0096337

SAF-RC-107
100-H Remaining Sites Burial Grounds – Soil Full Protocol
FINAL DATA PACKAGE

COMPLETE COPY OF DATA PACKAGE TO:

Kathy Wendt H4-21 KW 4/12/11
NITIAL/DATE

COMMENTS:

SDG JP0138 SAF-RC-107

Rad only Chem only ☑ Rad & Chem

☑ Complete Partial

Waste Site: 1607-H-1 Verification Resampling

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APR 18 2011
EDMC

Analytical Data Package Prepared For

Washington Closure Hanford

RECEIVED
APR 2011

Radiochemical Analysis By

TestAmerica

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

Assigned Laboratory Code: TARL

Data Package Contains 67 ***Pages***

Report No.: 46148

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.
JP0138	RC-107	J1FXW2	J1C240523-1	MF5F31AH	9MF5F310	1083434
		J1FXW2	J1C240523-1	MF5F31AF	9MF5F310	1083435
		J1FXW2	J1C240523-1	MF5F31AC	9MF5F310	1083436
		J1FXW2	J1C240523-1	MF5F31AJ	9MF5F310	1083438
		J1FXW2	J1C240523-1	MF5F31AE	9MF5F310	1083439
		J1FXW2	J1C240523-1	MF5F31AG	9MF5F310	1083440
		J1FXW2	J1C240523-1	MF5F31AD	9MF5F310	1083441
		J1FXW2	J1C240523-1	MF5F31AA	9MF5F310	1088197

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

Washington Hanford Closure
2620 Fermi Avenue
Richland, WA 99354

TestAmerica Laboratories, Inc.

April 6, 2011

Attention: Joan Kessner

SAF Number	:	RC-107
Date SDG Closed	:	March 24, 2011
Number of Samples	:	One (1)
Sample Type	:	Soil
SDG Number	:	JP0138
Data Deliverable	:	7– Day / Summary

CASE NARRATIVE

I. Introduction

On March 24, 2011, one soil sample was received at TestAmerica for radiochemical analysis. Upon receipt, the sample was assigned the following laboratory ID number to correspond with the Washington Closure Hanford (WCH) specific ID:

WCH ID#	TARL ID#	MATRIX	DATE OF RECEIPT
J1FXW2	MF5F3	SOIL	03/23/11

II. Sample Receipt

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

III. Analytical Results/Methodology

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

The requested analyses were:

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

Gamma Spec by method RL-GAM-001
Liquid Scintillation Counting
Tritium by method RL-LSC-005
Carbon-14 by method RL-LSC-008
Nickel-63 by method RL-LCS-017
Chemical Analysis
Hexavalent Chromium by EPA method 7196A

IV. Quality Control

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

QC and sample results are reported in the same units.

V. Comments

Alpha Spectroscopy
Plutonium-238, -239/240 by method RL-ALP-002 :
There was an obvious batch blank/LCS switch; the samples were switched and recalculated for acceptable results. Except as note; the LCS, batch blank, sample and sample duplicate (J1FXW2) results are within contractual requirements.

Uranium 234, 235 and 238 by method RL-ALP-015:
The LCS, batch blank, sample and sample duplicate (J1FXW2) results are within contractual requirements.

Gas Proportional Counting
Strontium-90 by method RL-GPC-003 :
The LCS, batch blank, sample and sample duplicate (J1FXW2) results are within contractual requirements.

Gamma Spectroscopy
Gamma Spec by method RL-GAM-001 :
There was insufficient volume for a duplicate. Sample J1FXW2 was recounted on a different detector for the duplicate (J1FXW2 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, sample and sample duplicate (J1FXW2) results are within contractual requirements.

Liquid Scintillation Counting
Tritium by method RL-LSC-005 :
The LCS, batch blank, sample and sample duplicate (J1FXW2) results are within contractual requirements.

Carbon-14 by method RL-LSC-008 :

The LCS, batch blank, sample and sample duplicate (J1FXW2) results are within contractual requirements.

Nickel-63 by method RL-LCS-017 :
The LCS, batch blank, sample and sample duplicate (J1FXW2) results are within contractual requirements.

Chemical Analysis
Hexavalent Chromium by EPA method 7196A
The LCS, batch blank, sample, sample duplicate (J1FXW2) and the sample matrix spike (J1FXW2) 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:

Whitney Kitson
for Rhonda Wagar
Project Manager

Drinking Water Method Cross References

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

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

Uncertainty Estimation

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

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

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

Report Definitions

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

Sample Results Summary

TestAmerica TARL

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

Date: 06-Apr-11

Report No. : 46148

SDG No: JP0138

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDC or MDA	CRDL	RPD
1083435 PUISO_PLATE_AEA									
J1FXW2									
	MF5F31AF	PU-238	0.00E+00 +- 6.2E-02	U	pCi/g	91%	1.17E-01	1.00E+00	
		PU239/40	0.00E+00 +- 6.2E-02	U	pCi/g	91%	1.17E-01	1.00E+00	
J1FXW2 DUP									
	MF5F31AL	PU-238	0.00E+00 +- 8.6E-02	U	pCi/g	79%	1.61E-01	1.00E+00	
		PU239/40	-2.16E-03 +- 8.6E-02	U	pCi/g	79%	1.61E-01	1.00E+00	-200.0
1083436 UISO_IE_PLATE_AEA									
J1FXW2									
	MF5F31AC	U-234	2.65E-01 +- 1.8E-01		pCi/g	98%	1.52E-01	1.00E+00	
		U-235	-7.60E-03 +- 5.1E-02	U	pCi/g	98%	1.33E-01	1.00E+00	
		U-238	1.05E-01 +- 1.2E-01	U	pCi/g	98%	1.77E-01	1.00E+00	
J1FXW2 DUP									
	MF5F31AM	U-234	9.01E-02 +- 1.0E-01	U	pCi/g	94%	1.48E-01	1.00E+00	98.5
		U-235	-5.09E-03 +- 5.1E-02	U	pCi/g	94%	1.22E-01	1.00E+00	-39.7
		U-238	2.17E-01 +- 1.6E-01		pCi/g	94%	1.48E-01	1.00E+00	69.8
1083434 GAMMA_GS									
J1FXW2									
	MF5F31AH	AG-108M	4.41E-03 +- 1.3E-02	U	pCi/g		2.33E-02		
		AMERICIUM 241	-5.67E-02 +- 7.8E-02	U	pCi/g		1.28E-01		
		BA-133	-4.69E-03 +- 2.5E-02	U	pCi/g		3.54E-02		
		CO-60	4.80E-03 +- 1.7E-02	U	pCi/g		3.07E-02	5.00E-02	
		CS-137	-7.27E-03 +- 1.6E-02	U	pCi/g		2.72E-02	1.00E-01	
		EU-152	3.02E-03 +- 6.3E-02	U	pCi/g		7.81E-02	1.00E-01	
		EU-154	3.62E-02 +- 5.2E-02	U	pCi/g		9.52E-02	1.00E-01	
		EU-155	-8.76E-03 +- 5.5E-02	U	pCi/g		9.18E-02	1.00E-01	
J1FXW2 DUP									
	MF5F31AK	AG-108M	2.95E-03 +- 1.4E-02	U	pCi/g		2.48E-02		39.7
		AMERICIUM 241	-4.85E-03 +- 1.9E-01	U	pCi/g		3.08E-01		-168.5
		BA-133	1.03E-02 +- 2.2E-02	U	pCi/g		3.33E-02		533.7
		CO-60	8.31E-03 +- 1.9E-02	U	pCi/g		3.36E-02	5.00E-02	53.6
		CS-137	-1.11E-02 +- 1.7E-02	U	pCi/g		2.83E-02	1.00E-01	-41.2
		EU-152	-2.79E-03 +- 4.8E-02	U	pCi/g		8.06E-02	1.00E-01	4910.4
		EU-154	1.79E-02 +- 6.4E-02	U	pCi/g		1.13E-01	1.00E-01	67.7
		EU-155	3.00E-02 +- 5.6E-02	U	pCi/g		9.63E-02	1.00E-01	364.8
1083441 SRTOT_SEP_PRECIP_GPC									
J1FXW2									
	MF5F31AD	STRONTIUM	6.22E-02 +- 8.8E-02	U	pCi/g	63%	1.88E-01		
J1FXW2 DUP									

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: 06-Apr-11

Report No. : 46148

SDG No: JP0138

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDC or MDA	CRDL	RPD
1083441 SRTOT_SEP_PRECIP_GPC									
J1FXW2 DUP									
	MF5F31AR	STRONTIUM	9.39E-02 +- 8.6E-02	U	pCi/g	63%	1.70E-01		40.6
1083438 C14_CHEM_LSC									
J1FXW2									
	MF5F31AJ	C-14	3.62E-01 +- 2.3E-01	U	pCi/g	100%	4.49E-01	5.00E+01	
J1FXW2 DUP									
	MF5F31AN	C-14	1.63E-01 +- 2.2E-01	U	pCi/g	100%	4.47E-01	5.00E+01	75.8
1083439 NI63_LSC									
J1FXW2									
	MF5F31AE	NI-63	1.35E+00 +- 7.0E+00	U	pCi/g	88%	1.42E+01	3.00E+01	
J1FXW2 DUP									
	MF5F31AP	NI-63	-3.64E-01 +- 6.9E+00	U	pCi/g	88%	1.42E+01	3.00E+01	347.4
1083440 906.0_H3_LSC									
J1FXW2									
	MF5F31AG	H-3	1.56E-02 +- 1.0E-02	U	pCi/g	100%	2.01E-02	4.00E+02	
J1FXW2 DUP									
	MF5F31AQ	H-3	2.43E-02 +- 9.2E-03		pCi/g	100%	1.75E-02	4.00E+02	43.4
1088197 7196_CR6									
J1FXW2									
	MF5F31AA	HEXCHROME	1.49E-01 +- 0.0E+00	U	mg/kg	N/A	1.49E-01	1.55E-01	
	MF5F31AW	HEXCHROME	1.50E-01 +- 0.0E+00	U	mg/kg	N/A	1.50E-01	3.50E-01	0.7

No. of Results: 36

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: 06-Apr-11

Report No. : 46148

SDG No.: JP0138

Batch Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDC|MDA
PUISO_PLATE_AEA								
1083435 BLANK QC,								
MF57G1AA	PU-238	-1.55E-03 +- 6.2E-02	U	pCi/g	89%			1.16E-01
	PU239/40	-1.55E-03 +- 6.2E-02	U	pCi/g	89%			1.16E-01
1083435 LCS,								
MF57G1AC	PU239/40	6.84E+00 +- 1.9E+00		pCi/g	85%	99%	0.0	1.49E-01
UISO_IE_PLATE_AEA								
1083436 BLANK QC,								
MF57H1AA	U-234	-3.65E-03 +- 4.9E-02	U	pCi/g	89%			1.09E-01
	U-235	0.00E+00 +- 4.9E-02	U	pCi/g	89%			9.09E-02
	U-238	-1.22E-03 +- 4.9E-02	U	pCi/g	89%			9.09E-02
1083436 LCS,								
MF57H1AC	U-234	3.10E+00 +- 8.3E-01		pCi/g	88%	100%	0.0	9.99E-02
	U-238	3.27E+00 +- 8.7E-01		pCi/g	88%	100%	0.0	1.08E-01
GAMMA_GS								
1083434 BLANK QC,								
MF57E1AA	AG-108M	-5.56E-03 +- 9.7E-03	U	pCi/g				1.65E-02
	AMERICIUM 241	6.32E-04 +- 4.8E-02	U	pCi/g				7.04E-02
	BA-133	9.47E-03 +- 1.7E-02	U	pCi/g				2.72E-02
	CO-60	-7.60E-03 +- 1.4E-02	U	pCi/g				2.39E-02
	CS-137	-3.66E-03 +- 1.3E-02	U	pCi/g				2.33E-02
	EU-152	-1.93E-02 +- 3.6E-02	U	pCi/g				5.88E-02
	EU-154	1.88E-02 +- 4.1E-02	U	pCi/g				8.16E-02
	EU-155	1.05E-02 +- 3.1E-02	U	pCi/g				5.54E-02
1083434 LCS,								
MF57E1AC	CS-137	9.83E-01 +- 1.5E-01		pCi/g		91%	-0.1	4.23E-02
	RA-226	9.07E-01 +- 1.6E-01		pCi/g		80%	-0.2	7.66E-02
	RA-228	9.48E-01 +- 2.1E-01		pCi/g		101%	0.0	1.35E-01
	U-238	9.45E-01 +- 1.6E-01		pCi/g		79%	-0.2	8.44E-02
SRTOT_SEP_PRECIP_GPC								
1083441 BLANK QC,								
MF57R1AA	STRONTIUM	4.55E-02 +- 5.9E-02	U	pCi/g	93%			1.25E-01
1083441 LCS,								
MF57R1AC	STRONTIUM	9.82E-01 +- 2.8E-01		pCi/g	94%	86%	-0.1	1.26E-01
C14_CHEM_LSC								
1083438 BLANK QC,								
MF57L1AA	C-14	-1.70E-03 +- 5.2E-03	U	pCi/g	100%			1.13E-02
1083438 LCS,								
MF57L1AC	C-14	7.72E+00 +- 5.4E-01		pCi/g	100%	100%	0.0	4.51E-01
NI63_LSC								
1083439 BLANK QC,								
MF57M1AA	NI-63	5.97E+00 +- 6.3E+00	U	pCi/g	96%			1.21E+01

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

rptSTLRchQcSummary V5:2.12 A2002

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

Date: 06-Apr-11

TestAmerica TARL

Ordered by Method, Batch No, QC Type,.

Report No. : 46148

SDG No.: JP0138

Batch Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDC|MDA
1083439 LCS,								
MF57M1AC	NI-63	5.12E+02 +- 5.0E+01		pCi/g	90%	87%	-0.1	1.35E+01
906.0_H3_LSC								
1083440 BLANK QC,								
MF57P1AA	H-3	3.13E-02 +- 2.0E-02	U	pCi/g	100%			3.87E-02
1083440 LCS,								
MF57P1AC	H-3	3.44E-01 +- 2.9E-02		pCi/g	100%	117%	0.2	3.48E-02
7196_CR6								
1088197 MATRIX SPIKE, J1FXW2								
MF5F31AT	HEXCHROME	9.04E+00 +- 0.0E+00		mg/kg	N/A	89%	-0.1	1.53E-01
1088197 LCS,								
MGAEQ1AC	HEXCHROME	1.90E+01 +- 0.0E+00		mg/kg	N/A	95%	-0.1	1.55E-01
1088197 BLANK QC,								
MGAEQ1AA	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.

TestAmerica Laboratories, Inc.

FORM I

SAMPLE RESULTS

Date: 06-Apr-11

Lab Name:	TestAmerica	**SDG:**	JP0138	**Collection Date:**	3/23/2011 8:15:00 AM
Lot-Sample No.:	J1C240523-1	**Report No. :**	46148	**Received Date:**	3/24/2011 11:00:00 AM
Client Sample ID:	J1FXW2	**COC No. :**	RC-107-064	**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: 1083434	GAMMA_GS			**Work Order:** MF5F31AH			**Report DB ID:** 9MF5F310					
AG-108M	***4.41E-03***	U	1.3E-02	1.3E-02	2.33E-02	pCi/g		*0.19*	3/28/11 06:12 a		354.0	GER10$1
						1.17E-02		*0.66*			g	
AMERICIUM 241	***-5.67E-02***	U	7.8E-02	7.8E-02	1.28E-01	pCi/g		*-0.44*	3/28/11 06:12 a		354.0	GER10$1
						6.40E-02		*-(1.5)*			g	
BA-133	***-4.69E-03***	U	2.5E-02	2.5E-02	3.54E-02	pCi/g		*-0.13*	3/28/11 06:12 a		354.0	GER10$1
						1.77E-02		*-0.37*			g	
CO-60	***4.80E-03***	U	1.7E-02	1.7E-02	3.07E-02	pCi/g		*0.16*	3/28/11 06:12 a		354.0	GER10$1
						1.54E-02	5.00E-02	*0.56*			g	
CS-137	***-7.27E-03***	U	1.6E-02	1.6E-02	2.72E-02	pCi/g		*-0.27*	3/28/11 06:12 a		354.0	GER10$1
							1.00E-01	*-0.9*			g	
EU-152	***3.02E-03***	U	6.3E-02	6.3E-02	7.81E-02	pCi/g		*0.04*	3/28/11 06:12 a		354.0	GER10$1
							1.00E-01	*0.1*			g	
EU-154	***3.62E-02***	U	5.2E-02	5.2E-02	9.52E-02	pCi/g		*0.38*	3/28/11 06:12 a		354.0	GER10$1
							1.00E-01	*(1.4)*			g	
EU-155	***-8.76E-03***	U	5.5E-02	5.5E-02	9.18E-02	pCi/g		*-0.1*	3/28/11 06:12 a		354.0	GER10$1
							1.00E-01	*-0.32*			g	
Batch: 1083435	PUISO_PLATE_AEA			**Work Order:** MF5F31AF			**Report DB ID:** 9MF5F310					
PU-238	***0.00E+00***	U	0.0E+00	6.2E-02	1.17E-01	pCi/g	91%	*0.*	3/31/11 05:08 p		1.03	ALP121
						1.62E-02	1.00E+00	*0.*			g	
PU239/40	***0.00E+00***	U	0.0E+00	6.2E-02	1.17E-01	pCi/g	91%	*0.*	3/31/11 05:08 p		1.03	ALP121
						1.62E-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.

TestAmerica Laboratories, Inc.

FORM I

SAMPLE RESULTS

Date: 06-Apr-11

Lab Name:	TestAmerica	SDG:	JP0138	Collection Date:	3/23/2011 8:15:00 AM
Lot-Sample No.:	J1C240523-1	Report No. :	46148	Received Date:	3/24/2011 11:00:00 AM
Client Sample ID:	J1FXW2	COC No. :	RC-107-064	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: 1083436	UISO_IE_PLATE_AEA			Work Order: MF5F31AC			Report DB ID: 9MF5F310					
U-234	***2.65E-01***		1.7E-01	1.8E-01	1.52E-01	pCi/g	98%	*(1.7)*	4/1/11 03:05 a		0.98	ALP3
						4.16E-02	1.00E+00	*(3.)*			g	
U-235	***-7.60E-03***	U	5.1E-02	5.1E-02	1.33E-01	pCi/g	98%	*-0.06*	4/1/11 03:05 a		0.98	ALP3
						3.22E-02	1.00E+00	*-0.3*			g	
U-238	***1.05E-01***	U	1.1E-01	1.2E-01	1.77E-01	pCi/g	98%	*0.59*	4/1/11 03:05 a		0.98	ALP3
						5.43E-02	1.00E+00	*(1.8)*			g	
							Ratio U-234/238 = 2.5					
Batch: 1083438	C14_CHEM_LSC			Work Order: MF5F31AJ			Report DB ID: 9MF5F310					
C-14	***3.62E-01***	U	2.0E-01	2.3E-01	4.49E-01	pCi/g	100%	*0.81*	4/3/11 03:11 a		5.029	LSC3
						2.11E-01	5.00E+01	*(3.2)*			g	
Batch: 1083439	NI63_LSC			Work Order: MF5F31AE			Report DB ID: 9MF5F310					
NI-63	***1.35E+00***	U	5.8E+00	7.0E+00	1.42E+01	pCi/g	88%	*0.1*	4/3/11 03:47 p		0.25	LSC3
						6.65E+00	3.00E+01	*0.38*			g	
Batch: 1083440	906.0_H3_LSC			Work Order: MF5F31AG			Report DB ID: 9MF5F310					
H-3	***1.56E-02***	U	9.1E-03	1.0E-02	2.01E-02	pCi/g	100%	*0.78*	4/4/11 04:01 a		79.3	LSC8
						9.52E-03	4.00E+02	*(3.1)*			g	
Batch: 1083441	SRTOT_SEP_PRECIP_GPC			Work Order: MF5F31AD			Report DB ID: 9MF5F310					
STRONTIUM	***6.22E-02***	U	8.6E-02	8.8E-02	1.88E-01	pCi/g	63%	*0.33*	4/5/11 03:06 p		6.06	GPC26A
						8.80E-02		*(1.4)*			g	
Batch: 1088197	7196_CR6			Work Order: MF5F31AA			Report DB ID: 9MF5F310					

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: 06-Apr-11

Lab Name:	TestAmerica	**SDG:**	JP0138	**Collection Date:**	3/23/2011 8:15:00 AM
Lot-Sample No.:	J1C240523-1	**Report No. :**	46148	**Received Date:**	3/24/2011 11:00:00 AM
Client Sample ID:	J1FXW2	**COC No. :**	RC-107-064	**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
HEXCHROME	***1.49E-01***	U		0.0E+00	1.49E-01	mg/kg	N/A 1.55E-01	*1.* *N/A*	3/29/11 11:15 a		2.5 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: 06-Apr-11

Lab Name:	TestAmerica	SDG:	JP0138	Collection Date:	3/23/2011 8:15:00 AM
Lot-Sample No.:	J1C240523-1	Report No. :	46148	Received Date:	3/24/2011 11:00:00 AM
Client Sample ID:	J1FXW2	COC No. :	RC-107-064	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

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.

TestAmerica Laboratories, Inc.

FORM II

Date: 06-Apr-11

DUPLICATE RESULTS

Lab Name:	TestAmerica	**SDG:**	JP0138	**Collection Date:**	3/23/2011 8:15:00 AM
Lot-Sample No.:	J1C240523-1	**Report No. :**	46148	**Received Date:**	3/24/2011 11:00:00 AM
Client Sample ID:	J1FXW2	**COC No. :**	RC-107-064	**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: 1088197	7196_CR6			**Work Order:** MF5F31AW		**Report DB ID:** MF5F31ER			**Orig Sa DB ID:** 9MF5F310			
HEXCHROME	1.50E-01	U		0.0E+00	1.50E-01	mg/kg	N/A	1.	3/29/11 11:15 a		2.5	
	1.49E-01	U	**RPD** 0.7			3.50E-01		N/A			g	

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

TestAmerica
rptSTLRchDupV5.2
.12 A2002

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

FORM II

Date: 06-Apr-11

DUPLICATE RESULTS

Lab Name:	TestAmerica	**SDG:**	JP0138	**Collection Date:**	3/23/2011 8:15:00 AM
Lot-Sample No.:	J1C240523-1	**Report No. :**	46148	**Received Date:**	3/24/2011 11:00:00 AM
Client Sample ID:	J1FXW2 DUP	**COC No. :**	RC-107-064	**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: 1083434	GAMMA_GS			**Work Order:** MF5F31AK		**Report DB ID:** MF5F31KR			**Orig Sa DB ID:** 9MF5F310			
AG-108M	2.95E-03	U	1.4E-02	1.4E-02	2.48E-02	pCi/g		0.12	3/28/11 09:40 a		354.0	GER13$1
	4.41E-03	U	**RPD**	**39.7**				0.41			g	
AMERICIUM 241	-4.85E-03	U	1.9E-01	1.9E-01	3.08E-01	pCi/g		-0.02	3/28/11 09:40 a		354.0	GER13$1
	-5.67E-02	U	**RPD**	**-168.5**				-0.05			g	
BA-133	1.03E-02	U	2.2E-02	2.2E-02	3.33E-02	pCi/g		0.31	3/28/11 09:40 a		354.0	GER13$1
	-4.69E-03	U	**RPD**	**533.7**				0.94			g	
CO-60	8.31E-03	U	1.9E-02	1.9E-02	3.36E-02	pCi/g		0.25	3/28/11 09:40 a		354.0	GER13$1
	4.80E-03	U	**RPD**	**53.6**		5.00E-02		0.89			g	
CS-137	-1.11E-02	U	1.7E-02	1.7E-02	2.83E-02	pCi/g		-0.39	3/28/11 09:40 a		354.0	GER13$1
	-7.27E-03	U	**RPD**	**-41.2**		1.00E-01		-(1.3)			g	
EU-152	-2.79E-03	U	4.8E-02	4.8E-02	8.06E-02	pCi/g		-0.03	3/28/11 09:40 a		354.0	GER13$1
	3.02E-03	U	**RPD**	**4910.4**		1.00E-01		-0.11			g	
EU-154	1.79E-02	U	6.4E-02	6.4E-02	1.13E-01	pCi/g		0.16	3/28/11 09:40 a		354.0	GER13$1
	3.62E-02	U	**RPD**	**67.7**		1.00E-01		0.56			g	
EU-155	3.00E-02	U	5.6E-02	5.6E-02	9.63E-02	pCi/g		0.31	3/28/11 09:40 a		354.0	GER13$1
	-8.76E-03	U	**RPD**	**364.8**		1.00E-01		(1.1)			g	
Batch: 1083435	PUISO_PLATE_AEA			**Work Order:** MF5F31AL		**Report DB ID:** MF5F31LR			**Orig Sa DB ID:** 9MF5F310			
PU-238	0.00E+00	U	0.0E+00	8.6E-02	1.61E-01	pCi/g	79%	0.	3/31/11 05:08 p		1.02	ALP123
	0.00E+00	U	**RPD**			1.00E+00		0.			g	
PU239/40	-2.16E-03	U	8.6E-02	8.6E-02	1.61E-01	pCi/g	79%	-0.01	3/31/11 05:08 p		1.02	ALP123
	0.00E+00	U	**RPD**	**-200.0**		1.00E+00		-0.05			g	

TestAmerica **RPD** - Relative Percent Difference.

rptSTLRchDupV5.2 .12 A2002 **MDC|MDA,Lc** - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.

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

FORM II

Date: 06-Apr-11

DUPLICATE RESULTS

Lab Name:	TestAmerica	**SDG:**	JP0138	**Collection Date:**	3/23/2011 8:15:00 AM
Lot-Sample No.:	J1C240523-1	**Report No. :**	46148	**Received Date:**	3/24/2011 11:00:00 AM
Client Sample ID:	J1FXW2 DUP	**COC No. :**	RC-107-064	**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: 1083436	UISO_IE_PLATE_AEA			**Work Order:** MF5F31AM		**Report DB ID:** MF5F31MR			**Orig Sa DB ID:** 9MF5F310			
U-234	9.01E-02	U	1.0E-01	1.0E-01	1.48E-01	pCi/g	94%	0.61	4/1/11 03:05 a		1.01	ALP4
	2.65E-01		**RPD**	**98.5**		1.00E+00		(1.7)			g	
U-235	-5.09E-03	U	5.1E-02	5.1E-02	1.22E-01	pCi/g	94%	-0.04	4/1/11 03:05 a		1.01	ALP4
	-7.60E-03	U	**RPD**	**-39.7**		1.00E+00		-0.2			g	
U-238	2.17E-01		1.5E-01	1.6E-01	1.48E-01	pCi/g	94%	(1.5)	4/1/11 03:05 a		1.01	ALP4
	1.05E-01	U	**RPD**	**69.8**		1.00E+00		(2.7)			g	
						Ratio U-234/238 = 0.4			***Alpha Spec Result Sum = 3.0E-01***			
Batch: 1083438	C14_CHEM_LSC			**Work Order:** MF5F31AN		**Report DB ID:** MF5F31NR			**Orig Sa DB ID:** 9MF5F310			
C-14	1.63E-01	U	1.9E-01	2.2E-01	4.47E-01	pCi/g	100%	0.36	4/3/11 03:34 a		5.034	LSC3
	3.62E-01	U	**RPD**	**75.8**		5.00E+01		(1.5)			g	
									Alpha Spec Result Sum = 3.0E-01			
Batch: 1083439	NI63_LSC			**Work Order:** MF5F31AP		**Report DB ID:** MF5F31PR			**Orig Sa DB ID:** 9MF5F310			
NI-63	-3.64E-01	U	5.7E+00	6.9E+00	1.42E+01	pCi/g	88%	-0.03	4/3/11 04:10 p		0.25	LSC3
	1.35E+00	U	**RPD**	**347.4**		3.00E+01		-0.11			g	
									Alpha Spec Result Sum = 3.0E-01			
Batch: 1083440	906.0_H3_LSC			**Work Order:** MF5F31AQ		**Report DB ID:** MF5F31QR			**Orig Sa DB ID:** 9MF5F310			
H-3	2.43E-02		8.3E-03	9.2E-03	1.75E-02	pCi/g	100%	(1.4)	4/4/11 05:22 a		91.6	LSC8
	1.56E-02	U	**RPD**	**43.4**		4.00E+02		(5.3)			g	
									Alpha Spec Result Sum = 3.0E-01			
Batch: 1083441	SRTOT_SEP_PRECIP_GPC			**Work Order:** MF5F31AR		**Report DB ID:** MF5F31RR			**Orig Sa DB ID:** 9MF5F310			

TestAmerica
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.12 A2002

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

Date: 06-Apr-11

DUPLICATE RESULTS

Lab Name:	TestAmerica	SDG:	JP0138	Collection Date:	3/23/2011 8:15:00 AM
Lot-Sample No.:	J1C240523-1	Report No. :	46148	Received Date:	3/24/2011 11:00:00 AM
Client Sample ID:	J1FXW2 DUP	COC No. :	RC-107-064	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
STRONTIUM	9.39E-02	U	8.2E-02	8.6E-02	1.70E-01	pCi/g	63%	0.55	4/5/11 03:06 p		6.02	GPC26B
	6.22E-02	U	RPD 40.6					(2.2)			g	

No. of Results: 17 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

BLANK RESULTS

Date: 06-Apr-11

Lab Name: TestAmerica

Matrix: SOIL

SDG: JP0138

Report No. : 46148

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: 1088197	7196_CR6			**Work Order:**	MGAEQ1AA		**Report DB ID:**	MGAEQ1AB				
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	1.	3/29/11 11:15 a		2.5	
						1.55E-01		N/A			g	
Batch: 1083438	C14_CHEM_LSC			**Work Order:**	MF57L1AA		**Report DB ID:**	MF57L1AB				
C-14	-1.70E-03	U	4.5E-03	5.2E-03	1.13E-02	pCi/g	100%	-0.15	4/3/11 03:57 a		200.0	LSC3
					5.30E-03	5.00E+01		-0.66			g	
Batch: 1083435	PUISO_PLATE_AEA			**Work Order:**	MF57G1AA		**Report DB ID:**	MF57G1AB				
PU-238	-1.55E-03	U	6.2E-02	6.2E-02	1.16E-01	pCi/g	89%	-0.01	3/31/11 05:09 p		1.04	ALP125
					1.61E-02	1.00E+00		-0.05			g	
PU239/40	-1.55E-03	U	6.2E-02	6.2E-02	1.16E-01	pCi/g	89%	-0.01	3/31/11 05:09 p		1.04	ALP125
					1.61E-02	1.00E+00		-0.05			g	
Batch: 1083436	UISO_IE_PLATE_AEA			**Work Order:**	MF57H1AA		**Report DB ID:**	MF57H1AB				
U-234	-3.65E-03	U	4.9E-02	4.9E-02	1.09E-01	pCi/g	89%	-0.03	4/1/11 03:05 a		1.04	ALP9
					2.19E-02	1.00E+00		-0.15			g	
U-235	0.00E+00	U	0.0E+00	4.9E-02	9.09E-02	pCi/g	89%	0.	4/1/11 03:05 a		1.04	ALP9
					1.26E-02	1.00E+00		0.			g	
U-238	-1.22E-03	U	4.9E-02	4.9E-02	9.09E-02	pCi/g	89%	-0.01	4/1/11 03:05 a		1.04	ALP9
					1.26E-02	1.00E+00		-0.05			g	
							Ratio U-234/238 = 3.0					
Batch: 1083439	NI63_LSC			**Work Order:**	MF57M1AA		**Report DB ID:**	MF57M1AB				
NI-63	5.97E+00	U	5.2E+00	6.3E+00	1.21E+01	pCi/g	96%	0.49	4/3/11 04:33 p		0.27	LSC3
					5.67E+00	3.00E+01		(1.9)			g	
Batch: 1083440	906.0_H3_LSC			**Work Order:**	MF57P1AA		**Report DB ID:**	MF57P1AB				

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: 06-Apr-11

Lab Name: TestAmerica

Matrix: SOIL

SDG: JP0138

Report No. : 46148

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA ,	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size ,	Aliquot Size	Primary Detector
H-3	3.13E-02	U	1.8E-02	2.0E-02	3.87E-02	pCi/g	100%	0.81	4/4/11 06:44 a		82.8	LSC8
					1.84E-02	4.00E+02		(3.2)			g	
Batch: 1083434	GAMMA_GS			**Work Order:** MF57E1AA			**Report DB ID:** MF57E1AB					
AG-108M	-5.56E-03	U	9.7E-03	9.7E-03	1.65E-02	pCi/g		-0.34	3/28/11 09:41 a		348.0	GER7$1
								-(1.1)			g	
AMERICIUM 241	6.32E-04	U	4.8E-02	4.8E-02	7.04E-02	pCi/g		0.01	3/28/11 09:41 a		348.0	GER7$1
								0.03			g	
BA-133	9.47E-03	U	1.7E-02	1.7E-02	2.72E-02	pCi/g		0.35	3/28/11 09:41 a		348.0	GER7$1
								(1.1)			g	
CO-60	-7.60E-03	U	1.4E-02	1.4E-02	2.39E-02	pCi/g		-0.32	3/28/11 09:41 a		348.0	GER7$1
						5.00E-02		-(1.1)			g	
CS-137	-3.66E-03	U	1.3E-02	1.3E-02	2.33E-02	pCi/g		-0.16	3/28/11 09:41 a		348.0	GER7$1
						1.00E-01		-0.55			g	
EU-152	-1.93E-02	U	3.6E-02	3.6E-02	5.88E-02	pCi/g		-0.33	3/28/11 09:41 a		348.0	GER7$1
						1.00E-01		-(1.1)			g	
EU-154	1.88E-02	U	4.1E-02	4.1E-02	8.16E-02	pCi/g		0.23	3/28/11 09:41 a		348.0	GER7$1
						1.00E-01		0.91			g	
EU-155	1.05E-02	U	3.1E-02	3.1E-02	5.54E-02	pCi/g		0.19	3/28/11 09:41 a		348.0	GER7$1
						1.00E-01		0.67			g	
Batch: 1083441	SRTOT_SEP_PRECIP_GPC			**Work Order:** MF57R1AA			**Report DB ID:** MF57R1AB					
STRONTIUM	4.55E-02	U	5.8E-02	5.9E-02	1.25E-01	pCi/g	93%	0.36	4/5/11 03:06 p		6.0	GPC26C
					5.79E-02			(1.5)			g	

No. of Results: 18 **Comments:**

TestAmerica
rptSTLRchBlank
V5.2.12 A2002

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

TestAmerica Laboratories, Inc.

FORM II

LCS RESULTS

Date: 06-Apr-11

Lab Name: TestAmerica

Matrix: SOIL

SDG: JP0138

Report No. : 46148

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: 1088197	7196_CR6			**Work Order:**	MGAEQ1AC		**Report DB ID:**	MGAEQ1AS					
HEXCHROME	1.90E+01			0.0E+00	1.55E-01	mg/kg	N/A	2.00E+01		95%	3/29/11 11:15 a	2.5	
							Rec Limits:	80	120	-0.1		g	
Batch: 1083438	C14_CHEM_LSC			**Work Order:**	MF57L1AC		**Report DB ID:**	MF57L1CS					
C-14	7.72E+00		4.3E-01	5.4E-01	4.51E-01	pCi/g	100%	7.69E+00	1.3E-01	100%	4/3/11 04:20 a	5.0	LSC3
							Rec Limits:	70	130	0.0		g	
Batch: 1083435	PUISO_PLATE_AEA			**Work Order:**	MF57G1AC		**Report DB ID:**	MF57G1CS					
PU239/40	6.84E+00		1.0E+00	1.9E+00	1.49E-01	pCi/g	85%	6.94E+00	2.1E-01	99%	3/31/11 05:09 p	0.99	ALP124
							Rec Limits:	70	130	0.0		g	
Batch: 1083436	UISO_IE_PLATE_AEA			**Work Order:**	MF57H1AC		**Report DB ID:**	MF57H1CS					
U-234	3.10E+00		5.4E-01	8.3E-01	9.99E-02	pCi/g	88%	3.11E+00	9.6E-02	100%	4/1/11 03:05 a	1.05	ALP11
							Rec Limits:	70	130	0.0		g	
U-238	3.27E+00		5.6E-01	8.7E-01	1.08E-01	pCi/g	88%	3.26E+00	1.0E-01	100%	4/1/11 03:05 a	1.05	ALP11
							Rec Limits:	70	130	0.0		g	
Batch: 1083439	NI63_LSC			**Work Order:**	MF57M1AC		**Report DB ID:**	MF57M1CS					
NI-63	5.12E+02		1.9E+01	5.0E+01	1.35E+01	pCi/g	90%	5.86E+02	9.9E+00	87%	4/3/11 04:56 p	0.26	LSC3
							Rec Limits:	70	130	-0.1		g	
Batch: 1083440	906.0_H3_LSC			**Work Order:**	MF57P1AC		**Report DB ID:**	MF57P1CS					
H-3	3.44E-01		2.6E-02	2.9E-02	3.48E-02	pCi/g	100%	2.93E-01	8.8E-03	117%	4/4/11 08:06 a	90.3	LSC8
							Rec Limits:	70	130	0.2		g	
Batch: 1083434	GAMMA_GS			**Work Order:**	MF57E1AC		**Report DB ID:**	MF57E1CS					
CS-137	9.83E-01		1.5E-01	1.5E-01	4.23E-02	pCi/g		1.09E+00	1.1E-02	91%	3/28/11 09:41 a	350.1	GER14$1
							Rec Limits:	70	130	-0.1		g	

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

rptSTLRchLcs
V5.2.12 A2002

TestAmerica Laboratories, Inc.

FORM II

LCS RESULTS

Date: 06-Apr-11

Lab Name: TestAmerica

Matrix: SOIL

SDG: JP0138

Report No. : 46148

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
RA-226	9.07E-01		1.6E-01	1.6E-01	7.66E-02	pCi/g		1.14E+00	1.2E-02	80%	3/28/11 09:41 a	350.1	GER14$1
							Rec Limits:	70	130	-0.2		g	
RA-228	9.48E-01		2.1E-01	2.1E-01	1.35E-01	pCi/g		9.42E-01	9.7E-03	101%	3/28/11 09:41 a	350.1	GER14$1
							Rec Limits:	70	130	0.0		g	
U-238	9.45E-01		1.6E-01	1.6E-01	8.44E-02	pCi/g		1.20E+00	1.2E-02	79%	3/28/11 09:41 a	350.1	GER14$1
							Rec Limits:	70	130	-0.2		g	
Batch: 1083441	SRTOT_SEP_PRECIP_GPC			Work Order: MF57R1AC			Report DB ID: MF57R1CS						
STRONTIUM	9.82E-01		1.3E-01	2.8E-01	1.26E-01	pCi/g	94%	1.14E+00	3.1E-02	86%	4/5/11 03:06 p	5.97	GPC26D
							Rec Limits:	70	130	-0.1		g	

No. of Results: 12 Comments:

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

rptSTLRchLcs
V5.2.12 A2002

FORM II

MATRIX SPIKE RESULTS

Date: 06-Apr-11

Lab Name: TestAmerica **SDG:** JP0138

Lot-Sample No.: J1C240523-1, J1FXW2 **Report No. :** 46148 **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: 1088197	Work Order: MF5F31AT			Report DB ID: MF5F31CW			Orig Sa DB ID: 9MF5F310					
HEXCHROME	9.04E+00			0.0E+00	1.53E-01	mg/kg	N/A	88.58%	1.02E+01	3/29/11 11:15 a	2.5	7196_CR6
	1.49E-01										g	

Number of Results: 1

Comments:

TestAmerica RER - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.

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

V5.2.12 A2002

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

4/1/2011 12:17:22 PM

Lot No., Due Date: J1C240523; 03/31/2011
Client, Site: 127642; S00N063A00 HANFORD
QC Batch No., Method Test: 1083435; RPUISO Pulso by ALP
SDG, Matrix: JP0138; 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:
NCM 10-17930

First Level Lisa Anderson Date 4/1/11

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 1083435

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: CPDL = See NCM #10-17950

Second Level Review: [signature] Date: 3/4/11 PW

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

Clouseau
Nonconformance Memo

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

NCM #: 10-17930
NCM Initiated By: Lisa Antonson
Date Opened: 04/01/2011
Date Closed:

Classification: **Deficiency**
Status: **PMREVIEW**
Production Area: Environmental - Sep
Tests: Pulso by ALP
Lot #'s (Sample #'s): J1C240000 (435), J1C240523 (1),
QC Batches: 1083435,

Nonconformance: Technician Error
Subcategory: LCS/Blank Switch

Problem Description / Root Cause

Name	Date	Description
Lisa Antonson	04/01/2011	there was an obvious blank/LCS switch in this batch. The samples were switched in Radcalc with good results.

Corrective Action

Name	Date	Corrective Action
Lisa Antonson	04/01/2011	The samples were switched and recalculated.

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

4/1/2011 10:26:48 AM

Lot No., Due Date: J1C240523; 03/31/2011
Client, Site: 127642; S00N063A00 HANFORD
QC Batch No., Method Test: 1083436; RUISO Also by ALP
SDG, Matrix: JP0138; SOIL

	Yes	No	N/A
1.0 COC			
1.1 Is the COC 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:

LMA 4/1/11

First Level [signature] Date 4/1/11

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 1083436

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. Jones Date: 4/1/11

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

4/6/2011 11:32:31 AM

Lot No., Due Date: J1C240523; 03/31/2011
Client, Site: 127642; S00N063A00 HANFORD
QC Batch No., Method Test: 1083441; RSRTOT SrTot by GPC
SDG, Matrix: JP0138; 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 Tina Autorson Date 4/16/11

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 1083441

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: _____

Second Level Review: [signature] Date: 4/6/11

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

3/29/2011 9:08:46 AM

Lot No., Due Date: J1C240523; 03/31/2011
Client, Site: 127642; S00N063A00 HANFORD
QC Batch No., Method Test: 1083434; RGAMMA Gamma by GER
SDG, Matrix: JP0138; 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:
NCM 10-17871

First Level Lisa Autorson Date 3/29/11

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 1083434

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 #: 10-17871

Second Level Review: [signature] Date: 3/29/11

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

Clouseau
Nonconformance Memo

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

NCM #: 10-17871
NCM Initiated By: Lisa Antonson
Date Opened: 03/29/2011
Date Closed:

Classification: Anomaly
Status: PMREVIEW
Production Area: Counting
Tests: Gamma by GER
Lot #'s (Sample #'s): J1C240000 (434), J1C240523 (1),
QC Batches: 1083434,

Nonconformance: MDA not met
Subcategory: Data accepted

Problem Description / Root Cause

Name	Date	Description
Lisa Antonson	03/29/2011	Not all CRDL's are met due to reduced count times based on priority processing.

Corrective Action

Name	Date	Corrective Action
Lisa Antonson	03/29/2011	Data accepted.

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

4/5/2011 10:47:53 AM

Lot No., Due Date: J1C240523; 03/31/2011
Client, Site: 127642; S00N063A00 HANFORD
QC Batch No., Method Test: 1083440; RTRITIUM H-3 by LSC
SDG, Matrix: JP0138; 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** 4/5/11

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 1083440

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: _____

Second Level Review: Jodie G Date: 4/5/11

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

4/4/2011 4:20:13 PM

Lot No., Due Date: J1C240523; 03/31/2011
Client, Site: 127642; S00N063A00 HANFORD
QC Batch No., Method Test: 1083438; RC14 C-14 by LSC
SDG, Matrix: JP0138; 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 4/4/11

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 1083438

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: _____

Second Level Review: Jodie G Date: 4/5/11

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

4/5/2011 10:59:25 AM

Lot No., Due Date: J1C240523; 03/31/2011
Client, Site: 127642; S00N063A00 HANFORD
QC Batch No., Method Test: 1083439; RNI63 Ni-63 by LSC
SDG, Matrix: JP0138; 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 4/5/11

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 1083439

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: _____

Second Level Review: Jodie Date: 4/5/11

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Richland Laboratory
Data Review Check List
Hexavalent Chromium

Batch Number(s): **1088197**

Lab Sample Numbers or SDG: **JP0138**

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

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

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

Comments on any "No" response

Analyst: _____ Date: 3-30-11

Second-Level Review: _____ Date: 3/30/11

Wash[illegible] Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-107-064	Page 1 of 2

Collector: J. Kuepfer	Company Contact: Joan Kessner	Telephone No.: 509-375-4688	Project Coordinator: KESSNER, JH
Price Code: 8L, 8B	Data Turnaround: 21 Days		
Project Designation: 100-H Remaining Sites Burial Grounds - Soil Full Protocol	Sampling Location: 1607-H-1 Verification Resampleing		SAF No.: RC-107
Ice Chest No.: NA	Field Logbook No.: EL 1627-05	COA: 0607H12600	Method of Shipment: ~~Government Vehicle/FedEx~~ Hand Deliver
Shipped To: TestAmerica Incorporated, Richland	Offsite Property No.: NA		Bill of Lading/Air Bill No.: NA

POSSIBLE SAMPLE HAZARDS/REMARKS

~~None~~ Radioactive <DOT limit

Lot# J1C240523

SDG# JP0138

Due 3-31-11

Special Handling and/or Storage

Cool 4 Deg C

Preservation	None	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	None	None	None	None
Type of Container	G/P	G/P	G/P	aG	aG	aG	G/P	G/P	G/P	G/P
No. of Container(s)	1	1	1	1	1	1	0	1	0	0
Volume	60mL	60mL	125mL	120mL	120mL	120mL	500mL	500mL	500mL	500mL
SAMPLE ANALYSIS	See item (1) in Special Instructions.	Chromium Hex - 7196	See item (2) in Special Instructions.	Semi-VOA - 8270A (TCL)	PCBs - 8082	Pesticides - 8081	Carbon-14; Tritium - H3 Low Level Soil	See item (3) in Special Instructions.	Isotopic Uranium	Isotopic Plutonium
Sample No. / Matrix * / Sample Date / Sample Time										
J1FXW2 / SOIL / 3/23/11 / 0815		X			MFSF	3	X	X	X	X

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

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
J Kuepfer	3/23/11 0820	JV Fullmer	3/23/11 0820
JV Fullmer	3-23-11 1600	A. Freier	3-23-11 1600
A. Freier (WCH)	3-24-11 1100	TALP Cameron Krapa	3-24-11 1100

SPECIAL INSTRUCTIONS

(1) ICP Metals - 6010TR (Close-out List) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Molybdenum, Nickel, Potassium, Selenium, Silicon, Silver, Sodium, Vanadium, Zinc}; Mercury - 7471 - (CV)
(2) IC Anions - 9056 Modified {Bromide, Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Phosphorous in phosphate, Sulfate}; NO2/NO3 - 353.2; pH (Soil) - 9045
(3) Gamma Spec - Client List {Americium-241, Barium-133, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155, Silver-108 metastable}

REVIEWED BY JEB DATE 3-24-11

JP0138

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-107-064	Page 2 of 2
Collector: J. Kuepfer	Company Contact: Joan Kessner; Telephone No.: 509-375-4688	Project Coordinator: KESSNER, JH	Price Code: ~~8L~~ 8B; Data Turnaround: ~~21 Days~~ 7
Project Designation: 100-H Remaining Sites Burial Grounds - Soil Full Protocol	Sampling Location: 1607-H-1 Verification Resampleing	SAF No.: RC-107	
Ice Chest No.: NA	Field Logbook No.: EL 1627-05; COA: 0607H12600	Method of Shipment: Hand Deliver ~~Government Vehicle/FedEx~~ AJ 3-23-11	
Shipped To: TestAmerica Incorporated, Richland	Offsite Property No.: NA	Bill of Lading/Air Bill No.: NA	

POSSIBLE SAMPLE HAZARDS/REMARKS

~~None~~ Radioactive < DOT limits

Lot#JIC240523
SDG#JP0138
Due 3.31.11

Special Handling and/or Storage

~~Cool 4 Deg C~~ AJ 3-23-11
NONE

Preservation	None											
Type of Container	G/P											
No. of Container(s)	0											
Volume	500mL											
SAMPLE ANALYSIS	Nickel-63; Strontium-89,90 – Total Sr											

Sample No.	Matrix *	Sample Date	Sample Time										
J1FXW2	SOIL	3/23/11	0815	X									

CHAIN OF POSSESSION — Sign/Print Names

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
J. Kuepfer	3/23/11 0820	JV Fullmer	3/23/11 0820
JV Fullmer	3-23-11 1600	A. Freier	3-23-11 1600
A. Freier	3-24-11 1100	TALR Cameron Krope	3-24-11 1100

SPECIAL INSTRUCTIONS

REVIEWED BY JEB
DATE 3-24-11

JP0138

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

EBERLINE ANALYTICAL/RICHMOND

SAMPLE DELIVERY GROUP K2132

7037-007 J1B9D1

NON-Reg

DATA SHEET

Sample J1FXW2

SDG	7037	Client/Case no	Hanford	SDG K2132	
Contact	N. Joseph Verville	Contract	No. S00W235A00		
Lab sample id	S007071-07	Client sample id	J1B9D1		
Dept sample id	7037-007	Location/Matrix	1607H1 Excavation Area	SOLID	
Received	07/14/10	Collected/Weight	07/12/10 09:50	606 g	
% solids	98.0	Custody/SAF No	RC-107-054	RC-107	

ANALYTE	CAS NO	RESULT pCi/g	2σ ERR (COUNT)	MDA pCi/g	RDL pCi/g	QUALI-FIERS	TEST
Tritium	10028-17-8	0.912	0.90	1.48	400	U	H
Carbon 14	14762-75-5	1.25	0.47	0.755	1.00		C
Nickel 63	13981-37-8	-0.395	1.8	3.16	30.0	U	NI_L
Total Strontium	SR-RAD	0.047	0.12	0.230	1.00	U	SR
Uranium 233/234	U-233/234	0.576	0.21	0.130	1.00		U
Uranium 235	15117-96-1	0.020	0.041	0.157	1.00	U	U
Uranium 238	U-238	0.576	0.21	0.130	1.00		U
Plutonium 238	13981-16-3	-0.030	0.12	0.335	1.00	U	PU
Plutonium 239/240	PU-239/240	0	0.061	0.232	1.00	U	PU
Potassium 40	13966-00-2	15.1	0.62	0.309			GAM
Cobalt 60	10198-40-0	U		0.027	0.050	U	GAM
Cesium 137	10045-97-3	0.212	0.033	0.034	0.100		GAM
Radium 226	13982-63-3	0.752	0.065	0.056	0.100		GAM
Radium 228	15262-20-1	1.04	0.12	0.119	0.200		GAM
Europium 152	14683-23-9	U		0.074	0.100	U	GAM
Europium 154	15585-10-1	U		0.088	0.100	U	GAM
Europium 155	14391-16-3	U		0.153	0.100	U	GAM
Thorium 228	14274-82-9	0.983	0.046	0.038			GAM
Thorium 232	TH-232	1.04	0.12	0.119			GAM
Uranium 235	15117-96-1	U		0.198		U	GAM
Uranium 238	U-238	U		3.08		U	GAM
Americium 241	14596-10-2	U		0.203		U	GAM
Silver 108m	14391-65-2	U		0.021		U	GAM
Barium 133	13981-41-4	U		0.032		U	GAM

DATA SHEETS
Page 13
SUMMARY DATA SECTION
Page 25

Lab id	EBRLNE
Protocol	Hanford1
Version	Ver 1.0
Form	DVD-DS
Version	3.06
Report date	08/19/10

J1C240523

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 3-24-11 1100 GM Screen Result (out) .2 (in) .9 Initials[ ]

Client: WCH SDG #: JP0138 NA [ ] SAF #: RC-107 NA [ ]

Work Order Number: J1C240523 Chain of Custody # RC-107-064

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

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 [ ] 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): 1 sample @ 1X JAR 60 MLG & 1X 500 MLP
7. Sample holding times exceeded? NA [ ] Yes [ ] No [CK]
8. Samples have:
   CK 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 : _____
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: [signature] Date: 3-24-11 1100

Client Informed on _____ by _____ Person contacted _____

[✓] No action necessary; process as is

Project Manager [signature] Date 3/24/11

LS-023, Rev. 12, 10/10

3/27/2011 3:52:15 PM

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

PRIORITY

Pipet #: _____

AnalyDueDate: 03/31/2011 JP0138

Sep1 DT/Tm Tech:

Batch: 1083435 SOIL pCi/g PM, Quote: RW2, 27038

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: WoodT

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 MF5F3-1-AF J1C240523-1-SAMP 03/23/2011 08:15		1.03g,in AmtRec: 1XJAR60MLG,1X500MLP #Containers: 2	PUTC12145 03/17/11,pd 01/01/10,r	50			Scr: Alpha: Beta:	
2 MF5F3-1-AL-X J1C240523-1-DUP 03/23/2011 08:15		1.02g,in AmtRec: 1XJAR60MLG,1X500MLP #Containers: 2	PUTC12146 03/17/11,pd 01/01/10,r				Scr: Alpha: Beta:	
3 MF57G-1-AA-B J1C240000-435-BLK 03/25/2011 08:09 pd		1.04g,in AmtRec: #Containers: 1	PUTC12147 03/17/11,pd 01/01/10,r				Scr: Alpha: Beta:	
4 MF57G-1-AC-C J1C240000-435-LCS 03/25/2011 08:09 pd		0.99g,in AmtRec: #Containers: 1	PUSK0841 03/10/11,pd 01/01/10,r				Scr: Alpha: Beta:	

Comments: MF5F3-SAMP "Comments: Not enough sample for a gamma duplicate, please recount on a seperate detector. 3/27/11 tgw"

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

MF5F31AF-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						

MF57G1AA-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						

MF57G1AC-LCS:

3/27/2011 3:52:15 PM

Sample Preparation/Analysis

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

PRIORITY

Balance Id:1120373922

Pipet #: _____

AnalyDueDate: 03/31/2011

Sep1 DT/Tm Tech:

Batch: 1083435 pCi/g

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,WoodT

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:

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

MF5F31AF-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MF57G1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MF57G1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

TestAmerica Laboratories, Inc.

4/1/2011 12:16:45 PM

ICOC Fraction Transfer/Status Report

ByDate: 4/1/2010, 4/6/2011, Batch: '1083435', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
1083435						
AC		Rev1C	WoodT	3/27/2011 3:42:12 PM		
SC			MaucieriS	IsBatched	3/25/2011 8:20:49 AM	ICOC_RADCALC v4.8.49
SC			WoodT	InPrep	3/27/2011 3:42:12 PM	RL-PRP-003 REVISION 1
SC			WoodT	Prep1C	3/28/2011 1:03:38 AM	RL-PRP-003 REVISION 1
SC			BouslaughP	Prep1C	3/28/2011 7:41:14 AM	RL-PRP-003 REVISION 1
SC			JorgensonD	Sep1C	3/31/2011 10:29:32 AM	RL-ALP-001 REVISION 2
SC			BockT	Sep2C	3/31/2011 3:24:59 PM	RL-ALP-016 REVISION 1
SC			ClarkR	InCnt1	3/31/2011 4:11:55 PM	RL-CI-008 REVISION 1
SC			BlackCL	CalcC	4/1/2011 7:12:19 AM	RL-CI-008 REVISION 1
SC			antonsonl	Rev1C	4/1/2011 12:16:38 PM	RL-DR-001 Rev 2
AC			WoodT	3/28/2011 1:03:38		
AC			BouslaughP	3/28/2011 7:41:14		
AC			JorgensonD	3/31/2011 10:29:32		
AC			BockT	3/31/2011 3:24:59 PM		RL-ALP-016
AC			ClarkR	3/31/2011 4:11:55 PM		
AC			BlackCL	4/1/2011 7:12:19 AM		
AC			antonsonl	4/1/2011 12:16:38 PM		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Page 1

Grp Rec Cnt: 8

ICOCFractions v4.8.44

3/27/2011 3:57:49 PM

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

PRIORITY

Pipet #:

AnalyDueDate: 03/31/2011 JP0138

Sep1 DT/Tm Tech:

Batch: 1083436 SOIL pCi/g PM, Quote: RW2, 27038

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: WoodT

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 MF5F3-1-AC J1C240523-1-SAMP 03/23/2011 08:15		0.98g,in AmtRec: 1XJAR60MLG,1X500MLP #Containers: 2	UITC26037 03/07/11,pd 06/15/01,r	50		Scr:	Alpha:	Beta:
2 MF5F3-1-AM-X J1C240523-1-DUP 03/23/2011 08:15		1.01g,in AmtRec: 1XJAR60MLG,1X500MLP #Containers: 2	UITC26038 03/07/11,pd 06/15/01,r			Scr:	Alpha:	Beta:
3 MF57H-1-AA-B J1C240000-436-BLK 03/25/2011 08:09 pd		1.04g,in AmtRec: #Containers: 1	UITC26039 03/07/11,pd 06/15/01,r			Scr:	Alpha:	Beta:
4 MF57H-1-AC-C J1C240000-436-LCS 03/25/2011 08:09 pd		1.05g,in AmtRec: #Containers: 1	UISH1297 03/03/11,pd 06/15/01,r			Scr:	Alpha:	Beta:

Comments: MF5F3-SAMP "Comments: Not enough sample for a gamma duplicate, please recount on a seperate detector. 3/27/11 tgw"

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

MF5F31AC-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:

MF57H1AA-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:

Sample Preparation/Analysis

Balance Id:1120373922

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

PRIORITY

Pipet #: _____

AnalyDueDate: 03/31/2011

Sep1 DT/Tm Tech:

Batch: 1083436 pCi/g

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,WoodT

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:

```
MF57H1AC-LCS:
  U-232        RDL:          pCi/g     LCL:20     UCL:105     RPD:35     Uranium     RDL:          pCi/g     LCL:70     UCL:130     RPD:35

MF5F31AC-SAMP Calc Info:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
MF57H1AA-BLK:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
MF57H1AC-LCS:
     Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
```


TestAmerica Laboratories, Inc.

4/1/2011 10:26:03 AM

ICOC Fraction Transfer/Status Report

ByDate: 4/1/2010, 4/6/2011, Batch: '1083436', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
1083436						
AC		Rev1C	WoodT	3/27/2011 3:53:13 PM		
SC			MauclerlS	IsBatched	3/25/2011 8:21:01 AM	ICOC_RADCALC v4.8.49
SC			WoodT	InPrep	3/27/2011 3:53:13 PM	RL-PRP-003 REVISION 1
SC			WoodT	Prep1C	3/28/2011 1:03:44 AM	RL-PRP-003 REVISION 1
SC			BouslaughP	Prep1C	3/28/2011 7:36:50 AM	RL-PRP-003 REVISION 1
SC			HoganH	Sep1C	3/29/2011 12:29:52 PM	ALP-004 REVISION 1
SC			HoganH	Sep2C	3/31/2011 1:53:05 PM	RL-ALP-015 REVISION 1
SC			ClarkR	InCnt1	3/31/2011 1:56:46 PM	RL-CI-008 REVISION 1
SC			antonsonl	Rev1C	4/1/2011 10:25:56 AM	RL-DR-001 Rev 2
AC			WoodT	3/28/2011 1:03:44		
AC			BouslaughP	3/28/2011 7:36:50		
AC			HoganH	3/29/2011 12:29:52		
AC			HoganH	3/31/2011 1:53:05 PM		
AC			ClarkR	3/31/2011 1:56:46 PM		
AC			antonsonl	4/1/2011 10:25:56		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Grp Rec Cnt: 7

ICOCFractions v4.8.44

3/27/2011 3:39:55 PM

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

PRIORITY

Pipet #:

AnalyDueDate: 03/31/2011 JP0138

Sep1 DT/Tm Tech: 10:15 4/5/11 APA

Batch: 1083441 SOIL pCi/g

PM, Quote: RW2, 27038

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: WoodT

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 MF5F3-1-AD J1C240523-1-SAMP 03/23/2011 08:15	AmtRec: 1XJAR60MLG,1X500MLP #Containers: 2	6.06g,in	SRTA20839 03/16/11	1.5	50	1.48019 -1.41749 62.7mg	264	1531	4/5/11 m Scr:	Alpha: Beta:
2 MF5F3-1-AR-X J1C240523-1-DUP 03/23/2011 08:15	AmtRec: 1XJAR60MLG,1X500MLP #Containers: 2	6.02g,in	SRTA20840 03/16/11			1.4746g -1.4116g 63.0mg	268		Scr:	Alpha: Beta:
3 MF57R-1-AA-B J1C240000-441-BLK 03/25/2011 08:09 pd	AmtRec: #Containers: 1	6.00g,in	SRTA20841 03/16/11			1.5175g -1.4247g 92.8mg	26L		Scr:	Alpha: Beta:
4 MF57R-1-AC-C J1C240000-441-LCS 03/25/2011 08:09 pd	AmtRec: #Containers: 1	5.97g,in	STSB1583 03/10/11			1.4997g -1.4053g 94.4mg	26D		Scr:	Alpha: Beta:

Comments: ~~MF5F3-SAMP "Comments: Not enough sample for a gamma duplicate, please recount on a seperate detector. 5/27/11 tgw"~~ 4/5/11 APA

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

MF5F31AD-SAMP Constituent List:

Sr-90	RDL:1	pCi/g	LCL:70	UCL:130	RPD:35

MF57R1AA-BLK:

Sr-90	RDL:1	pCi/g	LCL:	UCL:	RPD:

MF57R1AC-LCS:

Sr-90	RDL:1	pCi/g	LCL:70	UCL:130	RPD:35

Sample Preparation/Analysis

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

PRIORITY

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

AnalyDueDate: 03/31/2011

Batch: 1083441 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:

```
MF5F31AD-SAMP Calc Info:
    Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
MF57R1AA-BLK:
    Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
MF57R1AC-LCS:
    Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
```


TestAmerica Laboratories, Inc.

4/6/2011 11:32:00 AM

ICOC Fraction Transfer/Status Report

ByDate: 4/6/2010, 4/11/2011, Batch: '1083441', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus		Accepting		Comments
1083441						
AC		Rev1C	**WoodT**	3/27/2011 3:29:32 PM		
SC			MaucieriS	IsBatched	3/25/2011 8:21:34 AM	ICOC_RADCALC v4.8.49
SC			WoodT	InPrep	3/27/2011 3:29:32 PM	RL-PRP-003 REVISION 1
SC			WoodT	Prep1C	3/28/2011 1:03:57 AM	RL-PRP-003 REVISION 1
SC			AshworthA	Sep2C	4/5/2011 12:06:05 PM	RL-GPC-011 REVISION 1
SC			ClarkR	InCnt1	4/5/2011 12:45:30 PM	RL-CI-006 REVISION 1
SC			DawkinsO	CalcC	4/6/2011 1:00:53 AM	RL-CI-006 REVISION 1
SC			antonsonl	Rev1C	4/6/2011 11:31:51 AM	RL-DR-001 Rev 2
AC			**WoodT**	3/28/2011 1:03:57		
AC			**AshworthA**	4/5/2011 12:06:05 PM		
AC			**ClarkR**	4/5/2011 12:45:30 PM		
AC			**DawkinsO**	4/6/2011 1:00:53 AM		
AC			**antonsonl**	4/6/2011 11:31:51		

AC: Accepting Entry; SC: Status Change

Grp Rec Cnt: 6

TRLSP

3/27/2011 1:35:03 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

PRIORITY

Pipet #:

AnalyDueDate: 03/31/2011 JPC138

Sep1 DT/Tm Tech:

Batch: 1083434 SOIL pCi/g PM, Quote: RW2, 27038

Sep2 DT/Tm Tech:

BEQ Batch, Test: None All Tests: DWEA, 1083434 AXTA, 1083435 6ASO, 1083436 7SSR, 1083438 5SS3, 1083439 AFS4, 1083440 ATS6, 1083441 CHTH,

Prep Tech: WoodT

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 MF5F3-1-AH J1C240523-1-SAMP 03/23/2011 08:15			354.00g,in AmtRec: 1XJAR60MLG,1X500MLP #Containers: 2	354.00g		5307	2400	610 Scr:	0432 Alpha:	3/28/5 Beta:	
2 MF5F3-1-AK-X J1C240523-1-DUP 03/23/2011 08:15			AmtRec: 1XJAR60MLG,1X500MLP #Containers: 2					613 Scr:	1300 Alpha:	Beta:	
3 MF57E-1-AA-B J1C240000-434-BLK 03/25/2011 08:09 pd			348.00g,in AmtRec: #Containers: 1	348.00g	osbk			617 Scr:	1301 Alpha:	Beta:	
4 MF57E-1-AC-C J1C240000-434-LCS 03/25/2011 08:09 pd			350.10g,in AmtRec: #Containers: 1	350.10g	qc20009 08/04/09,pd 09/01/09,r			614 Scr:	1301 Alpha:	Beta:	

Comments: MF5F3-SAMP "Comments: Not enough sample for a gamma duplicate, please recount on a seperate detector. 3/27/11 tgw"

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

MF5F31AH-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:

MF57E1AA-BLK:

Co-60	RDL:5.00E-02	pCi/g	LCL:	UCL:	RPD:	Cs-137	RDL:1.00E-01	pCi/g	LCL:	UCL:	RPD:

Sample Preparation/Analysis

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

PRIORITY

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

AnalyDueDate: 03/31/2011

Batch: 1083434 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:

```
 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:

MF57E1AC-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

MF5F31AH-SAMP Calc Info:
    Uncert Level (#s).: 2   Decay to SaDt: Y   Blk Subt.: N   Sci.Not.: Y   ODRs: B
MF57E1AA-BLK:
    Uncert Level (#s).: 2   Decay to SaDt: Y   Blk Subt.: N   Sci.Not.: Y   ODRs: B
MF57E1AC-LCS:
    Uncert Level (#s).: 2   Decay to SaDt: Y   Blk Subt.: N   Sci.Not.: Y   ODRs: B
```


TestAmerica Richland, Inc.
56

3/29/2011 8:51:02 AM

ICOC Fraction Transfer/Status Report

ByDate: 3/29/2010, 4/3/2011, Batch: '1083434', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus		Accepting		Comments
1083434						
AC		Rev1C	WoodT	3/27/2011 1:25:27 PM		
SC			MaucierlS	IsBatched	3/25/2011 8:20:40 AM	ICOC_RADCALC v4.8:49
SC			WoodT	InPrep	3/27/2011 1:25:27 PM	RL-PRP-003 REVISION 1
SC			WoodT	Prep1C	3/27/2011 1:36:17 PM	RL-PRP-003 REVISION 1
SC			WoodT	InPrep2	3/27/2011 1:36:32 PM	RL-GAM-001 REVISION 1
SC			WoodT	Prep2C	3/27/2011 1:36:49 PM	RL-GAM-001 REVISION 1
SC			BlackCL	InCnt1	3/28/2011 12:44:58 AM	RL-CI-007 REVISION 1
SC			BlackCL	CalcC	3/29/2011 6:13:41 AM	RL-CI-007 REVISION 1
SC			antonsonl	Rev1C	3/29/2011 8:47:09 AM	RL-DR-001 Rev 2
AC			WoodT	3/27/2011 1:36:17 PM		
AC			WoodT	3/27/2011 1:36:32 PM		
AC			WoodT	3/27/2011 1:36:49 PM		
AC			BlackCL	3/28/2011 12:44:58		
AC			BlackCL	3/29/2011 6:13:41		
AC			antonsonl	3/29/2011 8:47:09		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Page 1

Grp Rec Cnt: 7

ICOCFractions v4.8.44

5

TestAmerica Laboratories, Inc.

/25/2011 8:13:32 AM

Sample Preparation/Analysis

Balance Id:

27642, Washington Closure Hanford LLC
echtel Hanford, Inc.

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

Pipet #:

nalyDueDate: 03/31/2011

Sep1 DT/Tm Tech:

Batch: 1083440 SOIL pCi/g PM, Quote: RW2, 27038

Sep2 DT/Tm Tech:

EQ Batch, Test: None

Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MF5F3-1-AG J1C240523-1-SAMP 03/23/2011 08:15		AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
2 MF5F3-1-AQ-X J1C240523-1-DUP 03/23/2011 08:15		AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
3 MF57P-1-AA-B J1C240000-440-BLK 03/25/2011 08:13 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
4 MF57P-1-AC-C J1C240000-440-LCS 03/25/2011 08:13 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
5 MF57P-1-AD-BN J1C240000-440-IBLK 03/25/2011 08:13 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

Comments:

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

MF5F31AG-SAMP Constituent List:
H-3 RDL:400 pCi/g LCL:70 UCL:130 RPD:35

4/5/2011 10:47:23 AM

ICOC Fraction Transfer/Status Report

ByDate: 4/5/2010, 4/10/2011, Batch: '1083440', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
1083440						
AC		Rev1C	WagnerF	3/29/2011 9:38:18		
SC			MauderlS	IsBatched	3/25/2011 8:21:22 AM	ICOC_RADCALC v4.8.49
SC			WagnerF	Sep1C	3/29/2011 9:38:18 AM	RL-LSC-002 REVISION 1
SC			BlackCL	InCnt1	4/1/2011 8:53:17 AM	RL-CI-005 REVISION 1
SC			ClarkR	CalcC	4/4/2011 2:13:55 PM	RL-CI-005 REVISION 1
SC			WhelandS	Rev1C	4/5/2011 10:47:11 AM	RL-DR-001 Rev 2
AC			BlackCL	4/1/2011 8:53:17 AM		
AC			ClarkR	4/4/2011 2:13:55 PM		
AC			WhelandS	4/5/2011 10:47:11		

AC: Accepting Entry; SC: Status Change

2

3/25/2011 8:10:11 AM

Sample Preparation/Analysis

127642, Washington Closure Hanford LLC
Bechtel Hanford, Inc.

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

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

AnalyDueDate: 03/31/2011

Batch: 1083438 SOIL pCi/g PM, Quote: RW2, 27038

REQ 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:
MF5F3-1-AJ J1C240523-1-SAMP 03/23/2011 08:15		5.029g AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
2 MF5F3-1-AN-X J1C240523-1-DUP 03/23/2011 08:15		5.034g AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
3 MF57L-1-AA-B J1C240000-438-BLK 03/25/2011 08:09 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
4 MF57L-1-AC-C J1C240000-438-LCS 03/25/2011 08:09 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
5 MF57L-1-AD-BN J1C240000-438-IBLK 03/25/2011 08:09 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

Comments:

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

MF5F31AJ-SAMP Constituent List:
C-14 RDL:50 pCi/g LCL:70 UCL:130 RPD:35

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: 03/31/2011

Batch: 1083438 pCi/g
REQ 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:

```
MF57L1AA-BLK:
 C-14        RDL:50        pCi/g    LCL:       UCL:       RPD:
MF57L1AC-LCS:
 C-14        RDL:50        pCi/g    LCL:70     UCL:130    RPD:35
MF57L1AD-IBLK:
 C-14        RDL:50        pCi/g    LCL:       UCL:       RPD:
MF5F31AJ-SAMP Calc Info:
    Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
MF57L1AA-BLK:
    Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
MF57L1AC-LCS:
    Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
MF57L1AD-IBLK:
    Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
```


TestAmerica Laboratories, Inc.

4/4/2011 4:19:41 PM

ICOC Fraction Transfer/Status Report

ByDate: 4/4/2010, 4/9/2011, Batch: '1083438', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
1083438						
AC		Rev1C	WagnerF	3/29/2011 9:38:27		
SC			MauclerlS	IsBatched	3/25/2011 8:21:06 AM	ICOC_RADCALC v4.8.49
SC			WagnerF	Sep1C	3/29/2011 9:38:27 AM	RL-LSC-008 REVISION 1
SC			BlackCL	InCnt1	4/1/2011 8:53:12 AM	RL-CI-005 REVISION 1
SC			DawkinsO	CalcC	4/3/2011 10:25:58 PM	RL-CI-005 REVISION 1
SC			antonsonl	Rev1C	4/4/2011 4:19:35 PM	RL-DR-001 Rev 2
AC			BlackCL	4/1/2011 8:53:12 AM		
AC			DawkinsO	4/3/2011 10:25:58 PM		
AC			antonsonl	4/4/2011 4:19:35 PM		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Page 1

Grp Rec Cnt: 4

ICOCFractions v4.8.44

3/27/2011 3:39:54 PM

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

PRIORITY

Pipet #: _____

AnalyDueDate: 03/31/2011 JP0138

Sep1 DT/Tm Tech:

Batch: 1083439 SOIL pCi/g PM, Quote: RW2, 27038

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: DWEA, 1083434 AXTA, 1083435 6ASO, 1083436 7SSR, 1083438 5SS3, 1083439 AFS4, 1083440 ATS6, 1083441 CHTH,

Prep Tech: WoodT

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 MF5F3-1-AE J1C240523-1-SAMP 03/23/2011 08:15		AmtRec: 1XJAR60MLG,1X500MLP	0.25g,in	0.25g #Containers: 2	NITA4019 03/16/11			Scr:	Alpha:	Beta:
2 MF5F3-1-AP-X J1C240523-1-DUP 03/23/2011 08:15		AmtRec: 1XJAR60MLG,1X500MLP	0.25g,in	0.25g #Containers: 2	NITA4020 03/16/11			Scr:	Alpha:	Beta:
3 MF57M-1-AA-B J1C240000-439-BLK 03/25/2011 08:09 pd		AmtRec:	0.27g,in	0.27g #Containers: 1	NITA4021 03/16/11			Scr:	Alpha:	Beta:
4 MF57M-1-AC-C J1C240000-439-LCS 03/25/2011 08:09 pd		AmtRec:	0.26g,in	0.26g #Containers: 1	NISA1402 03/10/11			Scr:	Alpha:	Beta:
5 MF57M-1-AD-BN J1C240000-439-IBLK 03/25/2011 08:09 pd		AmtRec:		#Containers: 1				Scr:	Alpha:	Beta:

Comments: MF5F3-SAMP "Comments: Not enough sample for a gamma duplicate, please recount on a seperate detector. 3/27/11 tgw"

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

MF5F31AE-SAMP Constituent List:

TestAmerica Laboratories, Inc.

Sample Preparation/Analysis

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

PRIORITY

Balance Id:
Pipet #:

AnalyDueDate: 03/31/2011

Sep1 DT/Tm Tech:

Batch: 1083439 pCi/g

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech:

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

```
  Ni-63        RDL:30        pCi/g      LCL:70      UCL:130      RPD:35
MF57M1AA-BLK:
  Ni-63        RDL:30        pCi/g      LCL:        UCL:         RPD:
MF57M1AC-LCS:
  Ni-63        RDL:30        pCi/g      LCL:70      UCL:130      RPD:35
MF57M1AD-IBLK:
  Ni-63        RDL:30        pCi/g      LCL:        UCL:         RPD:
MF5F31AE-SAMP Calc Info:
     Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
MF57M1AA-BLK:
     Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
MF57M1AC-LCS:
     Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
MF57M1AD-IBLK:
     Uncert Level (#s).: 2    Decay to SaDt: Y    Blk Subt.: N    Sci.Not.: Y    ODRs: B
```


TestAmerica Laboratories, Inc.
64

4/5/2011 10:58:49 AM

ICOC Fraction Transfer/Status Report

ByDate: 4/5/2010, 4/10/2011, Batch: '1083439', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
1083439						
AC		Rev1C	WoodT	3/27/2011 3:35:35 PM		
SC			MauclerlS	IsBatched	3/25/2011 8:21:13 AM	ICOC_RADCALC v4.8.49
SC			WoodT	InPrep	3/27/2011 3:35:35 PM	RL-PRP-003 REVISION 1
SC			WoodT	Prep1C	3/28/2011 1:03:32 AM	RL-PRP-003 REVISION 1
SC			ClarkR	InCnt1	4/1/2011 11:57:09 AM	RL-CI-005 REVISION 1
SC			DawkinsO	CalcC	4/3/2011 10:23:21 PM	RL-CI-005 REVISION 1
SC			WhelandS	Rev1C	4/5/2011 10:58:40 AM	RL-DR-001 Rev 2
AC			WoodT	3/28/2011 1:03:32		
AC			ClarkR	4/1/2011 11:57:09		
AC			DawkinsO	4/3/2011 10:23:21 PM		
AC			WhelandS	4/5/2011 10:58:40		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Page 1

Grp Rec Cnt: 5

ICOCFractions v4.8.44

TestAmerica Laboratories, Inc.

/29/2011 11:09:09 AM

Sample Preparation/Analysis

Balance Id:

27642, Washington Closure Hanford LLC
Bechtel Hanford, Inc.

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

Pipet #:

AnalyDueDate: 03/31/2011

Sep1 DT/Tm Tech:

Batch: 1088197 SOIL mg/kg PM, Quote: RW2, 27038

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MF5F3-1-AA J1C240523-1-SAMP 03/23/2011 08:15		AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2					Scr:	Alpha:	Beta:
2 MF5F3-1-AT-S J1C240523-1-MS 03/23/2011 08:15		AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2					Scr:	Alpha:	Beta:
3 MF5F3-1-AV-D J1C240523-1-MSD 03/23/2011 08:15		AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2					Scr:	Alpha:	Beta:
4 MF5F3-1-AW-X J1C240523-1-DUP 03/23/2011 08:15		AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2					Scr:	Alpha:	Beta:
5 MGAEQ-1-AA-B J1C290000-197-BLK 03/29/2011 11:09 pd		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:
6 MGAEQ-1-AC-C J1C290000-197-LCS 03/29/2011 11:09 pd		AmtRec:	#Containers: 1					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: 03/31/2011

Batch: 1088197 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:

Comments: MF5F3-SAMP "Comments: Not enough sample for a gamma duplicate, please recount on a seperate detector. 3/27/11 tgw"

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

MF5F31AA-SAMP Constituent List:
HEXCHROME RDL:0.1548 mg/kg LCL:80 UCL:120 RPD:20
MF5F31AT-MS Constituent List:

MF5F31AV-MSD:

MGAEQ1AA-BLK:

MGAEQ1AC-LCS:

MF5F31AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MF5F31AT-MS Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MF5F31AV-MSD:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGAEQ1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGAEQ1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

TestAmerica Laboratories, Inc.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 280-13903-1

SDG Number: JP0138

Job Description: SAF# RC-107

RECEIVED
APR 2011

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

Attention: Joan H Kessner

Approved for release.
Kae E Yoder
Project Manager II
4/11/2011 1:58 PM

Kae E Yoder
Project Manager II
kae.yoder@testamericainc.com
04/11/2011

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

The Lab Certification ID# is E87667.

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

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

ACCREDITED IN ACCORDANCE WITH nelac

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CASE NARRATIVE

Client: Washington Closure Hanford

Project: WASHINGTON CLOSURE HANFORD

Report Number: 280-13903-1

SDG #: JP0138
SAF#: RC-107

Date SDG Closed: April 6, 2011
Data Deliverable: 7 Day / Summary

CLIENT ID	LAB ID	ANALYSES REQUESTED	ANALYSES PERFORMED
J1FXV7	280-13903-1	6010/7471	6010B/7471A
J1FXV8	280-13903-2	6010/7471	6010B/7471A
J1FXV9	280-13903-3	6010/7471	6010B/7471A
J1FXW0	280-13903-4	6010/7471	6010B/7471A/1311-6010B-7470A
J1FXW1	280-13903-5	6010/7471	6010B/7471A
J1FXW2	280-13903-6	6010/7471/9056M/353.2/8270A/8081A/8082	6010B/7471A/9056M/353.2/8270C/8081A/8082

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 3/25/2011; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 5.2 C.

On 4/6/2011, the client requested TCLP Metals 1311/6010B/7470A analysis for sample J1FXW0. Those results are included in this report.

GC/MS SEMIVOLATILES - SW846 8270C
Low levels of Bis(2-ethylhexyl) phthalate, a common laboratory contaminant, are present in the method blank associated with batch 280-59433. Because the concentration in the method blank is not present at a level greater than the reporting limit, corrective action is deemed unnecessary. Associated sample results present above the MDL and/or RL have been flagged with a "B".

No other anomalies were encountered.

GC SEMIVOLATILES - SW846 8081A - PESTICIDEs
The MSD aliquot of the MS/MSD performed on sample J1FXW2 exhibited the percent recovery outside the control limits for Endrin aldehyde, and the associated sample result has been flagged "N". In addition, the RPD limit was exceeded. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary.

No other anomalies were encountered.

GC SEMIVOLATILES - SW846 8082 - PCBs
No anomalies were encountered.

TOTAL METALS - SW846 6010B/7471A
Serial dilution of a digestate in batch 280-59400 indicates that physical and chemical interferences are present for Cobalt, Iron, Nickel and Zinc. Results have been flagged with an "X".

Low levels of Barium, Calcium, Chromium, Magnesium and Zinc are present in the method blank associated with batch 280-59400. Because the concentrations in the method blank are not present at levels greater than the reporting limits, 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 J1FXV7; therefore, control limits are not applicable.

The SW846 6010B duplicate analysis of sample J1FXV7 exhibited RPD data outside the control limits for Boron, Cadmium and Calcium, and the associated sample results have 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.

TCLP METALS - SW846 1311/6010B/7470A
Low levels of Barium and Mercury are present in the method blanks associated with batches 280-61148 and 280-61169, respectively. Because the concentrations in the method blanks are not present at levels greater than the reporting limits, corrective action is deemed unnecessary.

Mercury was recovered outside the control limits, biased high, in the LCS associated with batch 280-61169 and in the Matrix Spike performed on sample J1FXW0 in batch 280-61169. The associated sample result has been flagged "N". This is an indicator that data may be biased high. As Mercury is not present at a level greater than the reporting limit in the associated sample, corrective action is deemed unnecessary.

No other anomalies were encountered.

GENERAL CHEMISTRY - MCAWW 353.2 - NITRATE+NITRITE as N
The duplicate analysis of sample J1FXW2 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.

GENERAL CHEMISTRY - SW846 9056M - ANIONS
No anomalies were encountered.

DATA REPORTING QUALIFIERS

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Lab Section	Qualifier	Description
GC/MS Semi VOA		
	U	Analyzed for but not detected.
	J	Indicates an Estimated Value for TICs
	N	Presumptive evidence of material.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
GC Semi VOA		
	U	Analyzed for but not detected.
	N	MS, MSD: Spike recovery exceeds upper or lower control limits.
	*	MS/MSD RPD exceeded the control limit
Metals		
	U	Analyzed for but not detected.
	B	Estimated result. Result is less than the RL, but greater than MDL
	4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
	N	Recovery exceeds upper or lower control limits
	M	Sample duplicate precision not met.
	X	Serial dilution in the analytical batch indicates that physical and chemical interferences are present.
	C	The analyte was detected in both the sample and the assoicated QC blank, and the sample concentration was </= 5X the blank concentration.

DATA REPORTING QUALIFIERS

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Lab Section	Qualifier	Description
General Chemistry		
	U	Analyzed for but not detected.
	B	Estimated result. Result is less than the RL, but greater than MDL
	M	Sample duplicate precision not met.

METHOD SUMMARY

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

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
Metals (ICP)	TAL DEN	SW846 6010B	
Preparation, Metals	TAL DEN		SW846 3050B
TCLP Metals (ICP)	TAL DEN	SW846 6010B	
TCLP Extraction	TAL DEN		SW846 1311
Preparation, Total Metals	TAL DEN		SW846 3010A
TCLP Mercury	TAL DEN	SW846 7470A	
TCLP Extraction	TAL DEN		SW846 1311
Preparation, Mercury	TAL DEN		SW846 7470A
Mercury (CVAA)	TAL DEN	SW846 7471A	
Preparation, Mercury	TAL DEN		SW846 7471A
Nitrogen, Nitrate-Nitrite	TAL DEN	MCAWW 353.2	
Deionized Water Leaching Procedure	TAL DEN		ASTM DI Leach
Anions, Ion Chromatography	TAL DEN	SW846 9056M	
Deionized Water Leaching Procedure	TAL DEN		ASTM DI Leach
ASTM D-2216	TAL DEN	ASTM D-2216	

Lab References:

TAL DEN = TestAmerica Denver

Method References:

ASTM = ASTM International

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

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

METHOD / ANALYST SUMMARY

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Method	Analyst	Analyst ID
SW846 8270C	Tinkham, Sarah A	SAT
SW846 8081A	Ream, Brian E	BER
SW846 8082	Pavlakovich, Adam M	AMP
SW846 6010B	Bowen, Heidi E	HEB
SW846 7470A	Stoltz, Katie	KS
SW846 7471A	Stoltz, Katie	KS
MCAWW 353.2	Stosak, Lara E	LES
SW846 9056M	Phan, Thu L	TLP
ASTM D-2216	Berry III, Paul B	PBB

SAMPLE SUMMARY

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-13903-1	J1FXV7	Solid	03/23/2011 0755	03/25/2011 1000
280-13903-2	J1FXV8	Solid	03/23/2011 0758	03/25/2011 1000
280-13903-3	J1FXV9	Solid	03/23/2011 0800	03/25/2011 1000
280-13903-4	J1FXW0	Solid	03/23/2011 0802	03/25/2011 1000
280-13903-5	J1FXW1	Solid	03/23/2011 0758	03/25/2011 1000
280-13903-6	J1FXW2	Solid	03/23/2011 0815	03/25/2011 1000

SAMPLE RESULTS

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Client Sample ID: **J1FXW2**

Lab Sample ID: 280-13903-6
Client Matrix: Solid
% Moisture: 10.6

Date Sampled: 03/23/2011 0815
Date Received: 03/25/2011 1000

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-59803	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-59433	Lab File ID:	Y9085.D
Dilution:	1.0			Initial Weight/Volume:	30.3 g
Analysis Date:	03/29/2011 0252			Final Weight/Volume:	1000 uL
Prep Date:	03/25/2011 1652			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		11	U	11	370
Acenaphthylene		19	U	19	370
Anthracene		19	U	19	370
Benzo[a]anthracene		22	U	22	370
Benzo[a]pyrene		22	U	22	370
Benzo[b]fluoranthene		29	U	29	370
Benzo[ghi]perylene		18	U	18	370
Benzo[k]fluoranthene		44	U	44	370
Bis(2-chloroethoxy)methane		25	U	25	370
Bis(2-chloroethyl)ether		18	U	18	370
bis (2-chloroisopropyl) ether		25	U	25	370
Bis(2-ethylhexyl) phthalate		51	U	51	370
4-Bromophenyl phenyl ether		21	U	21	370
Butyl benzyl phthalate		48	U	48	370
Carbazole		40	U	40	370
4-Chloroaniline		91	U	91	370
4-Chloro-3-methylphenol		73	U	73	370
2-Chloronaphthalene		11	U	11	370
2-Chlorophenol		23	U	23	370
4-Chlorophenyl phenyl ether		23	U	23	370
Chrysene		30	U	30	370
Dibenz(a,h)anthracene		21	U	21	370
Dibenzofuran		22	U	22	370
1,2-Dichlorobenzene		24	U	24	370
1,3-Dichlorobenzene		13	U	13	370
1,4-Dichlorobenzene		15	U	15	370
3,3'-Dichlorobenzidine		100	U	100	730
2,4-Dichlorophenol		11	U	11	370
Diethyl phthalate		29	U	29	370
2,4-Dimethylphenol		73	U	73	370
Dimethyl phthalate		25	U	25	370
Di-n-butyl phthalate		32	U	32	370
4,6-Dinitro-2-methylphenol		370	U	370	730
2,4-Dinitrophenol		370	U	370	910
2,4-Dinitrotoluene		73	U	73	370
2,6-Dinitrotoluene		31	U	31	370
Di-n-octyl phthalate		16	U	16	370
Fluoranthene		40	U	40	370
Fluorene		20	U	20	370
Hexachlorobenzene		32	U	32	370
Hexachlorobutadiene		11	U	11	370
Hexachlorocyclopentadiene		55	U	55	370
Hexachloroethane		24	U	24	370
Indeno[1,2,3-cd]pyrene		24	U	24	370
Isophorone		19	U	19	370
2-Methylnaphthalene		21	U	21	370

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Client Sample ID: **J1FXW2**

Lab Sample ID: 280-13903-6
Client Matrix: Solid
% Moisture: 10.6

Date Sampled: 03/23/2011 0815
Date Received: 03/25/2011 1000

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-59803	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-59433	Lab File ID:	Y9085.D
Dilution:	1.0			Initial Weight/Volume:	30.3 g
Analysis Date:	03/29/2011 0252			Final Weight/Volume:	1000 uL
Prep Date:	03/25/2011 1652			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2-Methylphenol		14	U	14	370
3 & 4 Methylphenol		37	U	37	370
Naphthalene		34	U	34	370
2-Nitroaniline		55	U	55	370
3-Nitroaniline		81	U	81	370
4-Nitroaniline		80	U	80	370
Nitrobenzene		24	U	24	370
2-Nitrophenol		11	U	11	370
4-Nitrophenol		110	U	110	730
N-Nitrosodi-n-propylamine		34	U	34	370
N-Nitrosodiphenylamine		23	U	23	370
Pentachlorophenol		370	U	370	730
Phenanthrene		19	U	19	370
Phenol		20	U	20	370
Pyrene		13	U	13	370
1,2,4-Trichlorobenzene		31	U	31	370
2,4,5-Trichlorophenol		11	U	11	370
2,4,6-Trichlorophenol		11	U	11	370

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	87		50 - 120
2-Fluorophenol	88		53 - 120
Nitrobenzene-d5	86		50 - 120
Phenol-d5	88		52 - 120
Terphenyl-d14	101		55 - 120
2,4,6-Tribromophenol	84		51 - 120

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Client Sample ID: **J1FXW2**

Lab Sample ID: 280-13903-6
Client Matrix: Solid
% Moisture: 10.6

Date Sampled: 03/23/2011 0815
Date Received: 03/25/2011 1000

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-59803	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-59433	Lab File ID:	Y9085.D
Dilution:	1.0			Initial Weight/Volume:	30.3 g
Analysis Date:	03/29/2011 0252			Final Weight/Volume:	1000 uL
Prep Date:	03/25/2011 1652			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	1.75	1100	N J
	Unknown	2.80	270	N J
	Unknown	2.99	150	N J
	Unknown	3.04	170	N J
2216-30-0	Heptane, 2,5-dimethyl-	3.16	170	N J
	Unknown	3.23	4300	N J

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Client Sample ID: **J1FXW2**

Lab Sample ID: 280-13903-6
Client Matrix: Solid
% Moisture: 10.6

Date Sampled: 03/23/2011 0815
Date Received: 03/25/2011 1000

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-59982	Instrument ID:	GCS_P1
Prep Method:	3550C	Prep Batch:	280-59681	Initial Weight/Volume:	31.8 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	03/29/2011 1448			Injection Volume:	1 uL
Prep Date:	03/28/2011 1620			Result Type:	PRIMARY

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

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	81		59 - 115
Decachlorobiphenyl	90		63 - 124

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Client Sample ID: **J1FXW2**

Lab Sample ID: 280-13903-6
Client Matrix: Solid
% Moisture: 10.6

Date Sampled: 03/23/2011 0815
Date Received: 03/25/2011 1000

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-59806	Instrument ID:	GCS_P3
Prep Method:	3550C	Prep Batch:	280-59435	Initial Weight/Volume:	30.4 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	03/28/2011 2012			Injection Volume:	1 uL
Prep Date:	03/25/2011 1810			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		3.1	U	3.1	11
Aroclor 1221		8.9	U	8.9	18
Aroclor 1232		2.2	U	2.2	11
Aroclor 1242		5.1	U	5.1	11
Aroclor 1248		5.1	U	5.1	11
Aroclor 1254		2.9	U	2.9	11
Aroclor 1260		2.9	U	2.9	11

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	93		59 - 130
Tetrachloro-m-xylene	99		53 - 128

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Client Sample ID: **J1FXV7**

Lab Sample ID: 280-13903-1
Client Matrix: Solid
% Moisture: 12.9

Date Sampled: 03/23/2011 0755
Date Received: 03/25/2011 1000

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-59747	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-59400	Lab File ID:	26a032811.asc
Dilution:	1.0			Initial Weight/Volume:	1.16 g
Analysis Date:	03/28/2011 1641			Final Weight/Volume:	100 mL
Prep Date:	03/28/2011 0800				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		7520		1.5	4.9
Antimony		0.42	B	0.38	0.59
Arsenic		4.3		0.65	0.99
Barium		68.6		0.075	0.49
Beryllium		0.033	U	0.033	0.20
Boron		2.8	M	0.97	2.0
Cadmium		0.093	B M	0.041	0.20
Calcium		6940	M	14.0	49.5
Chromium		10.2		0.057	0.20
Cobalt		5.7	X	0.099	0.99
Copper		14.2		0.21	0.99
Iron		16000	X	3.8	4.9
Lead		9.7		0.27	0.49
Magnesium		4150		3.7	19.8
Manganese		283		0.099	0.99
Molybdenum		0.37	B	0.26	2.0
Nickel		11.1	X	0.12	4.0
Potassium		1580		40.6	297
Selenium		0.89	B	0.85	0.99
Silicon		315		5.6	9.9
Silver		0.16	U	0.16	0.20
Sodium		230		58.4	119
Vanadium		43.1		0.093	2.0
Zinc		37.2	X	0.39	0.99

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-60080	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-59424	Lab File ID:	110330AB.txt
Dilution:	1.0			Initial Weight/Volume:	0.64 g
Analysis Date:	03/30/2011 1555			Final Weight/Volume:	50. mL
Prep Date:	03/30/2011 0830				

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

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Client Sample ID: **J1FXV8**

Lab Sample ID: 280-13903-2
Client Matrix: Solid
% Moisture: 10.1

Date Sampled: 03/23/2011 0758
Date Received: 03/25/2011 1000

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-59747	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-59400	Lab File ID:	26a032811.asc
Dilution:	1.0			Initial Weight/Volume:	1.10 g
Analysis Date:	03/28/2011 1651			Final Weight/Volume:	100 mL
Prep Date:	03/28/2011 0800				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		6800		1.6	5.1
Antimony		0.38	U	0.38	0.61
Arsenic		3.5		0.67	1.0
Barium		58.8		0.077	0.51
Beryllium		0.033	U	0.033	0.20
Boron		1.7	B	0.99	2.0
Cadmium		0.054	B	0.041	0.20
Calcium		4240		14.3	50.6
Chromium		9.0		0.059	0.20
Cobalt		5.7	X	0.10	1.0
Copper		12.7		0.22	1.0
Iron		15100	X	3.8	5.1
Lead		15.4		0.27	0.51
Magnesium		3880		3.7	20.2
Manganese		271		0.10	1.0
Molybdenum		0.30	B	0.26	2.0
Nickel		9.7	X	0.12	4.0
Potassium		1670		41.5	303
Selenium		1.2		0.87	1.0
Silicon		328		5.7	10.1
Silver		0.16	U	0.16	0.20
Sodium		186		59.7	121
Vanadium		40.4		0.095	2.0
Zinc		34.7	X	0.40	1.0

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-60080	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-59424	Lab File ID:	110330AB.txt
Dilution:	1.0			Initial Weight/Volume:	0.60 g
Analysis Date:	03/30/2011 1557			Final Weight/Volume:	50 mL
Prep Date:	03/30/2011 0830				

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

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Client Sample ID: **J1FXV9**

Lab Sample ID: 280-13903-3
Client Matrix: Solid
% Moisture: 7.3

Date Sampled: 03/23/2011 0800
Date Received: 03/25/2011 1000

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-59747	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-59400	Lab File ID:	26a032811.asc
Dilution:	1.0			Initial Weight/Volume:	1.03 g
Analysis Date:	03/28/2011 1653			Final Weight/Volume:	100 mL
Prep Date:	03/28/2011 0800				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8390		1.6	5.2
Antimony		0.40	U	0.40	0.63
Arsenic		3.4		0.69	1.0
Barium		93.6		0.080	0.52
Beryllium		0.046	B	0.035	0.21
Boron		1.9	B	1.0	2.1
Cadmium		0.084	B	0.043	0.21
Calcium		4690		14.8	52.4
Chromium		10.9		0.061	0.21
Cobalt		6.2	X	0.10	1.0
Copper		14.6		0.23	1.0
Iron		17700	X	4.0	5.2
Lead		8.5		0.28	0.52
Magnesium		4200		3.9	21.0
Manganese		311		0.10	1.0
Molybdenum		0.27	B	0.27	2.1
Nickel		10.5	X	0.13	4.2
Potassium		1850		43.0	314
Selenium		0.90	U	0.90	1.0
Silicon		393		5.9	10.5
Silver		0.17	U	0.17	0.21
Sodium		231		61.8	126
Vanadium		43.6		0.098	2.1
Zinc		39.5	X	0.42	1.0

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-60080	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-59424	Lab File ID:	110330AB.txt
Dilution:	1.0			Initial Weight/Volume:	0.62 g
Analysis Date:	03/30/2011 1559			Final Weight/Volume:	50 mL
Prep Date:	03/30/2011 0830				

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

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Client Sample ID: **J1FXW0**

Lab Sample ID: 280-13903-4
Client Matrix: Solid
% Moisture: 17.2

Date Sampled: 03/23/2011 0802
Date Received: 03/25/2011 1000

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-59747	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-59400	Lab File ID:	26a032811.asc
Dilution:	1.0			Initial Weight/Volume:	1.03 g
Analysis Date:	03/28/2011 1655			Final Weight/Volume:	100 mL
Prep Date:	03/28/2011 0800				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		9000		1.8	5.9
Antimony		0.45	U	0.45	0.70
Arsenic		26.6		0.77	1.2
Barium		85.9		0.089	0.59
Beryllium		0.080	B	0.039	0.23
Boron		3.0		1.1	2.3
Cadmium		0.048	U	0.048	0.23
Calcium		3910		16.5	58.6
Chromium		11.9		0.068	0.23
Cobalt		6.2	X	0.12	1.2
Copper		12.5		0.25	1.2
Iron		17600	X	4.5	5.9
Lead		152		0.32	0.59
Magnesium		4240		4.3	23.4
Manganese		350		0.12	1.2
Molybdenum		0.30	U	0.30	2.3
Nickel		10.8	X	0.14	4.7
Potassium		2280		48.1	352
Selenium		1.0	U	1.0	1.2
Silicon		424		6.6	11.7
Silver		0.19	U	0.19	0.23
Sodium		208		69.2	141
Vanadium		40.8		0.11	2.3
Zinc		40.6	X	0.47	1.2

6010B TCLP Metals (ICP)-TCLP

Analysis Method:	6010B	Analysis Batch:	280-61374	Instrument ID:	MT_026
Prep Method:	3010A	Prep Batch:	280-61148	Lab File ID:	26c040711.asc
Dilution:	1.0	Leach Batch:	280-61023	Initial Weight/Volume:	10 mL
Analysis Date:	04/08/2011 0911			Final Weight/Volume:	50 mL
Prep Date:	04/07/2011 1500				
Leach Date:	04/06/2011 1629				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Arsenic		0.39	B	0.022	0.50
Barium		0.41	B	0.0020	1.0
Cadmium		0.0020	U	0.0020	0.10
Chromium		0.0064	B	0.0030	0.50
Lead		0.13	B	0.013	0.50
Selenium		0.024	B	0.024	0.10
Silver		0.0050	B	0.0040	0.50

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Client Sample ID: **J1FXW0**

Lab Sample ID: 280-13903-4
Client Matrix: Solid

Date Sampled: 03/23/2011 0802
Date Received: 03/25/2011 1000

7470A TCLP Mercury-TCLP

Analysis Method:	7470A	Analysis Batch:	280-61445	Instrument ID:	MT_033
Prep Method:	7470A	Prep Batch:	280-61169	Lab File ID:	110407AJ.TXT
Dilution:	1.0	Leach Batch:	280-61023	Initial Weight/Volume:	30 mL
Analysis Date:	04/08/2011 0143			Final Weight/Volume:	30 mL
Prep Date:	04/07/2011 1030				
Leach Date:	04/06/2011 1629				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Mercury		0.000083	B N C	0.000030	0.0020

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-60080	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-59424	Lab File ID:	110330AB.txt
Dilution:	1.0			Initial Weight/Volume:	0.67 g
Analysis Date:	03/30/2011 1602			Final Weight/Volume:	50 mL
Prep Date:	03/30/2011 0830				

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

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Client Sample ID: **J1FXW1**

Lab Sample ID: 280-13903-5
Client Matrix: Solid
% Moisture: 15.5

Date Sampled: 03/23/2011 0758
Date Received: 03/25/2011 1000

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-59747	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-59400	Lab File ID:	26a032811.asc
Dilution:	1.0			Initial Weight/Volume:	1.10 g
Analysis Date:	03/28/2011 1657			Final Weight/Volume:	100 mL
Prep Date:	03/28/2011 0800				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		7640		1.7	5.4
Antimony		0.41	U	0.41	0.65
Arsenic		3.4		0.71	1.1
Barium		66.5		0.082	0.54
Beryllium		0.042	B	0.035	0.22
Boron		1.8	B	1.1	2.2
Cadmium		0.072	B	0.044	0.22
Calcium		5230		15.2	53.8
Chromium		9.7		0.062	0.22
Cobalt		6.2	X	0.11	1.1
Copper		15.2		0.23	1.1
Iron		16900	X	4.1	5.4
Lead		14.8		0.29	0.54
Magnesium		4150		4.0	21.5
Manganese		287		0.11	1.1
Molybdenum		0.28	U	0.28	2.2
Nickel		9.9	X	0.13	4.3
Potassium		1930		44.1	323
Selenium		0.93	U	0.93	1.1
Silicon		383		6.1	10.8
Silver		0.17	U	0.17	0.22
Sodium		189		63.5	129
Vanadium		41.5		0.10	2.2
Zinc		39.0	X	0.43	1.1

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-60080	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-59424	Lab File ID:	110330AB.txt
Dilution:	1.0			Initial Weight/Volume:	0.65 g
Analysis Date:	03/30/2011 1604			Final Weight/Volume:	50 mL
Prep Date:	03/30/2011 0830				

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

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Client Sample ID: **J1FXW2**

Lab Sample ID: 280-13903-6
Client Matrix: Solid
% Moisture: 10.6

Date Sampled: 03/23/2011 0815
Date Received: 03/25/2011 1000

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-59748	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-59400	Lab File ID:	26b032811.asc
Dilution:	1.0			Initial Weight/Volume:	1.05 g
Analysis Date:	03/28/2011 1727			Final Weight/Volume:	100 mL
Prep Date:	03/28/2011 0800				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		5870		1.7	5.3
Antimony		0.40	U	0.40	0.64
Arsenic		1.3		0.70	1.1
Barium		40.5		0.081	0.53
Beryllium		0.035	U	0.035	0.21
Boron		1.0	U	1.0	2.1
Cadmium		0.055	B	0.044	0.21
Calcium		3610		15.0	53.3
Chromium		9.8		0.062	0.21
Cobalt		4.8	X	0.11	1.1
Copper		13.4		0.23	1.1
Iron		12400	X	4.0	5.3
Lead		2.7		0.29	0.53
Magnesium		3870		3.9	21.3
Manganese		228		0.11	1.1
Molybdenum		0.28	U	0.28	2.1
Nickel		11.2	X	0.13	4.3
Potassium		872		43.7	320
Selenium		0.92	U	0.92	1.1
Silicon		187		6.0	10.7
Silver		0.17	U	0.17	0.21
Sodium		293		62.9	128
Vanadium		33.5		0.10	2.1
Zinc		29.9	X	0.42	1.1

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-60080	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-59424	Lab File ID:	110330AB.txt
Dilution:	1.0			Initial Weight/Volume:	0.64 g
Analysis Date:	03/30/2011 1606			Final Weight/Volume:	50 mL
Prep Date:	03/30/2011 0830				

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

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

General Chemistry

Client Sample ID: **J1FXV7**

Lab Sample ID: 280-13903-1
Client Matrix: Solid

Date Sampled: 03/23/2011 0755
Date Received: 03/25/2011 1000

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	12.9		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-59369 Analysis Date: 03/25/2011 1216 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

General Chemistry

Client Sample ID: **J1FXV8**

Lab Sample ID: 280-13903-2
Client Matrix: Solid

Date Sampled: 03/23/2011 0758
Date Received: 03/25/2011 1000

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	10.1		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-59369 Analysis Date: 03/25/2011 1216 DryWt Corrected: N

General Chemistry

Client Sample ID: **J1FXV9**

Lab Sample ID: 280-13903-3
Client Matrix: Solid

Date Sampled: 03/23/2011 0800
Date Received: 03/25/2011 1000

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	7.3		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-59369 Analysis Date: 03/25/2011 1216 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

General Chemistry

Client Sample ID: **J1FXW0**

Lab Sample ID: 280-13903-4
Client Matrix: Solid

Date Sampled: 03/23/2011 0802
Date Received: 03/25/2011 1000

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	17.2		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-59369 Analysis Date: 03/25/2011 1216 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

General Chemistry

Client Sample ID: **J1FXW1**

Lab Sample ID: 280-13903-5
Client Matrix: Solid

Date Sampled: 03/23/2011 0758
Date Received: 03/25/2011 1000

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	15.5		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-59369 Analysis Date: 03/25/2011 1216 DryWt Corrected: N

General Chemistry

Client Sample ID: **J1FXW2**

Lab Sample ID: 280-13903-6
Client Matrix: Solid
% Moisture: 10.6

Date Sampled: 03/23/2011 0815
Date Received: 03/25/2011 1000

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate Nitrite as N-Soluble	0.57	B M	mg/Kg	0.40	0.84	1.0	353.2
Analysis Batch: 280-59512	Analysis Date: 03/26/2011 1138						DryWt Corrected: Y
Chloride-Soluble	2.2	U	mg/Kg	2.2	5.6	1.0	9056M
Analysis Batch: 280-59689	Analysis Date: 03/25/2011 2143						DryWt Corrected: Y
Nitrate as N-Soluble	0.84	B	mg/Kg	0.35	2.8	1.0	9056M
Analysis Batch: 280-59688	Analysis Date: 03/25/2011 2143						DryWt Corrected: Y
Bromide-Soluble	0.43	U	mg/Kg	0.43	2.2	1.0	9056M
Analysis Batch: 280-59689	Analysis Date: 03/25/2011 2143						DryWt Corrected: Y
Nitrite as N-Soluble	0.38	U	mg/Kg	0.38	2.8	1.0	9056M
Analysis Batch: 280-59688	Analysis Date: 03/25/2011 2143						DryWt Corrected: Y
Orthophosphate as P-Soluble	1.4	U	mg/Kg	1.4	5.6	1.0	9056M
Analysis Batch: 280-59688	Analysis Date: 03/25/2011 2143						DryWt Corrected: Y
Sulfate-Soluble	3.0	B	mg/Kg	1.9	5.6	1.0	9056M
Analysis Batch: 280-59689	Analysis Date: 03/25/2011 2143						DryWt Corrected: Y
Fluoride-Soluble	0.92	U	mg/Kg	0.92	5.6	1.0	9056M
Analysis Batch: 280-59689	Analysis Date: 03/25/2011 2143						DryWt Corrected: Y

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	10.6		%	0.10	0.10	1.0	D-2216
Analysis Batch: 280-59369	Analysis Date: 03/25/2011 1216						DryWt Corrected: N

QUALITY CONTROL RESULTS

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 280-59433					
LCS 280-59433/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-59433/1-A	Method Blank	T	Solid	3550C	
280-13903-6	J1FXW2	T	Solid	3550C	
280-13903-6MS	Matrix Spike	T	Solid	3550C	
280-13903-6MSD	Matrix Spike Duplicate	T	Solid	3550C	
Analysis Batch:280-59803					
LCS 280-59433/2-A	Lab Control Sample	T	Solid	8270C	280-59433
MB 280-59433/1-A	Method Blank	T	Solid	8270C	280-59433
280-13903-6	J1FXW2	T	Solid	8270C	280-59433
280-13903-6MS	Matrix Spike	T	Solid	8270C	280-59433
280-13903-6MSD	Matrix Spike Duplicate	T	Solid	8270C	280-59433

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 280-59435					
LCS 280-59435/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-59435/1-A	Method Blank	T	Solid	3550C	
280-13903-6	J1FXW2	T	Solid	3550C	
280-13903-6MS	Matrix Spike	T	Solid	3550C	
280-13903-6MSD	Matrix Spike Duplicate	T	Solid	3550C	
Prep Batch: 280-59681					
LCS 280-59681/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-59681/1-A	Method Blank	T	Solid	3550C	
280-13903-6	J1FXW2	T	Solid	3550C	
280-13903-6MS	Matrix Spike	T	Solid	3550C	
280-13903-6MSD	Matrix Spike Duplicate	T	Solid	3550C	
Analysis Batch:280-59806					
LCS 280-59435/2-A	Lab Control Sample	T	Solid	8082	280-59435
MB 280-59435/1-A	Method Blank	T	Solid	8082	280-59435
280-13903-6	J1FXW2	T	Solid	8082	280-59435
280-13903-6MS	Matrix Spike	T	Solid	8082	280-59435
280-13903-6MSD	Matrix Spike Duplicate	T	Solid	8082	280-59435
Analysis Batch:280-59982					
LCS 280-59681/2-A	Lab Control Sample	T	Solid	8081A	280-59681
MB 280-59681/1-A	Method Blank	T	Solid	8081A	280-59681
280-13903-6	J1FXW2	T	Solid	8081A	280-59681
280-13903-6MS	Matrix Spike	T	Solid	8081A	280-59681
280-13903-6MSD	Matrix Spike Duplicate	T	Solid	8081A	280-59681

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-59400					
LCS 280-59400/2-A	Lab Control Sample	T	Solid	3050B	
MB 280-59400/1-A	Method Blank	T	Solid	3050B	
280-13903-1	J1FXV7	T	Solid	3050B	
280-13903-1DU	Duplicate	T	Solid	3050B	
280-13903-1MS	Matrix Spike	T	Solid	3050B	
280-13903-2	J1FXV8	T	Solid	3050B	
280-13903-3	J1FXV9	T	Solid	3050B	
280-13903-4	J1FXW0	T	Solid	3050B	
280-13903-5	J1FXW1	T	Solid	3050B	
280-13903-6	J1FXW2	T	Solid	3050B	
Prep Batch: 280-59424					
LCS 280-59424/2-A	Lab Control Sample	T	Solid	7471A	
MB 280-59424/1-A	Method Blank	T	Solid	7471A	
280-13903-1	J1FXV7	T	Solid	7471A	
280-13903-2	J1FXV8	T	Solid	7471A	
280-13903-3	J1FXV9	T	Solid	7471A	
280-13903-4	J1FXW0	T	Solid	7471A	
280-13903-5	J1FXW1	T	Solid	7471A	
280-13903-6	J1FXW2	T	Solid	7471A	
280-13903-6DU	Duplicate	T	Solid	7471A	
280-13903-6MS	Matrix Spike	T	Solid	7471A	
Analysis Batch:280-59747					
LCS 280-59400/2-A	Lab Control Sample	T	Solid	6010B	280-59400
MB 280-59400/1-A	Method Blank	T	Solid	6010B	280-59400
280-13903-1	J1FXV7	T	Solid	6010B	280-59400
280-13903-1DU	Duplicate	T	Solid	6010B	280-59400
280-13903-1MS	Matrix Spike	T	Solid	6010B	280-59400
280-13903-2	J1FXV8	T	Solid	6010B	280-59400
280-13903-3	J1FXV9	T	Solid	6010B	280-59400
280-13903-4	J1FXW0	T	Solid	6010B	280-59400
280-13903-5	J1FXW1	T	Solid	6010B	280-59400
Analysis Batch:280-59748					
280-13903-6	J1FXW2	T	Solid	6010B	280-59400

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:280-60080					
LCS 280-59424/2-A	Lab Control Sample	T	Solid	7471A	280-59424
MB 280-59424/1-A	Method Blank	T	Solid	7471A	280-59424
280-13903-1	J1FXV7	T	Solid	7471A	280-59424
280-13903-2	J1FXV8	T	Solid	7471A	280-59424
280-13903-3	J1FXV9	T	Solid	7471A	280-59424
280-13903-4	J1FXW0	T	Solid	7471A	280-59424
280-13903-5	J1FXW1	T	Solid	7471A	280-59424
280-13903-6	J1FXW2	T	Solid	7471A	280-59424
280-13903-6DU	Duplicate	T	Solid	7471A	280-59424
280-13903-6MS	Matrix Spike	T	Solid	7471A	280-59424
Prep Batch: 280-61023					
LCS 280-61023/2-B	Lab Control Sample	P	Solid	1311	
LCS 280-61023/2-C	Lab Control Sample	P	Solid	1311	
LB 280-61023/1-B	TCLP SPLPE Leachate Blank	P	Solid	1311	
LB 280-61023/1-C	TCLP SPLPE Leachate Blank	P	Solid	1311	
280-13903-4	J1FXW0	P	Solid	1311	
280-13903-4DU	Duplicate	P	Solid	1311	
280-13903-4MS	Matrix Spike	P	Solid	1311	
Prep Batch: 280-61148					
LCS 280-61023/2-B	Lab Control Sample	P	Solid	3010A	280-61023
LB 280-61023/1-B	TCLP SPLPE Leachate Blank	P	Solid	3010A	280-61023
280-13903-4	J1FXW0	P	Solid	3010A	280-61023
280-13903-4DU	Duplicate	P	Solid	3010A	280-61023
280-13903-4MS	Matrix Spike	P	Solid	3010A	280-61023
Prep Batch: 280-61169					
LCS 280-61023/2-C	Lab Control Sample	P	Solid	7470A	280-61023
LB 280-61023/1-C	TCLP SPLPE Leachate Blank	P	Solid	7470A	280-61023
280-13903-4	J1FXW0	P	Solid	7470A	280-61023
280-13903-4DU	Duplicate	P	Solid	7470A	280-61023
280-13903-4MS	Matrix Spike	P	Solid	7470A	280-61023
Analysis Batch:280-61374					
LCS 280-61023/2-B	Lab Control Sample	P	Solid	6010B	280-61148
LB 280-61023/1-B	TCLP SPLPE Leachate Blank	P	Solid	6010B	280-61148
280-13903-4	J1FXW0	P	Solid	6010B	280-61148
280-13903-4DU	Duplicate	P	Solid	6010B	280-61148
280-13903-4MS	Matrix Spike	P	Solid	6010B	280-61148

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:280-61445					
LCS 280-61023/2-C	Lab Control Sample	P	Solid	7470A	280-61169
LB 280-61023/1-C	TCLP SPLPE Leachate Blank	P	Solid	7470A	280-61169
280-13903-4	J1FXW0	P	Solid	7470A	280-61169
280-13903-4DU	Duplicate	P	Solid	7470A	280-61169
280-13903-4MS	Matrix Spike	P	Solid	7470A	280-61169

Report Basis
P = TCLP
T = Total

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-59369					
280-13903-1	J1FXV7	T	Solid	D-2216	
280-13903-1DU	Duplicate	T	Solid	D-2216	
280-13903-2	J1FXV8	T	Solid	D-2216	
280-13903-3	J1FXV9	T	Solid	D-2216	
280-13903-4	J1FXW0	T	Solid	D-2216	
280-13903-5	J1FXW1	T	Solid	D-2216	
280-13903-6	J1FXW2	T	Solid	D-2216	
Prep Batch: 280-59386					
LCS 280-59386/2-A	Lab Control Sample	S	Solid	DI Leach	
MB 280-59386/1-A	Method Blank	S	Solid	DI Leach	
280-13903-6	J1FXW2	S	Solid	DI Leach	
280-13903-6DU	Duplicate	S	Solid	DI Leach	
280-13903-6MS	Matrix Spike	S	Solid	DI Leach	
Prep Batch: 280-59476					
LCS 280-59476/2-A	Lab Control Sample	S	Solid	DI Leach	
MB 280-59476/1-A	Method Blank	S	Solid	DI Leach	
280-13903-6	J1FXW2	S	Solid	DI Leach	
280-13903-6DU	Duplicate	S	Solid	DI Leach	
280-13903-6MS	Matrix Spike	S	Solid	DI Leach	
Analysis Batch:280-59512					
LCS 280-59476/2-A	Lab Control Sample	S	Solid	353.2	
MB 280-59476/1-A	Method Blank	S	Solid	353.2	
280-13903-6	J1FXW2	S	Solid	353.2	
280-13903-6DU	Duplicate	S	Solid	353.2	
280-13903-6MS	Matrix Spike	S	Solid	353.2	
Analysis Batch:280-59688					
LCS 280-59386/2-A	Lab Control Sample	S	Solid	9056M	
MB 280-59386/1-A	Method Blank	S	Solid	9056M	
280-13903-6	J1FXW2	S	Solid	9056M	
280-13903-6DU	Duplicate	S	Solid	9056M	
280-13903-6MS	Matrix Spike	S	Solid	9056M	
Analysis Batch:280-59689					
LCS 280-59386/2-A	Lab Control Sample	S	Solid	9056M	
MB 280-59386/1-A	Method Blank	S	Solid	9056M	
280-13903-6	J1FXW2	S	Solid	9056M	
280-13903-6DU	Duplicate	S	Solid	9056M	
280-13903-6MS	Matrix Spike	S	Solid	9056M	

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

QC Association Summary

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

Report Basis
S = Soluble
T = Total

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Method Blank - Batch: 280-59433

Method: 8270C
Preparation: 3550C

Lab Sample ID:	MB 280-59433/1-A	Analysis Batch:	280-59803	Instrument ID:	MSS_Y
Client Matrix:	Solid	Prep Batch:	280-59433	Lab File ID:	Y9075.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 g
Analysis Date:	03/28/2011 2332	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	03/25/2011 1652			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acenaphthene	10	U	10	330
Acenaphthylene	17	U	17	330
Anthracene	17	U	17	330
Benzo[a]anthracene	20	U	20	330
Benzo[a]pyrene	20	U	20	330
Benzo[b]fluoranthene	26	U	26	330
Benzo[ghi]perylene	16	U	16	330
Benzo[k]fluoranthene	40	U	40	330
Bis(2-chloroethoxy)methane	23	U	23	330
Bis(2-chloroethyl)ether	17	U	17	330
bis (2-chloroisopropyl) ether	23	U	23	330
Bis(2-ethylhexyl) phthalate	65.5	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	82	U	82	330
4-Chloro-3-methylphenol	66	U	66	330
2-Chloronaphthalene	10	U	10	330
2-Chlorophenol	21	U	21	330
4-Chlorophenyl phenyl ether	21	U	21	330
Chrysene	27	U	27	330
Dibenz(a,h)anthracene	19	U	19	330
Dibenzofuran	20	U	20	330
1,2-Dichlorobenzene	22	U	22	330
1,3-Dichlorobenzene	12	U	12	330
1,4-Dichlorobenzene	14	U	14	330
3,3'-Dichlorobenzidine	90	U	90	660
2,4-Dichlorophenol	10	U	10	330
Diethyl phthalate	26	U	26	330
2,4-Dimethylphenol	66	U	66	330
Dimethyl phthalate	23	U	23	330
Di-n-butyl phthalate	29	U	29	330
4,6-Dinitro-2-methylphenol	330	U	330	660
2,4-Dinitrophenol	330	U	330	830
2,4-Dinitrotoluene	66	U	66	330
2,6-Dinitrotoluene	28	U	28	330
Di-n-octyl phthalate	14	U	14	330
Fluoranthene	36	U	36	330
Fluorene	18	U	18	330
Hexachlorobenzene	29	U	29	330
Hexachlorobutadiene	10	U	10	330
Hexachlorocyclopentadiene	50	U	50	330
Hexachloroethane	21	U	21	330
Indeno[1,2,3-cd]pyrene	22	U	22	330
Isophorone	17	U	17	330

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Method Blank - Batch: 280-59433

Method: 8270C
Preparation: 3550C

Lab Sample ID:	MB 280-59433/1-A	Analysis Batch:	280-59803	Instrument ID:	MSS_Y
Client Matrix:	Solid	Prep Batch:	280-59433	Lab File ID:	Y9075.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 g
Analysis Date:	03/28/2011 2332	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	03/25/2011 1652			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
2-Methylnaphthalene	19	U	19	330
2-Methylphenol	13	U	13	330
3 & 4 Methylphenol	33	U	33	330
Naphthalene	31	U	31	330
2-Nitroaniline	50	U	50	330
3-Nitroaniline	73	U	73	330
4-Nitroaniline	73	U	73	330
Nitrobenzene	22	U	22	330
2-Nitrophenol	10	U	10	330
4-Nitrophenol	97	U	97	660
N-Nitrosodi-n-propylamine	31	U	31	330
N-Nitrosodiphenylamine	21	U	21	330
Pentachlorophenol	330	U	330	660
Phenanthrene	17	U	17	330
Phenol	18	U	18	330
Pyrene	12	U	12	330
1,2,4-Trichlorobenzene	28	U	28	330
2,4,5-Trichlorophenol	10	U	10	330
2,4,6-Trichlorophenol	10	U	10	330

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	86	50 - 120
2-Fluorophenol	83	53 - 120
Nitrobenzene-d5	80	50 - 120
Phenol-d5	84	52 - 120
Terphenyl-d14	97	55 - 120
2,4,6-Tribromophenol	79	51 - 120

Method Blank TICs- Batch: 280-59433

Cas Number	Analyte	RT	Est. Result	Qual
2213-23-2	Heptane, 2,4-dimethyl-	3.04	144	N J
2216-30-0	Heptane, 2,5-dimethyl-	3.16	147	N J
	Unknown	3.23	3440	N J
	Unknown	1.75	4240	N J

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Lab Control Sample - Batch: 280-59433

Method: 8270C
Preparation: 3550C

Lab Sample ID:	LCS 280-59433/2-A	Analysis Batch:	280-59803	Instrument ID:	MSS_Y
Client Matrix:	Solid	Prep Batch:	280-59433	Lab File ID:	Y9076.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 g
Analysis Date:	03/28/2011 2353	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	03/25/2011 1652			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acenaphthene	2670	2310	87	52 - 120	
Anthracene	2670	2550	96	57 - 120	
Carbazole	2670	2580	97	54 - 120	
4-Chloro-3-methylphenol	2670	2370	89	57 - 120	
2-Chlorophenol	2670	2180	82	53 - 120	
1,4-Dichlorobenzene	2670	2090	78	46 - 120	
2,4-Dinitrotoluene	2670	2660	100	53 - 120	
2-Methylnaphthalene	2670	2280	85	55 - 120	
2-Methylphenol	2670	2200	83	51 - 120	
4-Nitrophenol	2670	2680	101	41 - 120	
N-Nitrosodi-n-propylamine	2670	2220	83	51 - 120	
Pentachlorophenol	2670	2610	98	30 - 120	
Phenol	2670	2230	84	54 - 120	
Pyrene	2670	2560	96	50 - 120	
1,2,4-Trichlorobenzene	2670	2110	79	50 - 120	
2,4,6-Trichlorophenol	2670	2410	90	50 - 120	

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	85	50 - 120
2-Fluorophenol	84	53 - 120
Nitrobenzene-d5	84	50 - 120
Phenol-d5	83	52 - 120
Terphenyl-d14	96	55 - 120
2,4,6-Tribromophenol	93	51 - 120

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-59433

Method: 8270C
Preparation: 3550C

MS Lab Sample ID:	280-13903-6	Analysis Batch:	280-59803	Instrument ID:	MSS_Y
Client Matrix:	Solid	Prep Batch:	280-59433	Lab File ID:	Y9086.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.1 g
Analysis Date:	03/29/2011 0312			Final Weight/Volume:	1000 uL
Prep Date:	03/25/2011 1652			Injection Volume:	0.5 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-13903-6	Analysis Batch:	280-59803	Instrument ID:	MSS_Y
Client Matrix:	Solid	Prep Batch:	280-59433	Lab File ID:	Y9087.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.2 g
Analysis Date:	03/29/2011 0332			Final Weight/Volume:	1000 uL
Prep Date:	03/25/2011 1652			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acenaphthene	83	84	52 - 120	1	30		
Anthracene	93	92	57 - 120	1	30		
Carbazole	92	91	54 - 120	1	30		
4-Chloro-3-methylphenol	88	87	57 - 120	1	30		
2-Chlorophenol	82	83	53 - 120	1	30		
1,4-Dichlorobenzene	77	78	46 - 120	1	30		
2,4-Dinitrotoluene	97	98	53 - 120	0	30		
2-Methylnaphthalene	81	80	55 - 120	2	30		
2-Methylphenol	82	85	51 - 120	3	30		
4-Nitrophenol	98	96	41 - 120	2	30		
N-Nitrosodi-n-propylamine	81	83	51 - 120	2	30		
Pentachlorophenol	88	90	30 - 120	2	30		
Phenol	82	85	54 - 120	3	30		
Pyrene	93	93	50 - 120	0	38		
1,2,4-Trichlorobenzene	76	76	50 - 120	1	30		
2,4,6-Trichlorophenol	87	87	50 - 120	0	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
2-Fluorobiphenyl	83	83	50 - 120
2-Fluorophenol	81	84	53 - 120
Nitrobenzene-d5	80	81	50 - 120
Phenol-d5	82	85	52 - 120
Terphenyl-d14	93	94	55 - 120
2,4,6-Tribromophenol	92	91	51 - 120

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Method Blank - Batch: 280-59681

Method: 8081A
Preparation: 3550C

Lab Sample ID:	MB 280-59681/1-A	Analysis Batch:	280-59982	Instrument ID:	GCS_P1
Client Matrix:	Solid	Prep Batch:	280-59681	Lab File ID:	011F1101.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	32.2 g
Analysis Date:	03/29/2011 1538	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	03/28/2011 1620			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
4,4'-DDD	0.51	U	0.51	1.6
4,4'-DDE	0.22	U	0.22	1.6
4,4'-DDT	0.55	U	0.55	1.6
Aldrin	0.23	U	0.23	1.5
alpha-BHC	0.20	U	0.20	1.5
beta-BHC	0.62	U	0.62	1.5
delta-BHC	0.37	U	0.37	1.5
gamma-BHC (Lindane)	0.43	U	0.43	1.5
Heptachlor	0.20	U	0.20	1.5
Heptachlor epoxide	0.40	U	0.40	1.5
Endosulfan I	0.16	U	0.16	1.5
Endosulfan II	0.27	U	0.27	1.6
Endosulfan sulfate	0.26	U	0.26	1.6
Endrin	0.29	U	0.29	1.6
Endrin aldehyde	0.16	U	0.16	1.6
Endrin ketone	0.46	U	0.46	1.6
gamma-Chlordane	0.25	U	0.25	1.6
Methoxychlor	0.42	U	0.42	3.1
alpha-Chlordane	0.30	U	0.30	1.6
Dieldrin	0.20	U	0.20	1.6
Toxaphene	15	U	15	150

Surrogate	% Rec	Acceptance Limits
Tetrachloro-m-xylene	83	59 - 115
Decachlorobiphenyl	99	63 - 124

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Lab Control Sample - Batch: 280-59681

Method: 8081A
Preparation: 3550C

Lab Sample ID:	LCS 280-59681/2-A	Analysis Batch:	280-59982	Instrument ID:	GCS_P1
Client Matrix:	Solid	Prep Batch:	280-59681	Lab File ID:	007F0701.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.3 g
Analysis Date:	03/29/2011 1432	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	03/28/2011 1620			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
4,4'-DDD	16.5	12.1	73	57 - 118	
4,4'-DDE	16.5	13.6	82	61 - 115	
4,4'-DDT	16.5	15.8	96	53 - 125	
Aldrin	16.5	13.4	81	60 - 115	
alpha-BHC	16.5	13.8	83	54 - 115	
beta-BHC	16.5	13.9	84	58 - 115	
delta-BHC	16.5	13.8	84	62 - 115	
gamma-BHC (Lindane)	16.5	13.9	84	59 - 115	
Heptachlor	16.5	14.5	88	61 - 115	
Heptachlor epoxide	16.5	14.1	86	62 - 112	
Endosulfan I	16.5	13.7	83	55 - 115	
Endosulfan II	16.5	13.9	84	60 - 115	
Endosulfan sulfate	16.5	13.8	83	58 - 118	
Endrin	16.5	16.0	97	61 - 121	
Endrin aldehyde	16.5	12.4	75	54 - 115	
Endrin ketone	16.5	12.7	77	61 - 118	
gamma-Chlordane	16.5	13.7	83	60 - 115	
Methoxychlor	16.5	15.6	95	52 - 123	
alpha-Chlordane	16.5	13.7	83	60 - 115	
Dieldrin	16.5	14.1	85	63 - 117	

Surrogate	% Rec	Acceptance Limits
Tetrachloro-m-xylene	86	59 - 115
Decachlorobiphenyl	100	63 - 124

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-59681

Method: 8081A
Preparation: 3550C

MS Lab Sample ID:	280-13903-6	Analysis Batch:	280-59982	Instrument ID:	GCS_P1
Client Matrix:	Solid	Prep Batch:	280-59681	Lab File ID:	009F0901.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.1 g
Analysis Date:	03/29/2011 1505			Final Weight/Volume:	10000 uL
Prep Date:	03/28/2011 1620			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-13903-6	Analysis Batch:	280-59982	Instrument ID:	GCS_P1
Client Matrix:	Solid	Prep Batch:	280-59681	Lab File ID:	010F1001.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.1 g
Analysis Date:	03/29/2011 1522			Final Weight/Volume:	10000 uL
Prep Date:	03/28/2011 1620			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
4,4'-DDD	76	76	57 - 118	4	20		
4,4'-DDE	82	83	61 - 115	5	15		
4,4'-DDT	95	96	53 - 125	5	29		
Aldrin	81	82	60 - 115	4	50		
alpha-BHC	84	84	54 - 115	4	17		
beta-BHC	78	80	58 - 115	5	17		
delta-BHC	84	84	62 - 115	4	19		
gamma-BHC (Lindane)	84	85	59 - 115	4	24		
Heptachlor	88	89	61 - 115	4	18		
Heptachlor epoxide	85	86	62 - 112	4	18		
Endosulfan I	81	82	55 - 115	5	26		
Endosulfan II	82	84	60 - 115	5	20		
Endosulfan sulfate	81	82	58 - 118	4	22		
Endrin	98	100	61 - 121	5	30		
Endrin aldehyde	59	30	54 - 115	61	29		N *
Endrin ketone	76	76	61 - 118	4	20		
gamma-Chlordane	83	83	60 - 115	4	21		
Methoxychlor	90	92	52 - 123	5	23		
alpha-Chlordane	82	83	60 - 115	4	18		
Dieldrin	84	85	63 - 117	4	25		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Tetrachloro-m-xylene	87	86	59 - 115
Decachlorobiphenyl	100	102	63 - 124

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Method Blank - Batch: 280-59435

Method: 8082
Preparation: 3550C

Lab Sample ID:	MB 280-59435/1-A	Analysis Batch:	280-59806	Instrument ID:	GCS_P3
Client Matrix:	Solid	Prep Batch:	280-59435	Lab File ID:	005B0501.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 g
Analysis Date:	03/28/2011 1929	Units:	ug/Kg	Final Weight/Volume:	5000 uL
Prep Date:	03/25/2011 1810			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	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	Acceptance Limits
Decachlorobiphenyl	121	59 - 130
Tetrachloro-m-xylene	119	53 - 128

Lab Control Sample - Batch: 280-59435

Method: 8082
Preparation: 3550C

Lab Sample ID:	LCS 280-59435/2-A	Analysis Batch:	280-59806	Instrument ID:	GCS_P3
Client Matrix:	Solid	Prep Batch:	280-59435	Lab File ID:	006B0601.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 g
Analysis Date:	03/28/2011 1951	Units:	ug/Kg	Final Weight/Volume:	5000 uL
Prep Date:	03/25/2011 1810			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aroclor 1016	33.3	37.2	112	54 - 132	
Aroclor 1260	33.3	31.1	93	62 - 129	

Surrogate	% Rec	Acceptance Limits
Decachlorobiphenyl	91	59 - 130
Tetrachloro-m-xylene	96	53 - 128

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-59435

Method: 8082
Preparation: 3550C

MS Lab Sample ID:	280-13903-6	Analysis Batch:	280-59806	Instrument ID:	GCS_P3
Client Matrix:	Solid	Prep Batch:	280-59435	Lab File ID:	008B0801.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.1 g
Analysis Date:	03/28/2011 2034			Final Weight/Volume:	5000 uL
Prep Date:	03/25/2011 1810			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-13903-6	Analysis Batch:	280-59806	Instrument ID:	GCS_P3
Client Matrix:	Solid	Prep Batch:	280-59435	Lab File ID:	009B0901.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0 g
Analysis Date:	03/28/2011 2055			Final Weight/Volume:	5000 uL
Prep Date:	03/25/2011 1810			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Aroclor 1016	102	98	54 - 132	3	26		
Aroclor 1260	99	91	62 - 129	7	26		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Decachlorobiphenyl	93	89	59 - 130
Tetrachloro-m-xylene	93	85	53 - 128

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Method Blank - Batch: 280-59400

Method: 6010B
Preparation: 3050B

Lab Sample ID:	MB 280-59400/1-A	Analysis Batch:	280-59747	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-59400	Lab File ID:	26a032811.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	03/28/2011 1637	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	03/28/2011 0800				
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	0.124	B	0.076	0.50
Beryllium	0.033	U	0.033	0.20
Boron	0.98	U	0.98	2.0
Cadmium	0.041	U	0.041	0.20
Calcium	15.30	B	14.1	50.0
Chromium	0.0710	B	0.058	0.20
Cobalt	0.10	U	0.10	1.0
Copper	0.22	U	0.22	1.0
Iron	3.8	U	3.8	5.0
Lead	0.27	U	0.27	0.50
Magnesium	4.57	B	3.7	20.0
Manganese	0.10	U	0.10	1.0
Molybdenum	0.26	U	0.26	2.0
Nickel	0.12	U	0.12	4.0
Potassium	41.0	U	41.0	300
Selenium	0.86	U	0.86	1.0
Silicon	5.7	U	5.7	10.0
Silver	0.16	U	0.16	0.20
Sodium	59.0	U	59.0	120
Vanadium	0.094	U	0.094	2.0
Zinc	0.441	[illegible]	0.40	1.0

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Lab Control Sample - Batch: 280-59400

Method: 6010B
Preparation: 3050B

Lab Sample ID:	LCS 280-59400/2-A	Analysis Batch:	280-59747	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-59400	Lab File ID:	26a032811.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	03/28/2011 1639	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	03/28/2011 0800				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	200	180.8	90	82 - 116	
Antimony	50.0	45.92	92	82 - 110	
Arsenic	100	92.96	93	85 - 110	
Barium	200	191.1	96	87 - 112	
Beryllium	5.00	4.74	95	84 - 114	
Boron	100	87.29	87	81 - 110	
Cadmium	10.0	8.74	87	87 - 110	
Calcium	5000	4680	94	82 - 114	
Chromium	20.0	18.35	92	84 - 114	
Cobalt	50.0	44.84	90	87 - 110	
Copper	25.0	24.20	97	88 - 110	
Iron	100	100.9	101	87 - 120	
Lead	50.0	46.56	93	86 - 110	
Magnesium	5000	4719	94	90 - 110	
Manganese	50.0	47.77	96	88 - 110	
Molybdenum	100	94.67	95	86 - 110	
Nickel	50.0	46.17	92	87 - 110	
Potassium	5000	4865	97	89 - 110	
Selenium	200	181.6	91	83 - 110	
Silicon	1000	247.6	25	10 - 70	
Silver	5.00	4.72	94	87 - 114	
Sodium	5000	4852	97	90 - 112	
Vanadium	50.0	48.00	96	88 - 110	
Zinc	50.0	47.26	95	76 - 114	

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Matrix Spike - Batch: 280-59400

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-13903-1	Analysis Batch:	280-59747	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-59400	Lab File ID:	26a032811.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.00 g
Analysis Date:	03/28/2011 1648	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	03/28/2011 0800				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	7520		230	9694	945	50 - 200	4
Antimony	0.42	B	57.4	33.38	57	20 - 200	
Arsenic	4.3		115	102.9	86	76 - 111	
Barium	68.6		230	275.9	90	52 - 159	
Beryllium	0.033	U	5.74	5.01	87	72 - 105	
Boron	2.8		115	92.36	78	75 - 107	
Cadmium	0.093	B	11.5	9.34	81	40 - 130	
Calcium	6940		5740	11460	79	43 - 165	
Chromium	10.2		23.0	31.46	93	70 - 200	
Cobalt	5.7		57.4	52.97	82	72 - 106	
Copper	14.2		28.7	40.87	93	37 - 187	
Iron	16000		115	17330	1121	70 - 200	4
Lead	9.7		57.4	58.06	84	70 - 200	
Magnesium	4150		5740	9770	98	64 - 145	
Manganese	283		57.4	359.5	134	40 - 200	4
Molybdenum	0.37	B	115	98.59	86	75 - 103	
Nickel	11.1		57.4	59.96	85	61 - 126	
Potassium	1580		5740	7087	96	56 - 172	
Selenium	0.89	B	230	193.4	84	76 - 104	
Silicon	315		1150	644.8	29	20 - 200	
Silver	0.16	U	5.74	5.17	90	75 - 141	
Sodium	230		5740	5750	96	78 - 111	
Vanadium	43.1		57.4	99.43	98	50 - 169	
Zinc	37.2		57.4	89.14	91	70 - 200	

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Duplicate - Batch: 280-59400

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-13903-1	Analysis Batch:	280-59747	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-59400	Lab File ID:	26a032811.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.01 g
Analysis Date:	03/28/2011 1646	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	03/28/2011 0800				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Aluminum	7520		7133	5	40	
Antimony	0.42	B	0.43	NC	40	U
Arsenic	4.3		3.60	17	30	
Barium	68.6		61.14	11	30	
Beryllium	0.033	U	0.038	NC	30	U
Boron	2.8		1.91	36	30	B M
Cadmium	0.093	B	0.0568	48	30	B M
Calcium	6940		4974	33	30	M
Chromium	10.2		9.31	9	40	
Cobalt	5.7		5.65	0.04	30	
Copper	14.2		14.54	3	30	
Iron	16000		15530	3	40	
Lead	9.7		10.17	4	40	
Magnesium	4150		3985	4	30	
Manganese	283		279.0	1	40	
Molybdenum	0.37	B	0.30	NC	30	U
Nickel	11.1		9.58	15	30	
Potassium	1580		1535	3	40	
Selenium	0.89	B	0.98	NC	30	U
Silicon	315		322.2	2	40	
Silver	0.16	U	0.18	NC	30	U
Sodium	230		194.4	17	30	
Vanadium	43.1		41.32	4	30	
Zinc	37.2		37.74	1	40	

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

TCLP SPLPE Leachate Blank - Batch: 280-61148

Method: 6010B
Preparation: 3010A
TCLP

Lab Sample ID:	LB 280-61023/1-B	Analysis Batch:	280-61374	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-61148	Lab File ID:	26c040711.asc
Dilution:	1.0	Leach Batch:	280-61023	Initial Weight/Volume:	10 mL
Analysis Date:	04/08/2011 0906	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	04/07/2011 1500				
Leach Date:	04/06/2011 1629				

Analyte	Result	Qual	MDL	RL
Arsenic	0.022	U	0.022	0.50
Barium	0.00780	B	0.0020	1.0
Cadmium	0.0020	U	0.0020	0.10
Chromium	0.0030	U	0.0030	0.50
Lead	0.013	U	0.013	0.50
Selenium	0.024	U	0.024	0.10
Silver	0.0040	U	0.0040	0.50

Lab Control Sample - Batch: 280-61148

Method: 6010B
Preparation: 3010A
TCLP

Lab Sample ID:	LCS 280-61023/2-B	Analysis Batch:	280-61374	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-61148	Lab File ID:	26c040711.asc
Dilution:	1.0	Leach Batch:	280-61023	Initial Weight/Volume:	10 mL
Analysis Date:	04/08/2011 0908	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	04/07/2011 1500				
Leach Date:	04/06/2011 1629				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Arsenic	4.00	4.24	106	80 - 120	
Barium	12.0	12.08	101	80 - 120	
Cadmium	1.10	1.11	101	80 - 120	
Chromium	5.20	5.68	109	80 - 120	
Lead	5.50	5.81	106	80 - 120	
Selenium	3.00	3.07	102	80 - 120	
Silver	1.05	1.03	98	80 - 120	

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Matrix Spike - Batch: 280-61148

Method: 6010B
Preparation: 3010A
TCLP

Lab Sample ID:	280-13903-4	Analysis Batch:	280-61374	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-61148	Lab File ID:	26c040711.asc
Dilution:	1.0	Leach Batch:	280-61023	Initial Weight/Volume:	10 mL
Analysis Date:	04/08/2011 0918	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	04/07/2011 1500				
Leach Date:	04/06/2011 1629				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Arsenic	0.39	B	4.00	4.75	109	80 - 120	
Barium	0.41	B	12.0	12.89	104	80 - 120	
Cadmium	0.0020	U	1.10	1.14	103	80 - 120	
Chromium	0.0064	B	5.20	5.84	112	80 - 120	
Lead	0.13	B	5.50	6.11	109	80 - 120	
Selenium	0.024	B	3.00	3.16	105	80 - 120	
Silver	0.0050	B	1.05	1.05	100	80 - 120	

Duplicate - Batch: 280-61148

Method: 6010B
Preparation: 3010A
TCLP

Lab Sample ID:	280-13903-4	Analysis Batch:	280-61374	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-61148	Lab File ID:	26c040711.asc
Dilution:	1.0	Leach Batch:	280-61023	Initial Weight/Volume:	10 mL
Analysis Date:	04/08/2011 0916	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	04/07/2011 1500				
Leach Date:	04/06/2011 1629				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Arsenic	0.39	B	0.389	0.9	20	B
Barium	0.41	B	0.412	0.2	20	B
Cadmium	0.0020	U	0.0020	NC	20	U
Chromium	0.0064	B	0.00575	11	20	B
Lead	0.13	B	0.145	8	20	B
Selenium	0.024	B	0.024	NC	20	U
Silver	0.0050	B	0.0040	NC	20	U

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

TCLP SPLPE Leachate Blank - Batch: 280-61169

Method: 7470A
Preparation: 7470A
TCLP

Lab Sample ID:	LB 280-61023/1-C	Analysis Batch:	280-61445	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-61169	Lab File ID:	110407AJ.TXT
Dilution:	1.0	Leach Batch:	280-61023	Initial Weight/Volume:	30 mL
Analysis Date:	04/08/2011 0138	Units:	mg/L	Final Weight/Volume:	30 mL
Prep Date:	04/07/2011 1030				
Leach Date:	04/06/2011 1629				

Analyte	Result	Qual	MDL	RL
Mercury	0.0000660	B	0.000030	0.0020

Lab Control Sample - Batch: 280-61169

Method: 7470A
Preparation: 7470A
TCLP

Lab Sample ID:	LCS 280-61023/2-C	Analysis Batch:	280-61445	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-61169	Lab File ID:	110407AJ.TXT
Dilution:	1.0	Leach Batch:	280-61023	Initial Weight/Volume:	30 mL
Analysis Date:	04/08/2011 0140	Units:	mg/L	Final Weight/Volume:	30 mL
Prep Date:	04/07/2011 1030				
Leach Date:	04/06/2011 1629				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.00500	0.00666	133	90 - 116	N

Matrix Spike - Batch: 280-61169

Method: 7470A
Preparation: 7470A
TCLP

Lab Sample ID:	280-13903-4	Analysis Batch:	280-61445	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-61169	Lab File ID:	110407AJ.TXT
Dilution:	1.0	Leach Batch:	280-61023	Initial Weight/Volume:	30 mL
Analysis Date:	04/08/2011 0147	Units:	mg/L	Final Weight/Volume:	30 mL
Prep Date:	04/07/2011 1030				
Leach Date:	04/06/2011 1629				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.000083	B	0.00500	0.00696	138	90 - 116	N

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Duplicate - Batch: 280-61169

Method: 7470A
Preparation: 7470A
TCLP

Lab Sample ID:	280-13903-4	Analysis Batch:	280-61445	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-61169	Lab File ID:	110407AJ.TXT
Dilution:	1.0	Leach Batch:	280-61023	Initial Weight/Volume:	30 mL
Analysis Date:	04/08/2011 0145	Units:	mg/L	Final Weight/Volume:	30 mL
Prep Date:	04/07/2011 1030				
Leach Date:	04/06/2011 1629				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Mercury	0.000083	B	0.0000860	4	20	B N

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Method Blank - Batch: 280-59424

Method: 7471A
Preparation: 7471A

Lab Sample ID:	MB 280-59424/1-A	Analysis Batch:	280-60080	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-59424	Lab File ID:	110330AB.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	03/30/2011 1545	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	03/30/2011 0830				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	0.0055	U	0.0055	0.017

Lab Control Sample - Batch: 280-59424

Method: 7471A
Preparation: 7471A

Lab Sample ID:	LCS 280-59424/2-A	Analysis Batch:	280-60080	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-59424	Lab File ID:	110330AB.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	03/30/2011 1548	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	03/30/2011 0830				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.417	0.421	101	87 - 111	

Matrix Spike - Batch: 280-59424

Method: 7471A
Preparation: 7471A

Lab Sample ID:	280-13903-6	Analysis Batch:	280-60080	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-59424	Lab File ID:	110330AB.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.64 g
Analysis Date:	03/30/2011 1611	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	03/30/2011 0830				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.0058	U	0.437	0.449	103	87 - 111	

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Duplicate - Batch: 280-59424

Method: 7471A
Preparation: 7471A

Lab Sample ID:	280-13903-6	Analysis Batch:	280-60080	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-59424	Lab File ID:	110330AB.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.63 g
Analysis Date:	03/30/2011 1608	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	03/30/2011 0830				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Mercury	0.0058	U	0.0059	NC	20	U

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Method Blank - Batch: 280-59512

Method: 353.2
Preparation: N/A

Lab Sample ID:	MB 280-59476/1-A	Analysis Batch:	280-59512	Instrument ID:	WC_Alp 2
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0326ANXN
Dilution:	1.0	Leach Batch:	280-59476	Initial Weight/Volume:	1.0 mL
Analysis Date:	03/26/2011 1135	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	03/25/2011 1330				

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

Method Reporting Limit Check - Batch: 280-59512

Method: 353.2
Preparation: N/A

Lab Sample ID:	MRL 280-59512/17	Analysis Batch:	280-59512	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0326ANXN
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	03/26/2011 1132	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate Nitrite as N-Soluble	0.100	0.0796	80	50 - 150	B

Lab Control Sample - Batch: 280-59512

Method: 353.2
Preparation: N/A

Lab Sample ID:	LCS 280-59476/2-A	Analysis Batch:	280-59512	Instrument ID:	WC_Alp 2
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0326ANXN
Dilution:	1.0	Leach Batch:	280-59476	Initial Weight/Volume:	1.0 mL
Analysis Date:	03/26/2011 1136	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	03/25/2011 1330				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate Nitrite as N-Soluble	50.0	50.12	100	90 - 110	

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Matrix Spike - Batch: 280-59512

Method: 353.2
Preparation: N/A

Lab Sample ID:	280-13903-6	Analysis Batch:	280-59512	Instrument ID:	WC_Alp 2
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0326ANXN
Dilution:	1.0	Leach Batch:	280-59476	Initial Weight/Volume:	1.0 mL
Analysis Date:	03/26/2011 1141	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	03/25/2011 1330				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Nitrate Nitrite as N-Soluble	0.57	B	42.2	44.96	105	90 - 110	

Duplicate - Batch: 280-59512

Method: 353.2
Preparation: N/A

Lab Sample ID:	280-13903-6	Analysis Batch:	280-59512	Instrument ID:	WC_Alp 2
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0326ANXN
Dilution:	1.0	Leach Batch:	280-59476	Initial Weight/Volume:	1.0 mL
Analysis Date:	03/26/2011 1139	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	03/25/2011 1330				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Nitrate Nitrite as N-Soluble	0.57	B	0.476	18	10	B M

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Method Blank - Batch: 280-59688

Method: 9056M
Preparation: N/A

Lab Sample ID:	MB 280-59386/1-A	Analysis Batch:	280-59688	Instrument ID:	WC_IC8
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	148.TXT
Dilution:	1.0	Leach Batch:	280-59386	Initial Weight/Volume:	1.0 mL
Analysis Date:	03/25/2011 2034	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	03/25/2011 1322				

Analyte	Result	Qual	MDL	RL
Nitrate as N-Soluble	0.31	U	0.31	2.5
Nitrite as N-Soluble	0.34	U	0.34	2.5
Orthophosphate as P-Soluble	1.2	U	1.2	5.0

Method Reporting Limit Check - Batch: 280-59688

Method: 9056M
Preparation: N/A

Lab Sample ID:	MRL 280-59688/3	Analysis Batch:	280-59688	Instrument ID:	WC_IC8
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	112.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	03/25/2011 0907	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate as N-Soluble	0.200	0.203	102	50 - 150	B
Nitrite as N-Soluble	0.200	0.194	97	50 - 150	B
Orthophosphate as P-Soluble	0.200	0.19	61	50 - 150	U

Lab Control Sample - Batch: 280-59688

Method: 9056M
Preparation: N/A

Lab Sample ID:	LCS 280-59386/2-A	Analysis Batch:	280-59688	Instrument ID:	WC_IC8
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	149.TXT
Dilution:	1.0	Leach Batch:	280-59386	Initial Weight/Volume:	1.0 mL
Analysis Date:	03/25/2011 2053	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	03/25/2011 1322				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate as N-Soluble	50.0	51.32	103	90 - 110	
Nitrite as N-Soluble	50.0	51.27	103	90 - 110	
Orthophosphate as P-Soluble	50.0	50.35	101	90 - 110	

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Matrix Spike - Batch: 280-59688

Method: 9056M
Preparation: N/A

Lab Sample ID:	280-13903-6	Analysis Batch:	280-59688	Instrument ID:	WC_IC8
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	154.TXT
Dilution:	1.0	Leach Batch:	280-59386	Initial Weight/Volume:	1.0 mL
Analysis Date:	03/25/2011 2217	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	03/25/2011 1322				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Nitrate as N-Soluble	0.84	B	55.4	57.96	103	80 - 120	
Nitrite as N-Soluble	0.38	U	55.4	56.54	102	80 - 120	
Orthophosphate as P-Soluble	1.4	U	55.4	56.73	102	80 - 120	

Duplicate - Batch: 280-59688

Method: 9056M
Preparation: N/A

Lab Sample ID:	280-13903-6	Analysis Batch:	280-59688	Instrument ID:	WC_IC8
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	153.TXT
Dilution:	1.0	Leach Batch:	280-59386	Initial Weight/Volume:	1.0 mL
Analysis Date:	03/25/2011 2200	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	03/25/2011 1322				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Nitrate as N-Soluble	0.84	B	0.850	1	15	B
Nitrite as N-Soluble	0.38	U	0.38	NC	15	U
Orthophosphate as P-Soluble	1.4	U	1.4	NC	15	U

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Method Blank - Batch: 280-59689

Method: 9056M
Preparation: N/A

Lab Sample ID:	MB 280-59386/1-A	Analysis Batch:	280-59689	Instrument ID:	WC_IC8
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	148.TXT
Dilution:	1.0	Leach Batch:	280-59386	Initial Weight/Volume:	1.0 mL
Analysis Date:	03/25/2011 2034	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	03/25/2011 1322				

Analyte	Result	Qual	MDL	RL
Chloride-Soluble	2.0	U	2.0	5.0
Bromide-Soluble	0.39	U	0.39	2.0
Sulfate-Soluble	1.7	U	1.7	5.0
Fluoride-Soluble	0.82	U	0.82	5.0

Method Reporting Limit Check - Batch: 280-59689

Method: 9056M
Preparation: N/A

Lab Sample ID:	MRL 280-59689/3	Analysis Batch:	280-59689	Instrument ID:	WC_IC8
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	112.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	03/25/2011 0907	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chloride-Soluble	1.00	1.00	100	50 - 150	B
Bromide-Soluble	0.200	0.190	95	50 - 150	B
Sulfate-Soluble	1.00	0.974	97	50 - 150	B
Fluoride-Soluble	0.200	0.191	96	50 - 150	B

Lab Control Sample - Batch: 280-59689

Method: 9056M
Preparation: N/A

Lab Sample ID:	LCS 280-59386/2-A	Analysis Batch:	280-59689	Instrument ID:	WC_IC8
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	149.TXT
Dilution:	1.0	Leach Batch:	280-59386	Initial Weight/Volume:	1.0 mL
Analysis Date:	03/25/2011 2053	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	03/25/2011 1322				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chloride-Soluble	250	254.7	102	90 - 110	
Bromide-Soluble	50.0	50.65	101	90 - 110	
Sulfate-Soluble	250	257.6	103	90 - 110	
Fluoride-Soluble	50.0	52.40	105	90 - 110	

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Matrix Spike - Batch: 280-59689

Method: 9056M
Preparation: N/A

Lab Sample ID:	280-13903-6	Analysis Batch:	280-59689	Instrument ID:	WC_IC8
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	154.TXT
Dilution:	1.0	Leach Batch:	280-59386	Initial Weight/Volume:	1.0 mL
Analysis Date:	03/25/2011 2217	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	03/25/2011 1322				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Chloride-Soluble	2.2	U	277	287.4	104	80 - 120	
Bromide-Soluble	0.43	U	55.4	56.30	102	80 - 120	
Sulfate-Soluble	3.0	B	277	290.2	104	80 - 120	
Fluoride-Soluble	0.92	U	55.4	54.76	99	80 - 120	

Duplicate - Batch: 280-59689

Method: 9056M
Preparation: N/A

Lab Sample ID:	280-13903-6	Analysis Batch:	280-59689	Instrument ID:	WC_IC8
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	153.TXT
Dilution:	1.0	Leach Batch:	280-59386	Initial Weight/Volume:	1.0 mL
Analysis Date:	03/25/2011 2200	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	03/25/2011 1322				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Chloride-Soluble	2.2	U	2.2	NC	15	U
Bromide-Soluble	0.43	U	0.43	NC	15	U
Sulfate-Soluble	3.0	B	3.01	1	15	B
Fluoride-Soluble	0.92	U	0.92	NC	15	U

Client: Washington Closure Hanford

Job Number: 280-13903-1
Sdg Number: JP0138

Duplicate - Batch: 280-59369

Method: D-2216
Preparation: N/A

Lab Sample ID:	280-13903-1	Analysis Batch:	280-59369	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:	03/25/2011 1216	Units:	%	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Moisture	12.9	12.2	5	20	

5.2°

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-107-064	Page 1 of 32

Collector: J. Kuepfer	Company Contact: Joan Kessner	Telephone No.: 509-375-4688	Project Coordinator: KESSNER, JH
Price Code: ~~8L~~ 8B	Data Turnaround: ~~21~~ 7 Days		
Project Designation: 100-H Remaining Sites Burial Grounds - Soil Full Protocol	Sampling Location: 1607-H-1 Verification Resampleing		SAF No.: RC-107
Ice Chest No.: ERC-96-511	Field Logbook No.: EL 1627-05	COA: 0607H12600	Method of Shipment: ~~Government Vehicle~~/FedEx
Shipped To: TestAmerica Incorporated, ~~Richland~~ Denver	Offsite Property No.: NA		Bill of Lading/Air Bill No.: 7945 7088 5037

POSSIBLE SAMPLE HAZARDS/REMARKS
~~None~~ Radioactive <DOT Limits

Special Handling and/or Storage
~~Cool 4 Deg C~~ NONE

Preservation	None											
Type of Container	G/P											
No. of Container(s)	1											
Volume	60mL											
SAMPLE ANALYSIS	See item (1) in Special Instructions.											
Sample No.	Matrix *	Sample Date	Sample Time									
J1FXV7	SOIL	3/23/11	0755	X								
J1FXV8	SOIL	3/23/11	0758	X								
J1FXV9	SOIL	3/23/11	0800	X								
J1FXW0	SOIL	3/23/11	0802	X								
J1FXW1	SOIL	3/23/11	0758	X								

CHAIN OF POSSESSION	Sign/Print Names		
Relinquished By/Removed From: J Kuepfer	Date/Time: 3/23/11 0820	Received By/Stored In: JV Fullmer	Date/Time: 0820 3/23/11
Relinquished By/Removed From: JV Fullmer	Date/Time: 1400 3/23/11	Received By/Stored In: A. Freier	Date/Time: 1600 3-23-11
Relinquished By/Removed From: WCH A. Freier	Date/Time: 1020 3-24-11	Received By/Stored In: Fed Ex	Date/Time:
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time: 3/25/11 1000
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time

SPECIAL INSTRUCTIONS

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

REVIEWED BY JEB
DATE 3-24-11

JP0138

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

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

WCH-EE-011

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-107-064	Page 23 of 32

Collector: J. Kuepfer	Company Contact: Joan Kessner — Telephone No.: 509-375-4688	Project Coordinator: KESSNER, JH	Price Code: ~~8L~~ 8B — Data Turnaround: ~~21~~ 7 Days
Project Designation: 100-H Remaining Sites Burial Grounds - Soil Full Protocol	Sampling Location: 1607-H-1 Verification Resampleing	SAF No.: RC-107	
Ice Chest No.: ERC-96-511	Field Logbook No.: EL 1627-05 — COA: 0607H12600	Method of Shipment: ~~Government Vehicle~~/FedEx	
Shipped To: TestAmerica Incorporated, ~~Richland~~ Denver	Offsite Property No.: NA	Bill of Lading/Air Bill No.: 7945 7088 5037	

POSSIBLE SAMPLE HAZARDS/REMARKS

~~None~~ Radioactive LOOT Limits

Special Handling and/or Storage

Cool 4 Deg C

Preservation	None	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	None	None	None	None
Type of Container	G/P	G/P	G/P	aG	aG	aG	G/P	G/P	G/P	G/P
No. of Container(s)	1	1	1	1	1	1	0	1	0	0
Volume	60mL	60mL	125mL	120mL	120mL	120mL	500mL	500mL	500mL	500mL
SAMPLE ANALYSIS	See item (1) in Special Instructions.	Chromium Hex - 7196	See item (2) in Special Instructions.	Semi-VOA - 8270A (TCL)	PCBs - 8082	Pesticides - 8081	Carbon-14; Tritium - H3 Low Level Soil	See item (3) in Special Instructions.	Isotopic Uranium	Isotopic Plutonium
Sample No. / Matrix * / Sample Date / Sample Time										
J1FXW2 / SOIL / 3/23/11 / 0815	X		X	X	X	X				

CHAIN OF POSSESSION — Sign/Print Names

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Kuepfer	3/23/11 0820	JV Fullmer	3/23/11 0820
JV Fullmer	3-23-11 1600	A. Freier	3-23-11 1600
A. Freier (WCH)	3-24-11 1020	Fed Ex	
		[illegible]	3/25/11 1000

SPECIAL INSTRUCTIONS

(1) ICP Metals - 6010TR (Close-out List) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Molybdenum, Nickel, Potassium, Selenium, Silicon, Silver, Sodium, Vanadium, Zinc}; Mercury - 7471 - (CV)
(2) IC Anions - 9056 Modified {Bromide, Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Phosphorous in phosphate, Sulfate}; NO2/NO3 - 353.2; ~~pH (Soil) - 9045~~
(3) Gamma Spec - Client List {Americium-241, Barium-133, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155, Silver-108 metastable}

REVIEWED BY JEB DATE 3-24-11

JP0138

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 ~~-5/1~~ 60 10 TR

Analytical Due:

Report Due: 4/1/11 (Rush 5 day TAT)

Sample Check-in List

Date/Time Received: 3/25/11 1000 GM Screen Result 13 microR/hr

Client: Washington Closure Hanford SDG #: JP0138 NA[ ] SAF #: RC-107-~~064~~ NA [ ]

Job Number: 13903 Chain of Custody # RC-107-064

Shipping Container ID: ERC-96-511 Air Bill # 7945708850 37

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: 5.2 NA [ ] 5. Vermiculite/packing materials is NA [ ] Wet [ ] Dry [✓]
6. Number of samples in shipping container: 6
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: 3/25/11

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on ___ by ___ Person Contacted ___

[ ] No action necessary; process as is.

Project Manager [signature] Date 3/28/11

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

J1115110225022 5

Ship Date: 24MAR11
ActWgt: 74.0 LB
CAD: 8897843/INET3130

Delivery Address Bar Code

SHIP TO: (303) 736-0100 BILL SENDER

Sample Recieving
Test America Denver
4955 YARROW ST

ARVADA, CO 80002

Ref #
Invoice #
PO #
Dept #

FRI - 25 MAR A1
PRIORITY OVERNIGHT

TRK# 0201 7945 7088 5037

XH WHHA

80002
CO-US
DEN

50D32/8DD9/7EFB

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