0095866

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 4/15/11
INITIAL/DATE

RECEIVED
APR 21 2011
EDMC

COMMENTS:

SDG JP0149 SAF RC-074

Rad only Chem only ☑ Rad & Chem

☑ Complete Partial

Waste Site: 100-D-8 Outfall Excavation Area

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 88 *Pages*

Report No.: 46201

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.
JP0149	RC-074	J1H0K9	J1D040471-1	MGJCT1AJ	9MGJCT10	1094273
		J1H0K9	J1D040471-1	MGJCT1AD	9MGJCT10	1094274
		J1H0K9	J1D040471-1	MGJCT1AF	9MGJCT10	1094275
		J1H0K9	J1D040471-1	MGJCT1AC	9MGJCT10	1094276
		J1H0K9	J1D040471-1	MGJCT1AK	9MGJCT10	1094277
		J1H0K9	J1D040471-1	MGJCT1AE	9MGJCT10	1094278
		J1H0K9	J1D040471-1	MGJCT1AG	9MGJCT10	1094279
		J1H0K9	J1D040471-1	MGJCT1AH	9MGJCT10	1094280
		J1H0K9	J1D040471-1	MGJCT1AA	9MGJCT10	1094293
		J1H0L0	J1D040471-2	MGJC41AJ	9MGJC410	1094273
		J1H0L0	J1D040471-2	MGJC41AD	9MGJC410	1094274
		J1H0L0	J1D040471-2	MGJC41AF	9MGJC410	1094275
		J1H0L0	J1D040471-2	MGJC41AC	9MGJC410	1094276
		J1H0L0	J1D040471-2	MGJC41AK	9MGJC410	1094277
		J1H0L0	J1D040471-2	MGJC41AE	9MGJC410	1094278
		J1H0L0	J1D040471-2	MGJC41AG	9MGJC410	1094279
		J1H0L0	J1D040471-2	MGJC41AH	9MGJC410	1094280
		J1H0L0	J1D040471-2	MGJC41AA	9MGJC410	1094293
		J1H0L1	J1D040471-3	MGJC61AJ	9MGJC610	1094273
		J1H0L1	J1D040471-3	MGJC61AD	9MGJC610	1094274
		J1H0L1	J1D040471-3	MGJC61AF	9MGJC610	1094275
		J1H0L1	J1D040471-3	MGJC61AC	9MGJC610	1094276
		J1H0L1	J1D040471-3	MGJC61AK	9MGJC610	1094277
		J1H0L1	J1D040471-3	MGJC61AE	9MGJC610	1094278
		J1H0L1	J1D040471-3	MGJC61AG	9MGJC610	1094279
		J1H0L1	J1D040471-3	MGJC61AH	9MGJC610	1094280

Report No.: 46201

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.
JP0149	RC-074	J1H0L1	J1D040471-3	MGJC61AA	9MGJC610	1094293
		J1H0L2	J1D040471-4	MGJC81AJ	9MGJC810	1094273
		J1H0L2	J1D040471-4	MGJC81AD	9MGJC810	1094274
		J1H0L2	J1D040471-4	MGJC81AF	9MGJC810	1094275
		J1H0L2	J1D040471-4	MGJC81AC	9MGJC810	1094276
		J1H0L2	J1D040471-4	MGJC81AK	9MGJC810	1094277
		J1H0L2	J1D040471-4	MGJC81AE	9MGJC810	1094278
		J1H0L2	J1D040471-4	MGJC81AG	9MGJC810	1094279
		J1H0L2	J1D040471-4	MGJC81AH	9MGJC810	1094280
		J1H0L2	J1D040471-4	MGJC81AA	9MGJC810	1094293

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

Washington Hanford Closure
2620 Fermi Avenue
Richland, WA 99354

TestAmerica Laboratories, Inc.

April 14, 2011

Attention: Joan Kessner

SAF Number	:	RC-074
Date SDG Closed	:	April 4, 2011
Number of Samples	:	Four (4)
Sample Type	:	Soil
SDG Number	:	JP0149
Data Deliverable	:	7– Day / Summary

CASE NARRATIVE

I. Introduction

On April 4, 2011 four 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
J1H0K9	MGJCT	SOIL	02/01/11
J1H0L0	MGJC4	SOIL	02/01/11
J1H0L1	MGJC6	SOIL	02/01/11
J1H0L2	MGJC8	SOIL	02/01/11

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
Technetium-99 by method RL-LSC-013
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 (J1H0K9) results are within contractual requirements.

Uranium 234, 235 and 238 by method RL-ALP-015:
The LCS, batch blank, samples and sample duplicate (J1H0L0) results are within contractual requirements.

Gas Proportional Counting
Strontium-90 by method RL-GPC-003 :
The LCS, batch blank, samples and sample duplicate (J1H0L0) results are within contractual requirements.

Gamma Spectroscopy
Gamma Spec by method RL-GAM-001 :
There was insufficient volume for a duplicate. Sample J1H0K9 was recounted on a different detector for the duplicate (J1H0K9 DUP). The CRDL was not met on some analytes due to reduced count time. The count time was reduced to meet the priority turn around time. Except as noted, the LCS, batch blank, samples and sample duplicate (J1H0K9) results are within contractual requirements.

Liquid Scintillation Counting
Technetium-99 by method RL-LSC-013 :

The LCS, batch blank, samples, sample duplicate (J1H0K9) and sample matrix spike (J1H0K9) results are within contractual requirements.

Tritium by method RL-LSC-005 :
The LCS, batch blank, samples and sample duplicate (J1H0L2) results are within contractual requirements.

Carbon-14 by method RL-LSC-008 :
The LCS, batch blank, samples and sample duplicate (J1H0L1) results are within contractual requirements.

Nickel-63 by method RL-LCS-017 :
The LCS, batch blank, samples and sample duplicate (J1H0L1) results are within contractual requirements.

Chemical Analysis
Hexavalent Chromium by EPA method 7196A
The matrix spike recovered low at 69%. The post digestive matrix spike and the insoluble matrix spike recovered within the acceptance limits. This implies a reducing capacity in the sample, but not enough to exhaust the more copious insoluble matrix spike. Except as noted; the LCS, batch blank, samples, sample duplicate (J1H0K9) and the sample matrix spike (J1H0K9) 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: 14-Apr-11

TestAmerica TARL

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

Report No. : 46201

SDG No: JP0149

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDC or MDA	CRDL	RPD
1094275 PUISO_PLATE_AEA									
J1H0K9									
	MGJCT1AF	PU-238	0.00E+00 +- 5.9E-02	U	pCi/g	97%	1.11E-01	1.00E+00	
		PU239/40	0.00E+00 +- 5.9E-02	U	pCi/g	97%	1.11E-01	1.00E+00	
J1H0K9 DUP									
	MGJCT1AM	PU-238	3.48E-02 +- 7.0E-02	U	pCi/g	99%	1.30E-01	1.00E+00	200.0
		PU239/40	6.95E-02 +- 9.9E-02	U	pCi/g	99%	1.30E-01	1.00E+00	200.0
J1H0L0									
	MGJC41AF	PU-238	0.00E+00 +- 8.7E-02	U	pCi/g	77%	1.63E-01	1.00E+00	
		PU239/40	-2.18E-03 +- 8.7E-02	U	pCi/g	77%	1.63E-01	1.00E+00	
J1H0L1									
	MGJC61AF	PU-238	-2.50E-03 +- 1.0E-01	U	pCi/g	58%	1.87E-01	1.00E+00	
		PU239/40	-2.50E-03 +- 1.0E-01	U	pCi/g	58%	1.87E-01	1.00E+00	
J1H0L2									
	MGJC81AF	PU-238	0.00E+00 +- 7.5E-02	U	pCi/g	100%	1.41E-01	1.00E+00	
		PU239/40	3.77E-02 +- 7.6E-02	U	pCi/g	100%	1.41E-01	1.00E+00	
1094276 UISO_IE_PLATE_AEA									
J1H0K9									
	MGJCT1AC	U-234	4.27E-01 +- 2.3E-01		pCi/g	105%	1.59E-01	1.00E+00	
		U-235	-1.11E-02 +- 5.0E-02	U	pCi/g	105%	1.43E-01	1.00E+00	
		U-238	4.93E-01 +- 2.5E-01		pCi/g	105%	1.78E-01	1.00E+00	
J1H0L0									
	MGJC41AC	U-234	2.90E-01 +- 2.0E-01		pCi/g	84%	2.09E-01	1.00E+00	
		U-235	-7.23E-03 +- 5.8E-02	U	pCi/g	84%	1.45E-01	1.00E+00	
		U-238	4.43E-01 +- 2.5E-01		pCi/g	84%	1.86E-01	1.00E+00	
J1H0L0 DUP									
	MGJC41AM	U-234	5.78E-01 +- 2.8E-01		pCi/g	86%	1.27E-01	1.00E+00	66.4
		U-235	2.65E-02 +- 5.3E-02	U	pCi/g	86%	9.95E-02	1.00E+00	349.8
		U-238	3.43E-01 +- 2.0E-01		pCi/g	86%	9.95E-02	1.00E+00	25.3
J1H0L1									
	MGJC61AC	U-234	2.72E-01 +- 1.7E-01		pCi/g	89%	1.05E-01	1.00E+00	
		U-235	2.37E-02 +- 5.0E-02	U	pCi/g	89%	9.38E-02	1.00E+00	
		U-238	2.21E-01 +- 1.6E-01		pCi/g	89%	1.13E-01	1.00E+00	
J1H0L2									
	MGJC81AC	U-234	1.94E-01 +- 1.5E-01		pCi/g	84%	1.04E-01	1.00E+00	
		U-235	-1.39E-03 +- 5.5E-02	U	pCi/g	84%	1.04E-01	1.00E+00	
		U-238	8.04E-02 +- 9.8E-02	U	pCi/g	84%	1.16E-01	1.00E+00	
1094273 GAMMA_GS									
J1H0K9									

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: 14-Apr-11

TestAmerica TARL

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

Report No. : 46201

SDG No: JP0149

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDC or MDA	CRDL	RPD
1094273 GAMMA_GS									
J1H0K9									
	MGJCT1AJ	AG-108M	1.13E-02 +- 1.7E-02	U	pCi/g		2.97E-02		
		AMERICIUM 241	3.40E-02 +- 7.3E-02	U	pCi/g		1.13E-01		
		CO-60	3.55E-02 +- 2.4E-02	U	pCi/g		4.67E-02	5.00E-02	
		CS-137	4.09E-01 +- 6.8E-02		pCi/g		3.66E-02	1.00E-01	
		EU-152	6.34E-01 +- 1.3E-01		pCi/g		9.61E-02	1.00E-01	
		EU-154	5.96E-02 +- 6.9E-02	U	pCi/g		1.28E-01	1.00E-01	
		EU-155	3.09E-02 +- 5.5E-02	U	pCi/g		9.59E-02	1.00E-01	
J1H0K9 DUP									
	MGJCT1AL	AG-108M	-2.22E-03 +- 1.8E-02	U	pCi/g		3.10E-02		297.3
		AMERICIUM 241	9.25E-03 +- 3.9E-02	U	pCi/g		6.66E-02		114.4
		CO-60	2.23E-02 +- 2.3E-02	U	pCi/g		4.32E-02	5.00E-02	45.7
		CS-137	3.88E-01 +- 7.1E-02		pCi/g		3.88E-02	1.00E-01	5.4
		EU-152	5.98E-01 +- 1.3E-01		pCi/g		1.02E-01	1.00E-01	5.9
		EU-154	1.01E-01 +- 7.4E-02	U	pCi/g		1.38E-01	1.00E-01	51.3
		EU-155	5.13E-02 +- 5.9E-02	U	pCi/g		1.01E-01	1.00E-01	49.6
J1H0L0									
	MGJC41AJ	AG-108M	-6.50E-03 +- 1.4E-02	U	pCi/g		2.35E-02		
		AMERICIUM 241	3.87E-02 +- 1.6E-01	U	pCi/g		2.75E-01		
		CO-60	1.89E-02 +- 1.9E-02	U	pCi/g		3.49E-02	5.00E-02	
		CS-137	1.51E-01 +- 3.7E-02		pCi/g		3.26E-02	1.00E-01	
		EU-152	9.04E-02 +- 5.2E-02	U	pCi/g		8.89E-02	1.00E-01	
		EU-154	1.27E-02 +- 6.0E-02	U	pCi/g		1.06E-01	1.00E-01	
		EU-155	3.27E-02 +- 5.7E-02	U	pCi/g		9.67E-02	1.00E-01	
J1H0L1									
	MGJC61AJ	AG-108M	-2.67E-03 +- 1.5E-02	U	pCi/g		2.55E-02		
		AMERICIUM 241	-2.96E-03 +- 6.5E-02	U	pCi/g		1.11E-01		
		CO-60	-9.08E-04 +- 1.8E-02	U	pCi/g		3.28E-02	5.00E-02	
		CS-137	-7.77E-03 +- 2.1E-02	U	pCi/g		3.60E-02	1.00E-01	
		EU-152	2.56E-02 +- 5.4E-02	U	pCi/g		9.47E-02	1.00E-01	
		EU-154	-2.26E-02 +- 7.0E-02	U	pCi/g		1.21E-01	1.00E-01	
		EU-155	3.48E-02 +- 4.8E-02	U	pCi/g		8.57E-02	1.00E-01	
J1H0L2									
	MGJC81AJ	AG-108M	6.17E-03 +- 1.4E-02	U	pCi/g		2.53E-02		
		AMERICIUM 241	-1.04E-02 +- 7.7E-02	U	pCi/g		1.28E-01		
		CO-60	-8.17E-03 +- 1.7E-02	U	pCi/g		2.83E-02	5.00E-02	
		CS-137	-4.28E-03 +- 1.7E-02	U	pCi/g		2.83E-02	1.00E-01	
		EU-152	6.88E-02 +- 6.8E-02	U	pCi/g		8.53E-02	1.00E-01	

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

TestAmerica TARL

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

Date: 14-Apr-11

Report No. : 46201

SDG No: JP0149

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDC or MDA	CRDL	RPD
1094273 GAMMA_GS									
J1H0L2									
	MGJC81AJ	EU-154	-1.28E-02 +- 5.7E-02	U	pCi/g		9.80E-02	1.00E-01	
		EU-155	-1.41E-02 +- 5.4E-02	U	pCi/g		9.14E-02	1.00E-01	
1094274 SRTOT_SEP_PRECIP_GPC									
J1H0K9									
	MGJCT1AD	STRONTIUM	1.48E-01 +- 8.7E-02	U	pCi/g	72%	1.48E-01		
J1H0L0									
	MGJC41AD	STRONTIUM	8.88E-02 +- 7.1E-02	U	pCi/g	75%	1.34E-01		
J1H0L0 DUP									
	MGJC41AL	STRONTIUM	1.08E-01 +- 7.4E-02	U	pCi/g	73%	1.32E-01		19.9
J1H0L1									
	MGJC61AD	STRONTIUM	6.89E-02 +- 6.5E-02	U	pCi/g	78%	1.29E-01		
J1H0L2									
	MGJC81AD	STRONTIUM	8.45E-02 +- 7.0E-02	U	pCi/g	79%	1.34E-01		
1094277 C14_CHEM_LSC									
J1H0K9									
	MGJCT1AK	C-14	3.48E-04 +- 5.6E-03	U	pCi/g	100%	1.18E-02	5.00E+01	
J1H0L0									
	MGJC41AK	C-14	-4.79E-03 +- 5.3E-03	U	pCi/g	100%	1.18E-02	5.00E+01	
J1H0L1									
	MGJC61AK	C-14	-2.93E-05 +- 5.5E-03	U	pCi/g	100%	1.18E-02	5.00E+01	
J1H0L1 DUP									
	MGJC61AL	C-14	2.56E-04 +- 5.6E-03	U	pCi/g	100%	1.18E-02	5.00E+01	251.9
J1H0L2									
	MGJC81AK	C-14	-3.33E-03 +- 5.4E-03	U	pCi/g	100%	1.18E-02	5.00E+01	
1094278 NI63_LSC									
J1H0K9									
	MGJCT1AE	NI-63	5.37E+00 +- 7.4E+00	U	pCi/g	100%	1.31E+01	3.00E+01	
J1H0L0									
	MGJC41AE	NI-63	-5.50E-01 +- 7.0E+00	U	pCi/g	93%	1.29E+01	3.00E+01	
J1H0L1									
	MGJC61AE	NI-63	-6.29E-01 +- 7.4E+00	U	pCi/g	91%	1.37E+01	3.00E+01	
J1H0L1 DUP									
	MGJC61AM	NI-63	-3.11E+00 +- 7.3E+00	U	pCi/g	94%	1.39E+01	3.00E+01	-132.7
J1H0L2									
	MGJC81AE	NI-63	-9.25E+00 +- 6.6E+00	U	pCi/g	92%	1.32E+01	3.00E+01	
1094279 TC99_ETVDSK_LSC									
J1H0K9									
	MGJCT1AG	TC-99	-8.69E-02 +- 3.7E-01	U	pCi/g	100%	6.50E-01	1.50E+01	

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: 14-Apr-11

TestAmerica TARL

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

Report No. : 46201

SDG No: JP0149

Batch / Client Id / Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDC or MDA	CRDL	RPD
1094279 TC99_ETVDSK_LSC								
J1H0K9 DUP								
MGJCT1AP	TC-99	-2.14E-01 +- 3.6E-01	U	pCi/g	100%	6.48E-01	1.50E+01	-84.6
J1H0L0								
MGJC41AG	TC-99	-4.75E-03 +- 3.7E-01	U	pCi/g	100%	6.46E-01	1.50E+01	
J1H0L1								
MGJC61AG	TC-99	-3.34E-02 +- 3.7E-01	U	pCi/g	100%	6.48E-01	1.50E+01	
J1H0L2								
MGJC81AG	TC-99	-2.50E-01 +- 3.6E-01	U	pCi/g	100%	6.54E-01	1.50E+01	
1094280 906.0_H3_LSC								
J1H0K9								
MGJCT1AH	H-3	5.63E-03 +- 8.4E-03	U	pCi/g	100%	1.79E-02	4.00E+02	
J1H0L0								
MGJC41AH	H-3	9.87E-03 +- 1.3E-02	U	pCi/g	100%	2.71E-02	4.00E+02	
J1H0L1								
MGJC61AH	H-3	1.08E-03 +- 6.3E-03	U	pCi/g	100%	1.36E-02	4.00E+02	
J1H0L2								
MGJC81AH	H-3	4.37E-03 +- 1.1E-02	U	pCi/g	100%	2.43E-02	4.00E+02	
J1H0L2 DUP								
MGJC81AL	H-3	-3.47E-04 +- 1.1E-02	U	pCi/g	100%	2.48E-02	4.00E+02	234.5
1094293 7196_CR6								
J1H0K9								
MGJCT1AA	HEXCHROME	1.54E-01 +- 0.0E+00	U	mg/kg	N/A	1.54E-01	1.55E-01	
MGJCT1AT	HEXCHROME	3.43E-01 +- 0.0E+00		mg/kg	N/A	1.55E-01	3.50E-01	76.1
J1H0L0								
MGJC41AA	HEXCHROME	1.54E-01 +- 0.0E+00	U	mg/kg	N/A	1.54E-01	1.55E-01	
J1H0L1								
MGJC61AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
J1H0L2								
MGJC81AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	

No. of Results: 90

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.

QC Results Summary

TestAmerica TARL

Ordered by Method, Batch No, QC Type,.

Date: 14-Apr-11

Report No. : 46201

SDG No.: JP0149

Batch Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDC|MDA
PUISO_PLATE_AEA								
1094275 BLANK QC,								
MGJHW1AA	PU-238	0.00E+00 +- 7.9E-02	U	pCi/g	92%			1.48E-01
	PU239/40	0.00E+00 +- 7.9E-02	U	pCi/g	92%			1.48E-01
1094275 LCS,								
MGJHW1AC	PU239/40	6.13E+00 +- 1.5E+00		pCi/g	100%	90%	-0.1	1.30E-01
UISO_IE_PLATE_AEA								
1094276 BLANK QC,								
MGJHX1AA	U-234	-2.42E-03 +- 4.8E-02	U	pCi/g	106%			1.01E-01
	U-235	-4.83E-04 +- 4.8E-02	U	pCi/g	106%			8.12E-02
	U-238	-4.83E-04 +- 4.8E-02	U	pCi/g	106%			8.12E-02
1094276 LCS,								
MGJHX1AC	U-234	2.54E+00 +- 7.4E-01		pCi/g	105%	80%	-0.2	1.28E-01
	U-235	1.63E-01 +- 1.4E-01		pCi/g	105%	113%	0.1	1.06E-01
	U-238	3.23E+00 +- 8.9E-01		pCi/g	105%	97%	0.0	1.22E-01
GAMMA_GS								
1094273 BLANK QC,								
MGJHR1AA	AG-108M	3.30E-03 +- 6.8E-03	U	pCi/g				1.27E-02
	AMERICIUM 241	3.31E-02 +- 4.5E-02	U	pCi/g				8.51E-02
	CO-60	3.20E-04 +- 8.7E-03	U	pCi/g				1.62E-02
	CS-137	3.92E-03 +- 9.0E-03	U	pCi/g				1.67E-02
	EU-152	-1.56E-02 +- 2.3E-02	U	pCi/g				3.82E-02
	EU-154	-9.50E-03 +- 3.1E-02	U	pCi/g				5.36E-02
	EU-155	-7.46E-03 +- 1.9E-02	U	pCi/g				3.25E-02
1094273 LCS,								
MGJHR1AC	CS-137	1.17E+00 +- 1.6E-01		pCi/g		108%	0.1	4.00E-02
SRTOT_SEP_PRECIP_GPC								
1094274 BLANK QC,								
MGJHT1AA	STRONTIUM	5.81E-02 +- 6.2E-02	U	pCi/g	90%			1.26E-01
1094274 LCS,								
MGJHT1AC	STRONTIUM	1.07E+00 +- 3.1E-01		pCi/g	87%	95%	0.0	1.25E-01
C14_CHEM_LSC								
1094277 BLANK QC,								
MGJH01AA	C-14	-5.97E-03 +- 5.2E-03	U	pCi/g	100%			1.18E-02
1094277 LCS,								
MGJH01AC	C-14	6.96E+00 +- 5.2E-01		pCi/g	100%	93%	-0.1	4.71E-01
NI63_LSC								
1094278 BLANK QC,								
MGJH11AA	NI-63	-2.23E+00 +- 6.8E+00	U	pCi/g	90%			1.29E+01
1094278 LCS,								
MGJH11AC	NI-63	5.04E+02 +- 5.1E+01		pCi/g	89%	82%	-0.2	1.41E+01
TC99_ETVDSK_LSC								

TestAmerica
rptSTLRchQcSummary V5.2.12
A2002

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

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

QC Results Summary

TestAmerica TARL

Ordered by Method, Batch No, QC Type,.

Date: 14-Apr-11

Report No. : 46201

SDG No.: JP0149

Batch Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDC|MDA
1094279 BLANK QC,								
MGJH21AA	TC-99	-1.83E-01 +- 3.6E-01	U	pCi/g	100%			6.57E-01
1094279 LCS,								
MGJH21AC	TC-99	6.44E+01 +- 3.9E+00		pCi/g	100%	93%	-0.1	6.51E-01
1094279 MATRIX SPIKE, J1H0K9								
MGJCT1AN	TC-99	2.05E+02 +- 1.2E+01		pCi/g	100%	90%	-0.1	6.53E-01
906.0_H3_LSC								
1094280 BLANK QC,								
MGJH31AA	H-3	-1.85E-04 +- 2.1E-02	U	pCi/g	100%			4.48E-02
1094280 LCS,								
MGJH31AC	H-3	3.35E-01 +- 3.5E-02		pCi/g	100%	90%	-0.1	4.93E-02
7196_CR6								
1094293 MATRIX SPIKE, J1H0K9								
MGJCT1AQ	HEXCHROME	7.24E+00 +- 0.0E+00		mg/kg	N/A	69%	-0.3	1.55E-01
1094293 LCS,								
MGJJ01AC	HEXCHROME	1.86E+01 +- 0.0E+00		mg/kg	N/A	93%	-0.1	1.55E-01
1094293 BLANK QC,								
MGJJ01AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A			1.55E-01

No. of Results: 31

TestAmerica
rptSTLRchQcSummary V5.2.12
A2002

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

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

FORM I

SAMPLE RESULTS

Date: 14-Apr-11

Lab Name:	TestAmerica	**SDG:**	JP0149	**Collection Date:**	3/31/2011 12:45:00 PM
Lot-Sample No.:	J1D040471-1	**Report No. :**	46201	**Received Date:**	4/4/2011 10:45:00 AM
Client Sample ID:	J1H0K9	**COC No. :**	RC-074-218	**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: 1094273	GAMMA_GS			**Work Order:** MGJCT1AJ			**Report DB ID:** 9MGJCT10					
AG-108M	***1.13E-02***	U	1.7E-02	1.7E-02	2.97E-02	pCi/g		*0.38*	4/8/11 10:55 p		402.0	GER7$1
								(1.4)			g	
AMERICIUM 241	***3.40E-02***	U	7.3E-02	7.3E-02	1.13E-01	pCi/g		*0.3*	4/8/11 10:55 p		402.0	GER7$1
								0.93			g	
CO-60	***3.55E-02***	U	2.4E-02	2.4E-02	4.67E-02	pCi/g		*0.76*	4/8/11 10:55 p		402.0	GER7$1
							5.00E-02	*(2.9)*			g	
CS-137	***4.09E-01***		6.8E-02	6.8E-02	3.66E-02	pCi/g		*(11.2)*	4/8/11 10:55 p		402.0	GER7$1
							1.00E-01	*(12.)*			g	
EU-152	***6.34E-01***		1.3E-01	1.3E-01	9.61E-02	pCi/g		*(6.6)*	4/8/11 10:55 p		402.0	GER7$1
							1.00E-01	*(9.7)*			g	
EU-154	***5.96E-02***	U	6.9E-02	6.9E-02	1.28E-01	pCi/g		*0.47*	4/8/11 10:55 p		402.0	GER7$1
							1.00E-01	*(1.7)*			g	
EU-155	***3.09E-02***	U	5.5E-02	5.5E-02	9.59E-02	pCi/g		*0.32*	4/8/11 10:55 p		402.0	GER7$1
							1.00E-01	*(1.1)*			g	
Batch: 1094274	SRTOT_SEP_PRECIP_GPC			**Work Order:** MGJCT1AD			**Report DB ID:** 9MGJCT10					
STRONTIUM	***1.48E-01***	U	7.8E-02	8.7E-02	1.48E-01	pCi/g	72%	*1.*	4/11/11 05:11 a		6.01	GPC26B
						6.92E-02		*(3.4)*			g	
Batch: 1094275	PUISO_PLATE_AEA			**Work Order:** MGJCT1AF			**Report DB ID:** 9MGJCT10					
PU-238	***0.00E+00***	U	0.0E+00	5.9E-02	1.11E-01	pCi/g	97%	*0.*	4/8/11 03:11 p		1.01	ALP121
						1.54E-02	1.00E+00	*0.*			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: 14-Apr-11

Lab Name:	TestAmerica	**SDG:**	JP0149	**Collection Date:**	3/31/2011 12:45:00 PM
Lot-Sample No.:	J1D040471-1	**Report No. :**	46201	**Received Date:**	4/4/2011 10:45:00 AM
Client Sample ID:	J1H0K9	**COC No. :**	RC-074-218	**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
PU239/40	***0.00E+00***	U	0.0E+00	5.9E-02	1.11E-01	pCi/g	97%	*0.*	4/8/11 03:11 p		1.01	ALP121
						1.54E-02	1.00E+00	*0.*			g	
Batch: 1094276	UISO_IE_PLATE_AEA			**Work Order:**	MGJCT1AC		**Report DB ID:**	9MGJCT10				
U-234	***4.27E-01***		2.1E-01	2.3E-01	1.59E-01	pCi/g	105%	*(2.7)*	4/8/11 04:01 a		0.99	ALP3
						4.62E-02	1.00E+00	*(3.8)*			g	
U-235	***-1.11E-02***	U	5.0E-02	5.0E-02	1.43E-01	pCi/g	105%	*-0.08*	4/8/11 04:01 a		0.99	ALP3
						3.84E-02	1.00E+00	*-0.45*			g	
U-238	***4.93E-01***		2.3E-01	2.5E-01	1.78E-01	pCi/g	105%	*(2.8)*	4/8/11 04:01 a		0.99	ALP3
						5.58E-02	1.00E+00	*(4.)*			g	
							Ratio U-234/238 = 0.9					
Batch: 1094277	C14_CHEM_LSC			**Work Order:**	MGJCT1AK		**Report DB ID:**	9MGJCT10				
C-14	***3.48E-04***	U	4.8E-03	5.6E-03	1.18E-02	pCi/g	100%	*0.03*	4/8/11 05:11 a		200.0	LSC3
						5.55E-03	5.00E+01	*0.13*			g	
Batch: 1094278	NI63_LSC			**Work Order:**	MGJCT1AE		**Report DB ID:**	9MGJCT10				
NI-63	***5.37E+00***	U	6.0E+00	7.4E+00	1.31E+01	pCi/g	100%	*0.41*	4/8/11 08:04 p		0.24	LSC3
						6.11E+00	3.00E+01	*(1.4)*			g	
Batch: 1094279	TC99_ETVDSK_LSC			**Work Order:**	MGJCT1AG		**Report DB ID:**	9MGJCT10				
TC-99	***-8.69E-02***	U	2.6E-01	3.7E-01	6.50E-01	pCi/g	100%	*-0.13*	4/9/11 06:30 p		2.0	LSC4
						3.12E-01	1.50E+01	*-0.48*			g	
Batch: 1094280	906.0_H3_LSC			**Work Order:**	MGJCT1AH		**Report DB ID:**	9MGJCT10				
H-3	***5.63E-03***	U	7.6E-03	8.4E-03	1.79E-02	pCi/g	100%	*0.31*	4/8/11 09:59 a		119.0	LSC3
						8.53E-03	4.00E+02	*(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: 14-Apr-11

Lab Name:	TestAmerica	**SDG:**	JP0149	**Collection Date:**	3/31/2011 12:45:00 PM
Lot-Sample No.:	J1D040471-1	**Report No. :**	46201	**Received Date:**	4/4/2011 10:45:00 AM
Client Sample ID:	J1H0K9	**COC No. :**	RC-074-218	**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: 1094293	7196_CR6			**Work Order:** MGJCT1AA			**Report DB ID:** 9MGJCT10					
HEXCHROME	***1.54E-01***	U		0.0E+00	1.54E-01	mg/kg	N/A	*(1.)*	4/4/11		2.5	
							1.55E-01	*N/A*			g	

No. of Results: 18 **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: 14-Apr-11

Lab Name:	TestAmerica	**SDG:**	JP0149	**Collection Date:**	3/31/2011 12:50:00 PM
Lot-Sample No.:	J1D040471-2	**Report No. :**	46201	**Received Date:**	4/4/2011 10:45:00 AM
Client Sample ID:	J1H0L0	**COC No. :**	RC-074-218	**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: 1094273	GAMMA_GS			**Work Order:** MGJC41AJ			**Report DB ID:** 9MGJC410					
AG-108M	***-6.50E-03***	U	1.4E-02	1.4E-02	2.35E-02	pCi/g		*-0.28*	4/9/11 02:39 a		382.1	GER13$1
								-0.92			g	
AMERICIUM 241	***3.87E-02***	U	1.6E-01	1.6E-01	2.75E-01	pCi/g		*0.14*	4/9/11 02:39 a		382.1	GER13$1
								0.49			g	
CO-60	***1.89E-02***	U	1.9E-02	1.9E-02	3.49E-02	pCi/g		*0.54*	4/9/11 02:39 a		382.1	GER13$1
							5.00E-02	*(2.)*			g	
CS-137	***1.51E-01***		3.7E-02	3.7E-02	3.26E-02	pCi/g		*(4.6)*	4/9/11 02:39 a		382.1	GER13$1
							1.00E-01	*(8.2)*			g	
EU-152	***9.04E-02***	U	5.2E-02	5.2E-02	8.89E-02	pCi/g		*(1.)*	4/9/11 02:39 a		382.1	GER13$1
							1.00E-01	*(3.5)*			g	
EU-154	***1.27E-02***	U	6.0E-02	6.0E-02	1.06E-01	pCi/g		*0.12*	4/9/11 02:39 a		382.1	GER13$1
							1.00E-01	*0.42*			g	
EU-155	***3.27E-02***	U	5.7E-02	5.7E-02	9.67E-02	pCi/g		*0.34*	4/9/11 02:39 a		382.1	GER13$1
							1.00E-01	*(1.1)*			g	
Batch: 1094274	SRTOT_SEP_PRECIP_GPC			**Work Order:** MGJC41AD			**Report DB ID:** 9MGJC410					
STRONTIUM	***8.88E-02***	U	6.7E-02	7.1E-02	1.34E-01	pCi/g	75%	*0.66*	4/11/11 05:11 a		5.99	GPC2oC
						6.23E-02		*(2.5)*			g	
Batch: 1094275	PUISO_PLATE_AEA			**Work Order:** MGJC41AF			**Report DB ID:** 9MGJC410					
PU-238	***0.00E+00***	U	0.0E+00	8.7E-02	1.63E-01	pCi/g	77%	*0.*	4/8/11 03:12 p		1.0	ALP124
						2.26E-02	1.00E+00	*0.*			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: 14-Apr-11

Lab Name:	TestAmerica	SDG:	JP0149	Collection Date:	3/31/2011 12:50:00 PM
Lot-Sample No.:	J1D040471-2	Report No. :	46201	Received Date:	4/4/2011 10:45:00 AM
Client Sample ID:	J1H0L0	COC No. :	RC-074-218	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
PU239/40	***-2.18E-03***	U	8.7E-02	8.7E-02	1.63E-01	pCi/g	77%	*-0.01*	4/8/11 03:12 p		1.0	ALP124
						2.26E-02	1.00E+00	*-0.05*			g	
Batch: 1094276	UISO_IE_PLATE_AEA			**Work Order:**	MGJC41AC		**Report DB ID:**	9MGJC410				
U-234	***2.90E-01***		1.9E-01	2.0E-01	2.09E-01	pCi/g	84%	*(1.4)*	4/8/11 04:01 a		0.99	ALP4
						6.55E-02	1.00E+00	*(2.9)*			g	
U-235	***-7.23E-03***	U	5.8E-02	5.8E-02	1.45E-01	pCi/g	84%	*-0.05*	4/8/11 04:01 a		0.99	ALP4
						3.36E-02	1.00E+00	*-0.25*			g	
U-238	***4.43E-01***		2.3E-01	2.5E-01	1.86E-01	pCi/g	84%	*(2.4)*	4/8/11 04:01 a		0.99	ALP4
						5.42E-02	1.00E+00	*(3.6)*			g	
							Ratio U-234/238 = 0.7					
Batch: 1094277	C14_CHEM_LSC			**Work Order:**	MGJC41AK		**Report DB ID:**	9MGJC410				
C-14	***-4.79E-03***	U	4.5E-03	5.3E-03	1.18E-02	pCi/g	100%	*-0.41*	4/8/11 05:34 a		200.0	LSC3
						5.55E-03	5.00E+01	*-(1.8)*			g	
Batch: 1094278	NI63_LSC			**Work Order:**	MGJC41AE		**Report DB ID:**	9MGJC410				
NI-63	***-5.50E-01***	U	5.6E+00	7.0E+00	1.29E+01	pCi/g	93%	*-0.04*	4/8/11 08:27 p		0.26	LSC3
						6.04E+00	3.00E+01	*-0.16*			g	
Batch: 1094279	TC99_ETVDSK_LSC			**Work Order:**	MGJC41AG		**Report DB ID:**	9MGJC410				
TC-99	***-4.75E-03***	U	2.6E-01	3.7E-01	6.46E-01	pCi/g	100%	*-0.01*	4/9/11 09:37 p		2.01	LSC4
						3.11E-01	1.50E+01	*-0.03*			g	
Batch: 1094280	906.0_H3_LSC			**Work Order:**	MGJC41AH		**Report DB ID:**	9MGJC410				
H-3	***9.87E-03***	U	1.1E-02	1.3E-02	2.71E-02	pCi/g	100%	*0.36*	4/8/11 11:23 a		96.4	LSC3
						1.29E-02	4.00E+02	*(1.5)*			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: 14-Apr-11

Lab Name:	TestAmerica	**SDG:**	JP0149	**Collection Date:**	3/31/2011 12:50:00 PM
Lot-Sample No.:	J1D040471-2	**Report No. :**	46201	**Received Date:**	4/4/2011 10:45:00 AM
Client Sample ID:	J1H0L0	**COC No. :**	RC-074-218	**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: 1094293	7196_CR6			**Work Order:** MGJC41AA			**Report DB ID:** 9MGJC410					
HEXCHROME	***1.54E-01***	U		0.0E+00	1.54E-01	mg/kg	N/A	*(1.)*	4/4/11		2.5	
							1.55E-01	*N/A*			g	

No. of Results: 18 **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: 14-Apr-11

Lab Name:	TestAmerica	**SDG:**	JP0149	**Collection Date:**	3/31/2011 12:55:00 PM
Lot-Sample No.:	J1D040471-3	**Report No. :**	46201	**Received Date:**	4/4/2011 10:45:00 AM
Client Sample ID:	J1H0L1	**COC No. :**	RC-074-218	**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: 1094273	GAMMA_GS			**Work Order:** MGJC61AJ			**Report DB ID:** 9MGJC610					
AG-108M	***-2.67E-03***	U	1.5E-02	1.5E-02	2.55E-02	pCi/g		*-0.1*	4/9/11 02:40 a		357.0	GER7S1
								-0.36			g	
AMERICIUM 241	***-2.96E-03***	U	6.5E-02	6.5E-02	1.11E-01	pCi/g		*-0.03*	4/9/11 02:40 a		357.0	GER7S1
								-0.09			g	
CO-60	***-9.08E-04***	U	1.8E-02	1.8E-02	3.28E-02	pCi/g		*-0.03*	4/9/11 02:40 a		357.0	GER7S1
							5.00E-02	*-0.1*			g	
CS-137	***-7.77E-03***	U	2.1E-02	2.1E-02	3.60E-02	pCi/g		*-0.22*	4/9/11 02:40 a		357.0	GER7S1
							1.00E-01	*-0.74*			g	
EU-152	***2.56E-02***	U	5.4E-02	5.4E-02	9.47E-02	pCi/g		*0.27*	4/9/11 02:40 a		357.0	GER7S1
							1.00E-01	*0.94*			g	
EU-154	***-2.26E-02***	U	7.0E-02	7.0E-02	1.21E-01	pCi/g		*-0.19*	4/9/11 02:40 a		357.0	GER7S1
							1.00E-01	*-0.65*			g	
EU-155	***3.48E-02***	U	4.8E-02	4.8E-02	8.57E-02	pCi/g		*0.41*	4/9/11 02:40 a		357.0	GER7S1
							1.00E-01	*(1.4)*			g	
Batch: 1094274	SRTOT_SEP_PRECIP_GPC			**Work Order:** MGJC61AD			**Report DB ID:** 9MGJC610					
STRONTIUM	***6.89E-02***	U	6.2E-02	6.5E-02	1.29E-01	pCi/g	78%	*0.53*	4/11/11 05:11 a		6.0	GPC27A
						5.98E-02		*(2.1)*			g	
Batch: 1094275	PUISO_PLATE_AEA			**Work Order:** MGJC61AF			**Report DB ID:** 9MGJC610					
PU-238	***-2.50E-03***	U	1.0E-01	1.0E-01	1.87E-01	pCi/g	58%	*-0.01*	4/8/11 03:13 p		0.99	ALP125
						2.60E-02	1.00E+00	*-0.05*			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: 14-Apr-11

Lab Name:	TestAmerica	SDG:	JP0149	Collection Date:	3/31/2011 12:55:00 PM
Lot-Sample No.:	J1D040471-3	Report No. :	46201	Received Date:	4/4/2011 10:45:00 AM
Client Sample ID:	J1H0L1	COC No. :	RC-074-218	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
PU239/40	***-2.50E-03***	U	1.0E-01	1.0E-01	1.87E-01	pCi/g	58%	*-0.01*	4/8/11 03:13 p		0.99	ALP125
						2.60E-02	1.00E+00	*-0.05*			g	
Batch: 1094276	UISO_IE_PLATE_AEA			**Work Order:**	MGJC61AC		**Report DB ID:**	9MGJC610				
U-234	***2.72E-01***		1.7E-01	1.7E-01	1.05E-01	pCi/g	89%	*(2.6)*	4/8/11 04:01 a		0.99	ALP11
						1.84E-02	1.00E+00	*(3.1)*			g	
U-235	***2.37E-02***	U	5.0E-02	5.0E-02	9.38E-02	pCi/g	89%	*0.25*	4/8/11 04:01 a		0.99	ALP11
						1.30E-02	1.00E+00	*0.94*			g	
U-238	***2.21E-01***		1.5E-01	1.6E-01	1.13E-01	pCi/g	89%	*(2.)*	4/8/11 04:01 a		0.99	ALP11
						2.26E-02	1.00E+00	*(2.8)*			g	
							Ratio U-234/238 = 1.2					
Batch: 1094277	C14_CHEM_LSC			**Work Order:**	MGJC61AK		**Report DB ID:**	9MGJC610				
C-14	***-2.93E-05***	U	4.8E-03	5.5E-03	1.18E-02	pCi/g	100%	*0.*	4/8/11 05:57 a		200.0	LSC3
						5.55E-03	5.00E+01	*-0.01*			g	
Batch: 1094278	NI63_LSC			**Work Order:**	MGJC61AE		**Report DB ID:**	9MGJC610				
NI-63	***-6.29E-01***	U	5.9E+00	7.4E+00	1.37E+01	pCi/g	91%	*-0.05*	4/8/11 08:49 p		0.25	LSC3
						6.41E+00	3.00E+01	*-0.17*			g	
Batch: 1094279	TC99_ETVDSK_LSC			**Work Order:**	MGJC61AG		**Report DB ID:**	9MGJC610				
TC-99	***-3.34E-02***	U	2.6E-01	3.7E-01	6.48E-01	pCi/g	100%	*-0.05*	4/9/11 10:40 p		2.0	LSC4
						3.12E-01	1.50E+01	*-0.18*			g	
Batch: 1094280	906.0_H3_LSC			**Work Order:**	MGJC61AH		**Report DB ID:**	9MGJC610				
H-3	***1.08E-03***	U	5.6E-03	6.3E-03	1.36E-02	pCi/g	100%	*0.08*	4/8/11 12:46 p		130.1	LSC3
						6.46E-03	4.00E+02	*0.34*			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: 14-Apr-11

Lab Name:	TestAmerica	**SDG:**	JP0149	**Collection Date:**	3/31/2011 12:55:00 PM
Lot-Sample No.:	J1D040471-3	**Report No. :**	46201	**Received Date:**	4/4/2011 10:45:00 AM
Client Sample ID:	J1H0L1	**COC No. :**	RC-074-218	**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: 1094293	7196_CR6			Work Order:	MGJC61AA		Report DB ID:	9MGJC610				
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	4/4/11		2.5	
							1.55E-01	*N/A*			g	

No. of Results: 18 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: 14-Apr-11

Lab Name:	TestAmerica	**SDG:**	JP0149	**Collection Date:**	3/31/2011 1:00:00 PM
Lot-Sample No.:	J1D040471-4	**Report No. :**	46201	**Received Date:**	4/4/2011 10:45:00 AM
Client Sample ID:	J1H0L2	**COC No. :**	RC-074-218	**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: 1094273	GAMMA_GS			**Work Order:**	MGJC81AJ		**Report DB ID:**	9MGJC810				
AG-108M	***6.17E-03***	U	1.4E-02	1.4E-02	2.53E-02	pCi/g		*0.24*	4/9/11 02:40 a		347.4	GER10$1
								0.85			g	
AMERICIUM 241	***-1.04E-02***	U	7.7E-02	7.7E-02	1.28E-01	pCi/g		*-0.08*	4/9/11 02:40 a		347.4	GER10$1
								-0.27			g	
CO-60	***-8.17E-03***	U	1.7E-02	1.7E-02	2.83E-02	pCi/g		*-0.29*	4/9/11 02:40 a		347.4	GER10$1
							5.00E-02	*-0.98*			g	
CS-137	***-4.28E-03***	U	1.7E-02	1.7E-02	2.83E-02	pCi/g		*-0.15*	4/9/11 02:40 a		347.4	GER10$1
							1.00E-01	*-0.51*			g	
EU-152	***6.88E-02***	U	6.8E-02	6.8E-02	8.53E-02	pCi/g		*0.81*	4/9/11 02:40 a		347.4	GER10$1
							1.00E-01	*(2.)*			g	
EU-154	***-1.28E-02***	U	5.7E-02	5.7E-02	9.80E-02	pCi/g		*-0.13*	4/9/11 02:40 a		347.4	GER10$1
							1.00E-01	*-0.45*			g	
EU-155	***-1.41E-02***	U	5.4E-02	5.4E-02	9.14E-02	pCi/g		*-0.15*	4/9/11 02:40 a		347.4	GER10$1
							1.00E-01	*-0.52*			g	
Batch: 1094274	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MGJC81AD		**Report DB ID:**	9MGJC810				
STRONTIUM	***8.45E-02***	U	6.6E-02	7.0E-02	1.34E-01	pCi/g	79%	*0.63*	4/11/11 05:11 a		6.01	GPC27B
						6.25E-02		*(2.4)*			g	
Batch: 1094275	PUISO_PLATE_AEA			**Work Order:**	MGJC81AF		**Report DB ID:**	9MGJC810				
PU-238	***0.00E+00***	U	0.0E+00	7.5E-02	1.41E-01	pCi/g	100%	*0.*	4/8/11 03:14 p		1.01	ALP127
						1.96E-02	1.00E+00	*0.*			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: 14-Apr-11

Lab Name:	TestAmerica	SDG:	JP0149	Collection Date:	3/31/2011 1:00:00 PM
Lot-Sample No.:	J1D040471-4	Report No. :	46201	Received Date:	4/4/2011 10:45:00 AM
Client Sample ID:	J1H0L2	COC No. :	RC-074-218	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
PU239/40	***3.77E-02***	U	7.5E-02	7.6E-02	1.41E-01	pCi/g	100%	*0.27*	4/8/11 03:14 p		1.01	ALP127
						1.96E-02	1.00E+00	*0.99*			g	
Batch: 1094276	UISO_IE_PLATE_AEA			**Work Order:**	MGJC81AC		**Report DB ID:**	9MGJC810				
U-234	***1.94E-01***		1.5E-01	1.5E-01	1.04E-01	pCi/g	84%	*(1.9)*	4/8/11 04:02 a		0.99	ALP12
						1.44E-02	1.00E+00	*(2.6)*			g	
U-235	***-1.39E-03***	U	5.5E-02	5.5E-02	1.04E-01	pCi/g	84%	*-0.01*	4/8/11 04:02 a		0.99	ALP12
						1.44E-02	1.00E+00	*-0.05*			g	
U-238	***8.04E-02***	U	9.6E-02	9.8E-02	1.16E-01	pCi/g	84%	*0.69*	4/8/11 04:02 a		0.99	ALP12
						2.04E-02	1.00E+00	*(1.6)*			g	
							Ratio U-234/238 = 2.4					
Batch: 1094277	C14_CHEM_LSC			**Work Order:**	MGJC81AK		**Report DB ID:**	9MGJC810				
C-14	***-3.33E-03***	U	4.6E-03	5.4E-03	1.18E-02	pCi/g	100%	*-0.28*	4/8/11 06:42 a		200.0	LSC3
						5.55E-03	5.00E+01	*-(1.2)*			g	
Batch: 1094278	NI63_LSC			**Work Order:**	MGJC81AE		**Report DB ID:**	9MGJC810				
NI-63	***-9.25E+00***	U	5.2E+00	6.6E+00	1.32E+01	pCi/g	92%	*-0.7*	4/8/11 09:35 p		0.26	LSC3
						6.17E+00	3.00E+01	*-(2.8)*			g	
Batch: 1094279	TC99_ETVDSK_LSC			**Work Order:**	MGJC81AG		**Report DB ID:**	9MGJC810				
TC-99	***-2.50E-01***	U	2.6E-01	3.6E-01	6.54E-01	pCi/g	100%	*-0.38*	4/9/11 11:43 p		1.99	LSC4
						3.14E-01	1.50E+01	*-(1.4)*			g	
Batch: 1094280	906.0_H3_LSC			**Work Order:**	MGJC81AH		**Report DB ID:**	9MGJC810				
H-3	***4.37E-03***	U	1.0E-02	1.1E-02	2.43E-02	pCi/g	100%	*0.18*	4/8/11 02:09 p		73.2	LSC3
						1.16E-02	4.00E+02	*0.77*			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: 14-Apr-11

Lab Name:	TestAmerica	SDG:	JP0149	Collection Date:	3/31/2011 1:00:00 PM
Lot-Sample No.:	J1D040471-4	Report No. :	46201	Received Date:	4/4/2011 10:45:00 AM
Client Sample ID:	J1H0L2	COC No. :	RC-074-218	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: 1094293	7196_CR6			Work Order:	MGJC81AA		Report DB ID:	9MGJC810				
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	4/4/11		2.5	
							1.55E-01	*N/A*			g	

No. of Results: 18 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: 14-Apr-11

DUPLICATE RESULTS

Lab Name:	TestAmerica	**SDG:**	JP0149	**Collection Date:**	3/31/2011 12:45:00 PM
Lot-Sample No.:	J1D040471-1	**Report No. :**	46201	**Received Date:**	4/4/2011 10:45:00 AM
Client Sample ID:	J1H0K9	**COC No. :**	RC-074-218	**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: 1094293	7196_CR6			Work Order: MGJCT1AT		Report DB ID: MGJCT1ER			Orig Sa DB ID: 9MGJCT10			
HEXCHROME	3.43E-01			0.0E+00	1.55E-01	mg/kg	N/A	(2.2)	4/4/11		2.5	
	1.54E-01	U	RPD 76.1			3.50E-01		N/A			9	

No. of Results: 1 Comments:

TestAmerica Laboratories, Inc.

26

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: 14-Apr-11

DUPLICATE RESULTS

Lab Name:	TestAmerica	SDG:	JP0149	Collection Date:	3/31/2011 12:45:00 PM
Lot-Sample No.:	J1D040471-1	Report No. :	46201	Received Date:	4/4/2011 10:45:00 AM
Client Sample ID:	J1H0K9 DUP	COC No. :	RC-074-218	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: 1094273	GAMMA_GS			Work Order: MGJCT1AL		Report DB ID: MGJCT1LR			Orig Sa DB ID: 9MGJCT10			
AG-108M	-2.22E-03	U	1.8E-02	1.8E-02	3.10E-02	pCi/g		-0.07	4/9/11 02:38 a		402.0	GER14$1
	1.13E-02	U	RPD	297.3				-0.24			g	
AMERICIUM 241	9.25E-03	U	3.9E-02	3.9E-02	6.66E-02	pCi/g		0.14	4/9/11 02:38 a		402.0	GER14$1
	3.40E-02	U	RPD	114.4				0.47			g	
CO-60	2.23E-02	U	2.3E-02	2.3E-02	4.32E-02	pCi/g		0.52	4/9/11 02:38 a		402.0	GER14$1
	3.55E-02	U	RPD	45.7		5.00E-02		(1.9)			g	
CS-137	3.88E-01		7.1E-02	7.1E-02	3.88E-02	pCi/g		(10.)	4/9/11 02:38 a		402.0	GER14$1
	4.09E-01		RPD	5.4		1.00E-01		(10.9)			g	
EU-152	5.98E-01		1.3E-01	1.3E-01	1.02E-01	pCi/g		(5.9)	4/9/11 02:38 a		402.0	GER14$1
	6.34E-01		RPD	5.9		1.00E-01		(9.1)			g	
EU-154	1.01E-01	U	7.4E-02	7.4E-02	1.38E-01	pCi/g		0.73	4/9/11 02:38 a		402.0	GER14$1
	5.96E-02	U	RPD	51.3		1.00E-01		(2.7)			g	
EU-155	5.13E-02	U	5.9E-02	5.9E-02	1.01E-01	pCi/g		0.51	4/9/11 02:38 a		402.0	GER14$1
	3.09E-02	U	RPD	49.6		1.00E-01		(1.7)			g	
Batch: 1094275	PUISO_PLATE_AEA			Work Order: MGJCT1AM		Report DB ID: MGJCT1MR			Orig Sa DB ID: 9MGJCT10			
PU-238	3.48E-02	U	7.0E-02	7.0E-02	1.30E-01	pCi/g	99%	0.27	4/8/11 03:12 p		1.01	ALP123
	0.00E+00	U	RPD	200.0		1.00E+00		0.99			g	
PU239/40	6.95E-02	U	9.8E-02	9.9E-02	1.30E-01	pCi/g	99%	0.53	4/8/11 03:12 p		1.01	ALP123
	0.00E+00	U	RPD	200.0		1.00E+00		(1.4)			g	
									Alpha Spec Result Sum = 1.0E-01			
Batch: 1094279	TC99_ETVDSK_LSC			Work Order: MGJCT1AP		Report DB ID: MGJCT1PR			Orig Sa DB ID: 9MGJCT10			

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: 14-Apr-11

DUPLICATE RESULTS

Lab Name:	TestAmerica	SDG:	JP0149	Collection Date:	3/31/2011 12:45:00 PM
Lot-Sample No.:	J1D040471-1	Report No. :	46201	Received Date:	4/4/2011 10:45:00 AM
Client Sample ID:	J1H0K9 DUP	COC No. :	RC-074-218	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
TC-99	-2.14E-01	U	2.6E-01	3.6E-01	6.48E-01	pCi/g	100%	-0.33	4/9/11 08:35 p		2.0	LSC4
	-8.69E-02	U	RPD -84.6			1.50E+01		-(1.2)			g	

No. of Results: 10 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: 14-Apr-11

DUPLICATE RESULTS

Lab Name:	TestAmerica	SDG:	JP0149	Collection Date:	3/31/2011 12:50:00 PM
Lot-Sample No.:	J1D040471-2	Report No. :	46201	Received Date:	4/4/2011 10:45:00 AM
Client Sample ID:	J1H0L0 DUP	COC No. :	RC-074-218	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: 1094274	SRTOT_SEP_PRECIP_GPC			Work Order: MGJC41AL		Report DB ID: MGJC41LR			Orig Sa DB ID: 9MGJC410			
STRONTIUM	1.08E-01	U	6.8E-02	7.4E-02	1.32E-01	pCi/g	73%	0.82	4/11/11 05:11 a		5.99	GPC26D
	8.88E-02	U	RPD	19.9				(2.9)			g	
Batch: 1094276	UISO_IE_PLATE_AEA			Work Order: MGJC41AM		Report DB ID: MGJC41MR			Orig Sa DB ID: 9MGJC410			
U-234	5.78E-01		2.5E-01	2.8E-01	1.27E-01	pCi/g	86%	(4.6)	4/8/11 04:01 a		0.99	ALP9
	2.90E-01		RPD	66.4		1.00E+00		(4.2)			g	
U-235	2.65E-02	U	5.3E-02	5.3E-02	9.95E-02	pCi/g	86%	0.27	4/8/11 04:01 a		0.99	ALP9
	-7.23E-03	U	RPD	349.8		1.00E+00		0.99			g	
U-238	3.43E-01		1.9E-01	2.0E-01	9.95E-02	pCi/g	86%	(3.5)	4/8/11 04:01 a		0.99	ALP9
	4.43E-01		RPD	25.3		1.00E+00		(3.4)			g	

Ratio U-234/238 = 1.7 *Alpha Spec Result Sum = 9.5E-01*

No. of Results: 4 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: 14-Apr-11

DUPLICATE RESULTS

Lab Name:	TestAmerica	**SDG:**	JP0149	**Collection Date:**	3/31/2011 12:55:00 PM
Lot-Sample No.:	J1D040471-3	**Report No. :**	46201	**Received Date:**	4/4/2011 10:45:00 AM
Client Sample ID:	J1H0L1 DUP	**COC No. :**	RC-074-218	**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: 1094277	C14_CHEM_LSC			**Work Order:** MGJC61AL		**Report DB ID:** MGJC61LR			**Orig Sa DB ID:** 9MGJC610			
C-14	2.56E-04	U	4.8E-03	5.6E-03	1.18E-02	pCi/g	100%	0.02	4/8/11 06:20 a		200.0	LSC3
	-2.93E-05	U	**RPD**	**251.9**		5.00E+01		0.09			g	
Batch: 1094278	NI63_LSC			**Work Order:** MGJC61AM		**Report DB ID:** MGJC61MR			**Orig Sa DB ID:** 9MGJC610			
NI-63	-3.11E+00	U	5.9E+00	7.3E+00	1.39E+01	pCi/g	94%	-0.22	4/8/11 09:12 p		0.24	LSC3
	-6.29E-01	U	**RPD**	**-132.7**		3.00E+01		-0.85			g	

No. of Results: 2 **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: 14-Apr-11

DUPLICATE RESULTS

Lab Name:	TestAmerica	SDG:	JP0149	Collection Date:	3/31/2011 1:00:00 PM
Lot-Sample No.:	J1D040471-4	Report No. :	46201	Received Date:	4/4/2011 10:45:00 AM
Client Sample ID:	J1H0L2 DUP	COC No. :	RC-074-218	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: 1094280	906.0_H3_LSC			Work Order: MGJC81AL		Report DB ID: MGJC81LR			Orig Sa DB ID: 9MGJC810			
H-3	-3.47E-04	U	1.0E-02	1.1E-02	2.48E-02	pCi/g	100%	-0.01	4/8/11 03:32 p		71.3	LSC3
	4.37E-03	U	RPD	234.5		4.00E+02		-0.06			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

BLANK RESULTS

Date: 14-Apr-11

Lab Name: TestAmerica

Matrix: SOIL

SDG: JP0149

Report No. : 46201

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: 1094293	7196_CR6			**Work Order:**	MGJJ01AA		**Report DB ID:**	MFJJ01AB				
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	1.	4/4/11		2.5	
						1.55E-01		N/A			g	
Batch: 1094277	C14_CHEM_LSC			**Work Order:**	MGJH01AA		**Report DB ID:**	MGJH01AB				
C-14	-5.97E-03	U	4.5E-03	5.2E-03	1.18E-02	pCi/g	100%	-0.51	4/8/11 07:05 a		200.0	LSC3
					5.56E-03	5.00E+01		-(2.3)			g	
Batch: 1094275	PUISO_PLATE_AEA			**Work Order:**	MGJHW1AA		**Report DB ID:**	MGJHW1AB				
PU-238	0.00E+00	U	0.0E+00	7.9E-02	1.48E-01	pCi/g	92%	0.	4/8/11 03:15 p		1.0	ALP128
					2.06E-02	1.00E+00		0.			g	
PU239/40	0.00E+00	U	0.0E+00	7.9E-02	1.48E-01	pCi/g	92%	0.	4/8/11 03:15 p		1.0	ALP128
					2.06E-02	1.00E+00		0.			g	
Batch: 1094276	UISO_IE_PLATE_AEA			**Work Order:**	MGJHX1AA		**Report DB ID:**	MGJHX1AB				
U-234	-2.42E-03	U	4.8E-02	4.8E-02	1.01E-01	pCi/g	106%	-0.02	4/8/11 04:02 a		1.0	ALP71
					1.78E-02	1.00E+00		-0.1			g	
U-235	-4.83E-04	U	4.8E-02	4.8E-02	8.12E-02	pCi/g	106%	-0.01	4/8/11 04:02 a		1.0	ALP71
					7.94E-03	1.00E+00		-0.02			g	
U-238	-4.83E-04	U	4.8E-02	4.8E-02	8.12E-02	pCi/g	106%	-0.01	4/8/11 04:02 a		1.0	ALP71
					7.94E-03	1.00E+00		-0.02			g	
							Ratio U-234/238 = 5.0					
Batch: 1094278	NI63_LSC			**Work Order:**	MGJH11AA		**Report DB ID:**	MGJH11AB				
NI-63	-2.23E+00	U	5.4E+00	6.8E+00	1.29E+01	pCi/g	90%	-0.17	4/8/11 09:58 p		0.27	LSC3
					6.01E+00	3.00E+01		-0.66			g	
Batch: 1094279	TC99_ETVDSK_LSC			**Work Order:**	MGJH21AA		**Report DB ID:**	MGJH21AB				

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: 14-Apr-11

Lab Name: TestAmerica

Matrix: SOIL

SDG: JP0149

Report No. : 46201

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
TC-99	-1.83E-01	U	2.6E-01	3.6E-01	6.57E-01	pCi/g	100%	-0.28	4/10/11 12:46 a		1.99	LSC4
					3.16E-01	1.50E+01		-(1.)			g	
Batch: 1094280	906.0_H3_LSC			**Work Order:**	MGJH31AA		**Report DB ID:**	MGJH31AB				
H-3	-1.85E-04	U	1.8E-02	2.1E-02	4.48E-02	pCi/g	100%	0.	4/8/11 04:55 p		77.0	LSC3
					2.13E-02	4.00E+02		-0.02			g	
Batch: 1094273	GAMMA_GS			**Work Order:**	MGJHR1AA		**Report DB ID:**	MGJHR1AB				
AG-108M	3.30E-03	U	6.8E-03	6.8E-03	1.27E-02	pCi/g		0.26	4/9/11 06:09 a		348.0	GER11$1
								0.97			g	
AMERICIUM 241	3.31E-02	U	4.5E-02	4.5E-02	8.51E-02	pCi/g		0.39	4/9/11 06:09 a		348.0	GER11$1
								(1.5)			g	
CO-60	3.20E-04	U	8.7E-03	8.7E-03	1.62E-02	pCi/g		0.02	4/9/11 06:09 a		348.0	GER11$1
						5.00E-02		0.07			g	
CS-137	3.92E-03	U	9.0E-03	9.0E-03	1.67E-02	pCi/g		0.24	4/9/11 06:09 a		348.0	GER11$1
						1.00E-01		0.87			g	
EU-152	-1.56E-02	U	2.3E-02	2.3E-02	3.82E-02	pCi/g		-0.41	4/9/11 06:09 a		348.0	GER11$1
						1.00E-01		-(1.3)			g	
EU-154	-9.50E-03	U	3.1E-02	3.1E-02	5.36E-02	pCi/g		-0.18	4/9/11 06:09 a		348.0	GER11$1
						1.00E-01		-0.62			g	
EU-155	-7.46E-03	U	1.9E-02	1.9E-02	3.25E-02	pCi/g		-0.23	4/9/11 06:09 a		348.0	GER11$1
						1.00E-01		-0.8			g	
Batch: 1094274	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MGJHT1AA		**Report DB ID:**	MGJHT1AB				
STRONTIUM	5.81E-02	U	6.0E-02	6.2E-02	1.26E-01	pCi/g	90%	0.46	4/11/11 05:11 a		6.01	GPC27C
					5.89E-02			(1.9)			g	

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: 14-Apr-11

Lab Name: TestAmerica

Matrix: SOIL

SDG: JP0149

Report No. : 46201

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

No. of Results: 18 Comments:

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

rptSTLRchBlank
V5.2.12 A2002

FORM II

LCS RESULTS

Date: 14-Apr-11

Lab Name: TestAmerica

Matrix: SOIL

SDG: JP0149

Report No. : 46201

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: 1094293	7196_CR6			**Work Order:**	MGJJ01AC		**Report DB ID:**	MFJJ01AS					
HEXCHROME	1.86E+01			0.0E+00	1.55E-01	mg/kg	N/A	2.00E+01		93%	4/4/11	2.5	
							Rec Limits:	80	120	-0.1		g	
Batch: 1094277	C14_CHEM_LSC			**Work Order:**	MGJH01AC		**Report DB ID:**	MGJH01CS					
C-14	6.96E+00		4.2E-01	5.2E-01	4.71E-01	pCi/g	100%	7.50E+00	1.2E-01	93%	4/8/11 07:28 a	5.0	LSC3
							Rec Limits:	70	130	-0.1		g	
Batch: 1094275	PUISO_PLATE_AEA			**Work Order:**	MGJHW1AC		**Report DB ID:**	MGJHW1CS					
PU239/40	6.13E+00		9.2E-01	1.5E+00	1.30E-01	pCi/g	100%	6.78E+00	2.0E-01	90%	4/8/11 03:15 p	1.01	ALP130
							Rec Limits:	70	130	-0.1		g	
Batch: 1094276	UISO_IE_PLATE_AEA			**Work Order:**	MGJHX1AC		**Report DB ID:**	MGJHX1CS					
U-234	2.54E+00		5.3E-01	7.4E-01	1.28E-01	pCi/g	105%	3.17E+00	9.8E-02	80%	4/8/11 04:02 a	1.02	ALP84
							Rec Limits:	70	130	-0.2		g	
U-235	1.63E-01		1.3E-01	1.4E-01	1.06E-01	pCi/g	105%	1.45E-01	4.5E-03	113%	4/8/11 04:02 a	1.02	ALP84
							Rec Limits:	70	130	0.1		g	
U-238	3.23E+00		6.0E-01	8.9E-01	1.22E-01	pCi/g	105%	3.32E+00	1.0E-01	97%	4/8/11 04:02 a	1.02	ALP84
							Rec Limits:	70	130	0.0		g	
Batch: 1094278	NI63_LSC			**Work Order:**	MGJH11AC		**Report DB ID:**	MGJH11CS					
NI-63	5.04E+02		2.0E+01	5.1E+01	1.41E+01	pCi/g	89%	6.12E+02	1.0E+01	82%	4/8/11 10:21 p	0.25	LSC3
							Rec Limits:	70	130	-0.2		g	
Batch: 1094279	TC99_ETVDSK_LSC			**Work Order:**	MGJH21AC		**Report DB ID:**	MGJH21CS					
TC-99	6.44E+01		1.1E+00	3.9E+00	6.51E-01	pCi/g	100%	6.91E+01	3.0E-01	93%	4/10/11 01:48 a	1.99	LSC4
							Rec Limits:	70	130	-0.1		g	
Batch: 1094280	906.0_H3_LSC			**Work Order:**	MGJH31AC		**Report DB ID:**	MGJH31CS					

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

rptSTLRchLcs
V5.2.12 A2002

FORM II

LCS RESULTS

Date: 14-Apr-11

Lab Name: TestAmerica

Matrix: SOIL

SDG: JP0149

Report No. : 46201

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
H-3	3.35E-01		3.1E-02	3.5E-02	4.93E-02	pCi/g	100%	3.71E-01	1.1E-02	90%	4/8/11 06:19 p	74.2	LSC3
							Rec Limits:	70	130	-0.1		g	
Batch: 1094273	GAMMA_GS			Work Order:	MGJHR1AC		Report DB ID:	MGJHR1CS					
CS-137	1.17E+00		1.6E-01	1.6E-01	4.00E-02	pCi/g		1.08E+00	1.1E-02	108%	4/9/11 06:09 a	350.1	GER7$1
							Rec Limits:	70	130	0.1		g	
Batch: 1094274	SRTOT_SEP_PRECIP_GPC			Work Order:	MGJHT1AC		Report DB ID:	MGJHT1CS					
STRONTIUM	1.07E+00		1.3E-01	3.1E-01	1.25E-01	pCi/g	87%	1.13E+00	3.1E-02	95%	4/11/11 05:11 a	6.0	GPC27D
							Rec Limits:	70	130	0.0		g	

No. of Results: 11 Comments:

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

rptSTLRchLcs
V5.2.12 A2002

FORM II

MATRIX SPIKE RESULTS

Date: 14-Apr-11

Lab Name: TestAmerica

SDG: JP0149

Lot-Sample No.: J1D040471-1, J1H0K9

Report No. : 46201

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: 1094279	Work Order: MGJCT1AN			Report DB ID: MGJCT1NW			Orig Sa DB ID: 9MGJCT10					
TC-99	2.05E+02		2.0E+00	1.2E+01	6.53E-01	pCi/g	100%	90.33%	2.26E+02	4/9/11 07:32 p	2.01	TC99_ETVDSK_LSC
	-8.69E-02								9.2E-01		g	LSC4
Batch: 1094293	Work Order: MGJCT1AQ			Report DB ID: MGJCT1CW			Orig Sa DB ID: 9MGJCT10					
HEXCHROME	7.24E+00			0.0E+00	1.55E-01	mg/kg	N/A	68.99%	1.05E+01	4/4/11	2.5	7196_CR6
	1.54E-01										g	

Number of Results: 2

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

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

4/11/2011 2:24:14 PM

Lot No., Due Date: J1D040471; 04/11/2011
Client, Site: 127642; S00N063A00 HANFORD
QC Batch No., Method Test: 1094275; RPUISO Pulse by ALP
SDG, Matrix: JP0149; 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 Norton Date 4/11/11

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 1094275

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

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

Second Level Review: [signature] Date: 4/12/11

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

4/8/2011 1:29:09 PM

Lot No., Due Date: J1D040471; 04/11/2011
Client, Site: 127642; S00N063A00 HANFORD
QC Batch No., Method Test: 1094276; RUISO Ulso by ALP
SDG, Matrix: JP0149; SOIL

	Yes	No	N/A
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 4/8/11

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 1094276

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

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

Second Level Review: [signature] Date: 4/12/11

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

4/12/2011 9:53:42 AM

Lot No., Due Date:	J1D040471; 04/11/2011
Client, Site:	127642; S00N063A00 HANFORD
QC Batch No., Method Test:	1094274; RSRTOT SrTot by GPC
SDG, Matrix:	JP0149; 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 Lisa Anderson Date 4/12/11

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 1094274

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: Rhonda W. Ager Date: 4/12/11

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

4/11/2011 3:22:25 PM

Lot No., Due Date: J1D040471; 04/11/2011
Client, Site: 127642; S00N063A00 HANFORD
QC Batch No., Method Test: 1094273; RGAMMA Gamma by GER
SDG, Matrix: JP0149; 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 # 10-18017

First Level [signature] Date 4-11-11

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 10914273

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 #: 10-18017

Second Level Review: [signature] Date: 4/12/11

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

Clouseau
Nonconformance Memo

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

NCM #: 10-18017
NCM Initiated By: John Norton
Date Opened: 04/11/2011
Date Closed:

Classification: **Anomaly**
Status: **PMREVIEW**
Production Area: Counting
Tests: Gamma by GER
Lot #'s (Sample #'s): J1D040000 (273), J1D040471 (1,2,3,4),
QC Batches: 1094273,

Nonconformance: MDA not met
Subcategory: Data accepted

Problem Description / Root Cause

Name	Date	Description
John Norton	04/11/2011	1: Many of these samples did not meet the CRDL.
		2: The volume of sample available was not sufficient for the creation of a duplicate.

Corrective Action

Name	Date	Corrective Action
John Norton	04/11/2011	1: The data will be presented to the client as per client instructions.
		2: The sample was re-counted in order to create a duplicate.

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: 4/11/2011

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

4/12/2011 9:58:02 AM

Lot No., Due Date: J1D040471; 04/11/2011
Client, Site: 127642; S00N063A00 HANFORD
QC Batch No., Method Test: 1094279; RTC99 Tc-99 by LSC
SDG, Matrix: JP0149; 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 Lisa Anderson Date 4/12/11

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 1094279

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 = 15.0 pCi/g

Second Level Review: [signature] Date: 4/12/11

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

4/11/2011 3:16:43 PM

Lot No., Due Date: J1D040471; 04/11/2011
Client, Site: 127642; S00N063A00 HANFORD
QC Batch No., Method Test: 1094280; RTRITIUM H-3 by LSC
SDG, Matrix: JP0149; SOIL

	Yes	No	N/A
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 John Worster Date 4-11-11

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 1094280

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

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

Second Level Review: [signature] Date: 4/12/11

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

4/8/2011 4:18:37 PM

Lot No., Due Date: J1D040471; 04/11/2011
Client, Site: 127642; S00N063A00 HANFORD
QC Batch No., Method Test: 1094277; RC14 C-14 by LSC
SDG, Matrix: JP0149; 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 4/8/11

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 1094277

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: 4/12/11

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

4/14/2011 10:08:02 AM

Lot No., Due Date: J1D040471; 04/11/2011
Client, Site: 127642; S00N063A00 HANFORD
QC Batch No., Method Test: 1094278; RNI63 Ni-63 by LSC
SDG, Matrix: JP0149; 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 [signature] **Date** 4-14-11

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 1094278

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?	✓		✗ 4/14/11
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: 4/14/11

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Richland Laboratory
Data Review Check List
Hexavalent Chromium

Batch Number(s): 1094293

Lab Sample Numbers or SDG:JP0149

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?				✓
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 "

Analyst: [signature] Date: 4-5-11

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

Clouseau
Nonconformance Memo

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

NCM #: **10-17963**
NCM Initiated By: Britnie Clark
Date Opened: 04/05/2011
Date Closed:

Classification: **Anomaly**
Status: **PMREVIEW**
Production Area: Classical Chemistry
Tests: 7196A
Lot #'s (Sample #'s): J1D040000 (293), J1D040471 (1,2,3,4),
QC Batches: 1094293,

Nonconformance: QC Result Out of Limits
Subcategory: Tracer/carrier recovery outside acceptance limits

Problem Description / Root Cause

Name	Date	Description
Britnie Clark	04/05/2011	

Corrective Action

Name	Date	Corrective Action
Britnie Clark	04/05/2011	Matrix Spike wasn't within limits, followed up with a post matrix spike, limits within criteria.

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: 4/5/2011

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-074-218	Page 1 of 2

Collector: K LUCAS	Company Contact: D Woolery	Telephone No.: 509-431-0448	Project Coordinator: KESSNER, JH
Price Code: ~~8L~~ 8B	Data Turnaround: ~~21~~ 7 Days		
Project Designation: 100-D/DR Burial Grounds & Remaining Sites - Soil In-Proce	Sampling Location: 100-D-8 Outfall Excavation Area		SAF No.: RC-074
Ice Chest No.: N/A	Field Logbook No.: EL-1607-10	COA: R100D82600	Method of Shipment: HAND DELIVER
Shipped To: TestAmerica Incorporated, Richland	Offsite Property No.: N/A		Bill of Lading/Air Bill No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

None

Lot#J1D040471

Special Handling and/or Storage

Cool 4 Deg C

SDG#JP0149

Due 4.11.11

Preservation	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	None	None	None	None
Type of Container	G/P	G/P	aG	aG	aG	aG	G/P	G/P	G/P	G/P
No. of Container(s)	1	1	1	0	0	0	1	0	0	0
Volume	60mL	60mL	250mL	250mL	250mL	250mL	500mL	500mL	500mL	500mL
SAMPLE ANALYSIS	See item (1) in Special Instructions	Chromium Hex - 7196	Semi-VOA - 8270A (TCL)	PAHs - 8310	PCBs - 8082	Pesticides - 8081	See item (2) in Special Instructions	Isotopic Uranium	Isotopic Plutonium	Nickel-63; Strontium-89,90 – Total Sr	
Sample No. / Matrix * / Sample Date / Sample Time											
J1H0K9 / SOIL / 3/31/11 / 1245		X			MGJCT		X	X	X	X	2
J1H0L0 / SOIL / 3/31/11 / 1250		X			MGJC4		X	X	X	X	5
J1H0L1 / SOIL / 3/31/11 / 1255		X			MGJC6		X	X	X	X	7
J1H0L2 / SOIL / 3/31/11 / 1300		X			MGJC8		X	X	X	X	8

CHAIN OF POSSESSION	Date/Time	Sign/Print Names	Date/Time
Relinquished By/Removed From: Lucas Reuben Lucas	3-31-11 1340	Received By/Stored In: DWOOLERY	3/31/11 1340
Relinquished By/Removed From: DWOOLERY	3/31/11 1650	Received By/Stored In: J.E. Bebl	3-31-11 1650
Relinquished By/Removed From: J.E. Bebl WCH	4-4-11 1045	Received By/Stored In: TMR ANGEL	4.4.11 1045
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time

SPECIAL INSTRUCTIONS

None

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

REVIEWED BY
DATE 4-4-11

JP0149

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

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

WCH-EE-011

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-074-218	Page 2 of 2

Collector: K LUCAS	Company Contact: D Woolery	Telephone No.: 509-431-0448	Project Coordinator: KESSNER, JH
Price Code: 8L 8B	Data Turnaround: 21 Days 7		
Project Designation: 100-D/DR Burial Grounds & Remaining Sites - Soil In-Proce	Sampling Location: 100-D-8 Outfall Excavation Area		SAF No.: RC-074
Ice Chest No.: N/A	Field Logbook No.: EL-1607-10	COA: R100D82600	Method of Shipment: HAND DELIVER
Shipped To: TestAmerica Incorporated, Richland	Offsite Property No.: N/A		Bill of Lading/Air Bill No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

None

Lot# J1D040471

Special Handling and/or Storage

~~Cool 4 Deg C~~ JEB 3-31-11

NWE

SDG# JP0149

Due 4.11.11

Preservation			None	None								
Type of Container			G/P	G/P								
No. of Container(s)			0	0								
Volume			500mL	500mL								
SAMPLE ANALYSIS			Technetium-99	Carbon-14; Tritium - H3 Low Level Soil								
Sample No.	Matrix *	Sample Date	Sample Time									
J1H0K9	SOIL	3/31/11	1245	X	X							
J1H0L0	SOIL	3/31/11	1250	X	X							
J1H0L1	SOIL	3/31/11	1255	X	X							
J1H0L2	SOIL	3/31/11	1300	X	X							

2 5 7 8

CHAIN OF POSSESSION	Sign/Print Names		
Relinquished By/Removed From: K Lucas Kevin Lucas	Date/Time: 3-31-11 1340	Received By/Stored In: D Woolery	Date/Time: 3/31/11 1340
Relinquished By/Removed From: D Woolery	Date/Time: 3/31/11 1650	Received By/Stored In: J. E. Behl	Date/Time: 1650 3-31-11
Relinquished By/Removed From: J. E. Behl WCH	Date/Time: 1045 4-4-11	Received By/Stored In: TAI Angel Angel	Date/Time: 1045 4.4.11
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time

SPECIAL INSTRUCTIONS

None

REVIEWED BY

DATE 4-4-11

JP0149

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

J1D040471

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 4.4.11 1045 GM Screen Result (out) .2 (in) .6 Initials [CK]

Client: WCH SDG #: JP0149 NA [ ] SAF #: RC-074 NA [ ]

Work Order Number: J1D040471 Chain of Custody # RC-074-218

Shipping Container ID: hand delivery NA [ ] Air Bill # NA [X]

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

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

Item 6 through 10 for samples. Initial appropriate response.

6. Number of samples in shipping container (Each sample may contain multiple bottles): 4 samples @ 1X JAR 6oz NLG & 1X 500ML P per each
7. Sample holding times exceeded? NA [ ] Yes [ ] No [CK]
8. Samples have:
   ___ tape
   CK custody seals (soil)
   ___ hazard labels
   CK appropriate sample labels
9. Samples:
   CK are in good condition
   ___ 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 [CK] (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 : N/A
11. Sample Location, Sample Collector Listed? * Yes [CK] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [CK]
13. Description of anomalies (include sample numbers): NA [CK]

See other side for additional comments

Sample Custodian: Carmen J. Rosa Date: 4.4.11 1045

Client Informed on N/A by N/A Person contacted N/A.

[ ] No action necessary; process as is

Project Manager Ronda Fee Date 4/4/11

LS-023, Rev. 12, 10/10

4/5/2011 10:53:22 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: 04/11/2011

Sep1 DT/Tm Tech:

Batch: 1094275 SOIL pCi/g PM, Quote: RW2, 27038

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

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 MGJCT-1-AF J1D040471-1-SAMP 03/31/2011 12:45	AmtRec: 1XJAR60MLG,1X500MLP	1.01g,in	PUTC12148 03/17/11,pd 01/01/10,r #Containers: 2	50min		Scr:	Alpha:	Beta:
2 MGJCT-1-AM-X J1D040471-1-DUP 03/31/2011 12:45	AmtRec: 1XJAR60MLG,1X500MLP	1.01g,in	PUTC12149 03/17/11,pd 01/01/10,r #Containers: 2			Scr:	Alpha:	Beta:
3 MGJC4-1-AF J1D040471-2-SAMP 03/31/2011 12:50	AmtRec: 1XJAR60MLG,1X500MLP	1.00g,in	PUTC12150 03/17/11,pd 01/01/10,r #Containers: 2			Scr:	Alpha:	Beta:
4 MGJC6-1-AF J1D040471-3-SAMP 03/31/2011 12:55	AmtRec: 1XJAR60MLG,1X500MLP	0.99g,in	PUTC12151 03/17/11,pd 01/01/10,r #Containers: 2			Scr:	Alpha:	Beta:
5 MGJC8-1-AF J1D040471-4-SAMP 03/31/2011 13:00	AmtRec: 1XJAR60MLG,1X500MLP	1.01g,in	PUTC12152 03/17/11,pd 01/01/10,r #Containers: 2			Scr:	Alpha:	Beta:
6 MGJHW-1-AA-B J1D040000-275-BLK 04/04/2011 15:05 pd	AmtRec:	1.00g,in	PUTC12153 03/17/11,pd 01/01/10,r #Containers: 1			Scr:	Alpha:	Beta:
7 MGJHW-1-AC-C J1D040000-275-LCS 04/04/2011 15:05 pd	AmtRec:	1.01g,in	PUSK0842 03/10/11,pd 01/01/10,r #Containers: 1			Scr:	Alpha:	Beta:

4/5/2011 10:53:23 AM

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 #: _____

AnalyDueDate: 04/11/2011

Sep1 DT/Tm Tech:

Batch: 1094275 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	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

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

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

MGJCT1AF-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						

MGJHW1AA-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						

MGJHW1AC-LCS:

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

MGJCT1AF-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

MGJHW1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

MGJHW1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

4/11/2011 2:23:38 PM

ICOC Fraction Transfer/Status Report

ByDate: 4/11/2010, 4/16/2011, Batch: '1094275', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
1094275						
AC		Rev1C	BouslaughP	4/5/2011 10:42:07		
SC			Maucieris	IsBatched	4/4/2011 3:08:02 PM	ICOC_RADCALC v4.8.49
SC			BouslaughP	InPrep	4/5/2011 10:42:07 AM	RL-PRP-003 REVISION 1
SC			BouslaughP	Prep1C	4/6/2011 7:17:03 AM	RL-PRP-003 REVISION 1
SC			LuksicS	Sep1C	4/7/2011 5:13:19 PM	RL-ALP-001 REVISION 1
SC			DawkinsO	CalcC	4/8/2011 10:36:02 PM	RL-CI-008 REVISION 1
SC			nortonj	Rev1C	4/11/2011 2:23:25 PM	RL-DR-001 Rev 2
AC			BouslaughP	4/6/2011 7:17:03 AM		
AC			LuksicS	4/7/2011 5:13:19 PM		
AC			DawkinsO	4/8/2011 10:36:02 PM		
AC			nortonj	4/11/2011 2:23:25 PM		

AC: Accepting Entry; SC: Status Change

4/5/2011 10:33:43 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: 04/11/2011

Sep1 DT/Tm Tech:

Batch: 1094276 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 MGJCT-1-AC J1D040471-1-SAMP 03/31/2011 12:45		0.99g,in AmtRec: 1XJAR60MLG,1X500MLP	UITC26328 03/29/11,pd 06/15/01,r #Containers: 2	50 min		Scr:	Alpha:	Beta:
2 MGJC4-1-AC J1D040471-2-SAMP 03/31/2011 12:50		0.99g,in AmtRec: 1XJAR60MLG,1X500MLP	UITC26329 03/29/11,pd 06/15/01,r #Containers: 2			Scr:	Alpha:	Beta:
3 MGJC4-1-AM-X J1D040471-2-DUP 03/31/2011 12:50		0.99g,in AmtRec: 1XJAR60MLG,1X500MLP	UITC26330 03/29/11,pd 06/15/01,r #Containers: 2			Scr:	Alpha:	Beta:
4 MGJC6-1-AC J1D040471-3-SAMP 03/31/2011 12:55		0.99g,in AmtRec: 1XJAR60MLG,1X500MLP	UITC26331 03/29/11,pd 06/15/01,r #Containers: 2			Scr:	Alpha:	Beta:
5 MGJC8-1-AC J1D040471-4-SAMP 03/31/2011 13:00		0.99g,in AmtRec: 1XJAR60MLG,1X500MLP	UITC26332 03/29/11,pd 06/15/01,r #Containers: 2			Scr:	Alpha:	Beta:
6 MGJHX-1-AA-B J1D040000-276-BLK 04/04/2011 15:05 pd		1.00g,in AmtRec:	UITC26333 03/29/11,pd 06/15/01,r #Containers: 1			Scr:	Alpha:	Beta:
7 MGJHX-1-AC-C J1D040000-276-LCS 04/04/2011 15:05 pd		1.02g,in AmtRec:	UISH1352 03/17/11,pd 06/15/01,r #Containers: 1			Scr:	Alpha:	Beta:

4/5/2011 10:33:44 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: ,BouslaughP

AnalyDueDate: 04/11/2011

Batch: 1094276 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:

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

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

MGJCT1AC-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:

MGJHX1AA-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:

MGJHX1AC-LCS:

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

MGJCT1AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

MGJHX1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

MGJHX1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

TestAmerica Laboratories, Inc.

4/8/2011 1:28:42 PM

ICOC Fraction Transfer/Status Report

ByDate: 4/8/2010, 4/13/2011, Batch: '1094276', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
1094276						
AC		Rev1C	**BouslaughP**	4/5/2011 10:25:18		
SC			Maucieris	IsBatched	4/4/2011 3:08:06 PM	ICOC_RADCALC v4.8.49
SC			BouslaughP	InPrep	4/5/2011 10:25:18 AM	RL-PRP-003 REVISION 1
SC			BouslaughP	Prep1C	4/6/2011 7:16:55 AM	RL-PRP-003 REVISION 1
SC			HoganH	Sep1C	4/6/2011 4:42:19 PM	ALP-004 REVISION 1
SC			HoganS	Sep2C	4/7/2011 12:32:42 PM	RL-ALP-015 REVISION 1
SC			ClarkR	InCnt1	4/7/2011 12:55:18 PM	RL-CI-008 REVISION 1
SC			BlackCL	CalcC	4/8/2011 10:53:59 AM	RL-CI-008 REVISION 1
SC			WhelandS	Rev1C	4/8/2011 1:28:29 PM	RL-DR-001 Rev 2
AC			**BouslaughP**	4/6/2011 7:16:55 AM		
AC			**HoganH**	4/6/2011 4:42:19 PM		
AC			**HoganS**	4/7/2011 12:32:42 PM		
AC			**ClarkR**	4/7/2011 12:55:18 PM		
AC			**BlackCL**	4/8/2011 10:53:59		
AC			**WhelandS**	4/8/2011 1:28:29 PM		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Page 1

Grp Rec Cnt: 7

ICOCFractions v4.8.44

4/5/2011 10:24:02 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 #:

Sep1 DT/Tm Tech: 17:30 4/10/11 APA

AnalyDueDate: 04/11/2011

Batch: 1094274 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:
1 MGJCT-1-AD J1D040471-1-SAMP 03/31/2011 12:45		6.01g,in AmtRec: 1XJAR60MLG,1X500MLP	SRTA20848 03/16/11 #Containers: 2	1.5	1.4975g -1.4254g 72.1 mg	50min	26B Scr:	0535 Alpha:	4/11/11 S Beta:	
2 MGJC4-1-AD J1D040471-2-SAMP 03/31/2011 12:50		5.99g,in AmtRec: 1XJAR60MLG,1X500MLP	SRTA20849 03/16/11 #Containers: 2		1.4921g -1.4175g 74.6 mg		26G Scr:	Alpha:	Beta:	
3 MGJC4-1-AL-X J1D040471-2-DUP 03/31/2011 12:50		5.99g,in AmtRec: 1XJAR60MLG,1X500MLP	SRTA20850 03/16/11 #Containers: 2		1.4977g -1.4250g 72.7 mg		26D Scr:	Alpha:	Beta:	
4 MGJC6-1-AD J1D040471-3-SAMP 03/31/2011 12:55		6.00g,in AmtRec: 1XJAR60MLG,1X500MLP	SRTA20851 03/29/11 #Containers: 2		1.4965g -1.4190g 77.5 mg		27A Scr:	Alpha:	Beta:	
5 MGJC8-1-AD J1D040471-4-SAMP 03/31/2011 13:00		6.01g,in AmtRec: 1XJAR60MLG,1X500MLP	SRTA20852 03/29/11 #Containers: 2		1.5006g -1.4213g 79.3 mg		27B Scr:	Alpha:	Beta:	
6 MGJHT-1-AA-B J1D040000-274-BLK 04/04/2011 15:05 pd		6.01g,in AmtRec:	SRTA20853 03/29/11 #Containers: 1		1.5107g -1.4212g 89.5 mg		27C Scr:	Alpha:	Beta:	
7 MGJHT-1-AC-C J1D040000-274-LCS 04/04/2011 15:05 pd		6.00g,in AmtRec:	STSB1559 03/10/11 #Containers: 1		1.5070g -1.4202g 86.8 mg		27D Scr:	Alpha:	Beta:	

4/5/2011 10:24:03 AM

Sample Preparation/Analysis

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

Balance Id:1120373922

Pipet #: _____

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech: ,BouslaughP

AnalyDueDate: 04/11/2011

Batch: 1094274 pCi/g

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:

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

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

MGJCT1AD-SAMP Constituent List:
Sr-90 RDL:1 pCi/g LCL:70 UCL:130 RPD:35
MGJHT1AA-BLK:
Sr-90 RDL:1 pCi/g LCL: UCL: RPD:
MGJHT1AC-LCS:
Sr-90 RDL:1 pCi/g LCL:70 UCL:130 RPD:35

MGJCT1AD-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGJHT1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGJHT1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

TestAmerica Laboratories, Inc.

4/12/2011 9:52:11 AM

ICOC Fraction Transfer/Status Report

ByDate: 4/12/2010, 4/17/2011, Batch: '1094274', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
1094274						
AC		Rev1C	BouslaughP	4/5/2011 10:07:49		
SC			Maucieris	IsBatched	4/4/2011 3:07:57 PM	ICOC_RADCALC v4.8.49
SC			BouslaughP	InPrep	4/5/2011 10:07:49 AM	RL-PRP-003 REVISION 1
SC			BouslaughP	Prep1C	4/6/2011 7:16:47 AM	RL-PRP-003 REVISION 1
SC			ManisD	Prep2C	4/7/2011 7:14:25 PM	RL-GPC-003 REVISION 1
SC			AshworthA	Sep2C	4/11/2011 12:16:47 AM	RL-GPC-003 REVISION 1
SC			BlackCL	InCnt1	4/11/2011 1:04:33 AM	RL-CI-006 REVISION 1
SC			BlackCL	CalcC	4/11/2011 8:16:23 AM	RL-CI-006 REVISION 1
SC			antonsonl	Rev1C	4/12/2011 9:51:07 AM	RL-DR-001 Rev 2
AC			BouslaughP	4/6/2011 7:16:47 AM		
AC			ManisD	4/7/2011 7:14:25 PM		
AC			AshworthA	4/11/2011 12:16:47		
AC			BlackCL	4/11/2011 1:04:33		
AC			BlackCL	4/11/2011 8:16:23		
AC			antonsonl	4/12/2011 9:51:07		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Page 1

Grp Rec Cnt: 7

ICOCFractions v4.8.44

TRLSP. NLB

4/5/2011 4:09:56 PM

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: 04/11/2011

Sep1 DT/Tm Tech:

Batch: 1094273 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	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MGJCT-1-AJ J1D040471-1-SAMP 03/31/2011 12:45			402.00g,in AmtRec: 1XJAR60MLG,1X500MLP	402.00g #Containers: 2		S200	200min	G7	0215	4/8/11 Scr: Alpha: Beta:	
2 MGJCT-1-AL-X J1D040471-1-DUP 03/31/2011 12:45			AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2				G14	0558	4/8/11 Scr: Alpha: Beta:	
3 MGJC4-1-AJ J1D040471-2-SAMP 03/31/2011 12:50			382.10g,in AmtRec: 1XJAR60MLG,1X500MLP	382.10g #Containers: 2				G13	0559 Scr: Alpha: Beta:		
4 MGJC6-1-AJ J1D040471-3-SAMP 03/31/2011 12:55			357.00g,in AmtRec: 1XJAR60MLG,1X500MLP	357.00g #Containers: 2				G7	0600 Scr: Alpha: Beta:		
5 MGJC8-1-AJ J1D040471-4-SAMP 03/31/2011 13:00			347.40g,in AmtRec: 1XJAR60MLG,1X500MLP	347.40g #Containers: 2				G10	0680 Scr: Alpha: Beta:		
6 MGJHR-1-AA-B J1D040000-273-BLK 04/04/2011 15:05 pd			348.00g,in AmtRec:	348.00g #Containers: 1				G11	0929 Scr: Alpha: Beta:	4/9/11	
7 MGJHR-1-AC-C J1D040000-273-LCS 04/04/2011 15:05 pd			350.10g,in AmtRec:	350.10g #Containers: 1	QC20009 08/04/09,pd 09/01/09,r			G7	0929 Scr: Alpha: Beta:		

TestAmerica Laboratories, Inc.

70

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

4/5/2011 4:09:56 PM

Sample Preparation/Analysis

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

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

AnalyDueDate: 04/11/2011

Batch: 1094273 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:

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

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

MGJCT1AJ-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:

MGJHR1AA-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:

MGJHR1AC-LCS:

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

MGJCT1AJ-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGJHR1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGJHR1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

TestAmerica Laboratories, Inc.

71

4/11/2011 3:20:25 PM

ICOC Fraction Transfer/Status Report

ByDate: 4/11/2010, 4/16/2011, Batch: '1094273', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
1094273						
AC		Rev1C	BouslaughP	4/5/2011 8:42:03 AM		
SC			Maucieris	IsBatched	4/4/2011 3:07:45 PM	ICOC_RADCALC v4.8.49
SC			BouslaughP	InPrep	4/5/2011 8:42:03 AM	RL-GAM-001 REVISION 1
SC			SannohS	InPrep	4/5/2011 4:04:38 PM	RL-GAM-001 REVISION 1
SC			ClarkR	InCnt1	4/5/2011 4:13:35 PM	RL-CI-007 REVISION 1
SC			BlackCL	CalcC	4/9/2011 2:46:48 PM	RL-CI-007 REVISION 1
SC			nortonj	Rev1C	4/11/2011 3:20:11 PM	RL-DR-001 Rev 2
AC			SannohS	4/5/2011 4:04:38 PM		
AC			ClarkR	4/5/2011 4:13:35 PM		
AC			BlackCL	4/9/2011 2:46:48 PM		
AC			nortonj	4/11/2011 3:20:11 PM		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Page 1

Grp Rec Cnt: 5

ICOCFractions v4.8.44

4/5/2011 11:22:05 AM

Sample Preparation/Analysis

Balance Id:1120373922

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

AN Tc-99 Prp/Sep PRP003/LSC013
S5 Technetium-99 by Liquid Scint
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 04/11/2011

Sep1 DT/Tm Tech:

Batch: 1094279 SOIL pCi/g PM, Quote: RW2, 27038

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

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 MGJCT-1-AG J1D040471-1-SAMP 03/31/2011 12:45		2.00g,in AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
2 MGJCT-1-AN-S J1D040471-1-MS 03/31/2011 12:45		2.01g,in AmtRec: 1XJAR60MLG,1X500MLP	TCSG3102 12/21/10,pd 01/01/97,r #Containers: 2			Scr:	Alpha:	Beta:
3 MGJCT-1-AP-X J1D040471-1-DUP 03/31/2011 12:45		2.00g,in AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
4 MGJC4-1-AG J1D040471-2-SAMP 03/31/2011 12:50		2.01g,in AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
5 MGJC6-1-AG J1D040471-3-SAMP 03/31/2011 12:55		2.00g,in AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
6 MGJC8-1-AG J1D040471-4-SAMP 03/31/2011 13:00		1.99g,in AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
7 MGJH2-1-AA-B J1D040000-279-BLK 04/04/2011 15:05 pd		1.99g,in AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

4/5/2011 11:22:06 AM

Sample Preparation/Analysis

Balance Id:1120373922

AN Tc-99 Prp/Sep PRP003/LSC013
S5 Technetium-99 by Liquid Scint
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 04/11/2011

Sep1 DT/Tm Tech:

Batch: 1094279 pCi/g

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 MGJH2-1-AC-C		1.99g,in	TCSF2313					
J1D040000-279-LCS			03/08/11,pd					
04/04/2011 15:05 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
9 MGJH2-1-AD-BN								
J1D040000-279-IBLK								
04/04/2011 15:05 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

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

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

MGJCT1AG-SAMP Constituent List:
  Tc-99       RDL:15          pCi/g     LCL:70      UCL:130     RPD:35
MGJCT1AN-MS Constituent List:

MGJH21AA-BLK:
  Tc-99       RDL:15          pCi/g     LCL:        UCL:        RPD:
MGJH21AC-LCS:
  Tc-99       RDL:15          pCi/g     LCL:70      UCL:130     RPD:35
MGJH21AD-IBLK:
  Tc-99       RDL:15          pCi/g     LCL:        UCL:        RPD:
MGJCT1AG-SAMP Calc Info:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
MGJCT1AN-MS Calc Info:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
MGJH21AA-BLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
MGJH21AC-LCS:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
MGJH21AD-IBLK:
```


TestAmerica Laboratories, Inc.

4/5/2011 11:22:06 AM

Sample Preparation/Analysis

AN Tc-99 Prp/Sep PRP003/LSC013
S5 Technetium-99 by Liquid Scint
5I CLIENT: HANFORD

Balance Id:

Pipet #:

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech:

AnalyDueDate: 04/11/2011

Batch: 1094279 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:

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

4/12/2011 9:57:28 AM

ICOC Fraction Transfer/Status Report

ByDate: 4/12/2010, 4/17/2011, Batch: '1094279', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
1094279						
AC		Rev1C	BouslaughP	4/5/2011 11:10:55		
SC			Maucieris	IsBatched	4/4/2011 3:08:24 PM	ICOC_RADCALC v4.8.49
SC			BouslaughP	InPrep	4/5/2011 11:10:55 AM	RL-PRP-003 REVISION 1
SC			SannohS	Prep1C	4/5/2011 3:40:51 PM	RL-PRP-003 REVISION 1
SC			LuksicS	Sep2C	4/8/2011 5:05:45 PM	RL-LSC-013 REVISION 1
SC			DawkinsO	InCnt1	4/8/2011 5:32:01 PM	RL-CI-005 REVISION 1
SC			BlackCL	CalcC	4/11/2011 9:03:41 AM	RL-CI-005 REVISION 1
SC			antonsonl	Rev1C	4/12/2011 9:57:20 AM	RL-DR-001 Rev 2
AC			SannohS	4/5/2011 3:40:51 PM		
AC			LuksicS	4/8/2011 5:05:45 PM		
AC			DawkinsO	4/8/2011 5:32:01 PM		
AC			BlackCL	4/11/2011 9:03:41		
AC			antonsonl	4/12/2011 9:57:20		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Page 1

Grp Rec Cnt: 6

ICOCFractions v4.8.44

15

4/4/2011 3:06:04 PM

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 #:
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 04/11/2011

Batch: 1094280 SOIL pCi/g PM, Quote: RW2, 27038

SEQ Batch, Test: None

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 MGJCT-1-AH J1D040471-1-SAMP 03/31/2011 12:45	AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2				Scr:	Alpha:	Beta:
2 MGJC4-1-AH J1D040471-2-SAMP 03/31/2011 12:50	AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2				Scr:	Alpha:	Beta:
3 MGJC6-1-AH J1D040471-3-SAMP 03/31/2011 12:55	AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2				Scr:	Alpha:	Beta:
4 MGJC8-1-AH J1D040471-4-SAMP 03/31/2011 13:00	AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2				Scr:	Alpha:	Beta:
5 MGJC8-1-AL-X J1D040471-4-DUP 03/31/2011 13:00	AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2				Scr:	Alpha:	Beta:
6 MGJH3-1-AA-B J1D040000-280-BLK 04/04/2011 15:05 pd	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:
7 MGJH3-1-AC-C J1D040000-280-LCS 04/04/2011 15:05 pd	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:

4/4/2011 3:06:04 PM

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: 04/11/2011

Batch: 1094280 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:
8 MGJH3-1-AD-BN								
J1D040000-280-IBLK								
04/04/2011 15:05 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

Comments:

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

MGJCT1AH-SAMP Constituent List:

MGJH31AA-BLK:

MGJH31AC-LCS:

MGJH31AD-IBLK:

MGJCT1AH-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGJH31AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGJH31AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGJH31AD-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

TestAmerica Laboratories, Inc.

4/11/2011 3:15:58 PM

ICOC Fraction Transfer/Status Report

ByDate: 4/11/2010, 4/16/2011, Batch: '1094280', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
1094280						
AC		Rev1C	WagnerF	4/7/2011 3:15:34 PM		
SC			Maucieris	IsBatched	4/4/2011 3:08:30 PM	ICOC_RADCALC v4.8.49
SC			WagnerF	Sep1C	4/7/2011 3:15:34 PM	RL-LSC-008 REVISION 1
SC			DawkinsO	InCnt1	4/7/2011 5:09:44 PM	RL-CI-005 REVISION 1
SC			BlackCL	CalcC	4/9/2011 2:19:20 PM	RL-CI-005 REVISION 1
SC			nortonj	Rev1C	4/11/2011 3:15:52 PM	RL-DR-001 Rev 2
AC			DawkinsO	4/7/2011 5:09:44 PM		
AC			BlackCL	4/9/2011 2:19:20 PM		
AC			nortonj	4/11/2011 3:15:52 PM		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Page 1

Grp Rec Cnt: 4

ICOCFractions v4.8.44

13 [redacted]

4/4/2011 3:06:02 PM

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

AnalyDueDate: 04/11/2011

Batch: 1094277 SOIL pCi/g PM, Quote: RW2, 27038
SEQ Batch, Test: None

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

Work 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 MGJCT-1-AK J1D040471-1-SAMP 03/31/2011 12:45		5.030g AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
2 MGJC4-1-AK J1D040471-2-SAMP 03/31/2011 12:50		5.038g AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
3 MGJC6-1-AK J1D040471-3-SAMP 03/31/2011 12:55		5.045g AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
4 MGJC6-1-AL-X J1D040471-3-DUP 03/31/2011 12:55		5.046g AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
5 MGJC8-1-AK J1D040471-4-SAMP 03/31/2011 13:00		5.025g AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
6 MGJH0-1-AA-B J1D040000-277-BLK 04/04/2011 15:05 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
7 MGJH0-1-AC-C J1D040000-277-LCS 04/04/2011 15:05 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

TestAmerica Laboratories, Inc.

4/4/2011 3:06:02 PM

Sample Preparation/Analysis

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: 04/11/2011

Batch: 1094277 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:
8 MGJH0-1-AD-BN								
J1D040000-277-IBLK								
04/04/2011 15:05 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

Comments:

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

MGJCT1AK-SAMP Constituent List:

MGJH01AA-BLK:

MGJH01AC-LCS:

MGJH01AD-IBLK:

MGJCT1AK-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGJH01AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGJH01AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGJH01AD-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

TestAmerica Laboratories, Inc.

4/8/2011 4:18:06 PM

ICOC Fraction Transfer/Status Report

ByDate: 4/8/2010, 4/13/2011, Batch: '1094277', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
1094277						
AC		**Rev1C**	**WagnerF**	4/7/2011 3:15:47 PM		
SC			Mauclerls	IsBatched	4/4/2011 3:08:13 PM	ICOC_RADCALC v4.8.49
SC			WagnerF	Sep1C	4/7/2011 3:15:47 PM	RL-LSC-008 REVISION 1
SC			DawkinsO	InCnt1	4/7/2011 5:09:34 PM	RL-CI-005 REVISION 1
SC			WhelandS	Rev1C	4/8/2011 4:17:19 PM	RL-DR-001 Rev 2
AC			**DawkinsO**	4/7/2011 5:09:34 PM		
AC			**WhelandS**	4/8/2011 4:17:19 PM		

AC: Accepting Entry; SC: Status Change

Grp Rec Cnt: 3

4/5/2011 11:09:01 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: 04/11/2011

Sep1 DT/Tm Tech:

Batch: 1094278 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:
1 MGJCT-1-AE J1D040471-1-SAMP 03/31/2011 12:45		AmtRec: 1XJAR60MLG,1X500MLP	0.24g,in	0.24g #Containers: 2	NITA3857 01/11/11	2 Cmin		Scr:	Alpha:	Beta:
2 MGJC4-1-AE J1D040471-2-SAMP 03/31/2011 12:50		AmtRec: 1XJAR60MLG,1X500MLP	0.26g,in	0.26g #Containers: 2	NITA3858 01/11/11			Scr:	Alpha:	Beta:
3 MGJC6-1-AE J1D040471-3-SAMP 03/31/2011 12:55		AmtRec: 1XJAR60MLG,1X500MLP	0.25g,in	0.25g #Containers: 2	NITA3859 01/11/11			Scr:	Alpha:	Beta:
4 MGJC6-1-AM-X J1D040471-3-DUP 03/31/2011 12:55		AmtRec: 1XJAR60MLG,1X500MLP	0.24g,in	0.24g #Containers: 2	NITA3860 01/11/11			Scr:	Alpha:	Beta:
5 MGJC8-1-AE J1D040471-4-SAMP 03/31/2011 13:00		AmtRec: 1XJAR60MLG,1X500MLP	0.26g,in	0.26g #Containers: 2	NITA4031 03/30/11			Scr:	Alpha:	Beta:
6 MGJH1-1-AA-B J1D040000-278-BLK 04/04/2011 15:05 pd		AmtRec:	0.27g,in	0.27g #Containers: 1	NITA4032 03/30/11			Scr:	Alpha:	Beta:
7 MGJH1-1-AC-C J1D040000-278-LCS 04/04/2011 15:05 pd		AmtRec:	0.25g,in	0.25g #Containers: 1	NISA1328 10/27/10			Scr:	Alpha:	Beta:

TestAmerica Laboratories, Inc.

4/5/2011 11:09:02 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: 04/11/2011

Batch: 1094278 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:
8 MGJH1-1-AD-BN										
J1D040000-278-IBLK										
04/04/2011 15:05 pd		AmtRec:		#Containers: 1				Scr:	Alpha:	Beta:

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

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

MGJCT1AE-SAMP Constituent List:
Ni-63 RDL:30 pCi/g LCL:70 UCL:130 RPD:35
MGJH11AA-BLK:
Ni-63 RDL:30 pCi/g LCL: UCL: RPD:
MGJH11AC-LCS:
Ni-63 RDL:30 pCi/g LCL:70 UCL:130 RPD:35
MGJH11AD-IBLK:
Ni-63 RDL:30 pCi/g LCL: UCL: RPD:

MGJCT1AE-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGJH11AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGJH11AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGJH11AD-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

TestAmerica Laboratories, Inc.

4/14/2011 10:07:01 AM

ICOC Fraction Transfer/Status Report

ByDate: 4/14/2010, 4/19/2011, Batch: '1094278', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
1094278						
AC		Rev1C	BouslaughP	4/5/2011 10:55:03		
SC			Maucieris	IsBatched	4/4/2011 3:08:17 PM	ICOC_RADCALC v4.8.49
SC			BouslaughP	InPrep	4/5/2011 10:55:03 AM	RL-PRP-003 REVISION 1
SC			BouslaughP	Prep1C	4/6/2011 7:16:39 AM	RL-PRP-003 REVISION 1
SC			LuksicS	Sep1C	4/7/2011 5:48:02 PM	RL-LSC-017 REVISION 1
SC			DawkinsO	InCnt1	4/7/2011 6:19:31 PM	RL-CI-005 REVISION 1
SC			DawkinsO	CalcC	4/13/2011 11:36:01 PM	RL-CI-005 REVISION 1
SC			nortonj	Rev1C	4/14/2011 10:06:53 AM	RL-DR-001 Rev 2
AC			BouslaughP	4/6/2011 7:16:39 AM		
AC			LuksicS	4/7/2011 5:48:02 PM		
AC			DawkinsO	4/7/2011 6:19:31 PM		
AC			DawkinsO	4/13/2011 11:36:01		
AC			nortonj	4/14/2011 10:06:53		

AC: Accepting Entry; SC: Status Change

4/5/2011 11:03:06 AM

Sample Preparation/Analysis

127642, Washington Closure Hanford LLC
Bechtel Hanford, Inc.

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

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

AnalyDueDate: 04/11/2011

Batch: 1094293 **SOIL** **mg/kg** **PM, Quote: RW2, 27038**

SEQ Batch, Test: None All Tests: 1094273 AXTA, 1094274 CHTH, 1094275 6ASO, 1094276 7SSR, 1094277 5SS3, 1094278 AFS4, 1094279 ANS5, 1094280 ATS6, 1094293 DWEA,

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 MGJCT-1-AA J1D040471-1-SAMP 03/31/2011 12:45		AmtRec: 1XJAR60MLG,1X500MLP		#Containers: 2				Scr:	Alpha:	Beta:
2 MGJCT-1-AQ-S J1D040471-1-MS 03/31/2011 12:45		AmtRec: 1XJAR60MLG,1X500MLP		#Containers: 2				Scr:	Alpha:	Beta:
3 MGJCT-1-AR-Z J1D040471-1-Z 03/31/2011 12:45		AmtRec: 1XJAR60MLG,1X500MLP		#Containers: 2				Scr:	Alpha:	Beta:
4 MGJCT-1-AT-X J1D040471-1-DUP 03/31/2011 12:45		AmtRec: 1XJAR60MLG,1X500MLP		#Containers: 2				Scr:	Alpha:	Beta:
5 MGJC4-1-AA J1D040471-2-SAMP 03/31/2011 12:50		AmtRec: 1XJAR60MLG,1X500MLP		#Containers: 2				Scr:	Alpha:	Beta:
6 MGJC6-1-AA J1D040471-3-SAMP 03/31/2011 12:55		AmtRec: 1XJAR60MLG,1X500MLP		#Containers: 2				Scr:	Alpha:	Beta:
7 MGJC8-1-AA J1D040471-4-SAMP 03/31/2011 13:00		AmtRec: 1XJAR60MLG,1X500MLP		#Containers: 2				Scr:	Alpha:	Beta:

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: 04/11/2011

Batch: 1094293 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:

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

TestAmerica Laboratories, Inc.

Sample Preparation/Analysis

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

AnalyDueDate: 04/11/2011

Batch: 1094293 mg/kg
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	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 MGJJ0-1-AA-B J1D040000-293-BLK 04/05/2011 11:03 pd	AmtRec:	#Containers: 1						Scr:	Alpha:	Beta:
9 MGJJ0-1-AC-C J1D040000-293-LCS 04/05/2011 11:03 pd	AmtRec:	#Containers: 1						Scr:	Alpha:	Beta:

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

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

MGJCT1AA-SAMP Constituent List:
HEXCHROME RDL:0.1548 mg/kg LCL:80 UCL:120 RPD:20
MGJCT1AQ-MS Constituent List:
HEXCHROME RDL:0.35 mg/kg LCL:75 UCL:125 RPD:20
MGJCT1AR-MS:
HEXCHROME RDL:0.35 mg/kg LCL: UCL: RPD:
MGJJ01AA-BLK:
HEXCHROME RDL:0.1548 mg/kg LCL: UCL: RPD:
MGJJ01AC-LCS:
HEXCHROME RDL:0.35 mg/kg LCL:80 UCL:120 RPD:20
MGJCT1AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGJCT1AQ-MS Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGJCT1AR-MS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGJJ01AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGJJ01AC-LCS:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 280-14197-1

SDG Number: JP0149

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
4/12/2011 1:38 PM

Kae E Yoder
Project Manager II
kae.yoder@testamericainc.com
04/12/2011

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

Table of Contents

Cover Title Page 1

Report Narrative 3

Data Qualifiers 5

Method Summary 7

Method / Analyst Summary 8

Sample Summary 9

Sample Results 10

Sample Datasheets 11

QC Results 44

Qc Association Summary 45

Qc Reports 50

Client Chain of Custody 69

Sample Receipt Checklist 70

CASE NARRATIVE

Client: Washington Closure Hanford

Project: WASHINGTON CLOSURE HANFORD

Report Number: 280-14197-1

SDG #: JP0149
SAF#: RC-074

Date SDG Closed: April 5, 2011
Data Deliverable: 7 Day / Summary

CLIENT ID	LAB ID	ANALYSES REQUESTED	ANALYSES PERFORMED
J1H0K9	280-14197-1	6010/7471/8270A/8310/8082/8081	6010B/7471A/8270C/8310/8082/8081A
J1H0L0	280-14197-2	6010/7471/8270A/8310/8082/8081	6010B/7471A/8270C/8310/8082/8081A
J1H0L1	280-14197-3	6010/7471/8270A/8310/8082/8081	6010B/7471A/8270C/8310/8082/8081A
J1H0L2	280-14197-4	6010/7471/8270A/8310/8082/8081	6010B/7471A/8270C/8310/8082/8081A

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

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

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

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

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

RECEIPT
The samples were received on 4/5/2011; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 4.0 C.

GC/MS SEMIVOLATILES - SW846 8270C
Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to high concentrations of target analytes, sample J1H0K9 had to be analyzed at dilutions, and the associated results have been flagged with a "D". The reporting limits have been adjusted relative to the dilutions required. To provide the lowest possible detection limits, multiple dilutions are reported.

Surrogate recoveries have been "D" flagged in sample J1H0K9, as the recoveries obtained are calculated from diluted samples and are not considered reliable.

Compounds Benzo(b)fluoranthene and Benzo(k)fluoranthene were unresolved in samples J1H0K9, J1H0L0 and J1H0L2 due to matrix interferences. It can be noted that these compounds were adequately resolved in associated standards, indicating the instrument is achieving separation. The combined peak was reported as Benzo(b)fluoranthene, while Benzo(k)fluoranthene was reported as undetected even though it may be present. Associated results have been flagged with a "K".

No other anomalies were encountered.

GC SEMIVOLATILES - SW846 8081A - PESTICIDEs
The RPD between the primary and confirmation columns exceeded 40% for 4,4'-DDE in sample J1H0K9. The lower of the two values has been reported, as matrix interference is evident. The result has been flagged with an "X".

The LCS associated with batch 280-60783 exhibited the percent recovery outside the control limits for 4,4'-DDE at 54% (lower limit 61%), and associated sample results have been flagged "N". Although 4,4'-DDE was recovered outside current historical control limits, the recovery was within the allowed Marginal Exceedance control limits. This marginal exceedance has been determined to be sporadic, not systematic, and all other quality control acceptance criteria have been met; therefore, corrective action is deemed unnecessary.

No other anomalies were encountered.

GC SEMIVOLATILES - SW846 8082 - PCBs

No anomalies were encountered.

HPLC - SW846 8310 - PAHs

The RPD between the primary and confirmation columns exceeded 40% for analytes in samples J1H0K9 and J1H0L0. The lower of the two values have been reported, as matrix interference is evident. Associated results have been flagged with an "X".

No other anomalies were encountered.

TOTAL METALS - SW846 6010B/7471A

Serial dilution of a digestate in batch 280-60815 indicates that physical and chemical interferences are present for several elements. Results have been flagged with an "X".

Low levels of Zinc are present in the method blank associated with batch 280-60815. Because the concentration in the method blank is not present at a level greater than the reporting limit, corrective action is deemed unnecessary.

It can be noted that the sample amount was greater than four times the spike amount for Aluminum, Iron and Manganese in the Matrix Spike performed on sample J1H0K9; therefore, control limits are not applicable.

Silicon was recovered outside the control limits in the SW846 6010B Matrix Spike performed on sample J1H0K9, and the associated sample result has been flagged "N". There is no indication that the analytical system was operating out of control, and method accuracy has been verified by the acceptable LCS analysis data; therefore, corrective action is deemed unnecessary.

The SW846 6010B duplicate analysis of sample J1H0K9 exhibited RPD data outside the control limits for Nickel, 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.

The Mercury duplicate analysis of sample J1H0L2 exhibited RPD data outside the control limits, and the associated sample result has been flagged "M". There is no indication that the analytical system was operating out of control, and method accuracy has been verified by the acceptable LCS analysis data; therefore, corrective action is deemed unnecessary.

No other anomalies were encountered.

DATA REPORTING QUALIFIERS

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Lab Section	Qualifier	Description
GC/MS Semi VOA		
	U	Analyzed for but not detected.
	K	Benzo (b&k) fluoranthene are unresolved due to matrix, result is reported as Benzo(b)fluoranthene.
	J	Indicates an Estimated Value for TICs
	N	Presumptive evidence of material.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
GC Semi VOA		
	U	Analyzed for but not detected.
	N	LCS, LCSD: Recovery exceeds upper or lower control limits.
	X	More than 40% difference between columns, lower result reported.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
Metals		
	U	Analyzed for but not detected.
	B	Estimated result. Result is less than the RL, but greater than MDL
	4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
	N	Recovery exceeds upper or lower control limits
	M	Sample duplicate precision not met.
	X	Serial dilution in the analytical batch indicates that physical and chemical interferences are present.

DATA REPORTING QUALIFIERS

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

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

METHOD SUMMARY

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

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

Lab References:

TAL DEN = TestAmerica Denver

Method References:

ASTM = ASTM International

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

METHOD / ANALYST SUMMARY

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Method	Analyst	Analyst ID
SW846 8270C	Hoffman, Michael G	MGH
SW846 8081A	Ream, Brian E	BER
SW846 8082	Pavlakovich, Adam M	AMP
SW846 6010B	Harre, John K	JKH
SW846 7471A	Stoltz, Katie	KS
ASTM D-2216	Berry III, Paul B	PBB
SW846 8310	Hall, Koley J	KJH

SAMPLE SUMMARY

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-14197-1	J1H0K9	Solid	03/31/2011 1245	04/05/2011 0900
280-14197-2	J1H0L0	Solid	03/31/2011 1250	04/05/2011 0900
280-14197-3	J1H0L1	Solid	03/31/2011 1255	04/05/2011 0900
280-14197-4	J1H0L2	Solid	03/31/2011 1300	04/05/2011 0900

SAMPLE RESULTS

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Client Sample ID: **J1H0K9**

Lab Sample ID: 280-14197-1
Client Matrix: Solid
% Moisture: 5.2

Date Sampled: 03/31/2011 1245
Date Received: 04/05/2011 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-61082	Instrument ID:	MSS_D
Prep Method:	3550C	Prep Batch:	280-60784	Lab File ID:	D2951.D
Dilution:	5.0			Initial Weight/Volume:	30.8 g
Analysis Date:	04/06/2011 1308			Final Weight/Volume:	1000 uL
Prep Date:	04/05/2011 1430			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		3300	D	53	1700
Acenaphthylene		87	U D	87	1700
Anthracene		8600	D	87	1700
Benzo[a]anthracene		30000	D	100	1700
Benzo[a]pyrene		26000	D	100	1700
Benzo[ghi]perylene		13000	D	82	1700
Bis(2-chloroethoxy)methane		120	U D	120	1700
Bis(2-chloroethyl)ether		85	U D	85	1700
bis (2-chloroisopropyl) ether		120	U D	120	1700
Bis(2-ethylhexyl) phthalate		240	U D	240	1700
4-Bromophenyl phenyl ether		98	U D	98	1700
Butyl benzyl phthalate		220	U D	220	1700
Carbazole		1800	D	180	1700
4-Chloroaniline		420	U D	420	1700
4-Chloro-3-methylphenol		340	U D	340	1700
2-Chloronaphthalene		51	U D	51	1700
2-Chlorophenol		110	U D	110	1700
4-Chlorophenyl phenyl ether		110	U D	110	1700
Chrysene		27000	D	140	1700
Dibenz(a,h)anthracene		4700	D	98	1700
Dibenzofuran		1000	J D	100	1700
1,2-Dichlorobenzene		110	U D	110	1700
1,3-Dichlorobenzene		62	U D	62	1700
1,4-Dichlorobenzene		70	U D	70	1700
3,3'-Dichlorobenzidine		460	U D	460	3400
2,4-Dichlorophenol		51	U D	51	1700
Diethyl phthalate		130	U D	130	1700
2,4-Dimethylphenol		340	U D	340	1700
Dimethyl phthalate		120	U D	120	1700
Di-n-butyl phthalate		150	U D	150	1700
4,6-Dinitro-2-methylphenol		1700	U D	1700	3400
2,4-Dinitrophenol		1700	U D	1700	4200
2,4-Dinitrotoluene		340	U D	340	1700
2,6-Dinitrotoluene		140	U D	140	1700
Di-n-octyl phthalate		74	U D	74	1700
Fluorene		2400	D	92	1700
Hexachlorobenzene		150	U D	150	1700
Hexachlorobutadiene		51	U D	51	1700
Hexachlorocyclopentadiene		260	U D	260	1700
Hexachloroethane		110	U D	110	1700
Indeno[1,2,3-cd]pyrene		7700	D	110	1700
Isophorone		87	U D	87	1700
2-Methylnaphthalene		160	J D	98	1700
2-Methylphenol		67	U D	67	1700
3 & 4 Methylphenol		170	U D	170	1700
Naphthalene		160	U D	160	1700

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Client Sample ID: **J1H0K9**

Lab Sample ID: 280-14197-1
Client Matrix: Solid
% Moisture: 5.2

Date Sampled: 03/31/2011 1245
Date Received: 04/05/2011 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-61082	Instrument ID:	MSS_D
Prep Method:	3550C	Prep Batch:	280-60784	Lab File ID:	D2951.D
Dilution:	5.0			Initial Weight/Volume:	30.8 g
Analysis Date:	04/06/2011 1308			Final Weight/Volume:	1000 uL
Prep Date:	04/05/2011 1430			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2-Nitroaniline		260	U D	260	1700
3-Nitroaniline		380	U D	380	1700
4-Nitroaniline		370	U D	370	1700
Nitrobenzene		110	U D	110	1700
2-Nitrophenol		51	U D	51	1700
4-Nitrophenol		500	U D	500	3400
N-Nitrosodi-n-propylamine		160	U D	160	1700
N-Nitrosodiphenylamine		110	U D	110	1700
Pentachlorophenol		1700	U D	1700	3400
Phenol		92	U D	92	1700
1,2,4-Trichlorobenzene		140	U D	140	1700
2,4,5-Trichlorophenol		51	U D	51	1700
2,4,6-Trichlorophenol		51	U D	51	1700

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	73	D	50 - 120
2-Fluorophenol	65	D	53 - 120
Nitrobenzene-d5	62	D	50 - 120
Phenol-d5	72	D	52 - 120
Terphenyl-d14	60	D	55 - 120
2,4,6-Tribromophenol	63	D	51 - 120

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Client Sample ID: **J1H0K9**

Lab Sample ID: 280-14197-1
Client Matrix: Solid % Moisture: 5.2

Date Sampled: 03/31/2011 1245
Date Received: 04/05/2011 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-61082	Instrument ID:	MSS_D
Prep Method:	3550C	Prep Batch:	280-60784	Lab File ID:	D2951.D
Dilution:	5.0			Initial Weight/Volume:	30.8 g
Analysis Date:	04/06/2011 1308			Final Weight/Volume:	1000 uL
Prep Date:	04/05/2011 1430			Injection Volume:	0.5 uL

Tentatively Identified Compounds **Number TIC's Found:** **9**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
90-12-0	1-Methylnaphthalene	5.71	170	N J
613-12-7	Anthracene, 2-methyl-	8.20	760	J N
	Unknown	8.27	1700	J N
243-17-4	11H-Benzo[b]fluorene	9.18	1100	J N
239-35-0	Benzo[b]naphtho[2,1-d]thiophene	9.69	730	J N
	Unknown	9.74	740	J N
	Unknown	10.51	3200	J N
198-55-0	Perylene	11.01	16000	J N
191-26-4	Dibenzo[def,mno]chrysene	12.33	3200	J N

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Client Sample ID: **J1H0K9**

Lab Sample ID: 280-14197-1
Client Matrix: Solid
% Moisture: 5.2

Date Sampled: 03/31/2011 1245
Date Received: 04/05/2011 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-61082	Instrument ID:	MSS_D
Prep Method:	3550C	Prep Batch:	280-60784	Lab File ID:	D2952.D
Dilution:	20			Initial Weight/Volume:	30.8 g
Analysis Date:	04/06/2011 1327	Run Type:	DL	Final Weight/Volume:	1000 uL
Prep Date:	04/05/2011 1430			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Benzo[b]fluoranthene		38000	K D	540	6800
Benzo[k]fluoranthene		820	U K D	820	6800
Fluoranthene		79000	D	740	6800
Phenanthrene		38000	D	350	6800
Pyrene		68000	D	250	6800

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	76	D	50 - 120
2-Fluorophenol	66	D	53 - 120
Nitrobenzene-d5	64	D	50 - 120
Phenol-d5	63	D	52 - 120
Terphenyl-d14	78	D	55 - 120
2,4,6-Tribromophenol	86	D	51 - 120

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Client Sample ID: **J1H0L0**

Lab Sample ID: 280-14197-2
Client Matrix: Solid
% Moisture: 8.1

Date Sampled: 03/31/2011 1250
Date Received: 04/05/2011 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-61082	Instrument ID:	MSS_D
Prep Method:	3550C	Prep Batch:	280-60784	Lab File ID:	D2953.D
Dilution:	1.0			Initial Weight/Volume:	31.2 g
Analysis Date:	04/06/2011 1345			Final Weight/Volume:	1000 uL
Prep Date:	04/05/2011 1430			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		11	U	11	350
Acenaphthylene		18	U	18	350
Anthracene		18	U	18	350
Benzo[a]anthracene		35	J	21	350
Benzo[a]pyrene		52	J	21	350
Benzo[b]fluoranthene		130	J K	27	350
Benzo[ghi]perylene		21	J	17	350
Benzo[k]fluoranthene		42	U K	42	350
Bis(2-chloroethoxy)methane		24	U	24	350
Bis(2-chloroethyl)ether		17	U	17	350
bis (2-chloroisopropyl) ether		24	U	24	350
Bis(2-ethylhexyl) phthalate		48	U	48	350
4-Bromophenyl phenyl ether		20	U	20	350
Butyl benzyl phthalate		45	U	45	350
Carbazole		38	U	38	350
4-Chloroaniline		86	U	86	350
4-Chloro-3-methylphenol		69	U	69	350
2-Chloronaphthalene		10	U	10	350
2-Chlorophenol		22	U	22	350
4-Chlorophenyl phenyl ether		22	U	22	350
Chrysene		52	J	28	350
Dibenz(a,h)anthracene		20	U	20	350
Dibenzofuran		21	U	21	350
1,2-Dichlorobenzene		23	U	23	350
1,3-Dichlorobenzene		13	U	13	350
1,4-Dichlorobenzene		14	U	14	350
3,3'-Dichlorobenzidine		94	U	94	690
2,4-Dichlorophenol		10	U	10	350
Diethyl phthalate		27	U	27	350
2,4-Dimethylphenol		69	U	69	350
Dimethyl phthalate		24	U	24	350
Di-n-butyl phthalate		30	U	30	350
4,6-Dinitro-2-methylphenol		350	U	350	690
2,4-Dinitrophenol		350	U	350	860
2,4-Dinitrotoluene		69	U	69	350
2,6-Dinitrotoluene		29	U	29	350
Di-n-octyl phthalate		15	U	15	350
Fluoranthene		38	U	38	350
Fluorene		19	U	19	350
Hexachlorobenzene		30	U	30	350
Hexachlorobutadiene		10	U	10	350
Hexachlorocyclopentadiene		52	U	52	350
Hexachloroethane		22	U	22	350
Indeno[1,2,3-cd]pyrene		23	J	23	350
Isophorone		18	U	18	350
2-Methylnaphthalene		20	U	20	350

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Client Sample ID: **J1H0L0**

Lab Sample ID: 280-14197-2
Client Matrix: Solid
% Moisture: 8.1

Date Sampled: 03/31/2011 1250
Date Received: 04/05/2011 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-61082	Instrument ID:	MSS_D
Prep Method:	3550C	Prep Batch:	280-60784	Lab File ID:	D2953.D
Dilution:	1.0			Initial Weight/Volume:	31.2 g
Analysis Date:	04/06/2011 1345			Final Weight/Volume:	1000 uL
Prep Date:	04/05/2011 1430			Injection Volume:	0.5 uL

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

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	78		50 - 120
2-Fluorophenol	89		53 - 120
Nitrobenzene-d5	81		50 - 120
Phenol-d5	91		52 - 120
Terphenyl-d14	102		55 - 120
2,4,6-Tribromophenol	80		51 - 120

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Client Sample ID: **J1H0L0**

Lab Sample ID: 280-14197-2
Client Matrix: Solid

% Moisture: 8.1

Date Sampled: 03/31/2011 1250
Date Received: 04/05/2011 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-61082	Instrument ID:	MSS_D
Prep Method:	3550C	Prep Batch:	280-60784	Lab File ID:	D2953.D
Dilution:	1.0			Initial Weight/Volume:	31.2 g
Analysis Date:	04/06/2011 1345			Final Weight/Volume:	1000 uL
Prep Date:	04/05/2011 1430			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	1.99	470	J N
	Unknown	2.21	160	J N
	Unknown	2.31	190	J N
	Unknown	2.38	2900	J N

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Client Sample ID: **J1H0L1**

Lab Sample ID: 280-14197-3
Client Matrix: Solid
% Moisture: 3.1

Date Sampled: 03/31/2011 1255
Date Received: 04/05/2011 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-61082	Instrument ID:	MSS_D
Prep Method:	3550C	Prep Batch:	280-60784	Lab File ID:	D2954.D
Dilution:	1.0			Initial Weight/Volume:	30.4 g
Analysis Date:	04/06/2011 1404			Final Weight/Volume:	1000 uL
Prep Date:	04/05/2011 1430			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	340
Acenaphthylene		17	U	17	340
Anthracene		17	U	17	340
Benzo[a]anthracene		20	U	20	340
Benzo[a]pyrene		20	U	20	340
Benzo[b]fluoranthene		27	U	27	340
Benzo[ghi]perylene		16	U	16	340
Benzo[k]fluoranthene		41	U	41	340
Bis(2-chloroethoxy)methane		23	U	23	340
Bis(2-chloroethyl)ether		17	U	17	340
bis (2-chloroisopropyl) ether		23	U	23	340
Bis(2-ethylhexyl) phthalate		84	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		83	U	83	340
4-Chloro-3-methylphenol		67	U	67	340
2-Chloronaphthalene		10	U	10	340
2-Chlorophenol		21	U	21	340
4-Chlorophenyl phenyl ether		21	U	21	340
Chrysene		28	U	28	340
Dibenz(a,h)anthracene		19	U	19	340
Dibenzofuran		20	U	20	340
1,2-Dichlorobenzene		22	U	22	340
1,3-Dichlorobenzene		12	U	12	340
1,4-Dichlorobenzene		14	U	14	340
3,3'-Dichlorobenzidine		92	U	92	670
2,4-Dichlorophenol		10	U	10	340
Diethyl phthalate		26	U	26	340
2,4-Dimethylphenol		67	U	67	340
Dimethyl phthalate		23	U	23	340
Di-n-butyl phthalate		30	U	30	340
4,6-Dinitro-2-methylphenol		340	U	340	670
2,4-Dinitrophenol		340	U	340	840
2,4-Dinitrotoluene		67	U	67	340
2,6-Dinitrotoluene		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		22	U	22	340
Isophorone		17	U	17	340
2-Methylnaphthalene		19	U	19	340

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Client Sample ID: **J1H0L1**

Lab Sample ID: 280-14197-3
Client Matrix: Solid
% Moisture: 3.1

Date Sampled: 03/31/2011 1255
Date Received: 04/05/2011 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-61082	Instrument ID:	MSS_D
Prep Method:	3550C	Prep Batch:	280-60784	Lab File ID:	D2954.D
Dilution:	1.0			Initial Weight/Volume:	30.4 g
Analysis Date:	04/06/2011 1404			Final Weight/Volume:	1000 uL
Prep Date:	04/05/2011 1430			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2-Methylphenol		13	U	13	340
3 & 4 Methylphenol		34	U	34	340
Naphthalene		32	U	32	340
2-Nitroaniline		51	U	51	340
3-Nitroaniline		74	U	74	340
4-Nitroaniline		74	U	74	340
Nitrobenzene		22	U	22	340
2-Nitrophenol		10	U	10	340
4-Nitrophenol		99	U	99	670
N-Nitrosodi-n-propylamine		32	U	32	340
N-Nitrosodiphenylamine		21	U	21	340
Pentachlorophenol		340	U	340	670
Phenanthrene		17	U	17	340
Phenol		18	U	18	340
Pyrene		12	U	12	340
1,2,4-Trichlorobenzene		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	91		53 - 120
Nitrobenzene-d5	85		50 - 120
Phenol-d5	95		52 - 120
Terphenyl-d14	107		55 - 120
2,4,6-Tribromophenol	74		51 - 120

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Client Sample ID: **J1H0L1**

Lab Sample ID: 280-14197-3
Client Matrix: Solid
% Moisture: 3.1

Date Sampled: 03/31/2011 1255
Date Received: 04/05/2011 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-61082	Instrument ID:	MSS_D
Prep Method:	3550C	Prep Batch:	280-60784	Lab File ID:	D2954.D
Dilution:	1.0			Initial Weight/Volume:	30.4 g
Analysis Date:	04/06/2011 1404			Final Weight/Volume:	1000 uL
Prep Date:	04/05/2011 1430			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	2.20	160	J N
	Unknown	2.31	200	J N
	Unknown	2.38	3100	J N

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Client Sample ID: **J1H0L2**

Lab Sample ID: 280-14197-4
Client Matrix: Solid
% Moisture: 4.2

Date Sampled: 03/31/2011 1300
Date Received: 04/05/2011 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-61082	Instrument ID:	MSS_D
Prep Method:	3550C	Prep Batch:	280-60784	Lab File ID:	D2955.D
Dilution:	1.0			Initial Weight/Volume:	31.0 g
Analysis Date:	04/06/2011 1423			Final Weight/Volume:	1000 uL
Prep Date:	04/05/2011 1430			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		22	J	20	330
Benzo[a]pyrene		22	J	20	330
Benzo[b]fluoranthene		79	J K	26	330
Benzo[ghi]perylene		16	U	16	330
Benzo[k]fluoranthene		40	U K	40	330
Bis(2-chloroethoxy)methane		23	U	23	330
Bis(2-chloroethyl)ether		17	U	17	330
bis (2-chloroisopropyl) ether		23	U	23	330
Bis(2-ethylhexyl) phthalate		82	J	46	330
4-Bromophenyl phenyl ether		19	U	19	330
Butyl benzyl phthalate		43	U	43	330
Carbazole		36	U	36	330
4-Chloroaniline		83	U	83	330
4-Chloro-3-methylphenol		67	U	67	330
2-Chloronaphthalene		10	U	10	330
2-Chlorophenol		21	U	21	330
4-Chlorophenyl phenyl ether		21	U	21	330
Chrysene		27	U	27	330
Dibenz(a,h)anthracene		19	U	19	330
Dibenzofuran		20	U	20	330
1,2-Dichlorobenzene		22	U	22	330
1,3-Dichlorobenzene		12	U	12	330
1,4-Dichlorobenzene		14	U	14	330
3,3'-Dichlorobenzidine		91	U	91	670
2,4-Dichlorophenol		10	U	10	330
Diethyl phthalate		26	U	26	330
2,4-Dimethylphenol		67	U	67	330
Dimethyl phthalate		23	U	23	330
Di-n-butyl phthalate		29	U	29	330
4,6-Dinitro-2-methylphenol		330	U	330	670
2,4-Dinitrophenol		340	U	340	830
2,4-Dinitrotoluene		67	U	67	330
2,6-Dinitrotoluene		28	U	28	330
Di-n-octyl phthalate		15	U	15	330
Fluoranthene		36	J	36	330
Fluorene		18	U	18	330
Hexachlorobenzene		29	U	29	330
Hexachlorobutadiene		10	U	10	330
Hexachlorocyclopentadiene		50	U	50	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: 280-14197-1
Sdg Number: JP0149

Client Sample ID: **J1H0L2**

Lab Sample ID: 280-14197-4
Client Matrix: Solid
% Moisture: 4.2

Date Sampled: 03/31/2011 1300
Date Received: 04/05/2011 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-61082	Instrument ID:	MSS_D
Prep Method:	3550C	Prep Batch:	280-60784	Lab File ID:	D2955.D
Dilution:	1.0			Initial Weight/Volume:	31.0 g
Analysis Date:	04/06/2011 1423			Final Weight/Volume:	1000 uL
Prep Date:	04/05/2011 1430			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2-Methylphenol		13	U	13	330
3 & 4 Methylphenol		33	U	33	330
Naphthalene		31	U	31	330
2-Nitroaniline		50	U	50	330
3-Nitroaniline		74	U	74	330
4-Nitroaniline		73	U	73	330
Nitrobenzene		22	U	22	330
2-Nitrophenol		10	U	10	330
4-Nitrophenol		98	U	98	670
N-Nitrosodi-n-propylamine		31	U	31	330
N-Nitrosodiphenylamine		21	U	21	330
Pentachlorophenol		330	U	330	670
Phenanthrene		17	U	17	330
Phenol		18	U	18	330
Pyrene		48	J	12	330
1,2,4-Trichlorobenzene		28	U	28	330
2,4,5-Trichlorophenol		10	U	10	330
2,4,6-Trichlorophenol		10	U	10	330

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	80		50 - 120
2-Fluorophenol	88		53 - 120
Nitrobenzene-d5	81		50 - 120
Phenol-d5	91		52 - 120
Terphenyl-d14	101		55 - 120
2,4,6-Tribromophenol	72		51 - 120

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Client Sample ID: **J1H0L2**

Lab Sample ID: 280-14197-4
Client Matrix: Solid
% Moisture: 4.2

Date Sampled: 03/31/2011 1300
Date Received: 04/05/2011 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-61082	Instrument ID:	MSS_D
Prep Method:	3550C	Prep Batch:	280-60784	Lab File ID:	D2955.D
Dilution:	1.0			Initial Weight/Volume:	31.0 g
Analysis Date:	04/06/2011 1423			Final Weight/Volume:	1000 uL
Prep Date:	04/05/2011 1430			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	2.21	140	J N
2216-33-3	Octane, 3-methyl-	2.31	190	J N
	Unknown	2.38	2900	J N

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Client Sample ID: **J1H0K9**

Lab Sample ID: 280-14197-1
Client Matrix: Solid
% Moisture: 5.2

Date Sampled: 03/31/2011 1245
Date Received: 04/05/2011 0900

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-61485	Instrument ID:	GCS_P1
Prep Method:	3550C	Prep Batch:	280-60783	Initial Weight/Volume:	30.2 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	04/07/2011 0506			Injection Volume:	1 uL
Prep Date:	04/05/2011 1650			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.57	U	0.57	1.8
4,4'-DDE		0.29	J X N	0.25	1.8
4,4'-DDT		3.3		0.62	1.8
Aldrin		0.26	U	0.26	1.7
alpha-BHC		0.22	U	0.22	1.7
beta-BHC		0.70	U	0.70	1.7
delta-BHC		0.42	U	0.42	1.7
gamma-BHC (Lindane)		0.49	U	0.49	1.7
Heptachlor		0.22	U	0.22	1.7
Heptachlor epoxide		0.45	U	0.45	1.7
Endosulfan I		0.18	U	0.18	1.7
Endosulfan II		0.30	U	0.30	1.8
Endosulfan sulfate		0.29	U	0.29	1.8
Endrin		0.32	U	0.32	1.8
Endrin aldehyde		0.18	U	0.18	1.8
Endrin ketone		0.51	U	0.51	1.8
gamma-Chlordane		0.28	U	0.28	1.8
Methoxychlor		0.47	U	0.47	3.5
alpha-Chlordane		0.34	U	0.34	1.8
Dieldrin		0.22	U	0.22	1.8
Toxaphene		17	U	17	170

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	60		59 - 115
Decachlorobiphenyl	76		63 - 124

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Client Sample ID: **J1H0L0**

Lab Sample ID: 280-14197-2
Client Matrix: Solid
% Moisture: 8.1

Date Sampled: 03/31/2011 1250
Date Received: 04/05/2011 0900

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-61485	Instrument ID:	GCS_P1
Prep Method:	3550C	Prep Batch:	280-60783	Initial Weight/Volume:	31.5 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	04/07/2011 0522			Injection Volume:	1 uL
Prep Date:	04/05/2011 1650			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.57	U	0.57	1.8
4,4'-DDE		0.25	U N	0.25	1.8
4,4'-DDT		1.6	J	0.61	1.8
Aldrin		0.37	J	0.26	1.7
alpha-BHC		0.22	U	0.22	1.7
beta-BHC		0.69	U	0.69	1.7
delta-BHC		0.42	U	0.42	1.7
gamma-BHC (Lindane)		0.48	U	0.48	1.7
Heptachlor		0.22	U	0.22	1.7
Heptachlor epoxide		0.44	U	0.44	1.7
Endosulfan I		0.18	U	0.18	1.7
Endosulfan II		0.30	U	0.30	1.8
Endosulfan sulfate		0.29	U	0.29	1.8
Endrin		0.32	U	0.32	1.8
Endrin aldehyde		0.18	U	0.18	1.8
Endrin ketone		0.51	U	0.51	1.8
gamma-Chlordane		0.28	U	0.28	1.8
Methoxychlor		0.47	U	0.47	3.4
alpha-Chlordane		0.33	U	0.33	1.8
Dieldrin		0.22	U	0.22	1.8
Toxaphene		16	U	16	170

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	69		59 - 115
Decachlorobiphenyl	67		63 - 124

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Client Sample ID: **J1H0L1**

Lab Sample ID: 280-14197-3
Client Matrix: Solid
% Moisture: 3.1

Date Sampled: 03/31/2011 1255
Date Received: 04/05/2011 0900

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-61485	Instrument ID:	GCS_P1
Prep Method:	3550C	Prep Batch:	280-60783	Initial Weight/Volume:	30.1 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	04/06/2011 2333			Injection Volume:	1 uL
Prep Date:	04/05/2011 1650			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.56	U	0.56	1.7
4,4'-DDE		0.24	U N	0.24	1.7
4,4'-DDT		0.61	U	0.61	1.7
Aldrin		0.26	U	0.26	1.7
alpha-BHC		0.22	U	0.22	1.7
beta-BHC		0.68	U	0.68	1.7
delta-BHC		0.41	U	0.41	1.7
gamma-BHC (Lindane)		0.48	U	0.48	1.7
Heptachlor		0.22	U	0.22	1.7
Heptachlor epoxide		0.44	U	0.44	1.7
Endosulfan I		0.18	U	0.18	1.7
Endosulfan II		0.30	U	0.30	1.7
Endosulfan sulfate		0.28	U	0.28	1.7
Endrin		0.31	U	0.31	1.7
Endrin aldehyde		0.18	U	0.18	1.7
Endrin ketone		0.50	U	0.50	1.7
gamma-Chlordane		0.27	U	0.27	1.7
Methoxychlor		0.46	U	0.46	3.4
alpha-Chlordane		0.33	U	0.33	1.7
Dieldrin		0.22	U	0.22	1.7
Toxaphene		16	U	16	170

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

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Client Sample ID: **J1H0L2**

Lab Sample ID: 280-14197-4
Client Matrix: Solid
% Moisture: 4.2

Date Sampled: 03/31/2011 1300
Date Received: 04/05/2011 0900

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-61485	Instrument ID:	GCS_P1
Prep Method:	3550C	Prep Batch:	280-60783	Initial Weight/Volume:	30.8 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	04/06/2011 2350			Injection Volume:	1 uL
Prep Date:	04/05/2011 1650			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.55	U	0.55	1.7
4,4'-DDE		0.24	U N	0.24	1.7
4,4'-DDT		0.60	U	0.60	1.7
Aldrin		0.26	U	0.26	1.7
alpha-BHC		0.22	U	0.22	1.7
beta-BHC		0.67	U	0.67	1.7
delta-BHC		0.41	U	0.41	1.7
gamma-BHC (Lindane)		0.47	U	0.47	1.7
Heptachlor		0.22	U	0.22	1.7
Heptachlor epoxide		0.43	U	0.43	1.7
Endosulfan I		0.18	U	0.18	1.7
Endosulfan II		0.29	U	0.29	1.7
Endosulfan sulfate		0.28	U	0.28	1.7
Endrin		0.31	U	0.31	1.7
Endrin aldehyde		0.17	U	0.17	1.7
Endrin ketone		0.50	U	0.50	1.7
gamma-Chlordane		0.27	U	0.27	1.7
Methoxychlor		0.46	U	0.46	3.4
alpha-Chlordane		0.33	U	0.33	1.7
Dieldrin		0.21	U	0.21	1.7
Toxaphene		16	U	16	170

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	60		59 - 115
Decachlorobiphenyl	81		63 - 124

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Client Sample ID: **J1H0K9**

Lab Sample ID: 280-14197-1
Client Matrix: Solid
% Moisture: 5.2

Date Sampled: 03/31/2011 1245
Date Received: 04/05/2011 0900

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-61259	Instrument ID:	GCS_P3
Prep Method:	3550C	Prep Batch:	280-60782	Initial Weight/Volume:	32.6 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	04/07/2011 0849			Injection Volume:	1 uL
Prep Date:	04/05/2011 1650			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		2.7	U	2.7	9.7
Aroclor 1221		7.8	U	7.8	16
Aroclor 1232		1.9	U	1.9	9.7
Aroclor 1242		4.5	U	4.5	9.7
Aroclor 1248		4.5	U	4.5	9.7
Aroclor 1254		2.5	U	2.5	9.7
Aroclor 1260		2.5	U	2.5	9.7

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	96		59 - 130
Tetrachloro-m-xylene	115		53 - 128

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Client Sample ID: **J1H0L0**

Lab Sample ID: 280-14197-2
Client Matrix: Solid
% Moisture: 8.1

Date Sampled: 03/31/2011 1250
Date Received: 04/05/2011 0900

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-61259	Instrument ID:	GCS_P3
Prep Method:	3550C	Prep Batch:	280-60782	Initial Weight/Volume:	31.5 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	04/07/2011 1015			Injection Volume:	1 uL
Prep Date:	04/05/2011 1650			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		2.9	U	2.9	10
Aroclor 1221		8.3	U	8.3	17
Aroclor 1232		2.1	U	2.1	10
Aroclor 1242		4.8	U	4.8	10
Aroclor 1248		4.8	U	4.8	10
Aroclor 1254		2.7	U	2.7	10
Aroclor 1260		2.7	U	2.7	10

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	102		59 - 130
Tetrachloro-m-xylene	112		53 - 128

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Client Sample ID: **J1H0L1**

Lab Sample ID: 280-14197-3
Client Matrix: Solid
% Moisture: 3.1

Date Sampled: 03/31/2011 1255
Date Received: 04/05/2011 0900

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-61259	Instrument ID:	GCS_P3
Prep Method:	3550C	Prep Batch:	280-60782	Initial Weight/Volume:	30.9 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	04/07/2011 1042			Injection Volume:	1 uL
Prep Date:	04/05/2011 1650			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		2.8	U	2.8	10
Aroclor 1221		8.0	U	8.0	17
Aroclor 1232		2.0	U	2.0	10
Aroclor 1242		4.7	U	4.7	10
Aroclor 1248		4.7	U	4.7	10
Aroclor 1254		2.6	U	2.6	10
Aroclor 1260		2.6	U	2.6	10

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	111		59 - 130
Tetrachloro-m-xylene	117		53 - 128

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Client Sample ID: **J1H0L2**

Lab Sample ID: 280-14197-4
Client Matrix: Solid
% Moisture: 4.2

Date Sampled: 03/31/2011 1300
Date Received: 04/05/2011 0900

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-61259	Instrument ID:	GCS_P3
Prep Method:	3550C	Prep Batch:	280-60782	Initial Weight/Volume:	30.7 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	04/07/2011 1103			Injection Volume:	1 uL
Prep Date:	04/05/2011 1650			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		2.8	U	2.8	10
Aroclor 1221		8.2	U	8.2	17
Aroclor 1232		2.0	U	2.0	10
Aroclor 1242		4.8	U	4.8	10
Aroclor 1248		4.8	U	4.8	10
Aroclor 1254		2.7	U	2.7	10
Aroclor 1260		2.7	U	2.7	10

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	103		59 - 130
Tetrachloro-m-xylene	104		53 - 128

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Client Sample ID: **J1H0K9**

Lab Sample ID: 280-14197-1
Client Matrix: Solid
% Moisture: 5.2

Date Sampled: 03/31/2011 1245
Date Received: 04/05/2011 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-61359	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-60785	Initial Weight/Volume:	32.0 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	04/08/2011 1742			Injection Volume:	20 uL
Prep Date:	04/05/2011 1430			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		9.9	U	9.9	99
Acenaphthylene		8.9	U	8.9	99
Anthracene		28		3.0	20
Benzo[a]anthracene		57	X	3.2	15
Benzo[a]pyrene		57		6.3	15
Benzo[b]fluoranthene		41		4.2	15
Benzo[g,h,i]perylene		7.1	U	7.1	30
Benzo[k]fluoranthene		3.9	U	3.9	15
Chrysene		40		4.8	40
Dibenzo(a,h)anthracene		11	U	11	30
Fluoranthene		84		13	40
Fluorene		13	J	5.2	30
Indeno[1,2,3-cd]pyrene		12	U	12	30
Naphthalene		12	U	12	99
Phenanthrene		74		12	40
Pyrene		96		12	40

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

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Client Sample ID: **J1H0L0**

Lab Sample ID: 280-14197-2
Client Matrix: Solid

% Moisture: 8.1

Date Sampled: 03/31/2011 1250
Date Received: 04/05/2011 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-61359	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-60785	Initial Weight/Volume:	30.1 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	04/08/2011 1812			Injection Volume:	20 uL
Prep Date:	04/05/2011 1430			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		11	U	11	110
Acenaphthylene		9.8	U	9.8	110
Anthracene		16	J	3.3	22
Benzo[a]anthracene		67		3.5	16
Benzo[a]pyrene		100		7.0	16
Benzo[b]fluoranthene		77		4.6	16
Benzo[g,h,i]perylene		26	J X	7.8	33
Benzo[k]fluoranthene		38		4.3	16
Chrysene		120		5.2	43
Dibenzo(a,h)anthracene		16	J X	12	33
Fluoranthene		27	J X	14	43
Fluorene		5.7	U	5.7	33
Indeno[1,2,3-cd]pyrene		65		13	33
Naphthalene		13	U	13	110
Phenanthrene		14	J	13	43
Pyrene		37	J	13	43

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	100		72 - 115

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Client Sample ID: **J1H0L1**

Lab Sample ID: 280-14197-3
Client Matrix: Solid
% Moisture: 3.1

Date Sampled: 03/31/2011 1255
Date Received: 04/05/2011 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-61359	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-60785	Initial Weight/Volume:	31.1 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	04/08/2011 1843			Injection Volume:	20 uL
Prep Date:	04/05/2011 1430			Result Type:	PRIMARY

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

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	95		72 - 115

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Client Sample ID: **J1H0L2**

Lab Sample ID: 280-14197-4
Client Matrix: Solid
% Moisture: 4.2

Date Sampled: 03/31/2011 1300
Date Received: 04/05/2011 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-61359	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-60785	Initial Weight/Volume:	31.6 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	04/08/2011 1913			Injection Volume:	20 uL
Prep Date:	04/05/2011 1430			Result Type:	PRIMARY

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

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

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Client Sample ID: **J1H0K9**

Lab Sample ID: 280-14197-1
Client Matrix: Solid
% Moisture: 5.2

Date Sampled: 03/31/2011 1245
Date Received: 04/05/2011 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-61070	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-60815	Lab File ID:	25A3040611.asc
Dilution:	1.0			Initial Weight/Volume:	1.13 g
Analysis Date:	04/06/2011 1717			Final Weight/Volume:	100 mL
Prep Date:	04/06/2011 0830				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		5860	X	1.4	4.7
Antimony		0.35	U	0.35	0.56
Arsenic		3.0		0.62	0.93
Barium		72.2	X	0.071	0.47
Beryllium		0.031	U	0.031	0.19
Boron		0.92	U	0.92	1.9
Cadmium		0.62		0.038	0.19
Calcium		4680	X	13.2	46.7
Chromium		13.4	X	0.054	0.19
Cobalt		8.2	X	0.093	0.93
Copper		18.2		0.20	0.93
Iron		20500	X	3.5	4.7
Lead		13.5	X	0.25	0.47
Manganese		291	X	0.093	0.93
Molybdenum		0.28	B	0.24	1.9
Nickel		12.2	X M	0.11	3.7
Potassium		787		38.3	280
Selenium		0.80	U	0.80	0.93
Silicon		285	N	5.3	9.3
Silver		0.15	U	0.15	0.19
Vanadium		52.4		0.088	1.9
Zinc		84.5	X	0.37	0.93

Analysis Method:	6010B	Analysis Batch:	280-61299	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-60815	Lab File ID:	25A1040711.asc
Dilution:	1.0			Initial Weight/Volume:	1.13 g
Analysis Date:	04/07/2011 1151			Final Weight/Volume:	100 mL
Prep Date:	04/06/2011 0830				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Magnesium		3980	X	3.5	18.7
Sodium		228		55.1	112

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-61031	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-60779	Lab File ID:	110405AB.txt
Dilution:	1.0			Initial Weight/Volume:	0.62 g
Analysis Date:	04/05/2011 2234			Final Weight/Volume:	50 mL
Prep Date:	04/05/2011 1345				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.18		0.0056	0.017

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Client Sample ID: **J1H0L0**

Lab Sample ID: 280-14197-2
Client Matrix: Solid
% Moisture: 8.1

Date Sampled: 03/31/2011 1250
Date Received: 04/05/2011 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-61070	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-60815	Lab File ID:	25A3040611.asc
Dilution:	1.0			Initial Weight/Volume:	1.11 g
Analysis Date:	04/06/2011 1727			Final Weight/Volume:	100 mL
Prep Date:	04/06/2011 0830				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		7000	X	1.5	4.9
Antimony		0.37	U	0.37	0.59
Arsenic		3.5		0.65	0.98
Barium		82.4	X	0.075	0.49
Beryllium		0.032	U	0.032	0.20
Boron		0.96	U	0.96	2.0
Cadmium		0.51		0.040	0.20
Calcium		4280	X	13.8	49.0
Chromium		13.3	X	0.057	0.20
Cobalt		7.7	X	0.098	0.98
Copper		19.2		0.21	0.98
Iron		18500	X	3.7	4.9
Lead		11.4	X	0.26	0.49
Manganese		291	X	0.098	0.98
Molybdenum		0.25	U	0.25	2.0
Nickel		13.1	X	0.12	3.9
Potassium		823		40.2	294
Selenium		0.84	U	0.84	0.98
Silicon		215		5.5	9.8
Silver		0.16	U	0.16	0.20
Vanadium		47.3		0.092	2.0
Zinc		66.4	X	0.39	0.98

Analysis Method:	6010B	Analysis Batch:	280-61299	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-60815	Lab File ID:	25A1040711.asc
Dilution:	1.0			Initial Weight/Volume:	1.11 g
Analysis Date:	04/07/2011 1201			Final Weight/Volume:	100 mL
Prep Date:	04/06/2011 0830				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Magnesium		3830	X	3.6	19.6
Sodium		224		57.8	118

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-61031	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-60779	Lab File ID:	110405AB.txt
Dilution:	1.0			Initial Weight/Volume:	0.60 g
Analysis Date:	04/05/2011 2236			Final Weight/Volume:	50 mL
Prep Date:	04/05/2011 1345				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.092		0.0060	0.019

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Client Sample ID: **J1H0L1**

Lab Sample ID: 280-14197-3
Client Matrix: Solid
% Moisture: 3.1

Date Sampled: 03/31/2011 1255
Date Received: 04/05/2011 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-61070	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-60815	Lab File ID:	25A3040611.asc
Dilution:	1.0			Initial Weight/Volume:	1.05 g
Analysis Date:	04/06/2011 1730			Final Weight/Volume:	100 mL
Prep Date:	04/06/2011 0830				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		4670	X	1.5	4.9
Antimony		0.37	U	0.37	0.59
Arsenic		2.5		0.65	0.98
Barium		53.7	X	0.075	0.49
Beryllium		0.032	U	0.032	0.20
Boron		0.96	U	0.96	2.0
Cadmium		0.14	B	0.040	0.20
Calcium		3040	X	13.9	49.2
Chromium		8.7	X	0.057	0.20
Cobalt		6.0	X	0.098	0.98
Copper		11.9		0.21	0.98
Iron		14000	X	3.7	4.9
Lead		6.4	X	0.27	0.49
Manganese		226	X	0.098	0.98
Molybdenum		0.26	U	0.26	2.0
Nickel		11.0	X	0.12	3.9
Potassium		688		40.3	295
Selenium		0.85	U	0.85	0.98
Silicon		187		5.6	9.8
Silver		0.16	U	0.16	0.20
Vanadium		35.5		0.092	2.0
Zinc		33.1	X	0.39	0.98

Analysis Method:	6010B	Analysis Batch:	280-61299	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-60815	Lab File ID:	25A1040711.asc
Dilution:	1.0			Initial Weight/Volume:	1.05 g
Analysis Date:	04/07/2011 1203			Final Weight/Volume:	100 mL
Prep Date:	04/06/2011 0830				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Magnesium		3090	X	3.6	19.7
Sodium		170		58.0	118

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-61031	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-60779	Lab File ID:	110405AB.txt
Dilution:	1.0			Initial Weight/Volume:	0.69 g
Analysis Date:	04/05/2011 2238			Final Weight/Volume:	50 mL
Prep Date:	04/05/2011 1345				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.022		0.0050	0.015

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Client Sample ID: **J1H0L2**

Lab Sample ID: 280-14197-4
Client Matrix: Solid
% Moisture: 4.2

Date Sampled: 03/31/2011 1300
Date Received: 04/05/2011 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-61070	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-60815	Lab File ID:	25A3040611.asc
Dilution:	1.0			Initial Weight/Volume:	1.07 g
Analysis Date:	04/06/2011 1732			Final Weight/Volume:	100 mL
Prep Date:	04/06/2011 0830				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		4750	X	1.5	4.9
Antimony		0.37	U	0.37	0.59
Arsenic		2.1		0.64	0.98
Barium		49.7	X	0.074	0.49
Beryllium		0.032	U	0.032	0.20
Boron		0.96	U	0.96	2.0
Cadmium		0.18	B	0.040	0.20
Calcium		3100	X	13.8	48.8
Chromium		8.3	X	0.057	0.20
Cobalt		6.2	X	0.098	0.98
Copper		11.9		0.21	0.98
Iron		13600	X	3.7	4.9
Lead		6.5	X	0.26	0.49
Manganese		242	X	0.098	0.98
Molybdenum		0.25	U	0.25	2.0
Nickel		11.3	X	0.12	3.9
Potassium		707		40.0	293
Selenium		0.84	U	0.84	0.98
Silicon		207		5.5	9.8
Silver		0.16	U	0.16	0.20
Vanadium		33.8		0.092	2.0
Zinc		32.2	X	0.39	0.98

Analysis Method:	6010B	Analysis Batch:	280-61299	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-60815	Lab File ID:	25A1040711.asc
Dilution:	1.0			Initial Weight/Volume:	1.07 g
Analysis Date:	04/07/2011 1206			Final Weight/Volume:	100 mL
Prep Date:	04/06/2011 0830				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Magnesium		3190	X	3.6	19.5
Sodium		190		57.5	117

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-61031	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-60779	Lab File ID:	110405AB.txt
Dilution:	1.0			Initial Weight/Volume:	0.60 g
Analysis Date:	04/05/2011 2241			Final Weight/Volume:	50 mL
Prep Date:	04/05/2011 1345				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.038	M	0.0058	0.018

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

General Chemistry

Client Sample ID: **J1H0K9**

Lab Sample ID: 280-14197-1
Client Matrix: Solid

Date Sampled: 03/31/2011 1245
Date Received: 04/05/2011 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	5.2		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-60771 Analysis Date: 04/05/2011 1124 DryWt Corrected: N

General Chemistry

Client Sample ID: **J1H0L0**

Lab Sample ID: 280-14197-2
Client Matrix: Solid

Date Sampled: 03/31/2011 1250
Date Received: 04/05/2011 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	8.1		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-60771 Analysis Date: 04/05/2011 1124 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

General Chemistry

Client Sample ID: **J1H0L1**

Lab Sample ID: 280-14197-3
Client Matrix: Solid

Date Sampled: 03/31/2011 1255
Date Received: 04/05/2011 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	3.1		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-60771 Analysis Date: 04/05/2011 1124 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

General Chemistry

Client Sample ID: **J1H0L2**

Lab Sample ID: 280-14197-4
Client Matrix: Solid

Date Sampled: 03/31/2011 1300
Date Received: 04/05/2011 0900

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	4.2		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-60771 Analysis Date: 04/05/2011 1124 DryWt Corrected: N

QUALITY CONTROL RESULTS

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 280-60784					
LCS 280-60784/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-60784/1-A	Method Blank	T	Solid	3550C	
280-14197-1	J1H0K9	T	Solid	3550C	
280-14197-1DL	J1H0K9	T	Solid	3550C	
280-14197-2	J1H0L0	T	Solid	3550C	
280-14197-3	J1H0L1	T	Solid	3550C	
280-14197-3MS	Matrix Spike	T	Solid	3550C	
280-14197-3MSD	Matrix Spike Duplicate	T	Solid	3550C	
280-14197-4	J1H0L2	T	Solid	3550C	
Analysis Batch:280-61082					
LCS 280-60784/2-A	Lab Control Sample	T	Solid	8270C	280-60784
MB 280-60784/1-A	Method Blank	T	Solid	8270C	280-60784
280-14197-1	J1H0K9	T	Solid	8270C	280-60784
280-14197-1DL	J1H0K9	T	Solid	8270C	280-60784
280-14197-2	J1H0L0	T	Solid	8270C	280-60784
280-14197-3	J1H0L1	T	Solid	8270C	280-60784
280-14197-3MS	Matrix Spike	T	Solid	8270C	280-60784
280-14197-3MSD	Matrix Spike Duplicate	T	Solid	8270C	280-60784
280-14197-4	J1H0L2	T	Solid	8270C	280-60784

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 280-60782					
LCS 280-60782/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-60782/1-A	Method Blank	T	Solid	3550C	
280-14197-1	J1H0K9	T	Solid	3550C	
280-14197-1MS	Matrix Spike	T	Solid	3550C	
280-14197-1MSD	Matrix Spike Duplicate	T	Solid	3550C	
280-14197-2	J1H0L0	T	Solid	3550C	
280-14197-3	J1H0L1	T	Solid	3550C	
280-14197-4	J1H0L2	T	Solid	3550C	
Prep Batch: 280-60783					
LCS 280-60783/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-60783/1-A	Method Blank	T	Solid	3550C	
280-14197-1	J1H0K9	T	Solid	3550C	
280-14197-2	J1H0L0	T	Solid	3550C	
280-14197-2MS	Matrix Spike	T	Solid	3550C	
280-14197-2MSD	Matrix Spike Duplicate	T	Solid	3550C	
280-14197-3	J1H0L1	T	Solid	3550C	
280-14197-4	J1H0L2	T	Solid	3550C	
Analysis Batch:280-61259					
LCS 280-60782/2-A	Lab Control Sample	T	Solid	8082	280-60782
MB 280-60782/1-A	Method Blank	T	Solid	8082	280-60782
280-14197-1	J1H0K9	T	Solid	8082	280-60782
280-14197-1MS	Matrix Spike	T	Solid	8082	280-60782
280-14197-1MSD	Matrix Spike Duplicate	T	Solid	8082	280-60782
280-14197-2	J1H0L0	T	Solid	8082	280-60782
280-14197-3	J1H0L1	T	Solid	8082	280-60782
280-14197-4	J1H0L2	T	Solid	8082	280-60782
Analysis Batch:280-61485					
LCS 280-60783/2-A	Lab Control Sample	T	Solid	8081A	280-60783
MB 280-60783/1-A	Method Blank	T	Solid	8081A	280-60783
280-14197-1	J1H0K9	T	Solid	8081A	280-60783
280-14197-2	J1H0L0	T	Solid	8081A	280-60783
280-14197-2MS	Matrix Spike	T	Solid	8081A	280-60783
280-14197-2MSD	Matrix Spike Duplicate	T	Solid	8081A	280-60783
280-14197-3	J1H0L1	T	Solid	8081A	280-60783
280-14197-4	J1H0L2	T	Solid	8081A	280-60783

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-60779					
LCS 280-60779/2-A	Lab Control Sample	T	Solid	7471A	
MB 280-60779/1-A	Method Blank	T	Solid	7471A	
280-14197-1	J1H0K9	T	Solid	7471A	
280-14197-2	J1H0L0	T	Solid	7471A	
280-14197-3	J1H0L1	T	Solid	7471A	
280-14197-4	J1H0L2	T	Solid	7471A	
280-14197-4DU	Duplicate	T	Solid	7471A	
280-14197-4MS	Matrix Spike	T	Solid	7471A	
Prep Batch: 280-60815					
LCS 280-60815/2-A	Lab Control Sample	T	Solid	3050B	
MB 280-60815/1-A	Method Blank	T	Solid	3050B	
280-14197-1	J1H0K9	T	Solid	3050B	
280-14197-1DU	Duplicate	T	Solid	3050B	
280-14197-1MS	Matrix Spike	T	Solid	3050B	
280-14197-2	J1H0L0	T	Solid	3050B	
280-14197-3	J1H0L1	T	Solid	3050B	
280-14197-4	J1H0L2	T	Solid	3050B	
Analysis Batch:280-61031					
LCS 280-60779/2-A	Lab Control Sample	T	Solid	7471A	280-60779
MB 280-60779/1-A	Method Blank	T	Solid	7471A	280-60779
280-14197-1	J1H0K9	T	Solid	7471A	280-60779
280-14197-2	J1H0L0	T	Solid	7471A	280-60779
280-14197-3	J1H0L1	T	Solid	7471A	280-60779
280-14197-4	J1H0L2	T	Solid	7471A	280-60779
280-14197-4DU	Duplicate	T	Solid	7471A	280-60779
280-14197-4MS	Matrix Spike	T	Solid	7471A	280-60779
Analysis Batch:280-61070					
LCS 280-60815/2-A	Lab Control Sample	T	Solid	6010B	280-60815
MB 280-60815/1-A	Method Blank	T	Solid	6010B	280-60815
280-14197-1	J1H0K9	T	Solid	6010B	280-60815
280-14197-1DU	Duplicate	T	Solid	6010B	280-60815
280-14197-1MS	Matrix Spike	T	Solid	6010B	280-60815
280-14197-2	J1H0L0	T	Solid	6010B	280-60815
280-14197-3	J1H0L1	T	Solid	6010B	280-60815
280-14197-4	J1H0L2	T	Solid	6010B	280-60815

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:280-61299					
LCS 280-60815/2-A	Lab Control Sample	T	Solid	6010B	280-60815
MB 280-60815/1-A	Method Blank	T	Solid	6010B	280-60815
280-14197-1	J1H0K9	T	Solid	6010B	280-60815
280-14197-1DU	Duplicate	T	Solid	6010B	280-60815
280-14197-1MS	Matrix Spike	T	Solid	6010B	280-60815
280-14197-2	J1H0L0	T	Solid	6010B	280-60815
280-14197-3	J1H0L1	T	Solid	6010B	280-60815
280-14197-4	J1H0L2	T	Solid	6010B	280-60815

Report Basis
T = Total

General Chemistry					
Analysis Batch:280-60771					
280-14197-1	J1H0K9	T	Solid	D-2216	
280-14197-1DU	Duplicate	T	Solid	D-2216	
280-14197-2	J1H0L0	T	Solid	D-2216	
280-14197-3	J1H0L1	T	Solid	D-2216	
280-14197-4	J1H0L2	T	Solid	D-2216	

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
HPLC/IC					
Prep Batch: 280-60785					
LCS 280-60785/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-60785/1-A	Method Blank	T	Solid	3550C	
280-14197-1	J1H0K9	T	Solid	3550C	
280-14197-2	J1H0L0	T	Solid	3550C	
280-14197-3	J1H0L1	T	Solid	3550C	
280-14197-4	J1H0L2	T	Solid	3550C	
280-14197-4MS	Matrix Spike	T	Solid	3550C	
280-14197-4MSD	Matrix Spike Duplicate	T	Solid	3550C	
Analysis Batch:280-61359					
LCS 280-60785/2-A	Lab Control Sample	T	Solid	8310	280-60785
MB 280-60785/1-A	Method Blank	T	Solid	8310	280-60785
280-14197-1	J1H0K9	T	Solid	8310	280-60785
280-14197-2	J1H0L0	T	Solid	8310	280-60785
280-14197-3	J1H0L1	T	Solid	8310	280-60785
280-14197-4	J1H0L2	T	Solid	8310	280-60785
280-14197-4MS	Matrix Spike	T	Solid	8310	280-60785
280-14197-4MSD	Matrix Spike Duplicate	T	Solid	8310	280-60785

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Method Blank - Batch: 280-60784

Method: 8270C
Preparation: 3550C

Lab Sample ID:	MB 280-60784/1-A	Analysis Batch:	280-61082	Instrument ID:	MSS_D
Client Matrix:	Solid	Prep Batch:	280-60784	Lab File ID:	D2950.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.5 g
Analysis Date:	04/06/2011 1249	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	04/05/2011 1430			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acenaphthene	10	U	10	320
Acenaphthylene	17	U	17	320
Anthracene	17	U	17	320
Benzo[a]anthracene	20	U	20	320
Benzo[a]pyrene	20	U	20	320
Benzo[b]fluoranthene	26	U	26	320
Benzo[ghi]perylene	16	U	16	320
Benzo[k]fluoranthene	39	U	39	320
Bis(2-chloroethoxy)methane	23	U	23	320
Bis(2-chloroethyl)ether	16	U	16	320
bis (2-chloroisopropyl) ether	23	U	23	320
Bis(2-ethylhexyl) phthalate	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	81	U	81	320
4-Chloro-3-methylphenol	65	U	65	320
2-Chloronaphthalene	9.8	U	9.8	320
2-Chlorophenol	21	U	21	320
4-Chlorophenyl phenyl ether	21	U	21	320
Chrysene	27	U	27	320
Dibenz(a,h)anthracene	19	U	19	320
Dibenzofuran	20	U	20	320
1,2-Dichlorobenzene	22	U	22	320
1,3-Dichlorobenzene	12	U	12	320
1,4-Dichlorobenzene	13	U	13	320
3,3'-Dichlorobenzidine	89	U	89	650
2,4-Dichlorophenol	9.8	U	9.8	320
Diethyl phthalate	26	U	26	320
2,4-Dimethylphenol	65	U	65	320
Dimethyl phthalate	23	U	23	320
Di-n-butyl phthalate	29	U	29	320
4,6-Dinitro-2-methylphenol	320	U	320	650
2,4-Dinitrophenol	330	U	330	810
2,4-Dinitrotoluene	65	U	65	320
2,6-Dinitrotoluene	28	U	28	320
Di-n-octyl phthalate	14	U	14	320
Fluoranthene	35	U	35	320
Fluorene	18	U	18	320
Hexachlorobenzene	29	U	29	320
Hexachlorobutadiene	9.8	U	9.8	320
Hexachlorocyclopentadiene	49	U	49	320
Hexachloroethane	21	U	21	320
Indeno[1,2,3-cd]pyrene	22	U	22	320
Isophorone	17	U	17	320

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Method Blank - Batch: 280-60784

Method: 8270C
Preparation: 3550C

Lab Sample ID:	MB 280-60784/1-A	Analysis Batch:	280-61082	Instrument ID:	MSS_D
Client Matrix:	Solid	Prep Batch:	280-60784	Lab File ID:	D2950.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.5 g
Analysis Date:	04/06/2011 1249	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	04/05/2011 1430			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
2-Methylnaphthalene	19	U	19	320
2-Methylphenol	13	U	13	320
3 & 4 Methylphenol	32	U	32	320
Naphthalene	30	U	30	320
2-Nitroaniline	49	U	49	320
3-Nitroaniline	72	U	72	320
4-Nitroaniline	71	U	71	320
Nitrobenzene	22	U	22	320
2-Nitrophenol	9.8	U	9.8	320
4-Nitrophenol	95	U	95	650
N-Nitrosodi-n-propylamine	30	U	30	320
N-Nitrosodiphenylamine	21	U	21	320
Pentachlorophenol	320	U	320	650
Phenanthrene	17	U	17	320
Phenol	18	U	18	320
Pyrene	12	U	12	320
1,2,4-Trichlorobenzene	28	U	28	320
2,4,5-Trichlorophenol	9.8	U	9.8	320
2,4,6-Trichlorophenol	9.8	U	9.8	320

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	87	50 - 120
2-Fluorophenol	94	53 - 120
Nitrobenzene-d5	89	50 - 120
Phenol-d5	97	52 - 120
Terphenyl-d14	113	55 - 120
2,4,6-Tribromophenol	74	51 - 120

Method Blank TICs- Batch: 280-60784

Cas Number	Analyte	RT	Est. Result	Qual
	Unknown	2.21	151	N J
	Unknown	2.31	180	N J
	Unknown	2.38	3060	N J

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Lab Control Sample - Batch: 280-60784

Method: 8270C
Preparation: 3550C

Lab Sample ID:	LCS 280-60784/2-A	Analysis Batch:	280-61082	Instrument ID:	MSS_D
Client Matrix:	Solid	Prep Batch:	280-60784	Lab File ID:	D2937.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.2 g
Analysis Date:	04/06/2011 0846	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	04/05/2011 1430			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acenaphthene	2560	1970	77	52 - 120	
Anthracene	2560	2320	91	57 - 120	
Carbazole	2560	2360	92	54 - 120	
4-Chloro-3-methylphenol	2560	1980	77	57 - 120	
2-Chlorophenol	2560	1960	77	53 - 120	
1,4-Dichlorobenzene	2560	1800	70	46 - 120	
2,4-Dinitrotoluene	2560	2350	92	53 - 120	
2-Methylnaphthalene	2560	1950	76	55 - 120	
2-Methylphenol	2560	2020	79	51 - 120	
4-Nitrophenol	2560	2110	82	41 - 120	
N-Nitrosodi-n-propylamine	2560	2180	85	51 - 120	
Pentachlorophenol	2560	1840	72	30 - 120	
Phenol	2560	2070	81	54 - 120	
Pyrene	2560	2280	89	50 - 120	
1,2,4-Trichlorobenzene	2560	1710	67	50 - 120	
2,4,6-Trichlorophenol	2560	1990	78	50 - 120	

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	82	50 - 120
2-Fluorophenol	86	53 - 120
Nitrobenzene-d5	81	50 - 120
Phenol-d5	87	52 - 120
Terphenyl-d14	92	55 - 120
2,4,6-Tribromophenol	79	51 - 120

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-60784

Method: 8270C
Preparation: 3550C

MS Lab Sample ID:	280-14197-3	Analysis Batch:	280-61082	Instrument ID:	MSS_D
Client Matrix:	Solid	Prep Batch:	280-60784	Lab File ID:	D2938.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.4 g
Analysis Date:	04/06/2011 0906			Final Weight/Volume:	1000 uL
Prep Date:	04/05/2011 1430			Injection Volume:	0.5 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-14197-3	Analysis Batch:	280-61082	Instrument ID:	MSS_D
Client Matrix:	Solid	Prep Batch:	280-60784	Lab File ID:	D2939.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0 g
Analysis Date:	04/06/2011 0924			Final Weight/Volume:	1000 uL
Prep Date:	04/05/2011 1430			Injection Volume:	0.5 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acenaphthene	75	79	52 - 120	7	30		
Anthracene	87	90	57 - 120	4	30		
Carbazole	87	89	54 - 120	4	30		
4-Chloro-3-methylphenol	73	80	57 - 120	10	30		
2-Chlorophenol	78	78	53 - 120	2	30		
1,4-Dichlorobenzene	70	71	46 - 120	3	30		
2,4-Dinitrotoluene	87	90	53 - 120	4	30		
2-Methylnaphthalene	73	77	55 - 120	7	30		
2-Methylphenol	80	83	51 - 120	6	30		
4-Nitrophenol	79	77	41 - 120	1	30		
N-Nitrosodi-n-propylamine	83	86	51 - 120	6	30		
Pentachlorophenol	63	67	30 - 120	8	30		
Phenol	81	84	54 - 120	5	30		
Pyrene	85	84	50 - 120	1	38		
1,2,4-Trichlorobenzene	63	68	50 - 120	8	30		
2,4,6-Trichlorophenol	73	77	50 - 120	7	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
2-Fluorobiphenyl	79	80	50 - 120
2-Fluorophenol	84	82	53 - 120
Nitrobenzene-d5	77	79	50 - 120
Phenol-d5	86	87	52 - 120
Terphenyl-d14	90	85	55 - 120
2,4,6-Tribromophenol	78	80	51 - 120

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Method Blank - Batch: 280-60783

Method: 8081A
Preparation: 3550C

Lab Sample ID:	MB 280-60783/1-A	Analysis Batch:	280-61485	Instrument ID:	GCS_P1
Client Matrix:	Solid	Prep Batch:	280-60783	Lab File ID:	028F2801.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.2 g
Analysis Date:	04/07/2011 0006	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	04/05/2011 1650			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
4,4'-DDD	0.53	U	0.53	1.6
4,4'-DDE	0.23	U	0.23	1.6
4,4'-DDT	0.57	U	0.57	1.6
Aldrin	0.24	U	0.24	1.6
alpha-BHC	0.21	U	0.21	1.6
beta-BHC	0.64	U	0.64	1.6
delta-BHC	0.39	U	0.39	1.6
gamma-BHC (Lindane)	0.45	U	0.45	1.6
Heptachlor	0.21	U	0.21	1.6
Heptachlor epoxide	0.41	U	0.41	1.6
Endosulfan I	0.17	U	0.17	1.6
Endosulfan II	0.28	U	0.28	1.6
Endosulfan sulfate	0.27	U	0.27	1.6
Endrin	0.29	U	0.29	1.6
Endrin aldehyde	0.16	U	0.16	1.6
Endrin ketone	0.47	U	0.47	1.6
gamma-Chlordane	0.26	U	0.26	1.6
Methoxychlor	0.43	U	0.43	3.2
alpha-Chlordane	0.31	U	0.31	1.6
Dieldrin	0.20	U	0.20	1.6
Toxaphene	15	U	15	160

Surrogate	% Rec	Acceptance Limits
Tetrachloro-m-xylene	66	59 - 115
Decachlorobiphenyl	99	63 - 124

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Lab Control Sample - Batch: 280-60783

Method: 8081A
Preparation: 3550C

Lab Sample ID:	LCS 280-60783/2-A	Analysis Batch:	280-61485	Instrument ID:	GCS_P1
Client Matrix:	Solid	Prep Batch:	280-60783	Lab File ID:	021F2101.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.3 g
Analysis Date:	04/06/2011 2210	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	04/05/2011 1650			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
4,4'-DDD	16.5	9.79	59	57 - 118	
4,4'-DDE	16.5	8.86	54	61 - 115	N
4,4'-DDT	16.5	11.3	68	53 - 125	
Aldrin	16.5	12.1	73	60 - 115	
alpha-BHC	16.5	11.9	72	54 - 115	
beta-BHC	16.5	12.8	77	58 - 115	
delta-BHC	16.5	13.7	83	62 - 115	
gamma-BHC (Lindane)	16.5	12.5	76	59 - 115	
Heptachlor	16.5	13.1	79	61 - 115	
Heptachlor epoxide	16.5	13.0	79	62 - 112	
Endosulfan I	16.5	12.4	75	55 - 115	
Endosulfan II	16.5	13.7	83	60 - 115	
Endosulfan sulfate	16.5	13.8	84	58 - 118	
Endrin	16.5	15.3	93	61 - 121	
Endrin aldehyde	16.5	11.7	71	54 - 115	
Endrin ketone	16.5	12.9	78	61 - 118	
gamma-Chlordane	16.5	12.1	73	60 - 115	
Methoxychlor	16.5	14.6	88	52 - 123	
alpha-Chlordane	16.5	11.8	72	60 - 115	
Dieldrin	16.5	13.6	82	63 - 117	

Surrogate	% Rec	Acceptance Limits
Tetrachloro-m-xylene	61	59 - 115
Decachlorobiphenyl	95	63 - 124

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-60783

Method: 8081A
Preparation: 3550C

MS Lab Sample ID:	280-14197-2	Analysis Batch:	280-61485	Instrument ID:	GCS_P1
Client Matrix:	Solid	Prep Batch:	280-60783	Lab File ID:	048F4801.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.7 g
Analysis Date:	04/07/2011 0539			Final Weight/Volume:	10000 uL
Prep Date:	04/05/2011 1650			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-14197-2	Analysis Batch:	280-61485	Instrument ID:	GCS_P1
Client Matrix:	Solid	Prep Batch:	280-60783	Lab File ID:	049F4901.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.1 g
Analysis Date:	04/07/2011 0555			Final Weight/Volume:	10000 uL
Prep Date:	04/05/2011 1650			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
4,4'-DDD	57	60	57 - 118	6	20		
4,4'-DDE	62	64	61 - 115	5	15		
4,4'-DDT	55	63	53 - 125	14	29		
Aldrin	69	73	60 - 115	7	50		
alpha-BHC	73	75	54 - 115	5	17		
beta-BHC	78	82	58 - 115	7	17		
delta-BHC	77	83	62 - 115	10	19		
gamma-BHC (Lindane)	74	78	59 - 115	7	24		
Heptachlor	75	82	61 - 115	10	18		
Heptachlor epoxide	72	76	62 - 112	7	18		
Endosulfan I	66	69	55 - 115	6	26		
Endosulfan II	71	75	60 - 115	8	20		
Endosulfan sulfate	66	68	58 - 118	6	22		
Endrin	83	97	61 - 121	17	30		
Endrin aldehyde	58	64	54 - 115	12	29		
Endrin ketone	67	72	61 - 118	10	20		
gamma-Chlordane	66	67	60 - 115	2	21		
Methoxychlor	68	73	52 - 123	9	23		
alpha-Chlordane	65	62	60 - 115	1	18		
Dieldrin	71	76	63 - 117	9	25		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Tetrachloro-m-xylene	65	68	59 - 115
Decachlorobiphenyl	78	91	63 - 124

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Method Blank - Batch: 280-60782

Method: 8082
Preparation: 3550C

Lab Sample ID:	MB 280-60782/1-A	Analysis Batch:	280-61259	Instrument ID:	GCS_P3
Client Matrix:	Solid	Prep Batch:	280-60782	Lab File ID:	042B4201.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.5 g
Analysis Date:	04/07/2011 0807	Units:	ug/Kg	Final Weight/Volume:	5000 uL
Prep Date:	04/05/2011 1650			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Aroclor 1016	2.7	U	2.7	9.8
Aroclor 1221	7.9	U	7.9	16
Aroclor 1232	2.0	U	2.0	9.8
Aroclor 1242	4.6	U	4.6	9.8
Aroclor 1248	4.6	U	4.6	9.8
Aroclor 1254	2.6	U	2.6	9.8
Aroclor 1260	2.6	U	2.6	9.8

Surrogate	% Rec	Acceptance Limits
Decachlorobiphenyl	97	59 - 130
Tetrachloro-m-xylene	118	53 - 128

Lab Control Sample - Batch: 280-60782

Method: 8082
Preparation: 3550C

Lab Sample ID:	LCS 280-60782/2-A	Analysis Batch:	280-61259	Instrument ID:	GCS_P3
Client Matrix:	Solid	Prep Batch:	280-60782	Lab File ID:	043B4301.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.1 g
Analysis Date:	04/07/2011 0828	Units:	ug/Kg	Final Weight/Volume:	5000 uL
Prep Date:	04/05/2011 1650			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aroclor 1016	33.2	39.6	119	54 - 132	
Aroclor 1260	33.2	39.6	119	62 - 129	

Surrogate	% Rec	Acceptance Limits
Decachlorobiphenyl	106	59 - 130
Tetrachloro-m-xylene	113	53 - 128

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-60782

Method: 8082
Preparation: 3550C

MS Lab Sample ID:	280-14197-1	Analysis Batch:	280-61259	Instrument ID:	GCS_P3
Client Matrix:	Solid	Prep Batch:	280-60782	Lab File ID:	045B4501.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	32.0 g
Analysis Date:	04/07/2011 0911			Final Weight/Volume:	5000 uL
Prep Date:	04/05/2011 1650			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-14197-1	Analysis Batch:	280-61259	Instrument ID:	GCS_P3
Client Matrix:	Solid	Prep Batch:	280-60782	Lab File ID:	046B4601.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.4 g
Analysis Date:	04/07/2011 0932			Final Weight/Volume:	5000 uL
Prep Date:	04/05/2011 1650			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Aroclor 1016	114	112	54 - 132	3	26		
Aroclor 1260	118	118	62 - 129	5	26		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Decachlorobiphenyl	87	83	59 - 130
Tetrachloro-m-xylene	100	101	53 - 128

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Method Blank - Batch: 280-60785

Method: 8310
Preparation: 3550C

Lab Sample ID:	MB 280-60785/1-A	Analysis Batch:	280-61359	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-60785	Lab File ID:	G0408008.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	32.9 g
Analysis Date:	04/08/2011 1641	Units:	ug/Kg	Final Weight/Volume:	4000 uL
Prep Date:	04/05/2011 1430			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Acenaphthene	9.1	U	9.1	91
Acenaphthylene	8.2	U	8.2	91
Anthracene	2.8	U	2.8	18
Benzo[a]anthracene	2.9	U	2.9	14
Benzo[a]pyrene	5.8	U	5.8	14
Benzo[b]fluoranthene	3.8	U	3.8	14
Benzo[g,h,i]perylene	6.6	U	6.6	27
Benzo[k]fluoranthene	3.6	U	3.6	14
Chrysene	4.4	U	4.4	36
Dibenzo(a,h)anthracene	10	U	10	27
Fluoranthene	12	U	12	36
Fluorene	4.8	U	4.8	27
Indeno[1,2,3-cd]pyrene	11	U	11	27
Naphthalene	11	U	11	91
Phenanthrene	11	U	11	36
Pyrene	11	U	11	36

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

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Lab Control Sample - Batch: 280-60785

Method: 8310
Preparation: 3550C

Lab Sample ID:	LCS 280-60785/2-A	Analysis Batch:	280-61359	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-60785	Lab File ID:	G0408009.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.6 g
Analysis Date:	04/08/2011 1711	Units:	ug/Kg	Final Weight/Volume:	4000 uL
Prep Date:	04/05/2011 1430			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acenaphthene	1960	1790	91	72 - 115	
Acenaphthylene	1960	1790	91	60 - 115	
Anthracene	1960	1690	86	61 - 115	
Benzo[a]anthracene	1960	2000	102	76 - 115	
Benzo[a]pyrene	1960	1680	86	69 - 115	
Benzo[b]fluoranthene	1960	1870	95	81 - 115	
Benzo[g,h,i]perylene	1960	1880	96	71 - 115	
Benzo[k]fluoranthene	1960	1800	92	85 - 115	
Chrysene	1960	1860	95	70 - 115	
Dibenzo(a,h)anthracene	1960	1900	97	79 - 115	
Fluoranthene	1960	1840	94	67 - 115	
Fluorene	1960	1820	93	72 - 115	
Indeno[1,2,3-cd]pyrene	1960	2000	102	76 - 115	
Naphthalene	1960	1850	95	77 - 115	
Phenanthrene	1960	1860	95	79 - 115	
Pyrene	1960	1860	95	77 - 115	

Surrogate	% Rec	Acceptance Limits
Terphenyl-d14 (SUR)	91	72 - 115

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-60785

Method: 8310
Preparation: 3550C

MS Lab Sample ID:	280-14197-4	Analysis Batch:	280-61359	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-60785	Lab File ID:	G0408014.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.4 g
Analysis Date:	04/08/2011 1944			Final Weight/Volume:	4000 uL
Prep Date:	04/05/2011 1430			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-14197-4	Analysis Batch:	280-61359	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-60785	Lab File ID:	G0408015.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	32.0 g
Analysis Date:	04/08/2011 2015			Final Weight/Volume:	4000 uL
Prep Date:	04/05/2011 1430			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acenaphthene	94	94	72 - 115	6	20		
Acenaphthylene	92	93	60 - 115	4	21		
Anthracene	87	89	61 - 115	4	20		
Benzo[a]anthracene	104	106	76 - 115	3	20		
Benzo[a]pyrene	88	90	69 - 115	3	20		
Benzo[b]fluoranthene	97	99	81 - 115	3	20		
Benzo[g,h,i]perylene	98	99	71 - 115	3	20		
Benzo[k]fluoranthene	93	95	85 - 115	3	20		
Chrysene	96	98	70 - 115	3	20		
Dibenzo(a,h)anthracene	98	100	79 - 115	3	20		
Fluoranthene	96	97	67 - 115	3	20		
Fluorene	94	95	72 - 115	4	20		
Indeno[1,2,3-cd]pyrene	104	106	76 - 115	3	20		
Naphthalene	96	96	77 - 115	5	20		
Phenanthrene	96	97	79 - 115	4	20		
Pyrene	97	98	77 - 115	3	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Terphenyl-d14 (SUR)	92	96	72 - 115

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Method Blank - Batch: 280-60815

Method: 6010B
Preparation: 3050B

Lab Sample ID:	MB 280-60815/1-A	Analysis Batch:	280-61070	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-60815	Lab File ID:	25A3040611.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	04/06/2011 1713	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/06/2011 0830				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Aluminum	1.6	U	1.6	5.0
Antimony	0.38	U	0.38	0.60
Arsenic	0.66	U	0.66	1.0
Barium	0.076	U	0.076	0.50
Beryllium	0.033	U	0.033	0.20
Boron	0.98	U	0.98	2.0
Cadmium	0.041	U	0.041	0.20
Calcium	14.1	U	14.1	50.0
Chromium	0.058	U	0.058	0.20
Cobalt	0.10	U	0.10	1.0
Copper	0.22	U	0.22	1.0
Iron	3.8	U	3.8	5.0
Lead	0.27	U	0.27	0.50
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
Vanadium	0.094	U	0.094	2.0
Zinc	0.400	B	0.40	1.0

Method Blank - Batch: 280-60815

Method: 6010B
Preparation: 3050B

Lab Sample ID:	MB 280-60815/1-A	Analysis Batch:	280-61299	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-60815	Lab File ID:	25A1040711.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	04/07/2011 1147	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/06/2011 0830				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Magnesium	3.7	U	3.7	20.0
Sodium	59.0	U	59.0	120

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Lab Control Sample - Batch: 280-60815

Method: 6010B
Preparation: 3050B

Lab Sample ID:	LCS 280-60815/2-A	Analysis Batch:	280-61070	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-60815	Lab File ID:	25A3040611.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	04/06/2011 1715	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/06/2011 0830				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	200	183.9	92	82 - 116	
Antimony	50.0	45.58	91	82 - 110	
Arsenic	100	91.32	91	85 - 110	
Barium	200	191.5	96	87 - 112	
Beryllium	5.00	4.57	91	84 - 114	
Boron	100	89.72	90	81 - 110	
Cadmium	10.0	9.70	97	87 - 110	
Calcium	5000	4810	96	82 - 114	
Chromium	20.0	18.99	95	84 - 114	
Cobalt	50.0	46.75	93	87 - 110	
Copper	25.0	23.36	93	88 - 110	
Iron	100	96.44	96	87 - 120	
Lead	50.0	46.54	93	86 - 110	
Manganese	50.0	45.68	91	88 - 110	
Molybdenum	100	95.37	95	86 - 110	
Nickel	50.0	46.70	93	87 - 110	
Potassium	5000	4974	99	89 - 110	
Selenium	200	181.4	91	83 - 110	
Silicon	1000	140.8	14	10 - 70	
Silver	5.00	4.68	94	87 - 114	
Vanadium	50.0	46.89	94	88 - 110	
Zinc	50.0	44.82	90	76 - 114	

Lab Control Sample - Batch: 280-60815

Method: 6010B
Preparation: 3050B

Lab Sample ID:	LCS 280-60815/2-A	Analysis Batch:	280-61299	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-60815	Lab File ID:	25A1040711.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	04/07/2011 1149	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/06/2011 0830				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Magnesium	5000	4570	91	90 - 110	
Sodium	5000	4813	96	90 - 112	

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Matrix Spike - Batch: 280-60815

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-14197-1	Analysis Batch:	280-61070	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-60815	Lab File ID:	25A3040611.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.05 g
Analysis Date:	04/06/2011 1725	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/06/2011 0830				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	5860		201	7581	858	50 - 200	4
Antimony	0.35	U	50.2	27.02	54	20 - 200	
Arsenic	3.0		100	84.40	81	76 - 111	
Barium	72.2		201	261.7	94	52 - 159	
Beryllium	0.031	U	5.02	4.08	81	72 - 105	
Boron	0.92	U	100	77.02	77	75 - 107	
Cadmium	0.62		10.0	9.43	88	40 - 130	
Calcium	4680		5020	10360	113	43 - 165	
Chromium	13.4		20.1	32.06	93	70 - 200	
Cobalt	8.2		50.2	49.76	83	72 - 106	
Copper	18.2		25.1	37.67	77	37 - 187	
Iron	20500		100	21140	598	70 - 200	4
Lead	13.5		50.2	51.35	75	70 - 200	
Manganese	291		50.2	358.5	134	40 - 200	4
Molybdenum	0.28	B	100	83.69	83	75 - 103	
Nickel	12.2		50.2	52.95	81	61 - 126	
Potassium	787		5020	5558	95	56 - 172	
Selenium	0.80	U	201	163.2	81	76 - 104	
Silicon	285		1000	431.7	15	20 - 200	N
Silver	0.15	U	5.02	4.43	88	75 - 141	
Vanadium	52.4		50.2	98.08	91	50 - 169	
Zinc	84.5		50.2	121.1	73	70 - 200	

Matrix Spike - Batch: 280-60815

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-14197-1	Analysis Batch:	280-61299	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-60815	Lab File ID:	25A1040711.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.05 g
Analysis Date:	04/07/2011 1158	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/06/2011 0830				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Magnesium	3980	5020	8663	93	64 - 145	
Sodium	228	5020	4942	94	78 - 111	

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Duplicate - Batch: 280-60815

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-14197-1	Analysis Batch:	280-61070	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-60815	Lab File ID:	25A3040611.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.08 g
Analysis Date:	04/06/2011 1722	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/06/2011 0830				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Aluminum	5860		4859	19	40	
Antimony	0.35	U	0.37	NC	40	U
Arsenic	3.0		2.79	8	30	
Barium	72.2		58.28	21	30	
Beryllium	0.031	U	0.032	NC	30	U
Boron	0.92	U	0.96	NC	30	U
Cadmium	0.62		0.500	21	30	
Calcium	4680		4519	3	30	
Chromium	13.4		9.96	29	40	
Cobalt	8.2		6.66	21	30	
Copper	18.2		15.90	14	30	
Iron	20500		17410	17	40	
Lead	13.5		9.72	33	40	
Manganese	291		237.8	20	40	
Molybdenum	0.28	B	0.25	NC	30	U
Nickel	12.2		8.34	38	30	M
Potassium	787		668.3	16	40	
Selenium	0.80	U	0.84	NC	30	U
Silicon	285		210.9	30	40	
Silver	0.15	U	0.16	NC	30	U
Vanadium	52.4		45.16	15	30	
Zinc	84.5		67.40	23	40	

Duplicate - Batch: 280-60815

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-14197-1	Analysis Batch:	280-61299	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-60815	Lab File ID:	25A1040711.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.08 g
Analysis Date:	04/07/2011 1156	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/06/2011 0830				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Magnesium	3980	3007	28	30	
Sodium	228	192.1	17	30	

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Method Blank - Batch: 280-60779

Method: 7471A
Preparation: 7471A

Lab Sample ID:	MB 280-60779/1-A	Analysis Batch:	280-61031	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-60779	Lab File ID:	110405AB.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	04/05/2011 2229	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	04/05/2011 1345				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	0.0055	U	0.0055	0.017

Lab Control Sample - Batch: 280-60779

Method: 7471A
Preparation: 7471A

Lab Sample ID:	LCS 280-60779/2-A	Analysis Batch:	280-61031	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-60779	Lab File ID:	110405AB.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	04/05/2011 2231	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	04/05/2011 1345				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.417	0.419	100	87 - 111	

Matrix Spike - Batch: 280-60779

Method: 7471A
Preparation: 7471A

Lab Sample ID:	280-14197-4	Analysis Batch:	280-61031	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-60779	Lab File ID:	110405AB.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.63 g
Analysis Date:	04/05/2011 2245	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	04/05/2011 1345				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.038	0.414	0.438	97	87 - 111	

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Duplicate - Batch: 280-60779

Method: 7471A
Preparation: 7471A

Lab Sample ID:	280-14197-4	Analysis Batch:	280-61031	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-60779	Lab File ID:	110405AB.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.67 g
Analysis Date:	04/05/2011 2243	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	04/05/2011 1345				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Mercury	0.038	0.0283	29	20	M

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-14197-1
Sdg Number: JP0149

Duplicate - Batch: 280-60771

Method: D-2216
Preparation: N/A

Lab Sample ID:	280-14197-1	Analysis Batch:	280-60771	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:	04/05/2011 1124	Units:	%	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Moisture	5.2	5.2	0.3	20	

4.0 °C 4511 R

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-074-218	Page 1 of 21

Collector: K LUCAS	Company Contact: D Woolery	Telephone No.: 509-431-0448	Project Coordinator: KESSNER, JH
Price Code: 8L 88 D3/31/11	Data Turnaround: 21 Days 7 D3/31/11		
Project Designation: 100-D/DR Burial Grounds & Remaining Sites - Soil In-Proce	Sampling Location: 100-D-8 Outfall Excavation Area		SAF No.: RC-074
Ice Chest No.: D3/31/11 GWS-211	Field Logbook No.: EL-1607-10	COA: R100D82600	Method of Shipment: FED EX
Shipped To: D3/31/11 TestAmerica Incorporated, ~~Richland~~ DENVER	Offsite Property No.: D3/31/11 N/A NA		Bill of Lading/Air Bill No.: 7969 4576 1485

POSSIBLE SAMPLE HAZARDS/REMARKS

None

Special Handling and/or Storage

Cool 4 Deg C

Preservation	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	None	None	None	None
Type of Container	G/P	G/P	aG	aG	aG	aG	G/P	G/P	G/P	G/P
No. of Container(s)	1	1	1	0	0	0	1	0	0	0
Volume	60mL	60mL	250mL	250mL	250mL	250mL	500mL	500mL	500mL	500mL
SAMPLE ANALYSIS	See item (1) in Special Instructions.	Chromium Hex - 7196	Semi-VOA - 8270A (TCL)	PAHs - 8310	PCBs - 8082	Pesticides - 8081	See item (2) in Special Instructions.	Isotopic Uranium	Isotopic Plutonium	Nickel-63; Strontium-89,90 -- Total Sr
Sample No. / Matrix * / Sample Date / Sample Time										
J1H0K9 / SOIL / 3/31/11 / 1245	X		X	X	X	X				
J1H0L0 / SOIL / 3/31/11 / 1250	X		X	X	X	X				
J1H0L1 / SOIL / 3/31/11 / 1255	X		X	X	X	X				
J1H0L2 / SOIL / 3/31/11 / 1300	X		X	X	X	X				

D3/31/11

2578

CHAIN OF POSSESSION	Sign/Print Names		
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
K Lucas Kevin Lucas	3-31-11 1340	D Woolery	3/31/11 1340
Relinquished By/~~Removed~~ From: D Woolery	Date/Time: 3/31/11 1650	Received By/Stored In: A. Freier	Date/Time: 1650 3-31-11
Relinquished By/Removed From: A. Freier	WCH Date/Time: 1651 3-31-11	Received By/~~Stored In~~: J.E. Beck	Date/Time: 1651 3-31-11
Relinquished By/~~Removed~~ From: J.E. Beck	WCH Date/Time: 0830 4-4-11	Received By/Stored In: FED EX	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time: 4/5/11 900
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time

SPECIAL INSTRUCTIONS

None

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

(2) Gamma Spec (Client List) {Americium-241, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155, Silver-108 metastable}

JP0149

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

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

WCH-EE-011

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Project 28002142 -60167R -Sol.

Analytical Due:

Report Due: 4/12/11 (Rush 5d TAT)

Sample Check-in List

Date/Time Received: 4/5/11 900 GM Screen Result 12 microR/hr

Client: Washington Closure Hanford SDG #: JP0149 NA[ ] SAF #: RC-074 NA [ ]

Job Number: 14197 Chain of Custody # RC-074-218

Shipping Container ID: GWS-211 Air Bill # 7969 4576 1485

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: 4.0 NA [ ] 5. Vermiculite/packing materials is NA [ ] Wet [ ] Dry [✓]
6. Number of samples in shipping container: 4
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: 4/5/11

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on ___ by ___ Person Contacted ___

[ ] No action necessary; process as is.

Project Manager [signature] Date 4/6/11

LS-023, Rev. 7, 1/08

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

RICHLAND, WA 99354

FedEx Express

J11151102250225

Ship Date: 04APR11
ActWgt: 26.0 LB
CAD: 8897843/INET3130

Dims: 16 X 10 X 12 IN

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

TUE - 05 APR A1
PRIORITY OVERNIGHT

TRK# 0201 7969 4576 1485

XH WHHA

80002
CO-US
DEN

50DG3/26A8/7EFB

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic valueof the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.