4.1E-02	4.1E-02	7.07E-02	pCi/g		0.33	4/29/11 06:08 p		437.4	GER11$1
	3.33E-02	U	**RPD**	**35.0**		1.00E-01		(1.1)			g	

No. of Results: 6 **Comments:**

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: 04-May-11

DUPLICATE RESULTS

Lab Name:	TestAmerica	SDG:	JP0172	Collection Date:	4/26/2011 1:10:00 PM
Lot-Sample No.:	J1D280423-6	Report No. :	46458	Received Date:	4/27/2011 5:05:00 PM
Client Sample ID:	J1HK89 DUP	COC No. :	RC-075-237	Matrix:	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1118158	SRTOT_SEP_PRECIP_GPC			Work Order: MHLMJ1AK		Report DB ID: MHLMJ1KR			Orig Sa DB ID: 9MHLMJ10			
STRONTIUM	1.69E-01		8.4E-02	9.5E-02	1.57E-01	pCi/g	66%	(1.1)	5/4/11 06:27 a		6.01	GPC31A
	1.96E-01		RPD	15.1				(3.5)			g	

No. of Results: 1 Comments:

TestAmerica RPD - Relative Percent Difference.

rptSTLRchDupV5.2 .12 A2002 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: 04-May-11

Lab Name: TestAmerica

Matrix: SOIL

SDG: JP0172

Report No. : 46458

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA ,	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1118341	7196_CR6			**Work Order:**	MHM1E1AA		**Report DB ID:**	MHM1E1AB				
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	1.	5/3/11 12:30 p		2.5	
						1.55E-01		N/A			g	
Batch: 1118154	C14_CHEM_LSC			**Work Order:**	MHLRC1AA		**Report DB ID:**	MHLRC1AB				
C-14	-2.06E-03	U	4.5E-03	5.2E-03	1.14E-02	pCi/g	100%	-0.18	4/30/11 06:02 p		200.0	LSC3
					5.38E-03	5.00E+01		-0.79			g	
Batch: 1118152	PUISO_PLATE_AEA			**Work Order:**	MHLQ31AA		**Report DB ID:**	MHLQ31AB				
PU-238	0.00E+00	U	0.0E+00	1.0E-01	1.89E-01	pCi/g	69%	0.	5/3/11 03:52 p		1.01	ALP123
					2.62E-02	1.00E+00		0.			g	
PU239/40	5.03E-02	U	1.0E-01	1.0E-01	1.89E-01	pCi/g	69%	0.27	5/3/11 03:52 p		1.01	ALP123
					2.62E-02	1.00E+00		0.99			g	
Batch: 1118153	UISO_IE_PLATE_AEA			**Work Order:**	MHLQ61AA		**Report DB ID:**	MHLQ61AB				
U-234	-1.89E-02	U	7.6E-02	7.6E-02	2.26E-01	pCi/g	63%	-0.08	5/3/11 01:40 p		1.01	ALP4
					6.20E-02	1.00E+00		-0.49			g	
U-235	-7.56E-03	U	7.6E-02	7.6E-02	1.80E-01	pCi/g	63%	-0.04	5/3/11 01:40 p		1.01	ALP4
					3.92E-02	1.00E+00		-0.2			g	
U-238	-1.70E-02	U	7.6E-02	7.6E-02	2.20E-01	pCi/g	63%	-0.08	5/3/11 01:40 p		1.01	ALP4
					5.89E-02	1.00E+00		-0.45			g	
							Ratio U-234/238 = 1.1					
Batch: 1118156	NI63_LSC			**Work Order:**	MHLRN1AA		**Report DB ID:**	MHLRN1AB				
NI-63	-3.80E+00	U	5.2E+00	6.4E+00	1.38E+01	pCi/g	97%	-0.27	5/3/11 10:12 p		0.25	LSC3
					6.48E+00	3.00E+01		-(1.2)			g	
Batch: 1118155	906.0_H3_LSC			**Work Order:**	MHLRJ1AA		**Report DB ID:**	MHLRJ1AB				

TestAmerica
rptSTLRchBlank
V5.2.12 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: 04-May-11

Lab Name: TestAmerica

Matrix: SOIL

SDG: JP0172

Report No. : 46458

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA ,	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
H-3	1.58E-02	U	1.6E-02	1.8E-02	3.70E-02	pCi/g	100%	0.43	5/1/11 07:18 a		85.0	LSC4
					1.76E-02	4.00E+02		(1.8)			g	
Batch: 1118157	GAMMA_GS			**Work Order:**	MHLRR1AA		**Report DB ID:**	MHLRR1AB				
AMERICIUM 241	-2.31E-02	U	4.4E-02	4.4E-02	7.39E-02	pCi/g		-0.31	4/29/11 06:10 p		348.0	GER10$1
								-(1.)			g	
CO-60	-7.50E-04	U	1.0E-02	1.0E-02	1.83E-02	pCi/g		-0.04	4/29/11 06:10 p		348.0	GER10$1
						5.00E-02		-0.15			g	
CS-137	-4.08E-04	U	1.1E-02	1.1E-02	1.97E-02	pCi/g		-0.02	4/29/11 06:10 p		348.0	GER10$1
						1.00E-01		-0.07			g	
EU-152	-2.85E-02	U	3.7E-02	3.7E-02	5.23E-02	pCi/g		-0.54	4/29/11 06:10 p		348.0	GER10$1
						1.00E-01		-(1.6)			g	
EU-154	-4.09E-03	U	3.0E-02	3.0E-02	5.44E-02	pCi/g		-0.08	4/29/11 06:10 p		348.0	GER10$1
						1.00E-01		-0.27			g	
EU-155	-3.46E-02	U	3.1E-02	3.1E-02	4.84E-02	pCi/g		-0.72	4/29/11 06:10 p		348.0	GER10$1
						1.00E-01		-(2.3)			g	
Batch: 1118158	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MHLRX1AA		**Report DB ID:**	MHLRX1AB				
STRONTIUM	8.03E-03	U	5.3E-02	5.3E-02	1.24E-01	pCi/g	90%	0.06	5/4/11 06:27 a		6.0	GPC31D
					5.76E-02			0.3			g	

No. of Results: 16 **Comments:**

TestAmerica
rptSTLRchBlank
V5.2.12 A2002

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

FORM II

LCS RESULTS

Date: 04-May-11

Lab Name: TestAmerica

Matrix: SOIL

SDG: JP0172

Report No. : 46458

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA	Report Unit	Yield	Expected	Expected Uncert	Recovery, Bias	Analysis, Prep Date	Aliquot Size	Primary Detector
Batch: 1118341	7196_CR6			**Work Order:**	MHM1E1AC		**Report DB ID:**	MHM1E1AS					
HEXCHROME	1.85E+01			0.0E+00	1.55E-01	mg/kg	N/A	2.00E+01		92%	5/3/11 12:30 p	2.5	
							Rec Limits:	80	120	-0.1		g	
Batch: 1118154	C14_CHEM_LSC			**Work Order:**	MHLRC1AC		**Report DB ID:**	MHLRC1CS					
C-14	7.55E+00		4.3E-01	5.4E-01	4.58E-01	pCi/g	100%	7.55E+00	1.3E-01	100%	4/30/11 06:25 p	5.0	LSC3
							Rec Limits:	70	130	0.0		g	
Batch: 1118152	PUISO_PLATE_AEA			**Work Order:**	MHLQ31AC		**Report DB ID:**	MHLQ31CS					
PU239/40	6.75E+00		9.7E-01	1.8E+00	1.32E-01	pCi/g	95%	6.87E+00	2.1E-01	98%	5/3/11 03:53 p	1.0	ALP124
							Rec Limits:	70	130	0.0		g	
Batch: 1118153	UISO_IE_PLATE_AEA			**Work Order:**	MHLQ61AC		**Report DB ID:**	MHLQ61CS					
U-234	2.70E+00		5.3E-01	7.7E-01	9.84E-02	pCi/g	86%	3.23E+00	1.0E-01	84%	5/3/11 01:40 p	1.0	ALP9
							Rec Limits:	70	130	-0.2		g	
U-238	4.12E+00		6.6E-01	1.1E+00	9.84E-02	pCi/g	86%	3.38E+00	1.0E-01	122%	5/3/11 01:40 p	1.0	ALP9
							Rec Limits:	70	130	0.2		g	
Batch: 1118156	NI63_LSC			**Work Order:**	MHLRN1AC		**Report DB ID:**	MHLRN1CS					
NI-63	4.44E+02		1.8E+01	4.3E+01	1.35E+01	pCi/g	94%	5.62E+02	9.5E+00	79%	5/3/11 10:35 p	0.27	LSC3
							Rec Limits:	70	130	-0.2		g	
Batch: 1118155	906.0_H3_LSC			**Work Order:**	MHLRJ1AC		**Report DB ID:**	MHLRJ1CS					
H-3	3.39E-01		2.7E-02	2.9E-02	3.79E-02	pCi/g	100%	3.27E-01	9.8E-03	103%	5/1/11 08:41 a	82.7	LSC4
							Rec Limits:	70	130	0.0		g	
Batch: 1118157	GAMMA_GS			**Work Order:**	MHLRR1AC		**Report DB ID:**	MHLRR1CS					
CS-137	1.02E+00		1.5E-01	1.5E-01	4.35E-02	pCi/g		1.08E+00	1.1E-02	94%	4/30/11 08:56 a	350.1	GER14$1
							Rec Limits:	70	130	-0.1		g	

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

rptSTLRchLcs
V5.2.12 A2002

FORM II

LCS RESULTS

Date: 04-May-11

Lab Name: TestAmerica

Matrix: SOIL

SDG: JP0172

Report No. : 46458

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA	Report Unit	Yield	Expected	Expected Uncert	Recovery, Bias	Analysis, Prep Date	Aliquot Size	Primary Detector
Batch: 1118158	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MHLRX1AC		**Report DB ID:**	MHLRX1CS					
STRONTIUM	1.05E+00		1.2E-01	3.0E-01	1.15E-01	pCi/g	92%	1.13E+00	3.1E-02	93%	5/4/11 06:27 a	6.02	GPC32B
							Rec Limits:	70	130	-0.1		g	

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

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

rptSTLRchLcs
V5.2.12 A2002

FORM II

MATRIX SPIKE RESULTS

Date: 04-May-11

Lab Name: TestAmerica **SDG:** JP0172

Lot-Sample No.: J1D280423-1, J1HK84 **Report No. :** 46458 **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: 1118341	Work Order: MHLLP1AL			Report DB ID: MHLLP1CW			Orig Sa DB ID: 9MHLLP10					
HEXCHROME	8.53E+00			0.0E+00	1.53E-01	mg/kg	N/A	84.63%	1.01E+01	5/3/11 12:30 p	2.5	7196_CR6
	1.54E-01										g	

Number of Results: 1

Comments:

TestAmerica
rptSTLRchMs
V5.2.12 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

5/4/2011 10:59:15 AM

Lot No., Due Date: J1D280423; 05/04/2011
Client, Site: 127642; S00N063A00 HANFORD
QC Batch No., Method Test: 1118152; RPUISO Pulso by ALP
SDG, Matrix: JP0172; SOIL

1.0 COC

	Yes	No	N/A
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	✓		

2.0 QC Batch

	Yes	No	N/A
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	✓		
2.2 Are the QC appropriate for the analysis included in the batch?	✓		
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?			
2.4 Does the Worksheets include a Tracer Vial label for each sample?	✓		

3.0 QC & Samples

	Yes	No	N/A
3.1 Is the blank results, yield, and MDA within contract limits?	✓		
3.2 Is the LCS result, yield, and MDA within contract limits?	✓		
3.3 Are the MS/MSD results, yields, and MDA within contract limits?			✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	✓		
3.5 Are the sample yields and MDAs within contract limits?	✓		

4.0 Raw Data

	Yes	No	N/A
4.1 Were results calculated in the correct units?	✓		
4.2 Were analysis volumes entered correctly?	✓		
4.3 Were Yields entered correctly?	✓		
4.4 Were spectra reviewed/meet contractual requirements?	✓		
4.5 Were raw counts reviewed for anomalies?	✓		

5.0 Other

	Yes	No	N/A
5.1 Are all nonconformances included and noted?			✓
5.2 Are all required forms filled out?	✓		
5.3 Was the correct methodology used?	✓		
5.4 Was transcription checked?	✓		
5.5 Were all calculations checked at a minimum frequency?			✓
5.6 Are worksheet entries complete and correct?	✓		

6.0 Comments on any No response:

First Level John Morris Date 5-4-11

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 1118152

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 = 1.0 pCi/g

Second Level Review: [signature] Date: 5/4/16

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

5/4/2011 11:01:08 AM

Lot No., Due Date: J1D280423; 05/04/2011
Client, Site: 127642; S00N063A00 HANFORD
QC Batch No., Method Test: 1118153; RUISO Ulso by ALP
SDG, Matrix: JP0172; 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 5-4-11

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 1118153

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: CRDC = 1.0 pCi/g

Second Level Review: [signature] Date: 5/4/11

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

5/4/2011 11:20:04 AM

Lot No., Due Date: J1D280423; 05/04/2011
Client, Site: 127642; S00N063A00 HANFORD
QC Batch No., Method Test: 1118158; RSRTOT SrTot by GPC
SDG, Matrix: JP0172; 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 Hoots **Date** 5-4-11

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 1118158

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 = 1.0 pCi/g

Second Level Review: [signature] Date: 5/4/11

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

5/3/2011 2:56:09 PM

Lot No., Due Date: J1D280423; 05/04/2011
Client, Site: 127642; S00N063A00 HANFORD
QC Batch No., Method Test: 1118157; RGAMMA Gamma by GER
SDG, Matrix: JP0172; SOIL

1.0 COC

	Yes	No	N/A
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	✓		

2.0 QC Batch

	Yes	No	N/A
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	✓		
2.2 Are the QC appropriate for the analysis included in the batch?	✓		
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	✓		
2.4 Does the Worksheets include a Tracer Vial label for each sample?			✓

3.0 QC & Samples

	Yes	No	N/A
3.1 Is the blank results, yield, and MDA within contract limits?	✓		
3.2 Is the LCS result, yield, and MDA within contract limits?	✓		
3.3 Are the MS/MSD results, yields, and MDA within contract limits?			✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	✓		
3.5 Are the sample yields and MDAs within contract limits?		✓	

4.0 Raw Data

	Yes	No	N/A
4.1 Were results calculated in the correct units?	✓		
4.2 Were analysis volumes entered correctly?	✓		
4.3 Were Yields entered correctly?	✓		
4.4 Were spectra reviewed/meet contractual requirements?	✓		
4.5 Were raw counts reviewed for anomalies?	✓		

5.0 Other

	Yes	No	N/A
5.1 Are all nonconformances included and noted?	✓		
5.2 Are all required forms filled out?	✓		
5.3 Was the correct methodology used?	✓		
5.4 Was transcription checked?	✓		
5.5 Were all calculations checked at a minimum frequency?			✓
5.6 Are worksheet entries complete and correct?	✓		

6.0 Comments on any No response:
Please see NCM # 10-18277

First Level [signature] **Date** 5-3-11

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 1118157

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 #: 10-18277

Second Level Review: [signature] Date: 5/4/11

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

Clouseau
Nonconformance Memo

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

NCM #: 10-18277
NCM Initiated By: John Norton
Date Opened: 05/03/2011
Date Closed:

Classification: **Anomaly**
Status: **PMREVIEW**
Production Area: Counting
Tests: Gamma by GER
Lot #'s (Sample #'s): J1D280000 (157), J1D280423 (1,2,3,4,5,6,7),
QC Batches: 1118157,

Nonconformance: MDA not met
Subcategory: Data accepted

Problem Description / Root Cause

Name	Date	Description
John Norton	05/03/2011	Many of the samples did not meet the CRDL.

Corrective Action

Name	Date	Corrective Action
John Norton	05/03/2011	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: 5/3/2011

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

5/3/2011 11:33:34 AM

Lot No., Due Date: J1D280423; 05/04/2011
Client, Site: 127642; S00N063A00 HANFORD
QC Batch No., Method Test: 1118155; RTRITIUM H-3 by LSC
SDG, Matrix: JP0172; SOIL

1.0 COC			
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	✓		
2.0 QC Batch			
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	✓		
2.2 Are the QC appropriate for the analysis included in the batch?	✓		
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	✓		
2.4 Does the Worksheets include a Tracer Vial label for each sample?			✓
3.0 QC & Samples			
3.1 Is the blank results, yield, and MDA within contract limits?	✓		
3.2 Is the LCS result, yield, and MDA within contract limits?	✓		
3.3 Are the MS/MSD results, yields, and MDA within contract limits?			✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	✓		
3.5 Are the sample yields and MDAs within contract limits?	✓		
4.0 Raw Data			
4.1 Were results calculated in the correct units?	✓		
4.2 Were analysis volumes entered correctly?	✓		
4.3 Were Yields entered correctly?	✓		
4.4 Were spectra reviewed/meet contractual requirements?			✓
4.5 Were raw counts reviewed for anomalies?	✓		
5.0 Other			
5.1 Are all nonconformances included and noted?			✓
5.2 Are all required forms filled out?	✓		
5.3 Was the correct methodology used?	✓		
5.4 Was transcription checked?	✓		
5.5 Were all calculations checked at a minimum frequency?			✓
5.6 Are worksheet entries complete and correct?	✓		

6.0 Comments on any No response:

First Level [signature] **Date** 5-3-11

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 1118155

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= 400 pCi/gm

Second Level Review: [signature] Date: 5/4/11

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

5/3/2011 11:35:44 AM

Lot No., Due Date: J1D280423; 05/04/2011
Client, Site: 127642; S00N063A00 HANFORD
QC Batch No., Method Test: 1118154; RC14 C-14 by LSC
SDG, Matrix: JP0172; 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 5-3-11

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 1118154

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 = 50.0 pci/g

Second Level Review: [signature] Date: 5/4/11

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

5/4/2011 10:57:48 AM

Lot No., Due Date: J1D280423; 05/04/2011
Client, Site: 127642; S00N063A00 HANFORD
QC Batch No., Method Test: 1118156; RNI63 Ni-63 by LSC
SDG, Matrix: JP0172; 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 5-4-11

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 1118560

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=30.0pCi/g

Second Level Review: [signature] Date: 5/4/1

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Richland Laboratory
Data Review Check List
Hexavalent Chromium

Batch Number(s): 1118341

Lab Sample Numbers or SDG:JP0172

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

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

Review Item	Yes (✓)	No (✓)	N/A (✓)	2nd Level Review (✓)
E. Other 1. Are all nonconformances included and noted?			✓	N/A
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:

Analyst: _H.Rahavi_____ Date:__5/4/2011__

Second-Level Review: _____ Date:___5/4/2011_____

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-075-237	Page 1 of 12

Collector: K Lucas	Company Contact: J Kessner	Telephone No.: 509-3754688	Project Coordinator: KESSNER, JH
Project Designation: 100-D/DR Burial Grounds & Remaining Sites - Soil Full Prot	Sampling Location: 118-D-3:1 Excavation Area Re-Verification		SAF No. D 4/26/11 RC-~~075~~074
Ice Chest No. N/A	Field Logbook No.: EL-1607-10	COA: R118D32000	Method of Shipment: HAND DELIVER
Shipped To: TestAmerica Incorporated, Richland	Offsite Property No.: N/A		Bill of Lading/Air Bill No. N/A

Price Code: ~~8L~~ 8B D 4/21/11

Data Turnaround: D 4/22/11 ~~21~~ 7 Days D 4/21/11

POSSIBLE SAMPLE HAZARDS/REMARKS

Potential Rad < DGT

Special Handling and/or Storage

Cool 4 Deg C

J1D280423

Preservation	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	None	None	None	None	None
Type of Container	G/P	G/P	G/P	G	aG	G/P	G/P	G/P	G/P	G/P
No. of Container(s)	1	1	1	1	1	1	0	0	0	0
Volume	60mL	60mL	60mL	60mL	125mL	500mL	500mL	500mL	500mL	500mL
SAMPLE ANALYSIS	See item (1) in Special Instructions.	Chromium Hex - 7196	IC Anions - 9056 Modified; NO2/NO3 - 353.2; pH (Soil) - 9045	VOA - 8260A (TCL)	Semi-VOA - 8270A (TCL)	See item (2) in Special Instructions.	Carbon-14, Tritium - H3	Nickel-63; Strontium-89,90 -- Total Sr	Isotopic Plutonium	Isotopic Uranium

Sample No	Matrix *	Sample Date	Sample Time									
J1HK84	SOIL	4-26-11	1250		X		MHLLP	X	X	X	X	X
J1HK85	SOIL	4-26-11	1255		X		MHLLO	X	X	X	X	X
J1HK86	SOIL	4-26-11	1300		X		MHLLS	X	X	X	X	X
J1HK87	SOIL	4-26-11	1400		X		MHLL7	X	X	X	X	X
J1HK88	SOIL	4-26-11	1305		X		MHLMA	X	X	X	X	X

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

Relinquished By/Removed From	Date/Time	Received By/~~Stored In~~	Date/Time
K. Lucas Kevin Lucas	4-26-11 1440	Dwoolery	4/26/11 1440
Dwoolery	4/26/11 1700	A. Freier A. Freier	4-26-11 1700
A. Freier A. Freier WCH	4-27-11 1705	TARL RYAN	4.27.11 1705

SPECIAL INSTRUCTIONS

None

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

(2) Gamma Spec (Client List) {Americium-241, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}

REVIEWED BY [signature] DATE 4-27-11

J1D280423 SDG # JP0172 DUE-50411

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

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

WCH-EE-011

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-075-237	Page 2 of 12

Collector K Lucas	**Company Contact** J Kessner	**Telephone No.** 509-3754688	**Project Coordinator** KESSNER, JH
Project Designation 100-D/DR Burial Grounds & Remaining Sites - Soil Full Prot	**Sampling Location** 118-D-3:1 Excavation Area Re-Verification		**SAF No.** D 4/26/11 RC-~~073~~074
Ice Chest No. N/A	**Field Logbook No.** EL-1607-10	**COA** R118D32000	**Method of Shipment** HAND DELIVER
Shipped To TestAmerica Incorporated, Richland	**Offsite Property No.** N/A		**Bill of Lading/Air Bill No.** N/A

Price Code ~~8L~~ 8B D 4/21/11

Data Turnaround ~~21~~ 7 Days D 4/21/11 D 4/22/11

POSSIBLE SAMPLE HAZARDS/REMARKS

Potential Rad < DOT

Special Handling and/or Storage

Cool 4 Deg C

J1D280423

Preservation	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	None	None	None	None	None
Type of Container	G/P	G/P	G/P	G	aG	G/P	G/P	G/P	G/P	G/P
No. of Container(s)	1	1	1	1	1	1	0	0	0	0
Volume	60mL	60mL	60mL	60mL	125mL	500mL	500mL	500mL	500mL	500mL
SAMPLE ANALYSIS	See item (1) in Special Instructions. D 4/21/11	Chromium Hex - 7196	IC Anions - 9056 Modified; NO2/NO3 - 353.2; pH (Soil) - 9045	VOA - 8260A (TCL) D 4/21/11	Semi-VOA - 8270A (TCL)	See item (2) in Special Instructions.	Carbon-14; Tritium - H3	Nickel-63; Strontium-89,90 -- Total Sr	Isotopic Plutonium	Isotopic Uranium

Sample No.	Matrix *	Sample Date	Sample Time										
J1HK89 MHLMJ	SOIL	4-26-11	1310		X				X	X	X	X	X
~~J1HK90~~ D 4/26/11	SOIL				X		AJ	4-27-11	X	X	X	X	X
J1HK91 MHLML	SOIL	4-26-11	1245		X				X	X	X	X	X
~~J1HK92~~ D 4/26/11	SOIL												
~~J1HK93~~ D 4/26/11	SOIL												

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

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
K Lucas Kevin Lucas	4-26-11 1440	DWOOLERY D	4/26/11 1440
DWOOLERY D 4/26/11	1700 4-26-11	A. Freier A. Freier	1700 4-26-11
A. Freier A. Freier WCH	1705 4-27-11	TARL RYAN	~~4-26-11~~ 1705 4-27-11
			4-27-11

SPECIAL INSTRUCTIONS

None

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

(2) Gamma Spec (Client List) {Americium-241, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}

REVIEWED BY [signature] DATE 4-27-11

J1D280423 JDGT # JP0172 DUL-50411

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

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

WCH-EE-011

Apex™ NON-Reg

Analysis Report for RCF27941

J1CYN9 SAF-RC-074 100D/118-D-3:1 Excavation Area Re-Verificati

GAMMA SPECTRUM ANALYSIS

Sample Identification	: RCF27941
Sample Description	: J1CYN9 SAF-RC-074 100D/118-D-3:1 Excavation Area Re-Verificati
Sample Type	: 80g pillbox
Sample Size	: 7.700E+01 grams
Facility	: Default
Sample Taken On	: 4/26/2011 1:45:00PM
Acquisition Started	: 4/27/2011 7:30:36AM
Procedure	: 80 Gram Pill Box
Operator	: RCT
Detector Name	: GEA2703
Geometry	: 80 Gram Pill Box
Live Time	: 3600.0 seconds
Real Time	: 3601.2 seconds
Dead Time	: 0.03 %
Peak Locate Threshold	: 3.00
Peak Locate Range (in channels)	: 40 - 4096
Peak Area Range (in channels)	: 40 - 4096
Identification Energy Tolerance	: 1.000 keV
Energy Calibration Used Done On	: 2/2/2011
Efficiency Calibration Used Done On	: 2/23/2011
Efficiency Calibration Description	: GEA2703 80gPB 020311EC SN82752-238
Sample Number	: 14030

INTERFERENCE CORRECTED REPORT

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/grams)	Wt mean Activity Uncertainty	Comments
K-40	1.000	1.01E+01	2.14E+00	
CS-137	1.000	1.28E+00	2.08E-01	
PB-212	0.704	3.42E-01	1.17E-01	< MDA

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

·WCH·

Sample Check-in List

TAUR

Date/Time Received: 4.27.11@1705 GM Screen Result (out) -3 (in) .5 Initials [✓]

Client: WCH SDG #: JP0172 NA [ ] SAF #: RC-075 NA [ ]

Work Order Number: J1D280423 Chain of Custody # RC-075-237

Shipping Container ID: Hand Delivery NA [ ] Air Bill # _____ NA [✓]

Item 1 through 5 for shipping container only. Initial appropriate response.

1. Custody Seals on shipping container intact? Yes [✓] No [ ] No Custody Seal [ ]
2. Custody Seals dated and signed? Yes [✓] No [ ] No Custody Seal [ ]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature: ON ICE NA [ ] 5. Vermiculite/packing materials is NA [ ] Wet [ ] Dry [✓]

Item 6 through 10 for samples. Initial appropriate response.

6. Number of samples in shipping container (Each sample may contain multiple bottles): 7 @ 2 containers PER.
7. Sample holding times exceeded? NA [ ] Yes [ ] No [✓]
8. Samples have:
   - ___ tape
   - ✓ custody seals
   - ✓ hazard labels
   - ✓ appropriate sample labels
9. Samples:
   - ✓ are in good condition (Soil)
   - ___ are broken
   - ___ are leaking
   - ___ have air bubbles (Only for samples requiring no head space)
10. Sample pH appropriate for analysis requested Yes [ ] No [ ] N/A [✓] (Note discrepancies in #13)
    (If acidification necessary, then document sample ID, initial pH, amount of HNO_3 added and pH after addition)

    RPL ID # of preservative used : _____
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): NA [✓]

See other side for additional comments

Sample Custodian: [signature] Date: 4.27.11@1705 TAUR.

Client Informed on _____ by _____ Person contacted _____

[✓] No action necessary; process as is

Project Manager [signature] Date 4/28/11

LS-023, Rev. 12, 10/10

4/29/2011 9:36:42 AM

Sample Preparation/Analysis

Copit

Balance Id:1120373922

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

6A Pu Prp PRP003/PRP005, Sep ALP002(ALP015)
SO Plutonium-238,239/40 by Alpha Spec
5I CLIENT: HANFORD

Pipet #:

AnalyDueDate: 05/04/2011

Sep1 DT/Tm Tech:

Batch: 1118152 SOIL pCi/g PM, Quote: RW2, 27038

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BouslaughP

TestAmerica Laboratories, Inc.

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MHLLP-1-AF J1D280423-1-SAMP 04/26/2011 12:50	AmtRec: 1XJAR60MLG,1X500MLP #Containers: 2	1.00g,in	PUTC12154 03/17/11,pd 01/01/10,r	50min		Scr:	Alpha:	Beta:
2 MHLLP-1-AK-X J1D280423-1-DUP 04/26/2011 12:50	AmtRec: 1XJAR60MLG,1X500MLP #Containers: 2	0.99g,in	PUTC12155 03/17/11,pd 01/01/10,r			Scr:	Alpha:	Beta:
3 MHLL0-1-AF J1D280423-2-SAMP 04/26/2011 12:55	AmtRec: 1XJAR60MLG,1X500MLP #Containers: 2	1.01g,in	PUTC12156 03/17/11,pd 01/01/10,r			Scr:	Alpha:	Beta:
4 MHLL5-1-AF J1D280423-3-SAMP 04/26/2011 13:00	AmtRec: 1XJAR60MLG,1X500MLP #Containers: 2	1.01g,in	PUTC12157 03/17/11,pd 01/01/10,r			Scr:	Alpha:	Beta:
5 MHLL7-1-AF J1D280423-4-SAMP 04/26/2011 14:00	AmtRec: 1XJAR60MLG,1X500MLP #Containers: 2	1.01g,in	PUTC12158 03/17/11,pd 01/01/10,r			Scr:	Alpha:	Beta:
6 MHLMA-1-AF J1D280423-5-SAMP 04/26/2011 13:05	AmtRec: 1XJAR60MLG,1X500MLP #Containers: 2	1.02g,in	PUTC12159 03/17/11,pd 01/01/10,r			Scr:	Alpha:	Beta:
7 MHLMJ-1-AF J1D280423-6-SAMP 04/26/2011 13:10	AmtRec: 1XJAR60MLG,1X500MLP #Containers: 2	1.01g,in	PUTC12160 03/17/11,pd 01/01/10,r			Scr:	Alpha:	Beta:

4/29/2011 9:36:43 AM

Sample Preparation/Analysis

Balance Id:1120373922

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

6A Pu Prp PRP003/PRP005, Sep ALP002(ALP015)
SO Plutonium-238,239/40 by Alpha Spec
5I CLIENT: HANFORD

Pipet #:

AnalyDueDate: 05/04/2011

Sep1 DT/Tm Tech:

Batch: 1118152 SOIL pCi/g PM, Quote: RW2, 27038

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BouslaughP

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 MHLML-1-AF J1D280423-7-SAMP 04/26/2011 12:45		1.02g,in AmtRec: 1XJAR60MLG,1X500MLP #Containers: 2	PUTC12161 03/17/11,pd 01/01/10 r	50 min			Scr: Alpha: Beta:	
9 MHLQ3-1-AA-B J1D280000-152-BLK 04/28/2011 09:39 pd		1.01g,in AmtRec: #Containers: 1	PUTC12162 03/17/11,pd 01/01/10 r				Scr: Alpha: Beta:	
10 MHLQ3-1-AC-C J1D280000-152-LCS 04/28/2011 09:39 pd		1.00g,in AmtRec: #Containers: 1	PUSK0843 03/10/11,pd 01/01/10 r				Scr: Alpha: Beta:	

Comments: MHLMA-SAMP "ISV. Recount DUP on a different detector."

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

MHLLP1AF-SAMP Constituent List:

PU-238	RDL:1	pCi/g	LCL:	UCL:	RPD:	PU-239	RDL:1	pCi/g	LCL:70	UCL:130	RPD:35
Pu-242	RDL:	pCi/g	LCL:20	UCL:105	RPD:35						

MHLQ31AA-BLK:

PU-238	RDL:1	pCi/g	LCL:	UCL:	RPD:	PU-239	RDL:1	pCi/g	LCL:	UCL:	RPD:
Pu-242	RDL:	pCi/g	LCL:20	UCL:105	RPD:35						

MHLQ31AC-LCS:

PU-239	RDL:1	pCi/g	LCL:70	UCL:130	RPD:35	Pu-242	RDL:	pCi/g	LCL:20	UCL:105	RPD:35

MHLLP1AF-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

MHLQ31AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

TestAmerica Laboratories, Inc.

Sample Preparation/Analysis

6A Pu Prp PRP003/PRP005, Sep ALP002(ALP015)
SO Plutonium-238,239/40 by Alpha Spec
5I CLIENT: HANFORD

Balance Id:1120373922
Pipet #: _____
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech: ,BouslaughP

AnalyDueDate: 05/04/2011

Batch: 1118152 pCi/g
SEQ Batch, Test: None

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

MHLQ31AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

TestAmerica Laboratories, Inc.

5/4/2011 10:58:27 AM

ICOC Fraction Transfer/Status Report

ByDate: 5/4/2010, 5/9/2011, Batch: '1118152', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
1118152						
AC		Rev1C	BouslaughP	4/29/2011 9:24:48		
SC			MaucieriS	IsBatched	4/28/2011 10:01:58 AM	ICOC_RADCALC v4.8.49
SC			BouslaughP	InPrep	4/29/2011 9:24:48 AM	RL-PRP-003 REVISION 1
SC			WoodT	Prep1C	5/2/2011 12:16:12 AM	RL-PRP-003 REVISION 1
SC			JorgensonD	Sep2C	5/3/2011 2:21:07 PM	RL-ALP-016 REVISION 1
SC			ClarkR	InCnt1	5/3/2011 2:41:08 PM	RL-CI-008 REVISION 1
SC			ClarkR	CalcC	5/3/2011 6:41:37 PM	RL-CI-008 REVISION 1
SC			nortonj	Rev1C	5/4/2011 10:58:13 AM	RL-DR-001 Rev 2
AC			WoodT	5/2/2011 12:16:12		
AC			JorgensonD	5/3/2011 2:21:07 PM		
AC			ClarkR	5/3/2011 2:41:08 PM		
AC			ClarkR	5/3/2011 6:41:37 PM		
AC			nortonj	5/4/2011 10:58:13		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Page 1

Grp Rec Cnt: 6

ICOCFractions v4.8.44

4/29/2011 10:16:13 AM

Sample Preparation/Analysis

Balance Id:1120373922

127642, Washington Closure Hanford LLC
Bechtel Hanford, Inc.

7S Uiso Prp PRP003/PRP005, Sep ALP009(ALP015)
SR Uranium-234,235,238 by Alpha Spec
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 05/04/2011

Sep1 DT/Tm Tech:

Batch: 1118153 **SOIL** **pCi/g** **PM, Quote: RW2, 27038**

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 1118152 6ASO, 1118153 7SSR, 1118154 5SS3, 1118155 ATS6, 1118156 AFS4, 1118157 AXTA, 1118158 CHTH, 1118341 DWEA,

Prep Tech: ,SannohS

TestAmerica Laboratories, Inc.

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MHLLP-1-AC J1D280423-1-SAMP 04/26/2011 12:50	AmtRec: 1XJAR60MLG,1X500MLP	1.01g,in	UITC26343 03/29/11,pd 06/15/01,r	50min	#Containers: 2	Scr:	Alpha:	Beta:
2 MHLL0-1-AC J1D280423-2-SAMP 04/26/2011 12:55	AmtRec: 1XJAR60MLG,1X500MLP	1.01g,in	UITC26344 03/29/11,pd 06/15/01,r		#Containers: 2	Scr:	Alpha:	Beta:
3 MHLL0-1-AK-X J1D280423-2-DUP 04/26/2011 12:55	AmtRec: 1XJAR60MLG,1X500MLP	1.02g,in	UITC26345 03/29/11,pd 06/15/01,r		#Containers: 2	Scr:	Alpha:	Beta:
4 MHLL5-1-AC J1D280423-3-SAMP 04/26/2011 13:00	AmtRec: 1XJAR60MLG,1X500MLP	1.00g,in	UITC26346 03/29/11,pd 06/15/01,r		#Containers: 2	Scr:	Alpha:	Beta:
5 MHLL7-1-AC J1D280423-4-SAMP 04/26/2011 14:00	AmtRec: 1XJAR60MLG,1X500MLP	1.01g,in	UITC26347 03/29/11,pd 06/15/01,r		#Containers: 2	Scr:	Alpha:	Beta:
6 MHLMA-1-AC J1D280423-5-SAMP 04/26/2011 13:05	AmtRec: 1XJAR60MLG,1X500MLP	1.00g,in	UITC26348 03/29/11,pd 06/15/01,r		#Containers: 2	Scr:	Alpha:	Beta:
7 MHLMJ-1-AC J1D280423-6-SAMP 04/26/2011 13:10	AmtRec: 1XJAR60MLG,1X500MLP	1.02g,in	UITC26349 03/29/11,pd 06/15/01,r		#Containers: 2	Scr:	Alpha:	Beta:

4/29/2011 10:16:13 AM

Sample Preparation/Analysis

Balance Id:1120373922

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

7S Ulso Prp PRP003/PRP005, Sep ALP009(ALP015)
SR Uranium-234,235,238 by Alpha Spec
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 05/04/2011

Sep1 DT/Tm Tech:

Batch: 1118153 SOIL pCi/g PM, Quote: RW2, 27038

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,SannohS

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 MHLML-1-AC J1D280423-7-SAMP 04/26/2011 12:45		1.02g,in AmtRec: 1XJAR60MLG,1X500MLP	UITC26350 03/29/11,pd 06/15/01,r #Containers: 2	50 pkg		Scr:	Alpha:	Beta:
9 MHLQ6-1-AA-B J1D280000-153-BLK 04/28/2011 09:39 pd		1.01g,in AmtRec:	UITC26351 03/29/11,pd 06/15/01,r #Containers: 1			Scr:	Alpha:	Beta:
10 MHLQ6-1-AC-C J1D280000-153-LCS 04/28/2011 09:39 pd		1.00g,in AmtRec:	UISH1353 03/17/11,pd 06/15/01,r #Containers: 1			Scr:	Alpha:	Beta:

Comments: MHLMA-SAMP "ISV. Recount DUP on a different detector."

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

MHLLP1AC-SAMP Constituent List:

U-232	RDL:	pCi/g	LCL:20	UCL:105	RPD:35	U-234	RDL:1	pCi/g	LCL:	UCL:	RPD:
U-235	RDL:1	pCi/g	LCL:	UCL:	RPD:	U-238	RDL:1	pCi/g	LCL:	UCL:	RPD:

MHLQ61AA-BLK:

U-232	RDL:	pCi/g	LCL:20	UCL:105	RPD:35	U-234	RDL:1	pCi/g	LCL:	UCL:	RPD:
U-235	RDL:1	pCi/g	LCL:	UCL:	RPD:	U-238	RDL:1	pCi/g	LCL:	UCL:	RPD:

MHLQ61AC-LCS:

U-232	RDL:	pCi/g	LCL:20	UCL:105	RPD:35	Uranium	RDL:	pCi/g	LCL:70	UCL:130	RPD:35

MHLLP1AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

TestAmerica Laboratories, Inc.

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4/29/2011 10:16:14 AM

Sample Preparation/Analysis

7S Uiso Prp PRP003/PRP005, Sep ALP009(ALP015)
SR Uranium-234,235,238 by Alpha Spec
5I CLIENT: HANFORD

Balance Id:1120373922

Pipet #: _____

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech: ,SannohS

AnalyDueDate: 05/04/2011

Batch: 1118153 pCi/g

SEQ Batch, Test: None

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

MHLQ61AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

MHLQ61AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

TestAmerica Laboratories, Inc.

5/4/2011 11:00:15 AM

ICOC Fraction Transfer/Status Report

ByDate: 5/4/2010, 5/9/2011, Batch: '1118153', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
1118153						
AC		**Rev1C**	**SannohS**	4/29/2011 9:54:55		
SC			MaucieriS	IsBatched	4/28/2011 10:02:04 AM	ICOC_RADCALC v4.8.49
SC			SannohS	InPrep	4/29/2011 9:54:55 AM	RL-PRP-003 REVISION 1
SC			WoodT	Prep1C	5/2/2011 12:16:18 AM	RL-PRP-003 REVISION 1
SC			JorgensonD	Sep1C	5/2/2011 12:35:01 PM	ALP-004 REVISION 1
SC			JorgensonD	Sep2C	5/3/2011 11:10:55 AM	RL-ALP-015 REVISION 1
SC			ClarkR	InCnt1	5/3/2011 11:17:00 AM	RL-CI-008 REVISION 1
SC			ClarkR	CalcC	5/3/2011 6:35:28 PM	RL-CI-008 REVISION 1
SC			nortonj	Rev1C	5/4/2011 11:00:00 AM	RL-DR-001 Rev 2
AC			**WoodT**	5/2/2011 12:16:18		
AC			**JorgensonD**	5/2/2011 12:35:01 PM		
AC			**JorgensonD**	5/3/2011 11:10:55		
AC			**ClarkR**	5/3/2011 11:17:00		
AC			**ClarkR**	5/3/2011 6:35:28 PM		
AC			**nortonj**	5/4/2011 11:00:00		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Page 1

Grp Rec Cnt: 7

ICOCFractions v4.8.44

4/29/2011 9:22:58 AM

Sample Preparation/Analysis

Balance Id:1120373922

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

CH Sr-Total Prp PRP003, Sep GPC003
TH Total Strontium by GPC
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 05/04/2011

Sep1 DT/Tm Tech: 19:25 5/3/11 APA

Batch: 1118158 **SOIL** **pCi/g** **PM, Quote: RW2, 27038**

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 1118152 6ASO, 1118153 7SSR, 1118154 5SS3, 1118155 ATS6, 1118156 AFS4, 1118157 AXTA, 1118158 CHTH, 1118341 DWEA,

Prep Tech: ,BouslaughP

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MHLLP-1-AD J1D280423-1-SAMP 04/26/2011 12:50	AmtRec: 1XJAR60MLG,1X500MLP	6.02g,in	SRTA20869 03/29/11	#Containers: 2	1.5 1.4637g -1.4000g 63.7mg	50 min	31A Scr:	0657 Alpha:	5/4/11 Beta:	
2 MHLL0-1-AD J1D280423-2-SAMP 04/26/2011 12:55	AmtRec: 1XJAR60MLG,1X500MLP	5.99g,in	SRTA20870 03/29/11	#Containers: 2	1.4566g -1.3833g 73.3mg		31B Scr:	Alpha:	Beta:	
3 MHLL5-1-AD J1D280423-3-SAMP 04/26/2011 13:00	AmtRec: 1XJAR60MLG,1X500MLP	5.99g,in	SRTA20871 03/29/11	#Containers: 2	1.4643g -1.3927g 71.6mg		31D Scr:	Alpha:	Beta:	
4 MHLL7-1-AD J1D280423-4-SAMP 04/26/2011 14:00	AmtRec: 1XJAR60MLG,1X500MLP	6.01g,in	SRTA20872 03/29/11	#Containers: 2	1.4719g -1.3962g 75.7mg		32B Scr:	Alpha:	Beta:	
5 MHLMA-1-AD J1D280423-5-SAMP 04/26/2011 13:05	AmtRec: 1XJAR60MLG,1X500MLP	6.00g,in	SRTA20873 03/29/11	#Containers: 2	1.4506g -1.3785g 72.1mg		32C Scr:	Alpha:	Beta:	
6 MHLMJ-1-AD J1D280423-6-SAMP 04/26/2011 13:10	AmtRec: 1XJAR60MLG,1X500MLP	6.02g,in	SRTA20874 03/29/11	#Containers: 2	1.4507g -1.3830g 67.7mg		32D Scr:	Alpha:	Beta:	
7 MHLMJ-1-AK-X J1D280423-6-DUP 04/26/2011 13:10	AmtRec: 1XJAR60MLG,1X500MLP	6.01g,in	SRTA20875 03/29/11	#Containers: 2	1.4723g -1.4064g 65.9mg		31C Scr:	0657 Alpha:	5/4/11 Beta:	

TestAmerica Laboratories, Inc.

4/29/2011 9:22:58 AM

Sample Preparation/Analysis

Balance Id:1120373922

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

CH Sr-Total Prp PRP003, Sep GPC003
TH Total Strontium by GPC
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 05/04/2011

Sep1 DT/Tm Tech:

Batch: 1118158 SOIL pCi/g PM, Quote: RW2, 27038

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BouslaughP

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 MHLML-1-AD J1D280423-7-SAMP 04/26/2011 12:45		6.00g,in AmtRec: 1XJAR60MLG,1X500MLP	SRTA20876 03/29/11 #Containers: 2	1.5	1.4593g -1.3973g 62.0mg	5 min	31D	0657	5/4/11	
							Scr:	Alpha:		Beta:
9 MHLRX-1-AA-B J1D280000-158-BLK 04/28/2011 09:41 pd		6.00g,in AmtRec:	SRTA20877 03/29/11 #Containers: 1		1.5135g -1.4238g 89.7mg		31D			
							Scr:	Alpha:		Beta:
10 MHLRX-1-AC-C J1D280000-158-LCS 04/28/2011 09:41 pd		6.02g,in AmtRec:	STSB1585 03/10/11 #Containers: 1		1.5062g -1.4141g 92.1mg		32B			
							Scr:	Alpha:		Beta:

Comments: MHLMA-SAMP "ISV. Recount DUP on a different detector."

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

MHLLP1AD-SAMP Constituent List:
Sr-90 RDL:1 pCi/g LCL:70 UCL:130 RPD:35
MHLRX1AA-BLK:
Sr-90 RDL:1 pCi/g LCL: UCL: RPD:
MHLRX1AC-LCS:
Sr-90 RDL:1 pCi/g LCL:70 UCL:130 RPD:35
MHLLP1AD-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MHLRX1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MHLRX1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

TestAmerica Laboratories, Inc.

4/29/2011 9:22:59 AM

Sample Preparation/Analysis

CH Sr-Total Prp PRP003, Sep GPC003
TH Total Strontium by GPC
5I CLIENT: HANFORD

Balance Id:1120373922

Pipet #: _____

AnalyDueDate: 05/04/2011

Sep1 DT/Tm Tech:

Batch: 1118158 pCi/g

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BouslaughP

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

TestAmerica Laboratories, Inc.

5/4/2011 11:17:55 AM

ICOC Fraction Transfer/Status Report

ByDate: 5/4/2010, 5/9/2011, Batch: '1118158', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
1118158						
AC		Rev1C	**BouslaughP**	4/29/2011 8:45:48		
SC			MaucieriS	IsBatched	4/28/2011 10:03:17 AM	ICOC_RADCALC v4.8.49
SC			BouslaughP	InPrep	4/29/2011 8:45:48 AM	RL-PRP-003 REVISION 1
SC			WoodT	Prep1C	5/2/2011 12:16:25 AM	RL-PRP-003 REVISION 1
SC			AshworthA	Sep2C	5/3/2011 9:10:22 PM	RL-GPC-003 REVISION 1
SC			BlackCL	InCnt1	5/4/2011 12:18:52 AM	RL-CI-006 REVISION 1
SC			ClarkR	CalcC	5/4/2011 8:06:51 AM	RL-CI-006 REVISION 1
SC			nortonj	Rev1C	5/4/2011 11:17:43 AM	RL-DR-001 Rev 2
AC			**WoodT**	5/2/2011 12:16:25		
AC			**AshworthA**	5/3/2011 9:10:22 PM		
AC			**BlackCL**	5/4/2011 12:18:52		
AC			**ClarkR**	5/4/2011 8:06:51 AM		
AC			**nortonj**	5/4/2011 11:17:43		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Page 1

Grp Rec Cnt: 6

ICOCFractions v4.8.44

4/29/2011 7:56:18 AM

Sample Preparation/Analysis

Balance Id:1120421763

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

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

Pipet #: _____

AnalyDueDate: 05/04/2011

Sep1 DT/Tm Tech:

Batch: 1118157 SOIL pCi/g PM, Quote: RW2, 27038

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 1118152 6ASO, 1118153 7SSR, 1118154 5SS3, 1118155 ATS6, 1118156 AFS4, 1118157 AXTA, 1118158 CHTH, 1118341 DWEA,

Prep Tech: ,BouslaughP

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MHLLP-1-AH J1D280423-1-SAMP 04/26/2011 12:50			378.20g,in AmtRec: 1XJAR60MLG,1X500MLP	378.20g #Containers: 2		S200	200 min	G10 Scr:	1437 Alpha:	4/29/11 m Beta:	
2 MHLL0-1-AH J1D280423-2-SAMP 04/26/2011 12:55			400.90g,in AmtRec: 1XJAR60MLG,1X500MLP	400.90g #Containers: 2				G11 Scr:	1803 Alpha:	4/29/11 m Beta:	
3 MHLL5-1-AH J1D280423-3-SAMP 04/26/2011 13:00			356.90g,in AmtRec: 1XJAR60MLG,1X500MLP	356.90g #Containers: 2				~~G7~~ G7 G10 m Scr:	1804 Alpha:	Beta:	
4 MHLL7-1-AH J1D280423-4-SAMP 04/26/2011 14:00			365.30g,in AmtRec: 1XJAR60MLG,1X500MLP	365.30g #Containers: 2				G10 Scr:	1804 Alpha:	Beta:	
5 MHLMA-1-AH J1D280423-5-SAMP 04/26/2011 13:05			437.40g,in AmtRec: 1XJAR60MLG,1X500MLP	437.40g #Containers: 2				G14 Scr:	1805 Alpha:	Beta:	
6 MHLMA-1-AK-X J1D280423-5-DUP 04/26/2011 13:05	ISV		AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2				G11 Scr:	2128 Alpha:	4/29/11 m Beta:	
7 MHLMJ-1-AH J1D280423-6-SAMP 04/26/2011 13:10			385.90g,in AmtRec: 1XJAR60MLG,1X500MLP	385.90g #Containers: 2				G14 Scr:	2129 Alpha:	Beta:	

TestAmerica Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1 ISV - Insufficient Volume for Analysis WO Cnt: 7
Richland Wa. pd - Prep Dt, dc - Date Chg, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added Prep_SamplePrep v4.8.49

TestAmerica Laboratories, Inc.

4/29/2011 7:56:18 AM

Sample Preparation/Analysis

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

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

Balance Id:1120421763
Pipet #:

AnalyDueDate: 05/04/2011

Sep1 DT/Tm Tech:

Batch: 1118157 SOIL pCi/g PM, Quote: RW2, 27038

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BouslaughP

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 MHLML-1-AH J1D280423-7-SAMP 04/26/2011 12:45			395.10g,in AmtRec: 1XJAR60MLG,1X500MLP	395.10g #Containers: 2		500 Gee	200min	G7 Scr:	2129 Alpha:	4/29/km Beta:	
9 MHLRR-1-AA-B J1D280000-157-BLK 04/28/2011 09:39 pd			348.00g,in AmtRec:	348.00g #Containers: 1				G10 Scr:	2130 Alpha:	Beta:	
10 MHLRR-1-AC-C J1D280000-157-LCS 04/28/2011 09:39 pd			350.10g,in AmtRec:	350.10g #Containers: 1	QC20009 08/04/09,pd 09/01/09,r			G14 Scr:	1216 Alpha:	4/30/km Beta:	

Comments: MHLMA-SAMP "ISV. Recount DUP on a different detector."

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

MHLLP1AH-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:

MHLRR1AA-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:

MHLRR1AC-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

TestAmerica Laboratories, Inc.

Sample Preparation/Analysis

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

Balance Id:1120421763
Pipet #: _____
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech: ,BouslaughP

AnalyDueDate: 05/04/2011

Batch: 1118157 pCi/g
SEQ Batch, Test: None

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

```
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
MHLLP1AH-SAMP Calc Info:
    Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
MHLRR1AA-BLK:
    Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
MHLRR1AC-LCS:
    Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
```

5/3/2011 2:35:57 PM

ICOC Fraction Transfer/Status Report

ByDate: 5/3/2010, 5/8/2011, Batch: '1118157', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
1118157						
AC		**Rev1C**	**BouslaughP**	4/29/2011 6:19:54		
SC			MauclerIS	IsBatched	4/28/2011 10:03:12 AM	ICOC_RADCALC v4.8.49
SC			BouslaughP	InPrep	4/29/2011 6:19:54 AM	RL-GAM-001 REVISION 1
SC			BouslaughP	Prep1C	4/29/2011 8:00:19 AM	RL-GAM-001 REVISION 1
SC			BlackCL	InCnt1	4/29/2011 8:18:07 AM	RL-CI-007 REVISION 1
SC			ClarkR	CalcC	5/2/2011 8:18:40 AM	RL-CI-007 REVISION 1
SC			nortonj	Rev1C	5/3/2011 2:35:44 PM	RL-DR-001 Rev 2
AC			**BouslaughP**	4/29/2011 8:00:19		
AC			**BlackCL**	4/29/2011 8:18:07		
AC			**ClarkR**	5/2/2011 8:18:40 AM		
AC			**nortonj**	5/3/2011 2:35:44 PM		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Grp Rec Cnt: 5

ICOCFractions v4.8.44

4/28/2011 10:01:28 AM

Sample Preparation/Analysis

Balance Id:

Pipet #:

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech:

27642, Washington Closure Hanford LLC , Bechtel Hanford, Inc.

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

AnalyDueDate: 05/04/2011

Batch: 1118155 SOIL pCi/g PM, Quote: RW2, 27038

SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MHLLP-1-AG J1D280423-1-SAMP 04/26/2011 12:50		AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
2 MHLL0-1-AG J1D280423-2-SAMP 04/26/2011 12:55		AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
3 MHLL5-1-AG J1D280423-3-SAMP 04/26/2011 13:00		AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
4 MHLL5-1-AL-X J1D280423-3-DUP 04/26/2011 13:00		AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
5 MHLL7-1-AG J1D280423-4-SAMP 04/26/2011 14:00		AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
6 MHLMA-1-AG J1D280423-5-SAMP 04/26/2011 13:05		AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
7 MHLMJ-1-AG J1D280423-6-SAMP 04/26/2011 13:10		AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:

Hemecc/Laboratories, Inc.

4/28/2011 10:01:28 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

Balance Id:

Pipet #:

AnalyDueDate: 05/04/2011

Sep1 DT/Tm Tech:

Batch: 1118155 SOIL pCi/g PM, Quote: RW2, 27038

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 MHLML-1-AG J1D280423-7-SAMP 04/26/2011 12:45		AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
9 MHLRJ-1-AA-B J1D280000-155-BLK 04/28/2011 09:39 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
10 MHLRJ-1-AC-C J1D280000-155-LCS 04/28/2011 09:39 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
11 MHLRJ-1-AD-BN J1D280000-155-IBLK 04/28/2011 09:39 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

Comments:

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

MHLLP1AG-SAMP Constituent List:

MHLRJ1AA-BLK:

MHLRJ1AC-LCS:

MHLRJ1AD-IBLK:

TestAmerica Richland Laboratories, Inc.

Sample Preparation/Analysis

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

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

AnalyDueDate: 05/04/2011

Batch: 1118155 pCi/g
SEQ Batch, Test: None

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

MHLLP1AG-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MHLRJ1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MHLRJ1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MHLRJ1AD-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

5/3/2011 11:32:51 AM

ICOC Fraction Transfer/Status Report

ByDate: 5/3/2010, 5/8/2011, Batch: '1118155', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
1118155						
AC		Rev1C	WagnerF	4/29/2011 11:53:42		
SC			MaucieriS	IsBatched	4/28/2011 10:03:03 AM	ICOC_RADCALC v4.8.49
SC			WagnerF	Sep1C	4/29/2011 11:53:42 AM	RL-LSC-002 REVISION 1
SC			ClarkR	InCnt1	4/29/2011 3:26:53 PM	RL-CI-005 REVISION 1
SC			ClarkR	CalcC	5/2/2011 12:25:44 PM	RL-CI-005 REVISION 1
SC			nortonj	Rev1C	5/3/2011 11:32:40 AM	RL-DR-001 Rev 2
AC			**ClarkR**	4/29/2011 3:26:53 PM		
AC			**ClarkR**	5/2/2011 12:25:44 PM		
AC			**nortonj**	5/3/2011 11:32:40		

AC: Accepting Entry; SC: Status Change

126

4/28/2011 10:01:27 AM

Sample Preparation/Analysis

Balance Id:

Pipet #:

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech:

127642, Washington Closure Hanford LLC
Bechtel Hanford, Inc.

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

AnalyDueDate: 05/04/2011

Batch: 1118154 SOIL pCi/g PM, Quote: RW2, 27038

SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MHLLP-1-AJ J1D280423-1-SAMP 04/26/2011 12:50		5.039g AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
2 MHLL0-1-AJ J1D280423-2-SAMP 04/26/2011 12:55		5.016g AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
3 MHLL5-1-AJ J1D280423-3-SAMP 04/26/2011 13:00		5.031g AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
4 MHLL5-1-AK-X J1D280423-3-DUP 04/26/2011 13:00		5.036g AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
5 MHLL7-1-AJ J1D280423-4-SAMP 04/26/2011 14:00		5.047g AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
6 MHLMA-1-AJ J1D280423-5-SAMP 04/26/2011 13:05		5.028g AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
7 MHLMJ-1-AJ J1D280423-6-SAMP 04/26/2011 13:10		5.026 AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:

Test America Richland Laboratories, Inc.

4/28/2011 10:01:27 AM

Sample Preparation/Analysis

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

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

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

AnalyDueDate: 05/04/2011

Batch: 1118154 SOIL pCi/g PM, Quote: RW2, 27038

SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 MHLML-1-AJ J1D280423-7-SAMP 04/26/2011 12:45		5,065 AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
9 MHLRC-1-AA-B J1D280000-154-BLK 04/28/2011 09:39 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
10 MHLRC-1-AC-C J1D280000-154-LCS 04/28/2011 09:39 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
11 MHLRC-1-AD-BN J1D280000-154-IBLK 04/28/2011 09:39 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

Comments:

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

MHLLP1AJ-SAMP Constituent List:

MHLRC1AA-BLK:

MHLRC1AC-LCS:

MHLRC1AD-IBLK:

TestAmerica Laboratories, Inc.

Sample Preparation/Analysis

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

AnalyDueDate: 05/04/2011

Batch: 1118154 pCi/g
SEQ Batch, Test: None

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

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

```
MHLLP1AJ-SAMP Calc Info:
    Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
MHLRC1AA-BLK:
    Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
MHLRC1AC-LCS:
    Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
MHLRC1AD-IBLK:
    Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
```

5/3/2011 11:34:20 AM

ICOC Fraction Transfer/Status Report

ByDate: 5/3/2010, 5/8/2011, Batch: '1118154', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
1118154						
AC		Rev1C	WagnerF	4/29/2011 11:53:31		
SC			MaucleriS	IsBatched	4/28/2011 10:02:10 AM	ICOC_RADCALC v4.8.49
SC			WagnerF	Sep1C	4/29/2011 11:53:31 AM	RL-LSC-008 REVISION 1
SC			ClarkR	InCnt1	4/29/2011 3:27:03 PM	RL-CI-005 REVISION 1
SC			ClarkR	CalcC	5/2/2011 11:49:53 AM	RL-CI-005 REVISION 1
SC			norton|	Rev1C	5/3/2011 11:34:08 AM	RL-DR-001 Rev 2
AC			ClarkR	4/29/2011 3:27:03 PM		
AC			ClarkR	5/2/2011 11:49:53		
AC			norton|	5/3/2011 11:34:08		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Page 1

Grp Rec Cnt: 4

ICOCFractions v4.8.44

4/29/2011 10:32:00 AM

Sample Preparation/Analysis

Balance Id:1120373922

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

AF Ni-63 Prp PRP003/PRP005, Sep LSC017
S4 Nickel by ICP and Nickel-63 by Liquid Scint
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 05/04/2011

Sep1 DT/Tm Tech:

Batch: 1118156 SOIL pCi/g PM, Quote: RW2, 27038

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 1118152 6ASO, 1118153 7SSR, 1118154 5SS3, 1118155 ATS6, 1118156 AFS4, 1118157 AXTA, 1118158 CHTH, 1118341 DWEA,

Prep Tech: ,BouslaughP

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MHLLP-1-AE J1D280423-1-SAMP 04/26/2011 12:50		AmtRec: 1XJAR60MLG,1X500MLP	0.25g,in	0.25g	NITA4073 03/30/11	20min	#Containers: 2	Scr:	Alpha:	Beta:
2 MHLL0-1-AE J1D280423-2-SAMP 04/26/2011 12:55		AmtRec: 1XJAR60MLG,1X500MLP	0.25g,in	0.25g	NITA4074 03/30/11		#Containers: 2	Scr:	Alpha:	Beta:
3 MHLL5-1-AE J1D280423-3-SAMP 04/26/2011 13:00		AmtRec: 1XJAR60MLG,1X500MLP	0.25g,in	0.25g	NITA4075 03/30/11		#Containers: 2	Scr:	Alpha:	Beta:
4 MHLL7-1-AE J1D280423-4-SAMP 04/26/2011 14:00		AmtRec: 1XJAR60MLG,1X500MLP	0.25g,in	0.25g	NITA4076 03/30/11		#Containers: 2	Scr:	Alpha:	Beta:
5 MHLL7-1-AK-X J1D280423-4-DUP 04/26/2011 14:00		AmtRec: 1XJAR60MLG,1X500MLP	0.25g,in	0.25g	NITA4077 03/30/11		#Containers: 2	Scr:	Alpha:	Beta:
6 MHLMA-1-AE J1D280423-5-SAMP 04/26/2011 13:05		AmtRec: 1XJAR60MLG,1X500MLP	0.25g,in	0.25g	NITA4078 03/30/11		#Containers: 2	Scr:	Alpha:	Beta:
7 MHLMJ-1-AE J1D280423-6-SAMP 04/26/2011 13:10		AmtRec: 1XJAR60MLG,1X500MLP	0.25g,in	0.25g	NITA4079 03/30/11		#Containers: 2	Scr:	Alpha:	Beta:

TestAmerica Laboratories, Inc.

4/29/2011 10:32:01 AM

Sample Preparation/Analysis

Balance Id:1120373922

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

AF Ni-63 Prp PRP003/PRP005, Sep LSC017
S4 Nickel by ICP and Nickel-63 by Liquid Scint
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 05/04/2011

Sep1 DT/Tm Tech:

Batch: 1118156 SOIL pCi/g PM, Quote: RW2, 27038

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BouslaughP

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 MHLML-1-AE J1D280423-7-SAMP 04/26/2011 12:45		AmtRec: 1XJAR60MLG,1X500MLP	0.26g,in	0.26g #Containers: 2	NITA4080 03/30/11	20min		Scr:	Alpha:	Beta:
9 MHLRN-1-AA-B J1D280000-156-BLK 04/28/2011 09:39 pd		AmtRec:	0.25g,in	0.25g #Containers: 1	NITA4081 03/30/11			Scr:	Alpha:	Beta:
10 MHLRN-1-AC-C J1D280000-156-LCS 04/28/2011 09:39 pd		AmtRec:	0.27g,in	0.27g #Containers: 1	NISA1407 04/05/11			Scr:	Alpha:	Beta:
11 MHLRN-1-AD-BN J1D280000-156-IBLK 04/28/2011 09:39 pd		AmtRec:		#Containers: 1				Scr:	Alpha:	Beta:

Comments: MHLMA-SAMP "ISV. Recount DUP on a different detector."

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

MHLLP1AE-SAMP Constituent List:

Ni-63	RDL:30	pCi/g	LCL:70	UCL:130	RPD:35
MHLRN1AA-BLK:					
Ni-63	RDL:30	pCi/g	LCL:	UCL:	RPD:
MHLRN1AC-LCS:					
Ni-63	RDL:30	pCi/g	LCL:70	UCL:130	RPD:35
MHLRN1AD-IBLK:					

TestAmerica Laboratories, Inc.

4/29/2011 10:32:01 AM

Sample Preparation/Analysis

AF Ni-63 Prp PRP003/PRP005, Sep LSC017
S4 Nickel by ICP and Nickel-63 by Liquid Scint
5I CLIENT: HANFORD

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

AnalyDueDate: 05/04/2011

Batch: 1118156 pCi/g
SEQ Batch, Test: None

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

Ni-63 RDL:30 pCi/g LCL: UCL: RPD:

MHLLP1AE-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MHLRN1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MHLRN1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MHLRN1AD-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

5/4/2011 10:56:36 AM

ICOC Fraction Transfer/Status Report

ByDate: 5/4/2010, 5/9/2011, Batch: '1118156', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
1118156						
AC		Rev1C	BouslaughP	4/29/2011 10:17:43		
SC			MaucieriS	IsBatched	4/28/2011 10:03:07 AM	ICOC_RADCALC v4.8.49
SC			BouslaughP	InPrep	4/29/2011 10:17:43 AM	RL-PRP-003 REVISION 1
SC			WoodT	Prep1C	5/2/2011 12:16:04 AM	RL-PRP-003 REVISION 1
SC			LuksicS	Sep1C	5/3/2011 1:18:05 PM	RL-LSC-017 REVISION 1
SC			ClarkR	InCnt1	5/3/2011 1:30:40 PM	RL-CI-005 REVISION 1
SC			ClarkR	CalcC	5/4/2011 9:42:04 AM	RL-CI-005 REVISION 1
SC			nortonj	Rev1C	5/4/2011 10:56:23 AM	RL-DR-001 Rev 2
AC			WoodT	5/2/2011 12:16:04		
AC			LuksicS	5/3/2011 1:18:05 PM		
AC			ClarkR	5/3/2011 1:30:40 PM		
AC			ClarkR	5/4/2011 9:41:27 AM		
AC			ClarkR	5/4/2011 9:42:04 AM		
AC			nortonj	5/4/2011 10:56:23		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Page 1

Grp Rec Cnt: 7

ICOCFractions v4.8.44

4/28/2011 4:32:44 PM

Sample Preparation/Analysis

Balance Id:

Pipet #:

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

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

Sep1 DT/Tm Tech:

AnalyDueDate: 05/04/2011

Sep2 DT/Tm Tech:

Batch: 1118341 SOIL mg/kg PM, Quote: RW2, 27038

SEQ Batch, Test: None

Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MHLLP-1-AA J1D280423-1-SAMP 04/26/2011 12:50	2.5101	AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2	DISH: 1.0030	DISH+BASKET: 6.4299	Scr:	Alpha: 6.3241		Beta:	
2 MHLLP-1-AL-S J1D280423-1-MS 04/26/2011 12:50	2.5284	AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:		Beta:	
3 MHLLP-1-AM-X J1D280423-1-DUP 04/26/2011 12:50	PBW 2.5149	AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:		Beta:	
4 MHLL0-1-AA J1D280423-2-SAMP 04/26/2011 12:55	DUP 2.5105	AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2	1.0114	6.1866	Scr:	Alpha: 5.9701		Beta:	2.5080
5 MHLL5-1-AA J1D280423-3-SAMP 04/26/2011 13:00	2.5023	AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2	0.9951	6.1863	Scr:	Alpha: 5.9881		Beta:	
6 MHLL7-1-AA J1D280423-4-SAMP 04/26/2011 14:00	2.5050	AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2	0.9915	6.2922	Scr:	Alpha: 5.9079		Beta:	
7 MHLMA-1-AA J1D280423-5-SAMP 04/26/2011 13:05	2.5064	AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2	1.0072	6.6323	Scr:	Alpha: 6.4880		Beta:	

4/28/2011 4:32:45 PM

Sample Preparation/Analysis

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

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

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

AnalyDueDate: 05/04/2011

Batch: 1118341 SOIL mg/kg PM, Quote: RW2, 27038

SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 MHLMJ-1-AA J1D280423-6-SAMP 04/26/2011 13:10		2.5083			1.6021		6.4263		6.2868	
		AmtRec: 1XJAR60MLG,1X500MLP		#Containers: 2				Scr:	Alpha:	Beta:
9 MHLML-1-AA J1D280423-7-SAMP 04/26/2011 12:45		2.5186			1.0079		6.5187		6.3612	
		AmtRec: 1XJAR60MLG,1X500MLP		#Containers: 2				Scr:	Alpha:	Beta:
10 MHM1E-1-AA-B J1D280000-341-BLK 04/28/2011 16:32 pd										
		AmtRec:		#Containers: 1				Scr:	Alpha:	Beta:
11 MHM1E-1-AC-C J1D280000-341-LCS 04/28/2011 16:32 pd										
		AmtRec:		#Containers: 1				Scr:	Alpha:	Beta:

Comments:

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

MHLLP1AA-SAMP Constituent List:

MHLLP1AL-MS Constituent List:

MHM1E1AA-BLK:

MHM1E1AC-LCS:

4/28/2011 4:32:45 PM

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: 05/04/2011

Batch: 1118341 mg/kg
SEQ Batch, Test: None

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

MHLLP1AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MHLLP1AL-MS Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MHM1E1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MHM1E1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 280-15154-1

SDG Number: JP0172

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
5/5/2011 1:08 PM

Kae E Yoder
Project Manager II
kae.yoder@testamericainc.com

05/05/2011

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

The Lab Certification ID# is E87667.

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

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

ACCREDITED IN ACCORDANCE WITH nelac

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CASE NARRATIVE

Client: Washington Closure Hanford

Project: WASHINGTON CLOSURE HANFORD

Report Number: 280-15154-1

SDG #: JP0172
SAF#: RC-074

Date SDG Closed: April 28, 2011
Data Deliverable: 7 Day / Summary

CLIENT ID	LAB ID	ANALYSES REQUESTED	ANALYSES PERFORMED
J1HK84	280-15154-1	6010/7471/9056M/353.2/9045/8260A/8270A	6010B/7471A/9056M/353.2/9045C/8260B/8270C
J1HK85	280-15154-2	6010/7471/9056M/353.2/9045/8260A/8270A	6010B/7471A/9056M/353.2/9045C/8260B/8270C
J1HK86	280-15154-3	6010/7471/9056M/353.2/9045/8260A/8270A	6010B/7471A/9056M/353.2/9045C/8260B/8270C
J1HK87	280-15154-4	6010/7471/9056M/353.2/9045/8260A/8270A	6010B/7471A/9056M/353.2/9045C/8260B/8270C
J1HK88	280-15154-5	6010/7471/9056M/353.2/9045/8260A/8270A	6010B/7471A/9056M/353.2/9045C/8260B/8270C
J1HK89	280-15154-6	6010/7471/9056M/353.2/9045/8260A/8270A	6010B/7471A/9056M/353.2/9045C/8260B/8270C
J1HK91	280-15154-7	6010/7471/9056M/353.2/9045/8260A/8270A	6010B/7471A/9056M/353.2/9045C/8260B/8270C

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

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

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

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

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

RECEIPT
The samples were received on 4/28/2011; the samples arrived in good condition, properly preserved and on ice. The temperatures of the coolers at receipt were 4.6 C, 3.8 C and 4.8 C.

GC/MS VOLATILES - SW846 8260B
Surrogate Toluene-d8 was recovered outside the control limits, biased high, in sample J1HK87. This is an indicator that data may be biased high. As no detectable concentrations are present at levels greater than the reporting limits in the sample, corrective action is deemed unnecessary.

No other anomalies were encountered.

GC/MS SEMIVOLATILES - SW846 8270C
No anomalies were encountered.

TOTAL METALS - SW846 6010B/7471A
Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the methods. Due to matrix interferences causing the internal standard to fail high, the Method 6010B elements for sample J1HK84 had to be analyzed at a 2X dilution. The reporting limits have been adjusted relative to the dilution required.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to matrix interferences causing the internal standard to fail high, the Antimony analysis of sample J1HK89 had to be performed at a 2X dilution. The reporting limit has been adjusted relative to the dilution required.

Low levels of Barium are present in the method blank associated with batch 280-64672. Because the concentration in the method blank is not present at a level greater than the reporting limit, corrective action is deemed unnecessary.

Antimony is present at a level greater than the reporting limit in the instrument blank associated with batch 280-64672. As no detectable concentrations of Antimony are present in the associated samples, corrective action is deemed unnecessary.

It can be noted that the sample amount was greater than four times the spike amount for Aluminum, Iron and Manganese in the Matrix Spike performed on sample J1HK84; therefore, control limits are not applicable.

No other anomalies were encountered.

GENERAL CHEMISTRY - MCAWW 353.2 - NITRATE+NITRITE as N
No anomalies were encountered.

GENERAL CHEMISTRY - SW846 9056M - ANIONS
The duplicate analysis of sample J1HK84 exhibited RPD data outside the control limits for Chloride, and the associated sample result has been flagged "M". There is no indication that the analytical system was operating out of control, and method accuracy has been verified by the acceptable LCS analysis data; therefore, corrective action is deemed unnecessary.

No other anomalies were encountered.

GENERAL CHEMISTRY - SW846 9045C - PH
No anomalies were encountered.

DATA REPORTING QUALIFIERS

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Lab Section	Qualifier	Description
GC/MS VOA		
	U	Analyzed for but not detected.
	J	Indicates an Estimated Value for TICs
	N	Presumptive evidence of material.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	*	Surrogate exceeds the control limit
GC/MS Semi VOA		
	U	Analyzed for but not detected.
	J	Indicates an Estimated Value for TICs
	N	Presumptive evidence of material.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
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.
General Chemistry		
	U	Analyzed for but not detected.
	B	Estimated result. Result is less than the RL, but greater than MDL
	M	Sample duplicate precision not met.

METHOD SUMMARY

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Volatile Organic Compounds (GC/MS)	TAL DEN	SW846 8260B	
Purge and Trap	TAL DEN		SW846 5030B
Semivolatile Organic Compounds (GC/MS)	TAL DEN	SW846 8270C	
Ultrasonic Extraction	TAL DEN		SW846 3550C
Metals (ICP)	TAL DEN	SW846 6010B	
Preparation, Metals	TAL DEN		SW846 3050B
Mercury (CVAA)	TAL DEN	SW846 7471A	
Preparation, Mercury	TAL DEN		SW846 7471A
Nitrogen, Nitrate-Nitrite	TAL DEN	MCAWW 353.2	
Deionized Water Leaching Procedure	TAL DEN		ASTM DI Leach
pH	TAL DEN	SW846 9045C	
Deionized Water Leaching Procedure	TAL DEN		ASTM DI Leach
Anions, Ion Chromatography	TAL DEN	SW846 9056M	
Deionized Water Leaching Procedure	TAL DEN		ASTM DI Leach
ASTM D-2216	TAL DEN	ASTM D-2216	

Lab References:

TAL DEN = TestAmerica Denver

Method References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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: 280-15154-1
Sdg Number: JP0172

Method	Analyst	Analyst ID
SW846 8260B	Reinhardt, Jason	JR
SW846 8270C	Kiekel, Daniel C	DCK
SW846 6010B	Bowen, Heidi E	HEB
SW846 7471A	Niman, Katie M	KMN
MCAWW 353.2	Stosak, Lara E	LES
SW846 9045C	Ayala, Delaina	DA
SW846 9056M	Kudla, Ewa	EK
ASTM D-2216	Berry III, Paul B	PBB

SAMPLE SUMMARY

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-15154-1	J1HK84	Solid	04/26/2011 1250	04/28/2011 0930
280-15154-2	J1HK85	Solid	04/26/2011 1255	04/28/2011 0930
280-15154-3	J1HK86	Solid	04/26/2011 1300	04/28/2011 0930
280-15154-4	J1HK87	Solid	04/26/2011 1400	04/28/2011 0930
280-15154-5	J1HK88	Solid	04/26/2011 1305	04/28/2011 0930
280-15154-6	J1HK89	Solid	04/26/2011 1310	04/28/2011 0930
280-15154-7	J1HK91	Solid	04/26/2011 1245	04/28/2011 0930

SAMPLE RESULTS

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK84**

Lab Sample ID: 280-15154-1
Client Matrix: Solid
% Moisture: 2.3

Date Sampled: 04/26/2011 1250
Date Received: 04/28/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-65160	Instrument ID:	MSV_J
Prep Method:	5030B	Prep Batch:	280-64996	Lab File ID:	J6294.D
Dilution:	1.0			Initial Weight/Volume:	5.819 g
Analysis Date:	04/30/2011 1443			Final Weight/Volume:	5 mL
Prep Date:	04/30/2011 1200				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		4.7	U	4.7	18
Benzene		0.41	U	0.41	4.4
Bromodichloromethane		0.19	U	0.19	4.4
Bromoform		0.20	U	0.20	4.4
Bromomethane		0.44	U	0.44	8.8
2-Butanone (MEK)		1.6	U	1.6	8.8
Carbon disulfide		0.37	U	0.37	4.4
Carbon tetrachloride		0.55	U	0.55	4.4
Chlorobenzene		0.47	U	0.47	4.4
Dibromochloromethane		0.50	U	0.50	4.4
Chloroethane		0.78	U	0.78	8.8
Chloroform		0.26	U	0.26	4.4
Chloromethane		0.68	U	0.68	8.8
1,1-Dichloroethane		0.18	U	0.18	4.4
1,2-Dichloroethane		0.62	U	0.62	4.4
1,1-Dichloroethene		0.52	U	0.52	4.4
1,2-Dichloroethene, Total		0.34	U	0.34	4.4
1,2-Dichloropropane		0.48	U	0.48	4.4
cis-1,3-Dichloropropene		1.1	U	1.1	4.4
trans-1,3-Dichloropropene		0.59	U	0.59	4.4
Ethylbenzene		0.59	U	0.59	4.4
2-Hexanone		4.3	U	4.3	18
Methylene Chloride		0.66	U	0.66	4.4
4-Methyl-2-pentanone (MIBK)		3.8	U	3.8	8.8
Styrene		0.55	U	0.55	4.4
1,1,2,2-Tetrachloroethane		0.54	U	0.54	4.4
Tetrachloroethene		0.52	U	0.52	4.4
Toluene		0.61	U	0.61	4.4
1,1,1-Trichloroethane		0.46	U	0.46	4.4
1,1,2-Trichloroethane		0.77	U	0.77	4.4
Trichloroethene		0.20	U	0.20	4.4
Vinyl chloride		1.2	U	1.2	4.4
Xylenes, Total		0.54	U	0.54	4.4

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	90		58 - 140
Toluene-d8 (Surr)	110		80 - 126
4-Bromofluorobenzene (Surr)	103		76 - 127
Dibromofluoromethane (Surr)	96		75 - 121

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK84**

Lab Sample ID: 280-15154-1
Client Matrix: Solid
% Moisture: 2.3

Date Sampled: 04/26/2011 1250
Date Received: 04/28/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-65160	Instrument ID:	MSV_J
Prep Method:	5030B	Prep Batch:	280-64996	Lab File ID:	J6294.D
Dilution:	1.0			Initial Weight/Volume:	5.819 g
Analysis Date:	04/30/2011 1443			Final Weight/Volume:	5 mL
Prep Date:	04/30/2011 1200				

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	13.99	5.3	N J

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK85**

Lab Sample ID: 280-15154-2
Client Matrix: Solid
% Moisture: 4.2

Date Sampled: 04/26/2011 1255
Date Received: 04/28/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-65160	Instrument ID:	MSV_J
Prep Method:	5030B	Prep Batch:	280-64996	Lab File ID:	J6297.D
Dilution:	1.0			Initial Weight/Volume:	5.442 g
Analysis Date:	04/30/2011 1552			Final Weight/Volume:	5 mL
Prep Date:	04/30/2011 1200				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		7.3	J	5.2	19
Benzene		0.45	U	0.45	4.8
Bromodichloromethane		0.21	U	0.21	4.8
Bromoform		0.22	U	0.22	4.8
Bromomethane		0.48	U	0.48	9.6
2-Butanone (MEK)		1.8	U	1.8	9.6
Carbon disulfide		0.40	U	0.40	4.8
Carbon tetrachloride		0.60	U	0.60	4.8
Chlorobenzene		0.52	U	0.52	4.8
Dibromochloromethane		0.55	U	0.55	4.8
Chloroethane		0.85	U	0.85	9.6
Chloroform		0.28	U	0.28	4.8
Chloromethane		0.74	U	0.74	9.6
1,1-Dichloroethane		0.20	U	0.20	4.8
1,2-Dichloroethane		0.67	U	0.67	4.8
1,1-Dichloroethene		0.57	U	0.57	4.8
1,2-Dichloroethene, Total		0.37	U	0.37	4.8
1,2-Dichloropropane		0.53	U	0.53	4.8
cis-1,3-Dichloropropene		1.2	U	1.2	4.8
trans-1,3-Dichloropropene		0.64	U	0.64	4.8
Ethylbenzene		0.64	U	0.64	4.8
2-Hexanone		4.7	U	4.7	19
Methylene Chloride		0.72	U	0.72	4.8
4-Methyl-2-pentanone (MIBK)		4.2	U	4.2	9.6
Styrene		0.60	U	0.60	4.8
1,1,2,2-Tetrachloroethane		0.59	U	0.59	4.8
Tetrachloroethene		0.57	U	0.57	4.8
Toluene		0.66	U	0.66	4.8
1,1,1-Trichloroethane		0.50	U	0.50	4.8
1,1,2-Trichloroethane		0.84	U	0.84	4.8
Trichloroethene		0.22	U	0.22	4.8
Vinyl chloride		1.3	U	1.3	4.8
Xylenes, Total		0.59	U	0.59	4.8

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	88		58 - 140
Toluene-d8 (Surr)	107		80 - 126
4-Bromofluorobenzene (Surr)	101		76 - 127
Dibromofluoromethane (Surr)	94		75 - 121

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK85**

Lab Sample ID: 280-15154-2
Client Matrix: Solid

% Moisture: 4.2

Date Sampled: 04/26/2011 1255
Date Received: 04/28/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-65160	Instrument ID:	MSV_J
Prep Method:	5030B	Prep Batch:	280-64996	Lab File ID:	J6297.D
Dilution:	1.0			Initial Weight/Volume:	5.442 g
Analysis Date:	04/30/2011 1552			Final Weight/Volume:	5 mL
Prep Date:	04/30/2011 1200				

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	14.00	5.2	N J
	Unknown	16.04	8.1	N J

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK86**

Lab Sample ID: 280-15154-3
Client Matrix: Solid

% Moisture: 4.3

Date Sampled: 04/26/2011 1300
Date Received: 04/28/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-65160	Instrument ID:	MSV_J
Prep Method:	5030B	Prep Batch:	280-64996	Lab File ID:	J6298.D
Dilution:	1.0			Initial Weight/Volume:	5.825 g
Analysis Date:	04/30/2011 1615			Final Weight/Volume:	5 mL
Prep Date:	04/30/2011 1200				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		4.8	U	4.8	18
Benzene		0.42	U	0.42	4.5
Bromodichloromethane		0.20	U	0.20	4.5
Bromoform		0.21	U	0.21	4.5
Bromomethane		0.45	U	0.45	9.0
2-Butanone (MEK)		1.6	U	1.6	9.0
Carbon disulfide		0.38	U	0.38	4.5
Carbon tetrachloride		0.57	U	0.57	4.5
Chlorobenzene		0.48	U	0.48	4.5
Dibromochloromethane		0.51	U	0.51	4.5
Chloroethane		0.80	U	0.80	9.0
Chloroform		0.26	U	0.26	4.5
Chloromethane		0.69	U	0.69	9.0
1,1-Dichloroethane		0.19	U	0.19	4.5
1,2-Dichloroethane		0.63	U	0.63	4.5
1,1-Dichloroethene		0.53	U	0.53	4.5
1,2-Dichloroethene, Total		0.35	U	0.35	4.5
1,2-Dichloropropane		0.49	U	0.49	4.5
cis-1,3-Dichloropropene		1.2	U	1.2	4.5
trans-1,3-Dichloropropene		0.60	U	0.60	4.5
Ethylbenzene		0.60	U	0.60	4.5
2-Hexanone		4.4	U	4.4	18
Methylene Chloride		0.67	U	0.67	4.5
4-Methyl-2-pentanone (MIBK)		3.9	U	3.9	9.0
Styrene		0.57	U	0.57	4.5
1,1,2,2-Tetrachloroethane		0.55	U	0.55	4.5
Tetrachloroethene		0.53	U	0.53	4.5
Toluene		0.62	U	0.62	4.5
1,1,1-Trichloroethane		0.47	U	0.47	4.5
1,1,2-Trichloroethane		0.79	U	0.79	4.5
Trichloroethene		0.21	U	0.21	4.5
Vinyl chloride		1.2	U	1.2	4.5
Xylenes, Total		0.55	U	0.55	4.5

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	86		58 - 140
Toluene-d8 (Surr)	106		80 - 126
4-Bromofluorobenzene (Surr)	100		76 - 127
Dibromofluoromethane (Surr)	91		75 - 121

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK86**

Lab Sample ID: 280-15154-3
Client Matrix: Solid
% Moisture: 4.3

Date Sampled: 04/26/2011 1300
Date Received: 04/28/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-65160	Instrument ID:	MSV_J
Prep Method:	5030B	Prep Batch:	280-64996	Lab File ID:	J6298.D
Dilution:	1.0			Initial Weight/Volume:	5.825 g
Analysis Date:	04/30/2011 1615			Final Weight/Volume:	5 mL
Prep Date:	04/30/2011 1200				

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	16.04	5.3	N J

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK87**

Lab Sample ID: 280-15154-4
Client Matrix: Solid

% Moisture: 6.9

Date Sampled: 04/26/2011 1400
Date Received: 04/28/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-65160	Instrument ID:	MSV_J
Prep Method:	5030B	Prep Batch:	280-64996	Lab File ID:	J6299.D
Dilution:	1.0			Initial Weight/Volume:	5.074 g
Analysis Date:	04/30/2011 1638			Final Weight/Volume:	5 mL
Prep Date:	04/30/2011 1200				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		8.8	J	5.7	21
Benzene		0.50	U	0.50	5.3
Bromodichloromethane		0.23	U	0.23	5.3
Bromoform		0.24	U	0.24	5.3
Bromomethane		0.53	U	0.53	11
2-Butanone (MEK)		1.9	U	1.9	11
Carbon disulfide		0.44	U	0.44	5.3
Carbon tetrachloride		0.67	U	0.67	5.3
Chlorobenzene		0.57	U	0.57	5.3
Dibromochloromethane		0.60	U	0.60	5.3
Chloroethane		0.94	U	0.94	11
Chloroform		0.31	U	0.31	5.3
Chloromethane		0.82	U	0.82	11
1,1-Dichloroethane		0.22	U	0.22	5.3
1,2-Dichloroethane		0.74	U	0.74	5.3
1,1-Dichloroethene		0.62	U	0.62	5.3
1,2-Dichloroethene, Total		0.41	U	0.41	5.3
1,2-Dichloropropane		0.58	U	0.58	5.3
cis-1,3-Dichloropropene		1.4	U	1.4	5.3
trans-1,3-Dichloropropene		0.71	U	0.71	5.3
Ethylbenzene		0.71	U	0.71	5.3
2-Hexanone		5.2	U	5.2	21
Methylene Chloride		0.79	U	0.79	5.3
4-Methyl-2-pentanone (MIBK)		4.6	U	4.6	11
Styrene		0.67	U	0.67	5.3
1,1,2,2-Tetrachloroethane		0.65	U	0.65	5.3
Tetrachloroethene		0.62	U	0.62	5.3
Toluene		0.73	U	0.73	5.3
1,1,1-Trichloroethane		0.55	U	0.55	5.3
1,1,2-Trichloroethane		0.93	U	0.93	5.3
Trichloroethene		0.24	U	0.24	5.3
Vinyl chloride		1.4	U	1.4	5.3
Xylenes, Total		0.65	U	0.65	5.3

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	110		58 - 140
Toluene-d8 (Surr)	136	*	80 - 126
4-Bromofluorobenzene (Surr)	127		76 - 127
Dibromofluoromethane (Surr)	118		75 - 121

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK87**

Lab Sample ID: 280-15154-4
Client Matrix: Solid

% Moisture: 6.9

Date Sampled: 04/26/2011 1400
Date Received: 04/28/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-65160	Instrument ID:	MSV_J
Prep Method:	5030B	Prep Batch:	280-64996	Lab File ID:	J6299.D
Dilution:	1.0			Initial Weight/Volume:	5.074 g
Analysis Date:	04/30/2011 1638			Final Weight/Volume:	5 mL
Prep Date:	04/30/2011 1200				

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	13.99	9.3	N J
	Unknown	16.04	9.3	N J

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK88**

Lab Sample ID: 280-15154-5
Client Matrix: Solid
% Moisture: 3.3

Date Sampled: 04/26/2011 1305
Date Received: 04/28/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-65160	Instrument ID:	MSV_J
Prep Method:	5030B	Prep Batch:	280-64996	Lab File ID:	J6300.D
Dilution:	1.0			Initial Weight/Volume:	5.561 g
Analysis Date:	04/30/2011 1701			Final Weight/Volume:	5 mL
Prep Date:	04/30/2011 1200				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		5.0	U	5.0	19
Benzene		0.44	U	0.44	4.7
Bromodichloromethane		0.20	U	0.20	4.7
Bromoform		0.21	U	0.21	4.7
Bromomethane		0.47	U	0.47	9.3
2-Butanone (MEK)		1.7	U	1.7	9.3
Carbon disulfide		0.39	U	0.39	4.7
Carbon tetrachloride		0.59	U	0.59	4.7
Chlorobenzene		0.50	U	0.50	4.7
Dibromochloromethane		0.53	U	0.53	4.7
Chloroethane		0.83	U	0.83	9.3
Chloroform		0.27	U	0.27	4.7
Chloromethane		0.72	U	0.72	9.3
1,1-Dichloroethane		0.20	U	0.20	4.7
1,2-Dichloroethane		0.65	U	0.65	4.7
1,1-Dichloroethene		0.55	U	0.55	4.7
1,2-Dichloroethene, Total		0.36	U	0.36	4.7
1,2-Dichloropropane		0.51	U	0.51	4.7
cis-1,3-Dichloropropene		1.2	U	1.2	4.7
trans-1,3-Dichloropropene		0.62	U	0.62	4.7
Ethylbenzene		0.62	U	0.62	4.7
2-Hexanone		4.5	U	4.5	19
Methylene Chloride		0.70	U	0.70	4.7
4-Methyl-2-pentanone (MIBK)		4.1	U	4.1	9.3
Styrene		0.59	U	0.59	4.7
1,1,2,2-Tetrachloroethane		0.57	U	0.57	4.7
Tetrachloroethene		0.55	U	0.55	4.7
Toluene		0.64	U	0.64	4.7
1,1,1-Trichloroethane		0.48	U	0.48	4.7
1,1,2-Trichloroethane		0.82	U	0.82	4.7
Trichloroethene		0.21	U	0.21	4.7
Vinyl chloride		1.2	U	1.2	4.7
Xylenes, Total		0.57	U	0.57	4.7

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	92		58 - 140
Toluene-d8 (Surr)	114		80 - 126
4-Bromofluorobenzene (Surr)	105		76 - 127
Dibromofluoromethane (Surr)	98		75 - 121

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK88**

Lab Sample ID: 280-15154-5
Client Matrix: Solid

% Moisture: 3.3

Date Sampled: 04/26/2011 1305
Date Received: 04/28/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-65160	Instrument ID:	MSV_J
Prep Method:	5030B	Prep Batch:	280-64996	Lab File ID:	J6300.D
Dilution:	1.0			Initial Weight/Volume:	5.561 g
Analysis Date:	04/30/2011 1701			Final Weight/Volume:	5 mL
Prep Date:	04/30/2011 1200				

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

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

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK89**

Lab Sample ID: 280-15154-6
Client Matrix: Solid
% Moisture: 3.4

Date Sampled: 04/26/2011 1310
Date Received: 04/28/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-65160	Instrument ID:	MSV_J
Prep Method:	5030B	Prep Batch:	280-64996	Lab File ID:	J6301.D
Dilution:	1.0			Initial Weight/Volume:	5.403 g
Analysis Date:	04/30/2011 1724			Final Weight/Volume:	5 mL
Prep Date:	04/30/2011 1200				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		5.2	U	5.2	19
Benzene		0.45	U	0.45	4.8
Bromodichloromethane		0.21	U	0.21	4.8
Bromoform		0.22	U	0.22	4.8
Bromomethane		0.48	U	0.48	9.6
2-Butanone (MEK)		1.8	U	1.8	9.6
Carbon disulfide		0.40	U	0.40	4.8
Carbon tetrachloride		0.60	U	0.60	4.8
Chlorobenzene		0.52	U	0.52	4.8
Dibromochloromethane		0.55	U	0.55	4.8
Chloroethane		0.85	U	0.85	9.6
Chloroform		0.28	U	0.28	4.8
Chloromethane		0.74	U	0.74	9.6
1,1-Dichloroethane		0.20	U	0.20	4.8
1,2-Dichloroethane		0.67	U	0.67	4.8
1,1-Dichloroethene		0.56	U	0.56	4.8
1,2-Dichloroethene, Total		0.37	U	0.37	4.8
1,2-Dichloropropane		0.53	U	0.53	4.8
cis-1,3-Dichloropropene		1.2	U	1.2	4.8
trans-1,3-Dichloropropene		0.64	U	0.64	4.8
Ethylbenzene		0.64	U	0.64	4.8
2-Hexanone		4.7	U	4.7	19
Methylene Chloride		0.72	U	0.72	4.8
4-Methyl-2-pentanone (MIBK)		4.2	U	4.2	9.6
Styrene		0.60	U	0.60	4.8
1,1,2,2-Tetrachloroethane		0.58	U	0.58	4.8
Tetrachloroethene		0.56	U	0.56	4.8
Toluene		0.66	U	0.66	4.8
1,1,1-Trichloroethane		0.50	U	0.50	4.8
1,1,2-Trichloroethane		0.84	U	0.84	4.8
Trichloroethene		0.22	U	0.22	4.8
Vinyl chloride		1.3	U	1.3	4.8
Xylenes, Total		0.58	U	0.58	4.8

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	91		58 - 140
Toluene-d8 (Surr)	114		80 - 126
4-Bromofluorobenzene (Surr)	103		76 - 127
Dibromofluoromethane (Surr)	97		75 - 121

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK89**

Lab Sample ID: 280-15154-6
Client Matrix: Solid

% Moisture: 3.4

Date Sampled: 04/26/2011 1310
Date Received: 04/28/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-65160	Instrument ID:	MSV_J
Prep Method:	5030B	Prep Batch:	280-64996	Lab File ID:	J6301.D
Dilution:	1.0			Initial Weight/Volume:	5.403 g
Analysis Date:	04/30/2011 1724			Final Weight/Volume:	5 mL
Prep Date:	04/30/2011 1200				

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	16.02	5.7	N J

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK91**

Lab Sample ID: 280-15154-7
Client Matrix: Solid
% Moisture: 2.7

Date Sampled: 04/26/2011 1245
Date Received: 04/28/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-65160	Instrument ID:	MSV_J
Prep Method:	5030B	Prep Batch:	280-64996	Lab File ID:	J6302.D
Dilution:	1.0			Initial Weight/Volume:	5.283 g
Analysis Date:	04/30/2011 1747			Final Weight/Volume:	5 mL
Prep Date:	04/30/2011 1200				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		10	J	5.2	19
Benzene		0.46	U	0.46	4.9
Bromodichloromethane		0.21	U	0.21	4.9
Bromoform		0.22	U	0.22	4.9
Bromomethane		0.49	U	0.49	9.7
2-Butanone (MEK)		1.8	U	1.8	9.7
Carbon disulfide		0.41	U	0.41	4.9
Carbon tetrachloride		0.61	U	0.61	4.9
Chlorobenzene		0.53	U	0.53	4.9
Dibromochloromethane		0.55	U	0.55	4.9
Chloroethane		0.87	U	0.87	9.7
Chloroform		0.28	U	0.28	4.9
Chloromethane		0.75	U	0.75	9.7
1,1-Dichloroethane		0.20	U	0.20	4.9
1,2-Dichloroethane		0.68	U	0.68	4.9
1,1-Dichloroethene		0.57	U	0.57	4.9
1,2-Dichloroethene, Total		0.38	U	0.38	4.9
1,2-Dichloropropane		0.53	U	0.53	4.9
cis-1,3-Dichloropropene		1.3	U	1.3	4.9
trans-1,3-Dichloropropene		0.65	U	0.65	4.9
Ethylbenzene		0.65	U	0.65	4.9
2-Hexanone		4.8	U	4.8	19
Methylene Chloride		0.73	U	0.73	4.9
4-Methyl-2-pentanone (MIBK)		4.2	U	4.2	9.7
Styrene		0.61	U	0.61	4.9
1,1,2,2-Tetrachloroethane		0.59	U	0.59	4.9
Tetrachloroethene		0.57	U	0.57	4.9
Toluene		0.67	U	0.67	4.9
1,1,1-Trichloroethane		0.51	U	0.51	4.9
1,1,2-Trichloroethane		0.86	U	0.86	4.9
Trichloroethene		0.22	U	0.22	4.9
Vinyl chloride		1.3	U	1.3	4.9
Xylenes, Total		0.59	U	0.59	4.9

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	88		58 - 140
Toluene-d8 (Surr)	110		80 - 126
4-Bromofluorobenzene (Surr)	104		76 - 127
Dibromofluoromethane (Surr)	95		75 - 121

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK91**

Lab Sample ID: 280-15154-7
Client Matrix: Solid
% Moisture: 2.7

Date Sampled: 04/26/2011 1245
Date Received: 04/28/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-65160	Instrument ID:	MSV_J
Prep Method:	5030B	Prep Batch:	280-64996	Lab File ID:	J6302.D
Dilution:	1.0			Initial Weight/Volume:	5.283 g
Analysis Date:	04/30/2011 1747			Final Weight/Volume:	5 mL
Prep Date:	04/30/2011 1200				

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	16.04	6.9	N J

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK84**

Lab Sample ID: 280-15154-1
Client Matrix: Solid
% Moisture: 2.3

Date Sampled: 04/26/2011 1250
Date Received: 04/28/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-65289	Instrument ID:	MSS_B
Prep Method:	3550C	Prep Batch:	280-64722	Lab File ID:	B4626.D
Dilution:	1.0			Initial Weight/Volume:	30.8 g
Analysis Date:	05/02/2011 1729			Final Weight/Volume:	1000 uL
Prep Date:	04/28/2011 2352			Injection Volume:	0.5 uL

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

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK84**

Lab Sample ID: 280-15154-1
Client Matrix: Solid % Moisture: 2.3

Date Sampled: 04/26/2011 1250
Date Received: 04/28/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-65289	Instrument ID:	MSS_B
Prep Method:	3550C	Prep Batch:	280-64722	Lab File ID:	B4626.D
Dilution:	1.0			Initial Weight/Volume:	30.8 g
Analysis Date:	05/02/2011 1729			Final Weight/Volume:	1000 uL
Prep Date:	04/28/2011 2352			Injection Volume:	0.5 uL

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

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	79		50 - 120
2-Fluorophenol	76		53 - 120
Nitrobenzene-d5	78		50 - 120
Phenol-d5	79		52 - 120
Terphenyl-d14	92		55 - 120
2,4,6-Tribromophenol	87		51 - 120

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK84**

Lab Sample ID: 280-15154-1
Client Matrix: Solid
% Moisture: 2.3

Date Sampled: 04/26/2011 1250
Date Received: 04/28/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-65289	Instrument ID:	MSS_B
Prep Method:	3550C	Prep Batch:	280-64722	Lab File ID:	B4626.D
Dilution:	1.0			Initial Weight/Volume:	30.8 g
Analysis Date:	05/02/2011 1729			Final Weight/Volume:	1000 uL
Prep Date:	04/28/2011 2352			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	2.91	140	N J
	Unknown	3.13	3100	N J
	Unknown	10.51	240	N J

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK85**

Lab Sample ID: 280-15154-2
Client Matrix: Solid
% Moisture: 4.2

Date Sampled: 04/26/2011 1255
Date Received: 04/28/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-65289	Instrument ID:	MSS_B
Prep Method:	3550C	Prep Batch:	280-64722	Lab File ID:	B4627.D
Dilution:	1.0			Initial Weight/Volume:	30.9 g
Analysis Date:	05/02/2011 1749			Final Weight/Volume:	1000 uL
Prep Date:	04/28/2011 2352			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		41	U	41	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	840
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: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK85**

Lab Sample ID: 280-15154-2
Client Matrix: Solid
% Moisture: 4.2

Date Sampled: 04/26/2011 1255
Date Received: 04/28/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-65289	Instrument ID:	MSS_B
Prep Method:	3550C	Prep Batch:	280-64722	Lab File ID:	B4627.D
Dilution:	1.0			Initial Weight/Volume:	30.9 g
Analysis Date:	05/02/2011 1749			Final Weight/Volume:	1000 uL
Prep Date:	04/28/2011 2352			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		74	U	74	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	75		50 - 120
2-Fluorophenol	73		53 - 120
Nitrobenzene-d5	74		50 - 120
Phenol-d5	75		52 - 120
Terphenyl-d14	88		55 - 120
2,4,6-Tribromophenol	84		51 - 120

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK85**

Lab Sample ID: 280-15154-2
Client Matrix: Solid
% Moisture: 4.2

Date Sampled: 04/26/2011 1255
Date Received: 04/28/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-65289	Instrument ID:	MSS_B
Prep Method:	3550C	Prep Batch:	280-64722	Lab File ID:	B4627.D
Dilution:	1.0			Initial Weight/Volume:	30.9 g
Analysis Date:	05/02/2011 1749			Final Weight/Volume:	1000 uL
Prep Date:	04/28/2011 2352			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	3.13	2800	N J
301-02-0	9-Octadecenamide, (Z)-	10.51	320	N J

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK86**

Lab Sample ID: 280-15154-3
Client Matrix: Solid
% Moisture: 4.3

Date Sampled: 04/26/2011 1300
Date Received: 04/28/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-65289	Instrument ID:	MSS_B
Prep Method:	3550C	Prep Batch:	280-64722	Lab File ID:	B4628.D
Dilution:	1.0			Initial Weight/Volume:	30.1 g
Analysis Date:	05/02/2011 1808			Final Weight/Volume:	1000 uL
Prep Date:	04/28/2011 2352			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		42	U	42	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		69	U	69	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		94	U	94	690
2,4-Dichlorophenol		10	U	10	340
Diethyl phthalate		27	U	27	340
2,4-Dimethylphenol		69	U	69	340
Dimethyl phthalate		24	U	24	340
Di-n-butyl phthalate		30	U	30	340
4,6-Dinitro-2-methylphenol		340	U	340	690
2,4-Dinitrophenol		350	U	350	860
2,4-Dinitrotoluene		69	U	69	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: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK86**

Lab Sample ID: 280-15154-3
Client Matrix: Solid
% Moisture: 4.3

Date Sampled: 04/26/2011 1300
Date Received: 04/28/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-65289	Instrument ID:	MSS_B
Prep Method:	3550C	Prep Batch:	280-64722	Lab File ID:	B4628.D
Dilution:	1.0			Initial Weight/Volume:	30.1 g
Analysis Date:	05/02/2011 1808			Final Weight/Volume:	1000 uL
Prep Date:	04/28/2011 2352			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2-Methylphenol		14	U	14	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		76	U	76	340
Nitrobenzene		23	U	23	340
2-Nitrophenol		10	U	10	340
4-Nitrophenol		100	U	100	690
N-Nitrosodi-n-propylamine		32	U	32	340
N-Nitrosodiphenylamine		22	U	22	340
Pentachlorophenol		340	U	340	690
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	80		50 - 120
2-Fluorophenol	79		53 - 120
Nitrobenzene-d5	80		50 - 120
Phenol-d5	80		52 - 120
Terphenyl-d14	92		55 - 120
2,4,6-Tribromophenol	90		51 - 120

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK86**

Lab Sample ID: 280-15154-3
Client Matrix: Solid
% Moisture: 4.3

Date Sampled: 04/26/2011 1300
Date Received: 04/28/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-65289	Instrument ID:	MSS_B
Prep Method:	3550C	Prep Batch:	280-64722	Lab File ID:	B4628.D
Dilution:	1.0			Initial Weight/Volume:	30.1 g
Analysis Date:	05/02/2011 1808			Final Weight/Volume:	1000 uL
Prep Date:	04/28/2011 2352			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
2216-30-0	Heptane, 2,5-dimethyl-	3.04	140	N J
	Unknown	3.13	3200	N J
301-02-0	9-Octadecenamide, (Z)-	10.51	200	N J

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK87**

Lab Sample ID: 280-15154-4
Client Matrix: Solid
% Moisture: 6.9

Date Sampled: 04/26/2011 1400
Date Received: 04/28/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-65289	Instrument ID:	MSS_B
Prep Method:	3550C	Prep Batch:	280-64722	Lab File ID:	B4629.D
Dilution:	1.0			Initial Weight/Volume:	31.8 g
Analysis Date:	05/02/2011 1828			Final Weight/Volume:	1000 uL
Prep Date:	04/28/2011 2352			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		41	U	41	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	840
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: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK87**

Lab Sample ID: 280-15154-4
Client Matrix: Solid
% Moisture: 6.9

Date Sampled: 04/26/2011 1400
Date Received: 04/28/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-65289	Instrument ID:	MSS_B
Prep Method:	3550C	Prep Batch:	280-64722	Lab File ID:	B4629.D
Dilution:	1.0			Initial Weight/Volume:	31.8 g
Analysis Date:	05/02/2011 1828			Final Weight/Volume:	1000 uL
Prep Date:	04/28/2011 2352			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	80		50 - 120
2-Fluorophenol	79		53 - 120
Nitrobenzene-d5	80		50 - 120
Phenol-d5	81		52 - 120
Terphenyl-d14	91		55 - 120
2,4,6-Tribromophenol	91		51 - 120

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK87**

Lab Sample ID: 280-15154-4
Client Matrix: Solid
% Moisture: 6.9

Date Sampled: 04/26/2011 1400
Date Received: 04/28/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-65289	Instrument ID:	MSS_B
Prep Method:	3550C	Prep Batch:	280-64722	Lab File ID:	B4629.D
Dilution:	1.0			Initial Weight/Volume:	31.8 g
Analysis Date:	05/02/2011 1828			Final Weight/Volume:	1000 uL
Prep Date:	04/28/2011 2352			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	2.60	280	N J
	Unknown	3.13	3300	N J
301-02-0	9-Octadecenamide, (Z)-	10.51	310	N J

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK88**

Lab Sample ID: 280-15154-5
Client Matrix: Solid
% Moisture: 3.3

Date Sampled: 04/26/2011 1305
Date Received: 04/28/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-65289	Instrument ID:	MSS_B
Prep Method:	3550C	Prep Batch:	280-64722	Lab File ID:	B4630.D
Dilution:	1.0			Initial Weight/Volume:	30.3 g
Analysis Date:	05/02/2011 1847			Final Weight/Volume:	1000 uL
Prep Date:	04/28/2011 2352			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		100	J	47	340
4-Bromophenyl phenyl ether		19	U	19	340
Butyl benzyl phthalate		44	U	44	340
Carbazole		37	U	37	340
4-Chloroaniline		84	U	84	340
4-Chloro-3-methylphenol		68	U	68	340
2-Chloronaphthalene		10	U	10	340
2-Chlorophenol		22	U	22	340
4-Chlorophenyl phenyl ether		22	U	22	340
Chrysene		28	U	28	340
Dibenz(a,h)anthracene		19	U	19	340
Dibenzofuran		20	U	20	340
1,2-Dichlorobenzene		23	U	23	340
1,3-Dichlorobenzene		12	U	12	340
1,4-Dichlorobenzene		14	U	14	340
3,3'-Dichlorobenzidine		92	U	92	680
2,4-Dichlorophenol		10	U	10	340
Diethyl phthalate		27	U	27	340
2,4-Dimethylphenol		68	U	68	340
Dimethyl phthalate		24	U	24	340
Di-n-butyl phthalate		30	U	30	340
4,6-Dinitro-2-methylphenol		340	U	340	680
2,4-Dinitrophenol		340	U	340	850
2,4-Dinitrotoluene		68	U	68	340
2,6-Dinitrotoluene		29	U	29	340
Di-n-octyl phthalate		15	U	15	340
Fluoranthene		37	U	37	340
Fluorene		18	U	18	340
Hexachlorobenzene		30	U	30	340
Hexachlorobutadiene		10	U	10	340
Hexachlorocyclopentadiene		51	U	51	340
Hexachloroethane		22	U	22	340
Indeno[1,2,3-cd]pyrene		23	U	23	340
Isophorone		17	U	17	340
2-Methylnaphthalene		19	U	19	340

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK88**

Lab Sample ID: 280-15154-5
Client Matrix: Solid % Moisture: 3.3

Date Sampled: 04/26/2011 1305
Date Received: 04/28/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-65289	Instrument ID:	MSS_B
Prep Method:	3550C	Prep Batch:	280-64722	Lab File ID:	B4630.D
Dilution:	1.0			Initial Weight/Volume:	30.3 g
Analysis Date:	05/02/2011 1847			Final Weight/Volume:	1000 uL
Prep Date:	04/28/2011 2352			Injection Volume:	0.5 uL

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

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	69		50 - 120
2-Fluorophenol	64		53 - 120
Nitrobenzene-d5	65		50 - 120
Phenol-d5	67		52 - 120
Terphenyl-d14	87		55 - 120
2,4,6-Tribromophenol	82		51 - 120

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK88**

Lab Sample ID: 280-15154-5
Client Matrix: Solid
% Moisture: 3.3

Date Sampled: 04/26/2011 1305
Date Received: 04/28/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-65289	Instrument ID:	MSS_B
Prep Method:	3550C	Prep Batch:	280-64722	Lab File ID:	B4630.D
Dilution:	1.0			Initial Weight/Volume:	30.3 g
Analysis Date:	05/02/2011 1847			Final Weight/Volume:	1000 uL
Prep Date:	04/28/2011 2352			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	3.13	2700	N J

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK89**

Lab Sample ID: 280-15154-6
Client Matrix: Solid
% Moisture: 3.4

Date Sampled: 04/26/2011 1310
Date Received: 04/28/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-65289	Instrument ID:	MSS_B
Prep Method:	3550C	Prep Batch:	280-64722	Lab File ID:	B4631.D
Dilution:	1.0			Initial Weight/Volume:	29.9 g
Analysis Date:	05/02/2011 1907			Final Weight/Volume:	1000 uL
Prep Date:	04/28/2011 2352			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		42	U	42	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		69	U	69	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	690
2,4-Dichlorophenol		10	U	10	340
Diethyl phthalate		27	U	27	340
2,4-Dimethylphenol		69	U	69	340
Dimethyl phthalate		24	U	24	340
Di-n-butyl phthalate		30	U	30	340
4,6-Dinitro-2-methylphenol		340	U	340	690
2,4-Dinitrophenol		350	U	350	860
2,4-Dinitrotoluene		69	U	69	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: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK89**

Lab Sample ID: 280-15154-6
Client Matrix: Solid
% Moisture: 3.4

Date Sampled: 04/26/2011 1310
Date Received: 04/28/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-65289	Instrument ID:	MSS_B
Prep Method:	3550C	Prep Batch:	280-64722	Lab File ID:	B4631.D
Dilution:	1.0			Initial Weight/Volume:	29.9 g
Analysis Date:	05/02/2011 1907			Final Weight/Volume:	1000 uL
Prep Date:	04/28/2011 2352			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	690
N-Nitrosodi-n-propylamine		32	U	32	340
N-Nitrosodiphenylamine		22	U	22	340
Pentachlorophenol		340	U	340	690
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	81		50 - 120
2-Fluorophenol	79		53 - 120
Nitrobenzene-d5	81		50 - 120
Phenol-d5	81		52 - 120
Terphenyl-d14	93		55 - 120
2,4,6-Tribromophenol	86		51 - 120

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK89**

Lab Sample ID: 280-15154-6
Client Matrix: Solid
% Moisture: 3.4

Date Sampled: 04/26/2011 1310
Date Received: 04/28/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-65289	Instrument ID:	MSS_B
Prep Method:	3550C	Prep Batch:	280-64722	Lab File ID:	B4631.D
Dilution:	1.0			Initial Weight/Volume:	29.9 g
Analysis Date:	05/02/2011 1907			Final Weight/Volume:	1000 uL
Prep Date:	04/28/2011 2352			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	2.84	140	N J
	Unknown	2.90	140	N J
2216-30-0	Heptane, 2,5-dimethyl-	3.04	140	N J
	Unknown	3.13	3300	N J

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK91**

Lab Sample ID: 280-15154-7
Client Matrix: Solid
% Moisture: 2.7

Date Sampled: 04/26/2011 1245
Date Received: 04/28/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-65289	Instrument ID:	MSS_B
Prep Method:	3550C	Prep Batch:	280-64722	Lab File ID:	B4632.D
Dilution:	1.0			Initial Weight/Volume:	31.6 g
Analysis Date:	05/02/2011 1927			Final Weight/Volume:	1000 uL
Prep Date:	04/28/2011 2352			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		64	U	64	320
2-Chloronaphthalene		9.8	U	9.8	320
2-Chlorophenol		20	U	20	320
4-Chlorophenyl phenyl ether		20	U	20	320
Chrysene		26	U	26	320
Dibenz(a,h)anthracene		19	U	19	320
Dibenzofuran		20	U	20	320
1,2-Dichlorobenzene		21	U	21	320
1,3-Dichlorobenzene		12	U	12	320
1,4-Dichlorobenzene		13	U	13	320
3,3'-Dichlorobenzidine		88	U	88	640
2,4-Dichlorophenol		9.8	U	9.8	320
Diethyl phthalate		25	U	25	320
2,4-Dimethylphenol		64	U	64	320
Dimethyl phthalate		22	U	22	320
Di-n-butyl phthalate		28	U	28	320
4,6-Dinitro-2-methylphenol		320	U	320	640
2,4-Dinitrophenol		320	U	320	800
2,4-Dinitrotoluene		64	U	64	320
2,6-Dinitrotoluene		27	U	27	320
Di-n-octyl phthalate		14	U	14	320
Fluoranthene		35	U	35	320
Fluorene		18	U	18	320
Hexachlorobenzene		28	U	28	320
Hexachlorobutadiene		9.8	U	9.8	320
Hexachlorocyclopentadiene		49	U	49	320
Hexachloroethane		21	U	21	320
Indeno[1,2,3-cd]pyrene		21	U	21	320
Isophorone		17	U	17	320
2-Methylnaphthalene		19	U	19	320

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK91**

Lab Sample ID: 280-15154-7
Client Matrix: Solid
% Moisture: 2.7

Date Sampled: 04/26/2011 1245
Date Received: 04/28/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-65289	Instrument ID:	MSS_B
Prep Method:	3550C	Prep Batch:	280-64722	Lab File ID:	B4632.D
Dilution:	1.0			Initial Weight/Volume:	31.6 g
Analysis Date:	05/02/2011 1927			Final Weight/Volume:	1000 uL
Prep Date:	04/28/2011 2352			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2-Methylphenol		13	U	13	320
3 & 4 Methylphenol		32	U	32	320
Naphthalene		30	U	30	320
2-Nitroaniline		49	U	49	320
3-Nitroaniline		71	U	71	320
4-Nitroaniline		71	U	71	320
Nitrobenzene		21	U	21	320
2-Nitrophenol		9.8	U	9.8	320
4-Nitrophenol		95	U	95	640
N-Nitrosodi-n-propylamine		30	U	30	320
N-Nitrosodiphenylamine		20	U	20	320
Pentachlorophenol		320	U	320	640
Phenanthrene		17	U	17	320
Phenol		18	U	18	320
Pyrene		12	U	12	320
1,2,4-Trichlorobenzene		27	U	27	320
2,4,5-Trichlorophenol		9.8	U	9.8	320
2,4,6-Trichlorophenol		9.8	U	9.8	320

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	80		50 - 120
2-Fluorophenol	78		53 - 120
Nitrobenzene-d5	79		50 - 120
Phenol-d5	80		52 - 120
Terphenyl-d14	89		55 - 120
2,4,6-Tribromophenol	86		51 - 120

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK91**

Lab Sample ID: 280-15154-7
Client Matrix: Solid % Moisture: 2.7

Date Sampled: 04/26/2011 1245
Date Received: 04/28/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-65289	Instrument ID:	MSS_B
Prep Method:	3550C	Prep Batch:	280-64722	Lab File ID:	B4632.D
Dilution:	1.0			Initial Weight/Volume:	31.6 g
Analysis Date:	05/02/2011 1927			Final Weight/Volume:	1000 uL
Prep Date:	04/28/2011 2352			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	1.52	130	N J
	Unknown	3.13	3100	N J
301-02-0	9-Octadecenamide, (Z)-	10.51	570	N J

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK84**

Lab Sample ID: 280-15154-1
Client Matrix: Solid
% Moisture: 2.3

Date Sampled: 04/26/2011 1250
Date Received: 04/28/2011 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-65717	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-64672	Lab File ID:	26a050411.asc
Dilution:	2.0			Initial Weight/Volume:	1.12 g
Analysis Date:	05/04/2011 1424			Final Weight/Volume:	100 mL
Prep Date:	05/02/2011 0730				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		3770		2.8	9.1
Antimony		0.69	U	0.69	1.1
Arsenic		1.2	U	1.2	1.8
Barium		53.5		0.14	0.91
Beryllium		0.060	U	0.060	0.37
Boron		1.8	U	1.8	3.7
Cadmium		0.093	B	0.075	0.37
Calcium		5650		25.8	91.4
Chromium		4.0		0.11	0.37
Cobalt		11.6		0.18	1.8
Copper		16.0		0.40	1.8
Iron		27800		6.9	9.1
Lead		1.6		0.49	0.91
Magnesium		4260		6.8	36.6
Manganese		307		0.18	1.8
Molybdenum		0.63	B	0.48	3.7
Nickel		7.6		0.22	7.3
Potassium		463	B	74.9	548
Selenium		1.7	B	1.6	1.8
Silicon		195		10.3	18.3
Silver		0.29	U	0.29	0.37
Sodium		400		108	219
Vanadium		75.5		0.17	3.7
Zinc		46.1		0.73	1.8

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-65262	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-64682	Lab File ID:	110502AA.txt
Dilution:	1.0			Initial Weight/Volume:	0.63 g
Analysis Date:	05/02/2011 1532			Final Weight/Volume:	50 mL
Prep Date:	05/02/2011 1158				

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

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK85**

Lab Sample ID: 280-15154-2
Client Matrix: Solid
% Moisture: 4.2

Date Sampled: 04/26/2011 1255
Date Received: 04/28/2011 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-65487	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-64672	Lab File ID:	26a050311.asc
Dilution:	1.0			Initial Weight/Volume:	1.03 g
Analysis Date:	05/03/2011 1802			Final Weight/Volume:	100 mL
Prep Date:	05/02/2011 0730				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		5690		1.6	5.1
Arsenic		2.4		0.67	1.0
Barium		54.3		0.077	0.51
Beryllium		0.033	U	0.033	0.20
Boron		0.99	U	0.99	2.0
Cadmium		0.096	B	0.042	0.20
Calcium		9150		14.3	50.7
Chromium		8.6		0.059	0.20
Cobalt		8.6		0.10	1.0
Copper		16.1		0.22	1.0
Iron		21300		3.9	5.1
Lead		3.0		0.27	0.51
Magnesium		4760		3.8	20.3
Manganese		283		0.10	1.0
Molybdenum		0.26	U	0.26	2.0
Nickel		10.0		0.12	4.1
Potassium		863		41.6	304
Selenium		0.87	U	0.87	1.0
Silicon		267		5.7	10.1
Silver		0.16	U	0.16	0.20
Sodium		274		59.8	122
Vanadium		49.9		0.095	2.0
Zinc		37.8		0.40	1.0

Analysis Method:	6010B	Analysis Batch:	280-65717	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-64672	Lab File ID:	26a050411.asc
Dilution:	1.0			Initial Weight/Volume:	1.03 g
Analysis Date:	05/04/2011 1434			Final Weight/Volume:	100 mL
Prep Date:	05/02/2011 0730				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.39	U	0.39	0.61

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-65262	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-64682	Lab File ID:	110502AA.txt
Dilution:	1.0			Initial Weight/Volume:	0.64 g
Analysis Date:	05/02/2011 1534			Final Weight/Volume:	50 mL
Prep Date:	05/02/2011 1158				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0067	B	0.0054	0.017

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK86**

Lab Sample ID: 280-15154-3
Client Matrix: Solid
% Moisture: 4.3

Date Sampled: 04/26/2011 1300
Date Received: 04/28/2011 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-65487	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-64672	Lab File ID:	26a050311.asc
Dilution:	1.0			Initial Weight/Volume:	1.05 g
Analysis Date:	05/03/2011 1805			Final Weight/Volume:	100 mL
Prep Date:	05/02/2011 0730				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		5790		1.5	5.0
Arsenic		1.7		0.66	1.0
Barium		64.9		0.076	0.50
Beryllium		0.033	U	0.033	0.20
Boron		0.98	U	0.98	2.0
Cadmium		0.061	B	0.041	0.20
Calcium		6990		14.0	49.8
Chromium		7.7		0.058	0.20
Cobalt		8.8		0.10	1.0
Copper		16.6		0.22	1.0
Iron		21900		3.8	5.0
Lead		2.8		0.27	0.50
Magnesium		4360		3.7	19.9
Manganese		304		0.10	1.0
Molybdenum		0.26	U	0.26	2.0
Nickel		9.3		0.12	4.0
Potassium		916		40.8	299
Selenium		0.86	U	0.86	1.0
Silicon		261		5.6	10
Silver		0.16	U	0.16	0.20
Sodium		285		58.7	119
Vanadium		52.0		0.094	2.0
Zinc		39.4		0.40	1.0

Analysis Method:	6010B	Analysis Batch:	280-65717	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-64672	Lab File ID:	26a050411.asc
Dilution:	1.0			Initial Weight/Volume:	1.05 g
Analysis Date:	05/04/2011 1436			Final Weight/Volume:	100 mL
Prep Date:	05/02/2011 0730				

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

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-65262	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-64682	Lab File ID:	110502AA.txt
Dilution:	1.0			Initial Weight/Volume:	0.68 g
Analysis Date:	05/02/2011 1537			Final Weight/Volume:	50 mL
Prep Date:	05/02/2011 1158				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0085	B	0.0051	0.016

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK87**

Lab Sample ID: 280-15154-4
Client Matrix: Solid
% Moisture: 6.9

Date Sampled: 04/26/2011 1400
Date Received: 04/28/2011 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-65487	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-64672	Lab File ID:	26a050311.asc
Dilution:	1.0			Initial Weight/Volume:	1.07 g
Analysis Date:	05/03/2011 1807			Final Weight/Volume:	100 mL
Prep Date:	05/02/2011 0730				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		6490		1.6	5.0
Arsenic		3.1		0.66	1.0
Barium		70.5		0.076	0.50
Beryllium		0.033	U	0.033	0.20
Boron		0.98	B	0.98	2.0
Cadmium		0.13	B	0.041	0.20
Calcium		16700		14.2	50.2
Chromium		11.5		0.058	0.20
Cobalt		7.5		0.10	1.0
Copper		18.4		0.22	1.0
Iron		19400		3.8	5.0
Lead		3.5		0.27	0.50
Magnesium		4700		3.7	20.1
Manganese		292		0.10	1.0
Molybdenum		0.26	U	0.26	2.0
Nickel		11.5		0.12	4.0
Potassium		894		41.2	301
Selenium		0.86	U	0.86	1.0
Silicon		354		5.7	10.0
Silver		0.16	U	0.16	0.20
Sodium		248		59.2	120
Vanadium		47.2		0.094	2.0
Zinc		36.1		0.40	1.0

Analysis Method:	6010B	Analysis Batch:	280-65717	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-64672	Lab File ID:	26a050411.asc
Dilution:	1.0			Initial Weight/Volume:	1.07 g
Analysis Date:	05/04/2011 1438			Final Weight/Volume:	100 mL
Prep Date:	05/02/2011 0730				

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

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-65262	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-64682	Lab File ID:	110502AA.txt
Dilution:	1.0			Initial Weight/Volume:	0.66 g
Analysis Date:	05/02/2011 1539			Final Weight/Volume:	50 mL
Prep Date:	05/02/2011 1158				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0099	B	0.0054	0.017

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK88**

Lab Sample ID: 280-15154-5
Client Matrix: Solid
% Moisture: 3.3

Date Sampled: 04/26/2011 1305
Date Received: 04/28/2011 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-65487	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-64672	Lab File ID:	26a050311.asc
Dilution:	1.0			Initial Weight/Volume:	1.00 g
Analysis Date:	05/03/2011 1809			Final Weight/Volume:	100 mL
Prep Date:	05/02/2011 0730				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		3750		1.6	5.2
Arsenic		0.68	U	0.68	1.0
Barium		56.8		0.079	0.52
Beryllium		0.034	U	0.034	0.21
Boron		1.0	U	1.0	2.1
Cadmium		0.076	B	0.042	0.21
Calcium		5340		14.6	51.7
Chromium		3.5		0.060	0.21
Cobalt		9.6		0.10	1.0
Copper		14.9		0.22	1.0
Iron		22600		3.9	5.2
Lead		1.9		0.28	0.52
Magnesium		3890		3.8	20.7
Manganese		269		0.10	1.0
Molybdenum		0.27	U	0.27	2.1
Nickel		6.6		0.13	4.1
Potassium		500		42.4	310
Selenium		0.89	U	0.89	1.0
Silicon		267		5.9	10.3
Silver		0.17	U	0.17	0.21
Sodium		353		61.0	124
Vanadium		59.7		0.097	2.1
Zinc		38.9		0.41	1.0

Analysis Method:	6010B	Analysis Batch:	280-65717	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-64672	Lab File ID:	26a050411.asc
Dilution:	1.0			Initial Weight/Volume:	1.00 g
Analysis Date:	05/04/2011 1440			Final Weight/Volume:	100 mL
Prep Date:	05/02/2011 0730				

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

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-65262	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-64682	Lab File ID:	110502AA.txt
Dilution:	1.0			Initial Weight/Volume:	0.68 g
Analysis Date:	05/02/2011 1546			Final Weight/Volume:	50 mL
Prep Date:	05/02/2011 1158				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0088	B	0.0050	0.016

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK89**

Lab Sample ID: 280-15154-6
Client Matrix: Solid
% Moisture: 3.4

Date Sampled: 04/26/2011 1310
Date Received: 04/28/2011 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-65487	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-64672	Lab File ID:	26a050311.asc
Dilution:	1.0			Initial Weight/Volume:	1.03 g
Analysis Date:	05/03/2011 1811			Final Weight/Volume:	100 mL
Prep Date:	05/02/2011 0730				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		3380		1.6	5.0
Arsenic		0.66	U	0.66	1.0
Barium		67.7		0.076	0.50
Beryllium		0.033	U	0.033	0.20
Boron		0.98	U	0.98	2.0
Cadmium		0.057	B	0.041	0.20
Calcium		6330		14.2	50.2
Chromium		3.4		0.058	0.20
Cobalt		11.5		0.10	1.0
Copper		15.1		0.22	1.0
Iron		28400		3.8	5.0
Lead		1.7		0.27	0.50
Magnesium		4190		3.7	20.1
Manganese		311		0.10	1.0
Molybdenum		0.26	U	0.26	2.0
Nickel		6.2		0.12	4.0
Potassium		458		41.2	301
Selenium		0.86	U	0.86	1.0
Silicon		162		5.7	10.0
Silver		0.16	U	0.16	0.20
Sodium		333		59.3	121
Vanadium		74.8		0.094	2.0
Zinc		46.4		0.40	1.0

Analysis Method:	6010B	Analysis Batch:	280-65717	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-64672	Lab File ID:	26a050411.asc
Dilution:	2.0			Initial Weight/Volume:	1.03 g
Analysis Date:	05/04/2011 1406			Final Weight/Volume:	100 mL
Prep Date:	05/02/2011 0730				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.76	U	0.76	1.2

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-65262	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-64682	Lab File ID:	110502AA.txt
Dilution:	1.0			Initial Weight/Volume:	0.61 g
Analysis Date:	05/02/2011 1548			Final Weight/Volume:	50 mL
Prep Date:	05/02/2011 1158				

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

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Client Sample ID: **J1HK91**

Lab Sample ID: 280-15154-7
Client Matrix: Solid
% Moisture: 2.7

Date Sampled: 04/26/2011 1245
Date Received: 04/28/2011 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-65487	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-64672	Lab File ID:	26a050311.asc
Dilution:	1.0			Initial Weight/Volume:	1.07 g
Analysis Date:	05/03/2011 1814			Final Weight/Volume:	100 mL
Prep Date:	05/02/2011 0730				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		3750		1.5	4.8
Arsenic		0.63	U	0.63	0.96
Barium		47.1		0.073	0.48
Beryllium		0.032	U	0.032	0.19
Boron		0.94	U	0.94	1.9
Cadmium		0.048	B	0.039	0.19
Calcium		5280		13.5	48.0
Chromium		3.4		0.056	0.19
Cobalt		9.5		0.096	0.96
Copper		15.0		0.21	0.96
Iron		23200		3.6	4.8
Lead		1.9		0.26	0.48
Magnesium		3520		3.6	19.2
Manganese		257		0.096	0.96
Molybdenum		0.25	U	0.25	1.9
Nickel		5.8		0.12	3.8
Potassium		486		39.4	288
Selenium		0.83	U	0.83	0.96
Silicon		186		5.4	9.6
Silver		0.15	U	0.15	0.19
Sodium		341		56.7	115
Vanadium		62.4		0.090	1.9
Zinc		38.7		0.38	0.96

Analysis Method:	6010B	Analysis Batch:	280-65717	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-64672	Lab File ID:	26a050411.asc
Dilution:	1.0			Initial Weight/Volume:	1.07 g
Analysis Date:	05/04/2011 1408			Final Weight/Volume:	100 mL
Prep Date:	05/02/2011 0730				

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

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-65262	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-64682	Lab File ID:	110502AA.txt
Dilution:	1.0			Initial Weight/Volume:	0.60 g
Analysis Date:	05/02/2011 1551			Final Weight/Volume:	50 mL
Prep Date:	05/02/2011 1158				

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

General Chemistry

Client Sample ID: **J1HK84**

Lab Sample ID: 280-15154-1
Client Matrix: Solid
% Moisture: 2.3

Date Sampled: 04/26/2011 1250
Date Received: 04/28/2011 0930

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate Nitrite as N-Soluble	0.36	U	mg/Kg	0.36	0.76	1.0	353.2
Analysis Batch: 280-65429	Analysis Date: 05/03/2011 1547						DryWt Corrected: Y
Chloride-Soluble	3.2	B M	mg/Kg	2.0	5.1	1.0	9056M
Analysis Batch: 280-65500	Analysis Date: 05/03/2011 1402						DryWt Corrected: Y
Nitrate as N-Soluble	0.46	B	mg/Kg	0.32	2.5	1.0	9056M
Analysis Batch: 280-65501	Analysis Date: 05/03/2011 1402						DryWt Corrected: Y
Bromide-Soluble	0.39	U	mg/Kg	0.39	2.0	1.0	9056M
Analysis Batch: 280-65500	Analysis Date: 05/03/2011 1402						DryWt Corrected: Y
Nitrite as N-Soluble	0.34	U	mg/Kg	0.34	2.5	1.0	9056M
Analysis Batch: 280-65501	Analysis Date: 05/03/2011 1402						DryWt Corrected: Y
Orthophosphate as P-Soluble	1.3	U	mg/Kg	1.3	5.1	1.0	9056M
Analysis Batch: 280-65501	Analysis Date: 05/03/2011 1402						DryWt Corrected: Y
Sulfate-Soluble	4.2	B	mg/Kg	1.8	5.1	1.0	9056M
Analysis Batch: 280-65500	Analysis Date: 05/03/2011 1402						DryWt Corrected: Y
Fluoride-Soluble	0.83	U	mg/Kg	0.83	5.1	1.0	9056M
Analysis Batch: 280-65500	Analysis Date: 05/03/2011 1402						DryWt Corrected: Y

Analyte	Result	Qual	Units	RL	RL	Dil	Method
pH adj. to 25 deg C-Soluble	9.30		SU	0.0100	0.0100	1.0	9045C
Analysis Batch: 280-65000	Analysis Date: 04/29/2011 1250						DryWt Corrected: N
Percent Moisture	2.3		%	0.10	0.10	1.0	D-2216
Analysis Batch: 280-64762	Analysis Date: 04/29/2011 0859						DryWt Corrected: N

General Chemistry

Client Sample ID: **J1HK85**

Lab Sample ID: 280-15154-2
Client Matrix: Solid
% Moisture: 4.2

Date Sampled: 04/26/2011 1255
Date Received: 04/28/2011 0930

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate Nitrite as N-Soluble	0.36	U	mg/Kg	0.36	0.75	1.0	353.2
Analysis Batch: 280-65429	Analysis Date: 05/03/2011 1552						DryWt Corrected: Y
Chloride-Soluble	4.7	B	mg/Kg	2.0	5.0	1.0	9056M
Analysis Batch: 280-65500	Analysis Date: 05/03/2011 1452						DryWt Corrected: Y
Nitrate as N-Soluble	0.53	B	mg/Kg	0.32	2.5	1.0	9056M
Analysis Batch: 280-65501	Analysis Date: 05/03/2011 1452						DryWt Corrected: Y
Bromide-Soluble	0.39	U	mg/Kg	0.39	2.0	1.0	9056M
Analysis Batch: 280-65500	Analysis Date: 05/03/2011 1452						DryWt Corrected: Y
Nitrite as N-Soluble	0.34	U	mg/Kg	0.34	2.5	1.0	9056M
Analysis Batch: 280-65501	Analysis Date: 05/03/2011 1452						DryWt Corrected: Y
Orthophosphate as P-Soluble	1.2	U	mg/Kg	1.2	5.0	1.0	9056M
Analysis Batch: 280-65501	Analysis Date: 05/03/2011 1452						DryWt Corrected: Y
Sulfate-Soluble	3.3	B	mg/Kg	1.7	5.0	1.0	9056M
Analysis Batch: 280-65500	Analysis Date: 05/03/2011 1452						DryWt Corrected: Y
Fluoride-Soluble	0.83	U	mg/Kg	0.83	5.0	1.0	9056M
Analysis Batch: 280-65500	Analysis Date: 05/03/2011 1452						DryWt Corrected: Y

Analyte	Result	Qual	Units	RL	RL	Dil	Method
pH adj. to 25 deg C-Soluble	9.46		SU	0.0100	0.0100	1.0	9045C
Analysis Batch: 280-65000	Analysis Date: 04/29/2011 1254						DryWt Corrected: N
Percent Moisture	4.2		%	0.10	0.10	1.0	D-2216
Analysis Batch: 280-64762	Analysis Date: 04/29/2011 0859						DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

General Chemistry

Client Sample ID: **J1HK86**

Lab Sample ID: 280-15154-3
Client Matrix: Solid
% Moisture: 4.3

Date Sampled: 04/26/2011 1300
Date Received: 04/28/2011 0930

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate Nitrite as N-Soluble	0.37	B	mg/Kg	0.37	0.78	1.0	353.2
Analysis Batch: 280-65429	Analysis Date: 05/03/2011 1553						DryWt Corrected: Y
Chloride-Soluble	4.0	B	mg/Kg	2.0	5.2	1.0	9056M
Analysis Batch: 280-65500	Analysis Date: 05/03/2011 1509						DryWt Corrected: Y
Nitrate as N-Soluble	0.73	B	mg/Kg	0.32	2.6	1.0	9056M
Analysis Batch: 280-65501	Analysis Date: 05/03/2011 1509						DryWt Corrected: Y
Bromide-Soluble	0.40	U	mg/Kg	0.40	2.1	1.0	9056M
Analysis Batch: 280-65500	Analysis Date: 05/03/2011 1509						DryWt Corrected: Y
Nitrite as N-Soluble	0.35	U	mg/Kg	0.35	2.6	1.0	9056M
Analysis Batch: 280-65501	Analysis Date: 05/03/2011 1509						DryWt Corrected: Y
Orthophosphate as P-Soluble	1.3	U	mg/Kg	1.3	5.2	1.0	9056M
Analysis Batch: 280-65501	Analysis Date: 05/03/2011 1509						DryWt Corrected: Y
Sulfate-Soluble	11.0		mg/Kg	1.8	5.2	1.0	9056M
Analysis Batch: 280-65500	Analysis Date: 05/03/2011 1509						DryWt Corrected: Y
Fluoride-Soluble	0.85	U	mg/Kg	0.85	5.2	1.0	9056M
Analysis Batch: 280-65500	Analysis Date: 05/03/2011 1509						DryWt Corrected: Y

Analyte	Result	Qual	Units	RL	RL	Dil	Method
pH adj. to 25 deg C-Soluble	9.26		SU	0.0100	0.0100	1.0	9045C
Analysis Batch: 280-65000	Analysis Date: 04/29/2011 1258						DryWt Corrected: N
Percent Moisture	4.3		%	0.10	0.10	1.0	D-2216
Analysis Batch: 280-64762	Analysis Date: 04/29/2011 0859						DryWt Corrected: N

General Chemistry

Client Sample ID: **J1HK87**

Lab Sample ID: 280-15154-4
Client Matrix: Solid
% Moisture: 6.9

Date Sampled: 04/26/2011 1400
Date Received: 04/28/2011 0930

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate Nitrite as N-Soluble	1.8		mg/Kg	0.38	0.79	1.0	353.2
Analysis Batch: 280-65429		Analysis Date: 05/03/2011 1555					DryWt Corrected: Y
Chloride-Soluble	4.9	B	mg/Kg	2.1	5.3	1.0	9056M
Analysis Batch: 280-65500		Analysis Date: 05/03/2011 1526					DryWt Corrected: Y
Nitrate as N-Soluble	1.8	B	mg/Kg	0.33	2.6	1.0	9056M
Analysis Batch: 280-65501		Analysis Date: 05/03/2011 1526					DryWt Corrected: Y
Bromide-Soluble	0.41	U	mg/Kg	0.41	2.1	1.0	9056M
Analysis Batch: 280-65500		Analysis Date: 05/03/2011 1526					DryWt Corrected: Y
Nitrite as N-Soluble	0.35	U	mg/Kg	0.35	2.6	1.0	9056M
Analysis Batch: 280-65501		Analysis Date: 05/03/2011 1526					DryWt Corrected: Y
Orthophosphate as P-Soluble	1.3	U	mg/Kg	1.3	5.3	1.0	9056M
Analysis Batch: 280-65501		Analysis Date: 05/03/2011 1526					DryWt Corrected: Y
Sulfate-Soluble	7.9		mg/Kg	1.8	5.3	1.0	9056M
Analysis Batch: 280-65500		Analysis Date: 05/03/2011 1526					DryWt Corrected: Y
Fluoride-Soluble	1.4	B	mg/Kg	0.87	5.3	1.0	9056M
Analysis Batch: 280-65500		Analysis Date: 05/03/2011 1526					DryWt Corrected: Y

Analyte	Result	Qual	Units	RL	RL	Dil	Method
pH adj. to 25 deg C-Soluble	9.25		SU	0.0100	0.0100	1.0	9045C
Analysis Batch: 280-65000		Analysis Date: 04/29/2011 1259					DryWt Corrected: N
Percent Moisture	6.9		%	0.10	0.10	1.0	D-2216
Analysis Batch: 280-64762		Analysis Date: 04/29/2011 0859					DryWt Corrected: N

General Chemistry

Client Sample ID: **J1HK88**

Lab Sample ID: 280-15154-5
Client Matrix: Solid
% Moisture: 3.3

Date Sampled: 04/26/2011 1305
Date Received: 04/28/2011 0930

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate Nitrite as N-Soluble	0.44	B	mg/Kg	0.36	0.76	1.0	353.2
Analysis Batch: 280-65429	Analysis Date: 05/03/2011 1605						DryWt Corrected: Y
Chloride-Soluble	3.7	B	mg/Kg	2.0	5.1	1.0	9056M
Analysis Batch: 280-65500	Analysis Date: 05/03/2011 1542						DryWt Corrected: Y
Nitrate as N-Soluble	0.74	B	mg/Kg	0.32	2.5	1.0	9056M
Analysis Batch: 280-65501	Analysis Date: 05/03/2011 1542						DryWt Corrected: Y
Bromide-Soluble	0.39	U	mg/Kg	0.39	2.0	1.0	9056M
Analysis Batch: 280-65500	Analysis Date: 05/03/2011 1542						DryWt Corrected: Y
Nitrite as N-Soluble	0.34	U	mg/Kg	0.34	2.5	1.0	9056M
Analysis Batch: 280-65501	Analysis Date: 05/03/2011 1542						DryWt Corrected: Y
Orthophosphate as P-Soluble	1.3	U	mg/Kg	1.3	5.1	1.0	9056M
Analysis Batch: 280-65501	Analysis Date: 05/03/2011 1542						DryWt Corrected: Y
Sulfate-Soluble	3.5	B	mg/Kg	1.8	5.1	1.0	9056M
Analysis Batch: 280-65500	Analysis Date: 05/03/2011 1542						DryWt Corrected: Y
Fluoride-Soluble	0.83	U	mg/Kg	0.83	5.1	1.0	9056M
Analysis Batch: 280-65500	Analysis Date: 05/03/2011 1542						DryWt Corrected: Y

Analyte	Result	Qual	Units	RL	RL	Dil	Method
pH adj. to 25 deg C-Soluble	9.40		SU	0.0100	0.0100	1.0	9045C
Analysis Batch: 280-65000	Analysis Date: 04/29/2011 1311						DryWt Corrected: N
Percent Moisture	3.3		%	0.10	0.10	1.0	D-2216
Analysis Batch: 280-64762	Analysis Date: 04/29/2011 0859						DryWt Corrected: N

General Chemistry

Client Sample ID: **J1HK89**

Lab Sample ID: 280-15154-6
Client Matrix: Solid
% Moisture: 3.4

Date Sampled: 04/26/2011 1310
Date Received: 04/28/2011 0930

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate Nitrite as N-Soluble	0.37	U	mg/Kg	0.37	0.78	1.0	353.2
Analysis Batch: 280-65429	Analysis Date: 05/03/2011 1607						DryWt Corrected: Y
Chloride-Soluble	3.1	B	mg/Kg	2.0	5.2	1.0	9056M
Analysis Batch: 280-65500	Analysis Date: 05/03/2011 1559						DryWt Corrected: Y
Nitrate as N-Soluble	0.32	U	mg/Kg	0.32	2.6	1.0	9056M
Analysis Batch: 280-65501	Analysis Date: 05/03/2011 1559						DryWt Corrected: Y
Bromide-Soluble	0.40	U	mg/Kg	0.40	2.1	1.0	9056M
Analysis Batch: 280-65500	Analysis Date: 05/03/2011 1559						DryWt Corrected: Y
Nitrite as N-Soluble	0.35	U	mg/Kg	0.35	2.6	1.0	9056M
Analysis Batch: 280-65501	Analysis Date: 05/03/2011 1559						DryWt Corrected: Y
Orthophosphate as P-Soluble	1.3	U	mg/Kg	1.3	5.2	1.0	9056M
Analysis Batch: 280-65501	Analysis Date: 05/03/2011 1559						DryWt Corrected: Y
Sulfate-Soluble	4.0	B	mg/Kg	1.8	5.2	1.0	9056M
Analysis Batch: 280-65500	Analysis Date: 05/03/2011 1559						DryWt Corrected: Y
Fluoride-Soluble	0.85	U	mg/Kg	0.85	5.2	1.0	9056M
Analysis Batch: 280-65500	Analysis Date: 05/03/2011 1559						DryWt Corrected: Y

Analyte	Result	Qual	Units	RL	RL	Dil	Method
pH adj. to 25 deg C-Soluble	9.39		SU	0.0100	0.0100	1.0	9045C
Analysis Batch: 280-65000	Analysis Date: 04/29/2011 1314						DryWt Corrected: N
Percent Moisture	3.4		%	0.10	0.10	1.0	D-2216
Analysis Batch: 280-64762	Analysis Date: 04/29/2011 0859						DryWt Corrected: N

General Chemistry

Client Sample ID: **J1HK91**

Lab Sample ID: 280-15154-7
Client Matrix: Solid
% Moisture: 2.7

Date Sampled: 04/26/2011 1245
Date Received: 04/28/2011 0930

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate Nitrite as N-Soluble	0.36	U	mg/Kg	0.36	0.76	1.0	353.2
Analysis Batch: 280-65429	Analysis Date: 05/03/2011 1608						DryWt Corrected: Y
Chloride-Soluble	5.6		mg/Kg	2.0	5.0	1.0	9056M
Analysis Batch: 280-65500	Analysis Date: 05/03/2011 1616						DryWt Corrected: Y
Nitrate as N-Soluble	0.37	B	mg/Kg	0.32	2.5	1.0	9056M
Analysis Batch: 280-65501	Analysis Date: 05/03/2011 1616						DryWt Corrected: Y
Bromide-Soluble	0.39	U	mg/Kg	0.39	2.0	1.0	9056M
Analysis Batch: 280-65500	Analysis Date: 05/03/2011 1616						DryWt Corrected: Y
Nitrite as N-Soluble	0.34	U	mg/Kg	0.34	2.5	1.0	9056M
Analysis Batch: 280-65501	Analysis Date: 05/03/2011 1616						DryWt Corrected: Y
Orthophosphate as P-Soluble	1.2	U	mg/Kg	1.2	5.0	1.0	9056M
Analysis Batch: 280-65501	Analysis Date: 05/03/2011 1616						DryWt Corrected: Y
Sulfate-Soluble	3.4	B	mg/Kg	1.7	5.0	1.0	9056M
Analysis Batch: 280-65500	Analysis Date: 05/03/2011 1616						DryWt Corrected: Y
Fluoride-Soluble	0.83	U	mg/Kg	0.83	5.0	1.0	9056M
Analysis Batch: 280-65500	Analysis Date: 05/03/2011 1616						DryWt Corrected: Y

Analyte	Result	Qual	Units	RL	RL	Dil	Method
pH adj. to 25 deg C-Soluble	9.49		SU	0.0100	0.0100	1.0	9045C
Analysis Batch: 280-65000	Analysis Date: 04/29/2011 1317						DryWt Corrected: N
Percent Moisture	2.7		%	0.10	0.10	1.0	D-2216
Analysis Batch: 280-64762	Analysis Date: 04/29/2011 0859						DryWt Corrected: N

QUALITY CONTROL RESULTS

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Prep Batch: 280-64996					
LCS 280-64996/2-A	Lab Control Sample	T	Solid	5030B	
MB 280-64996/1-A	Method Blank	T	Solid	5030B	
280-15154-1	J1HK84	T	Solid	5030B	
280-15154-1MS	Matrix Spike	T	Solid	5030B	
280-15154-1MSD	Matrix Spike Duplicate	T	Solid	5030B	
280-15154-2	J1HK85	T	Solid	5030B	
280-15154-3	J1HK86	T	Solid	5030B	
280-15154-4	J1HK87	T	Solid	5030B	
280-15154-5	J1HK88	T	Solid	5030B	
280-15154-6	J1HK89	T	Solid	5030B	
280-15154-7	J1HK91	T	Solid	5030B	
Analysis Batch:280-65160					
LCS 280-64996/2-A	Lab Control Sample	T	Solid	8260B	280-64996
MB 280-64996/1-A	Method Blank	T	Solid	8260B	280-64996
280-15154-1	J1HK84	T	Solid	8260B	280-64996
280-15154-1MS	Matrix Spike	T	Solid	8260B	280-64996
280-15154-1MSD	Matrix Spike Duplicate	T	Solid	8260B	280-64996
280-15154-2	J1HK85	T	Solid	8260B	280-64996
280-15154-3	J1HK86	T	Solid	8260B	280-64996
280-15154-4	J1HK87	T	Solid	8260B	280-64996
280-15154-5	J1HK88	T	Solid	8260B	280-64996
280-15154-6	J1HK89	T	Solid	8260B	280-64996
280-15154-7	J1HK91	T	Solid	8260B	280-64996

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 280-64722					
LCS 280-64722/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-64722/1-A	Method Blank	T	Solid	3550C	
280-15154-1	J1HK84	T	Solid	3550C	
280-15154-2	J1HK85	T	Solid	3550C	
280-15154-3	J1HK86	T	Solid	3550C	
280-15154-4	J1HK87	T	Solid	3550C	
280-15154-5	J1HK88	T	Solid	3550C	
280-15154-6	J1HK89	T	Solid	3550C	
280-15154-7	J1HK91	T	Solid	3550C	
280-15154-7MS	Matrix Spike	T	Solid	3550C	
280-15154-7MSD	Matrix Spike Duplicate	T	Solid	3550C	
Analysis Batch:280-65289					
LCS 280-64722/2-A	Lab Control Sample	T	Solid	8270C	280-64722
MB 280-64722/1-A	Method Blank	T	Solid	8270C	280-64722
280-15154-1	J1HK84	T	Solid	8270C	280-64722
280-15154-2	J1HK85	T	Solid	8270C	280-64722
280-15154-3	J1HK86	T	Solid	8270C	280-64722
280-15154-4	J1HK87	T	Solid	8270C	280-64722
280-15154-5	J1HK88	T	Solid	8270C	280-64722
280-15154-6	J1HK89	T	Solid	8270C	280-64722
280-15154-7	J1HK91	T	Solid	8270C	280-64722
280-15154-7MS	Matrix Spike	T	Solid	8270C	280-64722
280-15154-7MSD	Matrix Spike Duplicate	T	Solid	8270C	280-64722

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-64672					
LCS 280-64672/2-A	Lab Control Sample	T	Solid	3050B	
MB 280-64672/1-A	Method Blank	T	Solid	3050B	
280-15154-1	J1HK84	T	Solid	3050B	
280-15154-1DU	Duplicate	T	Solid	3050B	
280-15154-1MS	Matrix Spike	T	Solid	3050B	
280-15154-2	J1HK85	T	Solid	3050B	
280-15154-3	J1HK86	T	Solid	3050B	
280-15154-4	J1HK87	T	Solid	3050B	
280-15154-5	J1HK88	T	Solid	3050B	
280-15154-6	J1HK89	T	Solid	3050B	
280-15154-7	J1HK91	T	Solid	3050B	
Prep Batch: 280-64682					
LCS 280-64682/2-A	Lab Control Sample	T	Solid	7471A	
MB 280-64682/1-A	Method Blank	T	Solid	7471A	
280-15154-1	J1HK84	T	Solid	7471A	
280-15154-2	J1HK85	T	Solid	7471A	
280-15154-3	J1HK86	T	Solid	7471A	
280-15154-4	J1HK87	T	Solid	7471A	
280-15154-4DU	Duplicate	T	Solid	7471A	
280-15154-4MS	Matrix Spike	T	Solid	7471A	
280-15154-5	J1HK88	T	Solid	7471A	
280-15154-6	J1HK89	T	Solid	7471A	
280-15154-7	J1HK91	T	Solid	7471A	
Analysis Batch:280-65262					
LCS 280-64682/2-A	Lab Control Sample	T	Solid	7471A	280-64682
MB 280-64682/1-A	Method Blank	T	Solid	7471A	280-64682
280-15154-1	J1HK84	T	Solid	7471A	280-64682
280-15154-2	J1HK85	T	Solid	7471A	280-64682
280-15154-3	J1HK86	T	Solid	7471A	280-64682
280-15154-4	J1HK87	T	Solid	7471A	280-64682
280-15154-4DU	Duplicate	T	Solid	7471A	280-64682
280-15154-4MS	Matrix Spike	T	Solid	7471A	280-64682
280-15154-5	J1HK88	T	Solid	7471A	280-64682
280-15154-6	J1HK89	T	Solid	7471A	280-64682
280-15154-7	J1HK91	T	Solid	7471A	280-64682

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:280-65487					
LCS 280-64672/2-A	Lab Control Sample	T	Solid	6010B	280-64672
MB 280-64672/1-A	Method Blank	T	Solid	6010B	280-64672
280-15154-2	J1HK85	T	Solid	6010B	280-64672
280-15154-3	J1HK86	T	Solid	6010B	280-64672
280-15154-4	J1HK87	T	Solid	6010B	280-64672
280-15154-5	J1HK88	T	Solid	6010B	280-64672
280-15154-6	J1HK89	T	Solid	6010B	280-64672
280-15154-7	J1HK91	T	Solid	6010B	280-64672
Analysis Batch:280-65717					
LCS 280-64672/2-A	Lab Control Sample	T	Solid	6010B	280-64672
MB 280-64672/1-A	Method Blank	T	Solid	6010B	280-64672
280-15154-1	J1HK84	T	Solid	6010B	280-64672
280-15154-1DU	Duplicate	T	Solid	6010B	280-64672
280-15154-1MS	Matrix Spike	T	Solid	6010B	280-64672
280-15154-2	J1HK85	T	Solid	6010B	280-64672
280-15154-3	J1HK86	T	Solid	6010B	280-64672
280-15154-4	J1HK87	T	Solid	6010B	280-64672
280-15154-5	J1HK88	T	Solid	6010B	280-64672
280-15154-6	J1HK89	T	Solid	6010B	280-64672
280-15154-7	J1HK91	T	Solid	6010B	280-64672

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-64762					
280-15154-1	J1HK84	T	Solid	D-2216	
280-15154-1DU	Duplicate	T	Solid	D-2216	
280-15154-2	J1HK85	T	Solid	D-2216	
280-15154-3	J1HK86	T	Solid	D-2216	
280-15154-4	J1HK87	T	Solid	D-2216	
280-15154-5	J1HK88	T	Solid	D-2216	
280-15154-6	J1HK89	T	Solid	D-2216	
280-15154-7	J1HK91	T	Solid	D-2216	
Prep Batch: 280-64771					
280-15154-1	J1HK84	S	Solid	DI Leach	
280-15154-1DU	Duplicate	S	Solid	DI Leach	
280-15154-2	J1HK85	S	Solid	DI Leach	
280-15154-3	J1HK86	S	Solid	DI Leach	
280-15154-4	J1HK87	S	Solid	DI Leach	
280-15154-5	J1HK88	S	Solid	DI Leach	
280-15154-6	J1HK89	S	Solid	DI Leach	
280-15154-7	J1HK91	S	Solid	DI Leach	
Analysis Batch:280-65000					
LCS 280-65000/4	Lab Control Sample	T	Water	9045C	
LCSD 280-65000/5	Lab Control Sample Duplicate	T	Water	9045C	
280-15154-1	J1HK84	S	Solid	9045C	
280-15154-1DU	Duplicate	S	Solid	9045C	
280-15154-2	J1HK85	S	Solid	9045C	
280-15154-3	J1HK86	S	Solid	9045C	
280-15154-4	J1HK87	S	Solid	9045C	
280-15154-5	J1HK88	S	Solid	9045C	
280-15154-6	J1HK89	S	Solid	9045C	
280-15154-7	J1HK91	S	Solid	9045C	
Prep Batch: 280-65310					
LCS 280-65310/1-A	Lab Control Sample	S	Solid	DI Leach	
MB 280-65310/2-A	Method Blank	S	Solid	DI Leach	
280-15154-1	J1HK84	S	Solid	DI Leach	
280-15154-1DU	Duplicate	S	Solid	DI Leach	
280-15154-1MS	Matrix Spike	S	Solid	DI Leach	
280-15154-2	J1HK85	S	Solid	DI Leach	
280-15154-3	J1HK86	S	Solid	DI Leach	
280-15154-4	J1HK87	S	Solid	DI Leach	
280-15154-5	J1HK88	S	Solid	DI Leach	
280-15154-6	J1HK89	S	Solid	DI Leach	
280-15154-7	J1HK91	S	Solid	DI Leach	

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Prep Batch: 280-65371					
LCS 280-65371/1-A	Lab Control Sample	S	Solid	DI Leach	
MB 280-65371/2-A	Method Blank	S	Solid	DI Leach	
280-15154-1	J1HK84	S	Solid	DI Leach	
280-15154-1DU	Duplicate	S	Solid	DI Leach	
280-15154-1MS	Matrix Spike	S	Solid	DI Leach	
280-15154-2	J1HK85	S	Solid	DI Leach	
280-15154-3	J1HK86	S	Solid	DI Leach	
280-15154-4	J1HK87	S	Solid	DI Leach	
280-15154-5	J1HK88	S	Solid	DI Leach	
280-15154-6	J1HK89	S	Solid	DI Leach	
280-15154-7	J1HK91	S	Solid	DI Leach	
Analysis Batch:280-65429					
LCS 280-65371/1-A	Lab Control Sample	S	Solid	353.2	
MB 280-65371/2-A	Method Blank	S	Solid	353.2	
280-15154-1	J1HK84	S	Solid	353.2	
280-15154-1DU	Duplicate	S	Solid	353.2	
280-15154-1MS	Matrix Spike	S	Solid	353.2	
280-15154-2	J1HK85	S	Solid	353.2	
280-15154-3	J1HK86	S	Solid	353.2	
280-15154-4	J1HK87	S	Solid	353.2	
280-15154-5	J1HK88	S	Solid	353.2	
280-15154-6	J1HK89	S	Solid	353.2	
280-15154-7	J1HK91	S	Solid	353.2	
Analysis Batch:280-65500					
LCS 280-65310/1-A	Lab Control Sample	S	Solid	9056M	
MB 280-65310/2-A	Method Blank	S	Solid	9056M	
280-15154-1	J1HK84	S	Solid	9056M	
280-15154-1DU	Duplicate	S	Solid	9056M	
280-15154-1MS	Matrix Spike	S	Solid	9056M	
280-15154-2	J1HK85	S	Solid	9056M	
280-15154-3	J1HK86	S	Solid	9056M	
280-15154-4	J1HK87	S	Solid	9056M	
280-15154-5	J1HK88	S	Solid	9056M	
280-15154-6	J1HK89	S	Solid	9056M	
280-15154-7	J1HK91	S	Solid	9056M	

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-65501					
LCS 280-65310/1-A	Lab Control Sample	S	Solid	9056M	
MB 280-65310/2-A	Method Blank	S	Solid	9056M	
280-15154-1	J1HK84	S	Solid	9056M	
280-15154-1DU	Duplicate	S	Solid	9056M	
280-15154-1MS	Matrix Spike	S	Solid	9056M	
280-15154-2	J1HK85	S	Solid	9056M	
280-15154-3	J1HK86	S	Solid	9056M	
280-15154-4	J1HK87	S	Solid	9056M	
280-15154-5	J1HK88	S	Solid	9056M	
280-15154-6	J1HK89	S	Solid	9056M	
280-15154-7	J1HK91	S	Solid	9056M	

Report Basis
S = Soluble
T = Total

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Method Blank - Batch: 280-64996

Method: 8260B
Preparation: 5030B

Lab Sample ID:	MB 280-64996/1-A	Analysis Batch:	280-65160	Instrument ID:	MSV_J
Client Matrix:	Solid	Prep Batch:	280-64996	Lab File ID:	J6293.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5.02 g
Analysis Date:	04/30/2011 1400	Units:	ug/Kg	Final Weight/Volume:	5 mL
Prep Date:	04/30/2011 1200				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acetone	5.4	U	5.4	20
Benzene	0.47	U	0.47	5.0
Bromodichloromethane	0.22	U	0.22	5.0
Bromoform	0.23	U	0.23	5.0
Bromomethane	0.50	U	0.50	10
2-Butanone (MEK)	1.8	U	1.8	10
Carbon disulfide	0.42	U	0.42	5.0
Carbon tetrachloride	0.63	U	0.63	5.0
Chlorobenzene	0.54	U	0.54	5.0
Dibromochloromethane	0.57	U	0.57	5.0
Chloroethane	0.89	U	0.89	10
Chloroform	0.29	U	0.29	5.0
Chloromethane	0.77	U	0.77	10
1,3-Dichlorobenzene	0.48	U	0.48	5.0
1,1-Dichloroethane	0.21	U	0.21	5.0
1,2-Dichloroethane	0.70	U	0.70	5.0
trans-1,2-Dichloroethene	0.39	U	0.39	2.5
1,1-Dichloroethene	0.59	U	0.59	5.0
1,2-Dichloroethene, Total	0.39	U	0.39	5.0
1,2-Dichloropropane	0.55	U	0.55	5.0
cis-1,3-Dichloropropene	1.3	U	1.3	5.0
trans-1,3-Dichloropropene	0.67	U	0.67	5.0
Ethylbenzene	0.67	U	0.67	5.0
2-Hexanone	4.9	U	4.9	20
Methylene Chloride	0.75	U	0.75	5.0
4-Methyl-2-pentanone (MIBK)	4.3	U	4.3	10
Styrene	0.63	U	0.63	5.0
1,1,2,2-Tetrachloroethane	0.61	U	0.61	5.0
Tetrachloroethene	0.59	U	0.59	5.0
Toluene	0.69	U	0.69	5.0
1,1,1-Trichloroethane	0.52	U	0.52	5.0
1,1,2-Trichloroethane	0.88	U	0.88	5.0
Trichloroethene	0.23	U	0.23	5.0
Vinyl chloride	1.3	U	1.3	5.0
Xylenes, Total	0.61	U	0.61	5.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	92	58 - 140
Toluene-d8 (Surr)	112	80 - 126
4-Bromofluorobenzene (Surr)	102	76 - 127
Dibromofluoromethane (Surr)	97	75 - 121

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Method Blank TICs- Batch: 280-64996

Cas Number	Analyte	RT	Est. Result	Qual
87-61-6	1,2,3-Trichlorobenzene	15.88	1.24	J N J
120-82-1	1,2,4-Trichlorobenzene	15.29	0.914	J N J
87-68-3	Hexachlorobutadiene	15.48	0.723	J N J
91-20-3	Naphthalene	15.59	1.25	J N J
	Unknown	2.21	70.3	N J

Lab Control Sample - Batch: 280-64996

Method: 8260B
Preparation: 5030B

Lab Sample ID:	LCS 280-64996/2-A	Analysis Batch:	280-65160	Instrument ID:	MSV_J
Client Matrix:	Solid	Prep Batch:	280-64996	Lab File ID:	J6292.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 g
Analysis Date:	04/30/2011 1321	Units:	ug/Kg	Final Weight/Volume:	5 mL
Prep Date:	04/30/2011 1200				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Benzene	50.0	51.7	103	76 - 120	
Bromodichloromethane	50.0	49.6	99	74 - 125	
Carbon tetrachloride	50.0	50.7	101	69 - 147	
Chlorobenzene	50.0	49.7	99	74 - 120	
Chloroform	50.0	50.2	100	77 - 125	
1,3-Dichlorobenzene	50.0	50.2	100	74 - 120	
1,1-Dichloroethane	50.0	48.0	96	74 - 120	
trans-1,2-Dichloroethene	50.0	50.6	101	80 - 127	
1,1-Dichloroethene	50.0	53.4	107	77 - 143	
1,2-Dichloropropane	50.0	48.2	96	74 - 120	
Ethylbenzene	50.0	50.8	102	78 - 120	
Methylene Chloride	50.0	54.6	109	76 - 137	
Tetrachloroethene	50.0	50.9	102	71 - 120	
Toluene	50.0	50.3	101	72 - 120	
1,1,1-Trichloroethane	50.0	48.4	97	67 - 143	
Trichloroethene	50.0	50.1	100	78 - 120	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	94	58 - 140
Toluene-d8 (Surr)	120	80 - 126
4-Bromofluorobenzene (Surr)	99	76 - 127
Dibromofluoromethane (Surr)	96	75 - 121

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-64996

Method: 8260B
Preparation: 5030B

MS Lab Sample ID:	280-15154-1	Analysis Batch:	280-65160	Instrument ID:	MSV_J
Client Matrix:	Solid	Prep Batch:	280-64996	Lab File ID:	J6295.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5.943 g
Analysis Date:	04/30/2011 1506			Final Weight/Volume:	5 mL
Prep Date:	04/30/2011 1200				
Leach Date:	N/A				

MSD Lab Sample ID:	280-15154-1	Analysis Batch:	280-65160	Instrument ID:	MSV_J
Client Matrix:	Solid	Prep Batch:	280-64996	Lab File ID:	J6296.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5.735 g
Analysis Date:	04/30/2011 1529			Final Weight/Volume:	5 mL
Prep Date:	04/30/2011 1200				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Benzene	107	101	76 - 120	2	20		
Bromodichloromethane	103	101	74 - 125	2	20		
Carbon tetrachloride	104	98	69 - 147	3	20		
Chlorobenzene	98	100	74 - 120	5	20		
Chloroform	101	98	77 - 125	0	20		
1,3-Dichlorobenzene	103	101	74 - 120	2	20		
1,1-Dichloroethane	98	93	74 - 120	1	20		
trans-1,2-Dichloroethene	101	94	80 - 127	4	20		
1,1-Dichloroethene	103	96	77 - 143	3	20		
1,2-Dichloropropane	101	98	74 - 120	0	20		
Ethylbenzene	101	98	78 - 120	1	20		
Methylene Chloride	107	103	76 - 137	0	21		
Tetrachloroethene	98	99	71 - 120	5	20		
Toluene	103	99	72 - 120	1	20		
1,1,1-Trichloroethane	99	94	67 - 143	1	20		
Trichloroethene	109	107	78 - 120	2	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	92	95	58 - 140
Toluene-d8 (Surr)	112	120	80 - 126
4-Bromofluorobenzene (Surr)	97	98	76 - 127
Dibromofluoromethane (Surr)	92	94	75 - 121

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Method Blank - Batch: 280-64722

Method: 8270C
Preparation: 3550C

Lab Sample ID:	MB 280-64722/1-A	Analysis Batch:	280-65289	Instrument ID:	MSS_B
Client Matrix:	Solid	Prep Batch:	280-64722	Lab File ID:	B4618.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.8 g
Analysis Date:	05/02/2011 1453	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	04/28/2011 2352			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acenaphthene	10	U	10	320
Acenaphthylene	17	U	17	320
Anthracene	17	U	17	320
Benzo[a]anthracene	19	U	19	320
Benzo[a]pyrene	19	U	19	320
Benzo[b]fluoranthene	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	64	U	64	320
2-Chloronaphthalene	9.7	U	9.7	320
2-Chlorophenol	20	U	20	320
4-Chlorophenyl phenyl ether	20	U	20	320
Chrysene	26	U	26	320
Dibenz(a,h)anthracene	19	U	19	320
Dibenzofuran	19	U	19	320
1,2-Dichlorobenzene	21	U	21	320
1,3-Dichlorobenzene	12	U	12	320
1,4-Dichlorobenzene	13	U	13	320
3,3'-Dichlorobenzidine	88	U	88	640
2,4-Dichlorophenol	9.7	U	9.7	320
Diethyl phthalate	25	U	25	320
2,4-Dimethylphenol	64	U	64	320
Dimethyl phthalate	22	U	22	320
Di-n-butyl phthalate	28	U	28	320
4,6-Dinitro-2-methylphenol	320	U	320	640
2,4-Dinitrophenol	320	U	320	800
2,4-Dinitrotoluene	64	U	64	320
2,6-Dinitrotoluene	27	U	27	320
Di-n-octyl phthalate	14	U	14	320
Fluoranthene	35	U	35	320
Fluorene	18	U	18	320
Hexachlorobenzene	28	U	28	320
Hexachlorobutadiene	9.7	U	9.7	320
Hexachlorocyclopentadiene	49	U	49	320
Hexachloroethane	21	U	21	320
Indeno[1,2,3-cd]pyrene	21	U	21	320
Isophorone	17	U	17	320

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Method Blank - Batch: 280-64722

Method: 8270C
Preparation: 3550C

Lab Sample ID:	MB 280-64722/1-A	Analysis Batch:	280-65289	Instrument ID:	MSS_B
Client Matrix:	Solid	Prep Batch:	280-64722	Lab File ID:	B4618.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.8 g
Analysis Date:	05/02/2011 1453	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	04/28/2011 2352			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
2-Methylnaphthalene	19	U	19	320
2-Methylphenol	13	U	13	320
3 & 4 Methylphenol	32	U	32	320
Naphthalene	30	U	30	320
2-Nitroaniline	49	U	49	320
3-Nitroaniline	71	U	71	320
4-Nitroaniline	71	U	71	320
Nitrobenzene	21	U	21	320
2-Nitrophenol	9.7	U	9.7	320
4-Nitrophenol	94	U	94	640
N-Nitrosodi-n-propylamine	30	U	30	320
N-Nitrosodiphenylamine	20	U	20	320
Pentachlorophenol	320	U	320	640
Phenanthrene	17	U	17	320
Phenol	18	U	18	320
Pyrene	12	U	12	320
1,2,4-Trichlorobenzene	27	U	27	320
2,4,5-Trichlorophenol	9.7	U	9.7	320
2,4,6-Trichlorophenol	9.7	U	9.7	320

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	74	50 - 120
2-Fluorophenol	71	53 - 120
Nitrobenzene-d5	73	50 - 120
Phenol-d5	73	52 - 120
Terphenyl-d14	80	55 - 120
2,4,6-Tribromophenol	75	51 - 120

Method Blank TICs- Batch: 280-64722

Cas Number	Analyte	RT	Est. Result	Qual
	Unknown	2.84	132	N J
	Unknown	2.90	139	N J
	Unknown	3.04	144	N J
	Unknown	3.13	2750	N J

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Lab Control Sample - Batch: 280-64722

Method: 8270C
Preparation: 3550C

Lab Sample ID:	LCS 280-64722/2-A	Analysis Batch:	280-65289	Instrument ID:	MSS_B
Client Matrix:	Solid	Prep Batch:	280-64722	Lab File ID:	B4619.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.5 g
Analysis Date:	05/02/2011 1512	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	04/28/2011 2352			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acenaphthene	2540	2210	87	52 - 120	
Anthracene	2540	2400	94	57 - 120	
Carbazole	2540	2340	92	54 - 120	
4-Chloro-3-methylphenol	2540	2310	91	57 - 120	
2-Chlorophenol	2540	2230	88	53 - 120	
1,4-Dichlorobenzene	2540	2000	79	46 - 120	
2,4-Dinitrotoluene	2540	2420	95	53 - 120	
2-Methylnaphthalene	2540	2150	85	55 - 120	
2-Methylphenol	2540	2130	84	51 - 120	
4-Nitrophenol	2540	2490	98	41 - 120	
N-Nitrosodi-n-propylamine	2540	2150	85	51 - 120	
Pentachlorophenol	2540	2290	90	30 - 120	
Phenol	2540	2170	85	54 - 120	
Pyrene	2540	2360	93	50 - 120	
1,2,4-Trichlorobenzene	2540	2020	79	50 - 120	
2,4,6-Trichlorophenol	2540	2380	94	50 - 120	

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	86	50 - 120
2-Fluorophenol	84	53 - 120
Nitrobenzene-d5	84	50 - 120
Phenol-d5	85	52 - 120
Terphenyl-d14	94	55 - 120
2,4,6-Tribromophenol	92	51 - 120

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-64722

Method: 8270C
Preparation: 3550C

MS Lab Sample ID:	280-15154-7	Analysis Batch:	280-65289	Instrument ID:	MSS_B
Client Matrix:	Solid	Prep Batch:	280-64722	Lab File ID:	B4633.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.7 g
Analysis Date:	05/02/2011 1946			Final Weight/Volume:	1000 uL
Prep Date:	04/28/2011 2352			Injection Volume:	0.5 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-15154-7	Analysis Batch:	280-65289	Instrument ID:	MSS_B
Client Matrix:	Solid	Prep Batch:	280-64722	Lab File ID:	B4634.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.7 g
Analysis Date:	05/02/2011 2006			Final Weight/Volume:	1000 uL
Prep Date:	04/28/2011 2352			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acenaphthene	85	85	52 - 120	4	30		
Anthracene	93	93	57 - 120	2	30		
Carbazole	89	90	54 - 120	3	30		
4-Chloro-3-methylphenol	91	91	57 - 120	3	30		
2-Chlorophenol	81	79	53 - 120	5	30		
1,4-Dichlorobenzene	72	73	46 - 120	3	30		
2,4-Dinitrotoluene	94	95	53 - 120	3	30		
2-Methylnaphthalene	80	79	55 - 120	5	30		
2-Methylphenol	81	78	51 - 120	7	30		
4-Nitrophenol	96	101	41 - 120	1	30		
N-Nitrosodi-n-propylamine	80	78	51 - 120	6	30		
Pentachlorophenol	85	87	30 - 120	1	30		
Phenol	79	78	54 - 120	5	30		
Pyrene	92	91	50 - 120	5	38		
1,2,4-Trichlorobenzene	73	74	50 - 120	2	30		
2,4,6-Trichlorophenol	92	93	50 - 120	1	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
2-Fluorobiphenyl	84	84	50 - 120
2-Fluorophenol	76	77	53 - 120
Nitrobenzene-d5	78	79	50 - 120
Phenol-d5	80	79	52 - 120
Terphenyl-d14	92	92	55 - 120
2,4,6-Tribromophenol	92	93	51 - 120

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Method Blank - Batch: 280-64672

Method: 6010B
Preparation: 3050B

Lab Sample ID:	MB 280-64672/1-A	Analysis Batch:	280-65487	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-64672	Lab File ID:	26a050311.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	05/03/2011 1731	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	05/02/2011 0730				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Aluminum	1.6	U	1.6	5.0
Arsenic	0.66	U	0.66	1.0
Barium	0.215	B	0.076	0.50
Beryllium	0.033	U	0.033	0.20
Boron	0.98	U	0.98	2.0
Cadmium	0.041	U	0.041	0.20
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

Method Blank - Batch: 280-64672

Method: 6010B
Preparation: 3050B

Lab Sample ID:	MB 280-64672/1-A	Analysis Batch:	280-65717	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-64672	Lab File ID:	26a050411.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	05/04/2011 1420	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	05/02/2011 0730				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Antimony	0.38	U	0.38	0.60

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Lab Control Sample - Batch: 280-64672

Method: 6010B
Preparation: 3050B

Lab Sample ID:	LCS 280-64672/2-A	Analysis Batch:	280-65487	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-64672	Lab File ID:	26a050311.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	05/03/2011 1734	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	05/02/2011 0730				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	200	181.8	91	82 - 116	
Arsenic	100	97.86	98	85 - 110	
Barium	200	208.6	104	87 - 112	
Beryllium	5.00	5.06	101	84 - 114	
Boron	100	98.13	98	81 - 110	
Cadmium	10.0	10.48	105	87 - 110	
Calcium	5000	5101	102	82 - 114	
Chromium	20.0	18.64	93	84 - 114	
Cobalt	50.0	48.65	97	87 - 110	
Copper	25.0	25.71	103	88 - 110	
Iron	100	104.7	105	87 - 120	
Lead	50.0	48.93	98	86 - 110	
Magnesium	5000	4871	97	90 - 110	
Manganese	50.0	48.93	98	88 - 110	
Molybdenum	100	97.10	97	86 - 110	
Nickel	50.0	46.70	93	87 - 110	
Potassium	5000	4996	100	89 - 110	
Selenium	200	195.0	98	83 - 110	
Silicon	1000	225.8	23	10 - 70	
Silver	5.00	4.67	93	87 - 114	
Sodium	5000	5078	102	90 - 112	
Vanadium	50.0	48.76	98	88 - 110	
Zinc	50.0	48.09	96	76 - 114	

Lab Control Sample - Batch: 280-64672

Method: 6010B
Preparation: 3050B

Lab Sample ID:	LCS 280-64672/2-A	Analysis Batch:	280-65717	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-64672	Lab File ID:	26a050411.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	05/04/2011 1422	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	05/02/2011 0730				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Antimony	50.0	49.63	99	82 - 110	

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Matrix Spike - Batch: 280-64672

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-15154-1	Analysis Batch:	280-65717	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-64672	Lab File ID:	26a050411.asc
Dilution:	2.0	Leach Batch:	N/A	Initial Weight/Volume:	1.13 g
Analysis Date:	05/04/2011 1429	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	05/02/2011 0730				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	3770		181	5500	954	50 - 200	4
Antimony	0.69	U	45.3	27.12	60	20 - 200	
Arsenic	1.2	U	90.6	76.90	85	76 - 111	
Barium	53.5		181	221.6	93	52 - 159	
Beryllium	0.060	U	4.53	3.49	77	72 - 105	
Boron	1.8	U	90.6	76.11	84	75 - 107	
Cadmium	0.093	B	9.06	8.46	92	40 - 130	
Calcium	5650		4530	12310	147	43 - 165	
Chromium	4.0		18.1	19.86	87	70 - 200	
Cobalt	11.6		45.3	51.49	88	72 - 106	
Copper	16.0		22.6	36.72	92	37 - 187	
Iron	27800		90.6	32060	4704	70 - 200	4
Lead	1.6		45.3	41.79	89	70 - 200	
Magnesium	4260		4530	9065	106	64 - 145	
Manganese	307		45.3	423.6	258	40 - 200	4
Molybdenum	0.63	B	90.6	77.44	85	75 - 103	
Nickel	7.6		45.3	45.59	84	61 - 126	
Potassium	463	B	4530	4563	91	56 - 172	
Selenium	1.7	B	181	154.0	84	76 - 104	
Silicon	195		906	471.3	31	20 - 200	
Silver	0.29	U	4.53	3.89	86	75 - 141	
Sodium	400		4530	4866	99	78 - 111	
Vanadium	75.5		45.3	129.9	120	50 - 169	
Zinc	46.1		45.3	89.27	95	70 - 200	

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Duplicate - Batch: 280-64672

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-15154-1	Analysis Batch:	280-65717	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-64672	Lab File ID:	26a050411.asc
Dilution:	2.0	Leach Batch:	N/A	Initial Weight/Volume:	1.07 g
Analysis Date:	05/04/2011 1431	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	05/02/2011 0730				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Aluminum	3770		4014	6	40	
Antimony	0.69	U	0.73	NC	40	U
Arsenic	1.2	U	1.3	NC	30	U
Barium	53.5		64.05	18	30	
Beryllium	0.060	U	0.063	NC	30	U
Boron	1.8	U	1.9	NC	30	U
Cadmium	0.093	B	0.0823	12	30	B
Calcium	5650		5988	6	30	
Chromium	4.0		3.67	10	40	
Cobalt	11.6		12.47	7	30	
Copper	16.0		16.89	6	30	
Iron	27800		30050	8	40	
Lead	1.6		1.97	20	40	
Magnesium	4260		4526	6	30	
Manganese	307		359.7	16	40	
Molybdenum	0.63	B	0.50	NC	30	U
Nickel	7.6		7.77	2	30	
Potassium	463	B	509.8	10	40	B
Selenium	1.7	B	1.6	NC	30	U
Silicon	195		204.9	5	40	
Silver	0.29	U	0.31	NC	30	U
Sodium	400		419.8	5	30	
Vanadium	75.5		83.04	9	30	
Zinc	46.1		49.43	7	40	

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Method Blank - Batch: 280-64682

Method: 7471A
Preparation: 7471A

Lab Sample ID:	MB 280-64682/1-A	Analysis Batch:	280-65262	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-64682	Lab File ID:	110502AA.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	05/02/2011 1523	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	05/02/2011 1158				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	0.0055	U	0.0055	0.017

Lab Control Sample - Batch: 280-64682

Method: 7471A
Preparation: 7471A

Lab Sample ID:	LCS 280-64682/2-A	Analysis Batch:	280-65262	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-64682	Lab File ID:	110502AA.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	05/02/2011 1525	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	05/02/2011 1158				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.417	0.413	99	87 - 111	

Matrix Spike - Batch: 280-64682

Method: 7471A
Preparation: 7471A

Lab Sample ID:	280-15154-4	Analysis Batch:	280-65262	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-64682	Lab File ID:	110502AA.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.68 g
Analysis Date:	05/02/2011 1544	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	05/02/2011 1158				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.0099	B	0.395	0.385	95	87 - 111	

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Duplicate - Batch: 280-64682

Method: 7471A
Preparation: 7471A

Lab Sample ID:	280-15154-4	Analysis Batch:	280-65262	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-64682	Lab File ID:	110502AA.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.61 g
Analysis Date:	05/02/2011 1541	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	05/02/2011 1158				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Mercury	0.0099	B	0.0106	6	20	B

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Method Blank - Batch: 280-65429

Method: 353.2
Preparation: N/A

Lab Sample ID:	MB 280-65371/2-A	Analysis Batch:	280-65429	Instrument ID:	WC_Alp 2
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0503ANXN
Dilution:	1.0	Leach Batch:	280-65371	Initial Weight/Volume:	1.0 mL
Analysis Date:	05/03/2011 1544	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	05/03/2011 1402				

Analyte	Result	Qual	MDL	RL
Nitrate Nitrite as N-Soluble	0.35	U	0.35	0.74

Method Reporting Limit Check - Batch: 280-65429

Method: 353.2
Preparation: N/A

Lab Sample ID:	MRL 280-65429/22	Analysis Batch:	280-65429	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0503ANXN
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	05/03/2011 1153	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate Nitrite as N-Soluble	0.100	0.0721	72	50 - 150	B

Lab Control Sample - Batch: 280-65429

Method: 353.2
Preparation: N/A

Lab Sample ID:	LCS 280-65371/1-A	Analysis Batch:	280-65429	Instrument ID:	WC_Alp 2
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0503ANXN
Dilution:	1.0	Leach Batch:	280-65371	Initial Weight/Volume:	1.0 mL
Analysis Date:	05/03/2011 1546	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	05/03/2011 1402				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate Nitrite as N-Soluble	49.5	47.63	96	90 - 110	

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Matrix Spike - Batch: 280-65429

Method: 353.2
Preparation: N/A

Lab Sample ID:	280-15154-1	Analysis Batch:	280-65429	Instrument ID:	WC_Alp 2
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0503ANXN
Dilution:	1.0	Leach Batch:	280-65371	Initial Weight/Volume:	1.0 mL
Analysis Date:	05/03/2011 1550	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	05/03/2011 1402				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Nitrate Nitrite as N-Soluble	0.36	U	40.1	40.22	100	90 - 110	

Duplicate - Batch: 280-65429

Method: 353.2
Preparation: N/A

Lab Sample ID:	280-15154-1	Analysis Batch:	280-65429	Instrument ID:	WC_Alp 2
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0503ANXN
Dilution:	1.0	Leach Batch:	280-65371	Initial Weight/Volume:	1.0 mL
Analysis Date:	05/03/2011 1549	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	05/03/2011 1402				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Nitrate Nitrite as N-Soluble	0.36	U	0.37	NC	10	U

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-65000

Method: 9045C
Preparation: N/A

LCS Lab Sample ID:	LCS 280-65000/4	Analysis Batch:	280-65000	Instrument ID:	WC_pH Probe
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/29/2011 1201	Units:	SU	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-65000/5	Analysis Batch:	280-65000	Instrument ID:	WC_pH Probe
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/29/2011 1201	Units:	SU	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
pH adj. to 25 deg C-Soluble	100	100	97 - 103	0	5		

Duplicate - Batch: 280-65000

Method: 9045C
Preparation: N/A

Lab Sample ID:	280-15154-1	Analysis Batch:	280-65000	Instrument ID:	WC_pH Probe
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	280-64771	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/29/2011 1252	Units:	SU	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	04/29/2011 0931				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
pH adj. to 25 deg C-Soluble	9.30	9.290	0.1	5	

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Method Blank - Batch: 280-65500

Method: 9056M
Preparation: N/A

Lab Sample ID:	MB 280-65310/2-A	Analysis Batch:	280-65500	Instrument ID:	WC_IC3
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	114.TXT
Dilution:	1.0	Leach Batch:	280-65310	Initial Weight/Volume:	1.0 mL
Analysis Date:	05/03/2011 1329	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	05/03/2011 1029				

Analyte	Result	Qual	MDL	RL
Chloride-Soluble	2.0	U	2.0	5.0
Bromide-Soluble	0.38	U	0.38	2.0
Sulfate-Soluble	1.7	U	1.7	5.0
Fluoride-Soluble	0.81	U	0.81	5.0

Method Reporting Limit Check - Batch: 280-65500

Method: 9056M
Preparation: N/A

Lab Sample ID:	MRL 280-65500/3	Analysis Batch:	280-65500	Instrument ID:	WC_IC3
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	112.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	05/03/2011 1256	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chloride-Soluble	1.00	1.20	120	50 - 150	B
Bromide-Soluble	0.200	0.248	124	50 - 150	B
Sulfate-Soluble	1.00	1.10	110	50 - 150	B
Fluoride-Soluble	0.200	0.234	117	50 - 150	B

Lab Control Sample - Batch: 280-65500

Method: 9056M
Preparation: N/A

Lab Sample ID:	LCS 280-65310/1-A	Analysis Batch:	280-65500	Instrument ID:	WC_IC3
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	113.TXT
Dilution:	1.0	Leach Batch:	280-65310	Initial Weight/Volume:	1.0 mL
Analysis Date:	05/03/2011 1313	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	05/03/2011 1029				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chloride-Soluble	248	252.0	102	90 - 110	
Bromide-Soluble	49.5	52.05	105	90 - 110	
Sulfate-Soluble	248	257.8	104	90 - 110	
Fluoride-Soluble	49.5	50.63	102	90 - 110	

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Matrix Spike - Batch: 280-65500

Method: 9056M
Preparation: N/A

Lab Sample ID:	280-15154-1	Analysis Batch:	280-65500	Instrument ID:	WC_IC3
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	117.TXT
Dilution:	1.0	Leach Batch:	280-65310	Initial Weight/Volume:	1.0 mL
Analysis Date:	05/03/2011 1436	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	05/03/2011 1029				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Chloride-Soluble	3.2	B	253	262.8	103	80 - 120	
Bromide-Soluble	0.39	U	50.7	52.64	104	80 - 120	
Sulfate-Soluble	4.2	B	253	266.8	104	80 - 120	
Fluoride-Soluble	0.83	U	50.7	46.29	91	80 - 120	

Duplicate - Batch: 280-65500

Method: 9056M
Preparation: N/A

Lab Sample ID:	280-15154-1	Analysis Batch:	280-65500	Instrument ID:	WC_IC3
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	116.TXT
Dilution:	1.0	Leach Batch:	280-65310	Initial Weight/Volume:	1.0 mL
Analysis Date:	05/03/2011 1419	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	05/03/2011 1029				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Chloride-Soluble	3.2	B	3.77	18	15	B M
Bromide-Soluble	0.39	U	0.40	NC	15	U
Sulfate-Soluble	4.2	B	4.42	5	15	B
Fluoride-Soluble	0.83	U	0.84	NC	15	U

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Method Blank - Batch: 280-65501

Method: 9056M
Preparation: N/A

Lab Sample ID:	MB 280-65310/2-A	Analysis Batch:	280-65501	Instrument ID:	WC_IC3
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	114.TXT
Dilution:	1.0	Leach Batch:	280-65310	Initial Weight/Volume:	1.0 mL
Analysis Date:	05/03/2011 1329	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	05/03/2011 1029				

Analyte	Result	Qual	MDL	RL
Nitrate as N-Soluble	0.31	U	0.31	2.5
Nitrite as N-Soluble	0.33	U	0.33	2.5
Orthophosphate as P-Soluble	1.2	U	1.2	5.0

Method Reporting Limit Check - Batch: 280-65501

Method: 9056M
Preparation: N/A

Lab Sample ID:	MRL 280-65501/3	Analysis Batch:	280-65501	Instrument ID:	WC_IC3
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	112.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	05/03/2011 1256	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate as N-Soluble	0.200	0.223	112	50 - 150	B
Nitrite as N-Soluble	0.200	0.206	103	50 - 150	B
Orthophosphate as P-Soluble	0.200	0.192	96	50 - 150	B

Lab Control Sample - Batch: 280-65501

Method: 9056M
Preparation: N/A

Lab Sample ID:	LCS 280-65310/1-A	Analysis Batch:	280-65501	Instrument ID:	WC_IC3
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	113.TXT
Dilution:	1.0	Leach Batch:	280-65310	Initial Weight/Volume:	1.0 mL
Analysis Date:	05/03/2011 1313	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	05/03/2011 1029				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate as N-Soluble	49.5	52.00	105	90 - 110	
Nitrite as N-Soluble	49.5	50.32	102	90 - 110	
Orthophosphate as P-Soluble	49.5	52.70	106	90 - 110	

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Matrix Spike - Batch: 280-65501

Method: 9056M
Preparation: N/A

Lab Sample ID:	280-15154-1	Analysis Batch:	280-65501	Instrument ID:	WC_IC3
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	117.TXT
Dilution:	1.0	Leach Batch:	280-65310	Initial Weight/Volume:	1.0 mL
Analysis Date:	05/03/2011 1436	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	05/03/2011 1029				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Nitrate as N-Soluble	0.46	B	50.7	51.59	101	80 - 120	
Nitrite as N-Soluble	0.34	U	50.7	50.80	100	80 - 120	
Orthophosphate as P-Soluble	1.3	U	50.7	53.84	106	80 - 120	

Duplicate - Batch: 280-65501

Method: 9056M
Preparation: N/A

Lab Sample ID:	280-15154-1	Analysis Batch:	280-65501	Instrument ID:	WC_IC3
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	116.TXT
Dilution:	1.0	Leach Batch:	280-65310	Initial Weight/Volume:	1.0 mL
Analysis Date:	05/03/2011 1419	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	05/03/2011 1029				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Nitrate as N-Soluble	0.46	B	0.522	13	15	B
Nitrite as N-Soluble	0.34	U	0.34	NC	15	U
Orthophosphate as P-Soluble	1.3	U	1.3	NC	15	U

Client: Washington Closure Hanford

Job Number: 280-15154-1
Sdg Number: JP0172

Duplicate - Batch: 280-64762

Method: D-2216
Preparation: N/A

Lab Sample ID:	280-15154-1	Analysis Batch:	280-64762	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:	04/29/2011 0859	Units:	%	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Moisture	2.3	2.5	7	20	

4-6, 3-8, 4-8 ac

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-075-237	Page 1 of 12

Collector: K Lucas	Company Contact: J Kessner; Telephone No.: 509-3754688	Project Coordinator: KESSNER, JH	Price Code: ~~8L~~ 8B 4/22/11; Data Turnaround: ~~21~~ 7 Days 4/26/11
Project Designation: 100-D/DR Burial Grounds & Remaining Sites - Soil Full Prot	Sampling Location: 118-D-3:1 Excavation Area Re-Verification	SAF No.: RC-~~075~~ 074 MT 4/28/11 JK	
Ice Chest No.: WCH-11-014	Field Logbook No.: EL-1607-10; COA: R118D32000	Method of Shipment: FED Ex	4/22/11
Shipped To: TestAmerica Incorporated, ~~Richland~~ DENVER 4/22/11	Offsite Property No.: N/A	Bill of Lading/Air Bill No.: 797034515978	

POSSIBLE SAMPLE HAZARDS/REMARKS

Potential Rad < DOT

Special Handling and/or Storage

Cool 4 Deg C

Preservation	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	None	None	None	None	None
Type of Container	G/P	G/P	G/P	G	aG	G/P	G/P	G/P	G/P	G/P
No. of Container(s)	1	1	~~1~~ 0 4/26/11	1	1	1	0	0	0	0
Volume	~~60mL~~ 125ml 4/26/11	60mL	~~60mL~~ 125ml 4/26/11	60mL	125mL	500mL	500mL	500mL	500mL	500mL
SAMPLE ANALYSIS	See item (1) in Special Instructions.	Chromium Hex - 7196 4/22/11	IC Anions - 9056 Modified; NO2/NO3 - 353.2; pH (Soil) - 9045	VOA - 8260A (TCL)	Semi-VOA - 8270A (TCL)	See item (2) in Special Instructions.	Carbon-14; Tritium - H3	Nickel-63; Strontium-89,90 -- Total Sr 4/22/11	Isotopic Plutonium	Isotopic Uranium

Sample No.	Matrix *	Sample Date	Sample Time									RCF		
J1HK84	SOIL	4-26-11	1250	X		X	X	X				27941		D22-8
J1HK85	SOIL	4-26-11	1255	X		X	X	X						S21-7
J1HK86	SOIL	4-26-11	1300	X		X	X	X						S22-
J1HK87	SOIL	4-26-11	1400	X		X	X	X						S22-
J1HK88	SOIL	4-26-11	1305	X		X	X	X						FS-1

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

Relinquished By/Removed From	Date/Time	Received By/~~Stored In~~	Date/Time
K. Lucas Kevin Lucas	4-26-11 1440	DWOOLFERY	4/26/11 1440
DWOOLFERY	4/26/11 1700	A. Freier A. Freier	4-26-11 1700
A. Freier A. Freier WCH	4-27-11 1000	FED EX	
			4/28/11 930

SPECIAL INSTRUCTIONS

None

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

(2) Gamma Spec (Client List) {Americium-241, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}

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

REVIEWED BY JEB DATE 4-27-11

JP0172

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

WCH-EE-011

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-075-237	Page 2 of 2

Collector: K Lucas	Company Contact: J Kessner	Telephone No.: 509-3754688	Project Coordinator: KESSNER, JH
Price Code: ~~8L~~ 8B D 4/22/11	Data Turnaround: ~~21~~ 7 Days D 4/22/11		
Project Designation: 100-D/DR Burial Grounds & Remaining Sites - Soil Full Prot	Sampling Location: 118-D-3:1 Excavation Area Re-Verification	SAF No. D 4/26/11 RC-~~075~~ 074	
Ice Chest No.: WCH-11-014	Field Logbook No.: EL-1607-10	COA: R118D32000	Method of Shipment: FED EX
Shipped To: D 4/22/11 TestAmerica Incorporated, ~~Richland~~ DENVER	Offsite Property No.: N/A		Bill of Lading/Air Bill No.: 797034515978

POSSIBLE SAMPLE HAZARDS/REMARKS

Potential Rad < DOT

Special Handling and/or Storage

Cool 4 Deg C

Preservation	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	None	None	None	None	None
Type of Container	G/P	G/P	G/P	G	aG	G/P	G/P	G/P	G/P	G/P
No. of Container(s)	1	1	~~1~~ 0 D 4/26/11	1	1	1	0	0	0	0
Volume	~~60mL~~ 125mL D 4/26/11	60mL	~~60mL~~ 125mL D 4/26/11	60mL	125mL	500mL	500mL	500mL	500mL	500mL
SAMPLE ANALYSIS	See item (1) in Special Instructions.	Chromium Hex - 7196	IC Anions - 9056 Modified; NO2/NO3 - 353.2; pH (Soil) - 9045	VOA - 8260A (TCL)	Semi-VOA - 8270A (TCL)	See item (2) in Special Instructions.	Carbon-14; Tritium - H3	Nickel-63; Strontium-89,90 - Total Sr	Isotopic Plutonium	Isotopic Uranium

Sample No.	Matrix *	Sample Date	Sample Time											
J1HK89	SOIL	4-26-11	1310	X		X	X	X				RCF		
~~J1HK90~~ D 4/26/11	SOIL			X		X	X	X				27941		FS-2
J1HK91	SOIL	4-26-11	1245	X		X	X	X						FS-8
~~J1HK92~~ D 4/26/11	SOIL													FS-12
~~J1HK93~~ D 4/26/11	SOIL													

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

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
K Lucas Kevin Lucas	4-26-11 1440	DWOOLFORD	4/26/11 1440
DWOOLFORD	4/26/11 1700	A. Freier A. Freier	1700 4-26-11
WCH A. Freier A. Freier	1000 4-27-11	FED EX	
		~~Received By/Stored In~~	4/28/11

SPECIAL INSTRUCTIONS

None

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

(2) Gamma Spec (Client List) {~~Americium~~ 241, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}

REVIEWED BY JEB DATE 4-27-11

JP0172

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

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

WCH-EE-011

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Project 28002142 ~6010TB ~Solid

Analytical Due:

Report Due: 5/5/11 (Rush Sdg TAT)

Sample Check-in List

Date/Time Received: 4/28/11 0930 GM Screen Result 12 microR/hr

Client: Washington Closure Hanford SDG #: JP0172 NA[ ] SAF #: RC-074 NA [ ]

Job Number: 15154 Chain of Custody # RC-675-237

Shipping Container ID: WCH-11-014 WCH-08-023 WCH-11-032 Air Bill # 7970 3451 5978 7970 3451 6150 7970 3451 6220

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? NA [ ] Yes [✓] No [ ]
4. Cooler Temperature °C: 4.6, 4.8, 3.8 NA [ ] 5. Vermiculite/packing materials is NA [ ] Wet [ ] Dry [✓]
6. Number of samples in shipping container: 7
7. Sample holding times exceeded? NA [ ] Yes [ ] No [✓]
8. Samples have:
   - ✓ Tape
   - ✓ Custody Seals
   - ✓ Hazard Lables
   - ✓ Appropriate Sample Lables
9. Samples are:
   - ✓ In Good Condition
   - Broken
   - Leaking
   - Have Air Bubbles

   (Only for samples requiring no head space.)
10. Sample pH taken? NA [✓] pH<2 [ ] pH>2 [ ] pH>9 [ ] **Amount HNO_3 Added** _____
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: [signature] **Date:** 4/28/11

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[ ] No action necessary; process as is.

Project Manager [signature] Date 4/29/11

From: (509) 375-4640 Origin ID: PSCA
WCH MAILROOM
WASHINGTON CLOSURE HANFORD
2620 FERMI AVE

RICHLAND, WA 99354

FedEx. Express

J111511022502 25

Ship Date: 27APR11
ActWgt: 95.0 LB
CAD: 8897843/INET3130

Delivery Address Bar Code

SHIP TO: (303) 736-0100 BILL SENDER

Sample Recieving
Test America Denver
4955 YARROW ST

ARVADA, CO 80002

Ref #
Invoice #
PO #
Dept #

1 of 3

THU - 28 APR A1
PRIORITY OVERNIGHT

TRK# 7970 3451 5978
0201

MASTER

XH WHHA

80002
CO-US
DEN

50DG3/26A8/7EFB

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WCH MAILROOM
WASHINGTON CLOSURE HANFORD
2620 FERMI AVE

RICHLAND, WA 99354

FedEx. Express

J11151102250225

Ship Date: 27APR11
ActWgt: 71.0 LB
CAD: 8897843/INET3130

Delivery Address Bar Code

Ref #
Invoice #
PO #
Dept #

SHIP TO: (303) 736-0100 BILL SENDER

Sample Recieving
Test America Denver
4955 YARROW ST

ARVADA, CO 80002

2 of 3

THU - 28 APR A1
PRIORITY OVERNIGHT

MPS# 7970 3451 6150
0263
Mstr# 7970 3451 5978 0201

XH WHHA

80002
CO-US
DEN

50DG3/26A8/7EFB

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From: (509) 375-4640 Origin ID: PSCA
WCH MAILROOM
WASHINGTON CLOSURE HANFORD
2620 FERMI AVE

RICHLAND, WA 99354

FedEx. Express

J11151102250225

Ship Date: 27APR11
ActWgt: 57.0 LB
CAD: 8897843/INET3130

Delivery Address Bar Code

Ref #
Invoice #
PO #
Dept #

SHIP TO: (303) 736-0100 BILL SENDER

Sample Recieving
Test America Denver
4955 YARROW ST

ARVADA, CO 80002

3 of 3

THU - 28 APR A1
PRIORITY OVERNIGHT

MPS# 7970 3451 6220
0263
Mstr# 7970 3451 5978 0201

80002
CO-US
DEN

XH WHHA

50DG3/26A8/7EFB

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