0098084

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

COMPLETE COPY OF DATA PACKAGE TO:

Kathy Wendt H4-21 KW 7/27/11
INITIAL/DATE

COMMENTS:

SDG JP0223 SAF RC-074

Rad only ☑ Chem only Rad & Chem

☑ Complete Partial

Waste Site: 100-D-73 & 100-D-76 Tier 1 Pre-Verification

RECEIVED
AUG 11 2011
EDMC

Analytical Data Package Prepared For

Washington Closure Hanford

RECEIVED
JUL 2011

Radiochemical Analysis By

TestAmerica

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

Assigned Laboratory Code: TARL

Data Package Contains 30 *Pages*

Report No.: 47490

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.
JP0223	RC-074	J1K4L7	J1G120443-6	MKVE91AA	9MKVE910	1194108
		J1K4L8	J1G120443-7	MKVFC1AA	9MKVFC10	1194108
		J1K4L9	J1G120443-8	MKVFE1AA	9MKVFE10	1194108
		J1K4M0	J1G120443-9	MKVFF1AA	9MKVFF10	1194108
		J1K4M1	J1G120443-10	MKVFG1AA	9MKVFG10	1194108
	RC-074	J1K4M2	J1G120443-1	MKVEP1AA	9MKVEP10	1194108
		J1K4M3	J1G120443-2	MKVE11AA	9MKVE110	1194108
		J1K4M4	J1G120443-3	MKVE31AA	9MKVE310	1194108
		J1K4M5	J1G120443-4	MKVE71AA	9MKVE710	1194108
		J1K4M6	J1G120443-5	MKVE81AA	9MKVE810	1194108

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

Washington Hanford Closure
2620 Fermi Avenue
Richland, WA 99354

TestAmerica Laboratories, Inc.

July 19, 2011

Attention: Joan Kessner

SAF Number	:	RC-074
Date SDG Closed	:	July 12, 2011
Number of Samples	:	Ten (10)
Sample Type	:	Soil
SDG Number	:	JP0223
Data Deliverable	:	7– Day / Summary

CASE NARRATIVE

I. Introduction

On July 12, 2011, ten soil samples were received at TestAmerica for radiochemical analysis. Upon receipt, the samples were assigned the following laboratory ID number to correspond with the Washington Closure Hanford (WCH) specific ID:

WCH ID#	TARL ID#	MATRIX	DATE OF RECEIPT
J1K4L7	MKVE9	SOIL	7/12/11
J1K4L8	MKVFC	SOIL	7/12/11
J1K4L9	MKVFE	SOIL	7/12/11
J1K4M0	MKVFF	SOIL	7/12/11
J1K4M1	MKVFG	SOIL	7/12/11
J1K4M2	MKVEP	SOIL	7/12/11
J1K4M3	MKVE1	SOIL	7/12/11
J1K4M4	MKVE3	SOIL	7/12/11
J1K4M5	MKVE7	SOIL	7/12/11
J1K4M6	MKVE8	SOIL	7/12/11

II. Sample Receipt

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

III. Analytical Results/Methodology

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

The requested analyses were:

Chemical Analysis
Hexavalent Chromium by EPA method 7196A

IV. Quality Control

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

QC and sample results are reported in the same units.

V. Comments

Chemical Analysis
Hexavalent Chromium by EPA method 7196A
The LCS, batch blank, samples, sample duplicate (J1K4M2) and the sample matrix spike (J1K4M2) results are within contractual requirements.

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

Reviewed and approved:

Rhonda Wagar
Project Manager

Drinking Water Method Cross References

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

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

Uncertainty Estimation

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

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

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

Report Definitions

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

Sample Results Summary

TestAmerica TARL

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

Date: 19-Jul-11

Report No. : 47490

SDG No: JP0223

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDC or MDA	CRDL	RPD
1194108	7196_CR6								
	J1K4L7								
	MKVE91AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	J1K4L8								
	MKVFC1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	J1K4L9								
	MKVFE1AA	HEXCHROME	2.22E-01 +- 0.0E+00		mg/kg	N/A	1.55E-01	1.55E-01	
	J1K4M0								
	MKVFF1AA	HEXCHROME	2.00E-01 +- 0.0E+00		mg/kg	N/A	1.55E-01	1.55E-01	
	J1K4M1								
	MKVFG1AA	HEXCHROME	2.86E-01 +- 0.0E+00		mg/kg	N/A	1.55E-01	1.55E-01	
	J1K4M2								
	MKVEP1AA	HEXCHROME	1.68E+01 +- 0.0E+00		mg/kg	N/A	1.55E-01	1.55E-01	
	MKVEP1AD	HEXCHROME	1.37E+01 +- 0.0E+00		mg/kg	N/A	1.55E-01	3.50E-01	19.9
	J1K4M3								
	MKVE11AA	HEXCHROME	1.19E+00 +- 0.0E+00		mg/kg	N/A	1.55E-01	1.55E-01	
	J1K4M4								
	MKVE31AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	J1K4M5								
	MKVE71AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	J1K4M6								
	MKVE81AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	

No. of Results: 11

TestAmerica

rptSTLRchSaSummary2 V5.2.15
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: 19-Jul-11

Report No. : 47490

SDG No.: JP0223

Batch Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDC|MDA
7196_CR6								
1194108 MATRIX SPIKE, J1K4M2								
MKVEP1AC	HEXCHROME	9.48E+00 +- 0.0E+00		mg/kg	N/A	94%	-0.1	1.55E-01
1194108 LCS,								
MKWDK1AC	HEXCHROME	1.84E+01 +- 0.0E+00		mg/kg	N/A	92%	-0.1	1.55E-01
1194108 BLANK QC,								
MKWDK1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A			1.55E-01

No. of Results: 3

TestAmerica
rptSTLRchQcSummary V5.2.15
A2002

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

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

FORM I

SAMPLE RESULTS

Date: 19-Jul-11

Lab Name:	TestAmerica	**SDG:**	JP0223	**Collection Date:**	7/11/2011 9:20:00 AM
Lot-Sample No.:	J1G120443-6	**Report No. :**	47490	**Received Date:**	7/12/2011 11:30:00 AM
Client Sample ID:	J1K4L7	**COC No. :**	RC-074-231	**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: 1194108	7196_CR6			**Work Order:** MKVE91AA			**Report DB ID:** 9MKVE910					
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	7/15/11 08:45 a		2.5038	
							1.55E-01	*N/A*			g	

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

TestAmerica
rptSTLRchSample
V5.2.15 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: 19-Jul-11

Lab Name:	TestAmerica	**SDG:**	JP0223	**Collection Date:**	7/11/2011 9:25:00 AM
Lot-Sample No.:	J1G120443-7	**Report No. :**	47490	**Received Date:**	7/12/2011 11:30:00 AM
Client Sample ID:	J1K4L8	**COC No. :**	RC-074-231	**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: 1194108	7196_CR6			**Work Order:**	MKVFC1AA		**Report DB ID:**	9MKVFC10				
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	7/15/11 08:45 a		2.5085	
							1.55E-01	*N/A*			g	

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

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

FORM I

SAMPLE RESULTS

Date: 19-Jul-11

Lab Name:	TestAmerica	SDG:	JP0223	Collection Date:	7/11/2011 9:30:00 AM
Lot-Sample No.:	J1G120443-8	Report No. :	47490	Received Date:	7/12/2011 11:30:00 AM
Client Sample ID:	J1K4L9	COC No. :	RC-074-231	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: 1194108	7196_CR6			Work Order:	MKVFE1AA		Report DB ID:	9MKVFE10				
HEXCHROME	***2.22E-01***			0.0E+00	1.55E-01	mg/kg	N/A	*(1.4)*	7/15/11 08:45 a		2.5055	
							1.55E-01	*N/A*			g	

No. of Results: 1 Comments:

TestAmerica
rptSTLRchSample
V5.2.15 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: 19-Jul-11

Lab Name:	**TestAmerica**	**SDG:**	JP0223	**Collection Date:**	7/11/2011 9:35:00 AM
Lot-Sample No.:	**J1G120443-9**	**Report No. :**	47490	**Received Date:**	7/12/2011 11:30:00 AM
Client Sample ID:	**J1K4M0**	**COC No. :**	RC-074-231	**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: 1194108	7196_CR6			**Work Order:** MKVFF1AA			**Report DB ID:** 9MKVFF10					
HEXCHROME	***2.00E-01***			0.0E+00	1.55E-01	mg/kg	N/A	*(1.3)*	7/15/11 08:45 a		2.5038	
							1.55E-01	*N/A*			g	

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

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

FORM I

SAMPLE RESULTS

Date: 19-Jul-11

Lab Name:	**TestAmerica**	**SDG:**	JP0223	**Collection Date:**	7/11/2011 9:40:00 AM
Lot-Sample No.:	**J1G120443-10**	**Report No. :**	47490	**Received Date:**	7/12/2011 11:30:00 AM
Client Sample ID:	**J1K4M1**	**COC No. :**	RC-074-231	**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: 1194108	7196_CR6			**Work Order:**	MKVFG1AA		**Report DB ID:**	9MKVFG10				
HEXCHROME	***2.86E-01***			0.0E+00	1.55E-01	mg/kg	N/A	*(1.8)*	7/15/11 08:45 a		2.5037	
							1.55E-01	*N/A*			g	

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

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

FORM I

SAMPLE RESULTS

Date: 19-Jul-11

Lab Name:	TestAmerica	**SDG:**	JP0223	**Collection Date:**	7/11/2011 9:45:00 AM
Lot-Sample No.:	J1G120443-1	**Report No. :**	47490	**Received Date:**	7/12/2011 11:30:00 AM
Client Sample ID:	J1K4M2	**COC No. :**	RC-074-231	**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: 1194108	7196_CR6			**Work Order:**	MKVEP1AA		**Report DB ID:**	9MKVEP10				
HEXCHROME	***1.68E+01***			0.0E+00	1.55E-01	mg/kg	N/A	*(108.2)*	7/15/11 08:45 a		2.5006	
							1.55E-01	*N/A*			g	

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

TestAmerica
rptSTLRchSample
V5.2.15 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: 19-Jul-11

Lab Name:	TestAmerica	**SDG:**	JP0223	**Collection Date:**	7/11/2011 9:50:00 AM
Lot-Sample No.:	J1G120443-2	**Report No. :**	47490	**Received Date:**	7/12/2011 11:30:00 AM
Client Sample ID:	J1K4M3	**COC No. :**	RC-074-231	**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: 1194108	7196_CR6			**Work Order:**	MKVE11AA		**Report DB ID:**	9MKVE110				
HEXCHROME	***1.19E+00***			0.0E+00	1.55E-01	mg/kg	N/A	*(7.7)*	7/15/11 08:45 a		2.504	
							1.55E-01	*N/A*			g	

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

TestAmerica
rptSTLRchSample
V5.2.15 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: 19-Jul-11

Lab Name:	**TestAmerica**	**SDG:**	JP0223	**Collection Date:**	7/11/2011 9:55:00 AM
Lot-Sample No.:	**J1G120443-3**	**Report No. :**	47490	**Received Date:**	7/12/2011 11:30:00 AM
Client Sample ID:	**J1K4M4**	**COC No. :**	RC-074-231	**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: 1194108	7196_CR6			**Work Order:** MKVE31AA			**Report DB ID:** 9MKVE310					
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	7/15/11 08:45 a		2.5038	
							1.55E-01	*N/A*			g	

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

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

FORM I

SAMPLE RESULTS

Date: 19-Jul-11

Lab Name:	**TestAmerica**	**SDG:**	JP0223	**Collection Date:**	7/11/2011 10:00:00 AM
Lot-Sample No.:	**J1G120443-4**	**Report No. :**	47490	**Received Date:**	7/12/2011 11:30:00 AM
Client Sample ID:	**J1K4M5**	**COC No. :**	RC-074-231	**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: 1194108	7196_CR6			**Work Order:** MKVE71AA			**Report DB ID:** 9MKVE710					
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A 1.55E-01	*1.* *N/A*	7/15/11 08:45 a		2.5056 g	

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

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

FORM I

SAMPLE RESULTS

Date: 19-Jul-11

Lab Name:	TestAmerica	**SDG:**	JP0223	**Collection Date:**	7/11/2011 10:05:00 AM
Lot-Sample No.:	J1G120443-5	**Report No. :**	47490	**Received Date:**	7/12/2011 11:30:00 AM
Client Sample ID:	J1K4M6	**COC No. :**	RC-074-231	**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: 1194108	7196_CR6			**Work Order:** MKVE81AA			**Report DB ID:** 9MKVE810					
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	7/15/11 08:45 a		2.5022	
							1.55E-01	*N/A*			g	

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

TestAmerica
rptSTLRchSample
V5.2.15 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: 19-Jul-11

DUPLICATE RESULTS

Lab Name:	TestAmerica	**SDG:**	JP0223	**Collection Date:**	7/11/2011 9:45:00 AM
Lot-Sample No.:	J1G120443-1	**Report No. :**	47490	**Received Date:**	7/12/2011 11:30:00 AM
Client Sample ID:	J1K4M2	**COC No. :**	RC-074-231	**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: 1194108	7196_CR6			**Work Order:** MKVEP1AD		**Report DB ID:** MKVEP1ER			**Orig Sa DB ID:** 9MKVEP10			
HEXCHROME	1.37E+01			0.0E+00	1.55E-01	mg/kg	N/A	(88.6)	7/15/11 08:45 a		2.5044	
	1.68E+01		**RPD**	**19.9**		3.50E-01		N/A			g	

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

TestAmerica **RPD** - Relative Percent Difference.

rptSTLRchDupV5.2 .15 A2002 **MDC|MDA,Lc** - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.

FORM II

BLANK RESULTS

Date: 19-Jul-11

Lab Name: TestAmerica

Matrix: SOIL

SDG: JP0223

Report No. : 47490

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: 1194108	7196_CR6			**Work Order:**	MKWDK1AA		**Report DB ID:**	MKWDK1AB				
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	1.	7/15/11 08:45 a		2.5	
						1.55E-01		N/A			g	

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

TestAmerica
rptSTLRchBlank
V5.2.15 A2002

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

FORM II

LCS RESULTS

Date: 19-Jul-11

Lab Name: TestAmerica

Matrix: SOIL

SDG: JP0223

Report No. : 47490

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: 1194108	7196_CR6			Work Order:	MKWDK1AC		Report DB ID:	MKWDK1AS					
HEXCHROME	1.84E+01			0.0E+00	1.55E-01	mg/kg	N/A	2.00E+01		92%	7/15/11 08:45 a	2.5	
							Rec Limits:	80	120	-0.1		g	

No. of Results: 1 Comments:

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

rptSTLRchLcs
V5.2.15 A2002

FORM II

MATRIX SPIKE RESULTS

Date: 19-Jul-11

Lab Name: TestAmerica **SDG:** JP0223

Lot-Sample No.: J1G120443-1, J1K4M2 **Report No. :** 47490 **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: 1194108	Work Order:	MKVEP1AC		Report DB ID:	MKVEP1CW		Orig Sa DB ID:	9MKVEP10				
HEXCHROME	9.48E+00			0.0E+00	1.55E-01	mg/kg	N/A	93.92%	1.01E+01	7/15/11 08:45 a	2.5032	7196_CR6
	1.68E+01										g	

Number of Results: 1

Comments:

TestAmerica
rptSTLRchMs
V5.2.15 A2002

RER - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.
Bias - (Result/Expected)-1 as defined by ANSI N13.30.

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Richland Laboratory
Data Review Check List
Hexavalent Chromium

Batch Number(s): 1194108

Lab Sample Numbers or SDG: **JP0223**

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

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

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

Comments on any "No" response:

Analyst: H.R. Date: 7-15-11

Second-Level Review: Dy Date: 7-18-11

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-074-231	Page 1 of 2

Collector: K Lucas	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-D/DR Burial Grounds & Remaining Sites - Soil In-Proce	Sampling Location: 100-D-73 & 100-D-76 Tier 1 Pre-Verification		SAF No.: RC-074
Ice Chest No.: N/A	Field Logbook No.: EL-1607-10	COA: 010D762600	Method of Shipment: HAND DELIVER
Shipped To: TestAmerica Incorporated, Richland	Offsite Property No.: N/A		Bill of Lading/Air Bill No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

~~Potential Rad <DOT~~ NONE

Special Handling and/or Storage

Cool 4 Deg C

SDG#JP0223
LOT#J1G120443

Preservation	Cool 4C	None	Cool 4C	Cool 4C	None						
Type of Container	G/P	G	G/P	G/P	G/P						
No. of Container(s)	1	1	1	1	1						
Volume	60mL	60mL	60mL	60mL	60g						
SAMPLE ANALYSIS	See item (1) in Special Instructions.	See item (2) in Special Instructions.	Chromium Hex - 7196	IC Anions 9056 Modified NO2/NO3 - 353.2; pH (Soil) - 9045	RCF GEA Shipping Screen						

Sample No.	Matrix *	Sample Date	Sample Time										
J1K4L7 MKVE9	SOIL	7-11-11	0920			X							
J1K4L8 MKVFC	SOIL	7-11-11	0925			X							
J1K4L9 MKVFE	SOIL	7-11-11	0930			X							
J1K4M0 MKVFF	SOIL	7-11-11	0935			X							
J1K4M1 MKVFG	SOIL	7-11-11	0940			X							

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

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
K. Lucas Kevin Lucas	7-11-11 1020	DuBoulay	7-11-11 1020
DuBoulay	7-11-11 1630	1060, #1 A. Freier	7-11-11 1630
1060 #1 A Freier	7-12-11 1105	A. PORTER	7-12-11 1105
WCH A. PORTER	7-12-11 1130	TALR Lucas Velazquez	7/12/11 1130

SPECIAL INSTRUCTIONS

(1) ICP Metals - 6010TR (Client List) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Molybdenum, Nickel, Potassium, Selenium, Silicon, Silver, Sodium, Vanadium, Zinc}; Mercury - 7471 - (CV)
(2) Metals by ICP (TCLP) - 1311/6010 {Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver}; Mercury (TCLP) - 1311/7470 {Mercury}

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

REVIEWED BY CMB DATE 7/12/11

JP0223

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

WCH-EE-011

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-074-231	Page 2 of 2

Collector: K Lucas	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-D/DR Burial Grounds & Remaining Sites - Soil In-Proce	Sampling Location: 100-D-73 & 100-D-76 Tier 1 Pre-Verification	SAF No.: RC-074	7-11-11
Ice Chest No.: N/A	Field Logbook No.: EL-1607-10; COA: 010D762600	Method of Shipment: HAND DELIVER	7-11-11
Shipped To: TestAmerica Incorporated, Richland	Offsite Property No.: N/A	Bill of Lading/Air Bill No.: N/A	

POSSIBLE SAMPLE HAZARDS/REMARKS

~~Potential Rad < DOT~~ NONE

7-11-11

Special Handling and/or Storage

Cool 4 Deg C

Quote # 27038

SDG # JP0223
LOT # J1G120443
Report: 7/14/11

Preservation	Cool 4C	None	Cool 4C	Cool 4C	None						
Type of Container	G/P	G	G/P	G/P	G/P						
No. of Container(s)	1	1	1	1	1						
Volume	60mL	60mL	60mL	60mL	60g						
SAMPLE ANALYSIS	See item (1) in Special Instructions	See item (2) in Special Instructions.	Chromium Hex - 7196	IC Anions 9056 Modified NO2/NO3, 353.2, pH (Soil) - 9045	RCF GEA Shipping Screen						

7-11-11 7-11-11

J1G120443

Sample No.	Matrix *	Sample Date	Sample Time										
J1K4M2 MKVEP	SOIL	7-11-11	0945			X							
J1K4M3 MKVE1	SOIL	7-11-11	0950			X							
J1K4M4 MKVE3	SOIL	7-11-11	0955			X							
J1K4M5 MKVE7	SOIL	7-11-11	1000			X							
J1K4M6 MKVE8	SOIL	7-11-11	1005			X							

CHAIN OF POSSESSION	Sign/Print Names		
Relinquished By/Removed From: K. Lucas Kenen Lucas	Date/Time: 7-11-11 1020	Received By/Stored In: DWOOLERY	Date/Time: 7-11-11 1020
Relinquished By/Removed From: DWOOLERY	Date/Time: 7-11-11 1630	Received By/Stored In: 1060, #1 A. Freier A. Freier	Date/Time: 1630 7-11-11
Relinquished By/Removed From: 1060, #1 A. Freier A. Freier	Date/Time: 1105 7-12-11	Received By/Stored In: A. PORTER A. Porter	Date/Time: 7-12-11 1105
Relinquished By/Removed From: WCH A. PORTER A. Porter	Date/Time: 1130 7-12-11	Received By/Stored In: TAIR Lucas Velazquez	Date/Time: 1130 7/12/11
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time

SPECIAL INSTRUCTIONS

(1) ICP Metals - 6010TR (Client List) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Molybdenum, Nickel, Potassium, Selenium, Silicon, Silver, Sodium, Vanadium, Zinc}; Mercury - 7471 - (CV)
(2) Metals by ICP (TCLP) - 1311/6010 {Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver}; Mercury (TCLP) - 1311/7470 {Mercury}

REVIEWED BY CMB DATE 7/12/11

JP0223

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

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Sample Check-in List

Date/Time Received: 7/12/11 @ 1130 GM Screen Result: (Airlock) .03 Initials [HC]
(Sample Receiving) .04 Initials [HC]

Client: WCH SDG #: JP0223 NA [ ] SAF #: RC-074 NA [ ]

Lot Number: JIG120443

Chain of Custody # RC-074-231

Shipping Container ID: Hand delivered NA [ ]

Samples received inside shipping container/cooler/box Yes [HC] Continue with 1 through 4. Initial appropriate response.
No [ ] Go to 5, add comment to #16.

1. Custody Seals on shipping container intact? Yes [ ] No [ ] No Custody Seal [HC]
2. Custody Seals dated and signed? Yes [ ] No [ ] No Custody Seal [HC]
3. Cooler temperature: 22.5°C on-Ice NA [ ]
4. Vermiculite/packing materials is NA [ ] Wet [ ] Dry [HC]

Item 5 through 16 for samples. Initial appropriate response.

5. Chain of Custody record present? Yes [HC] No [ ]
6. Number of samples received (Each sample may contain multiple bottles): 10 samples @ 1 per
7. Containers received: 10x bomb-acq
8. Sample holding times exceeded? NA [ ] Yes [ ] No [HC]
9. Samples have:
   [HC] tape
   [HC] custody seals
   [HC] hazard labels
   [HC] appropriate sample labels
10. Matrix:
    [HC] A (FLT, Wipe, Solid, Soil)
    ____ S (Air, Niosh 7400)
    ____ I (Water)
    ____ T (Biological, Ni-63)
11. Samples:
    [HC] are in good condition
    ____ are broken
    ____ are leaking
    ____ have air bubbles (Only for samples requiring no head space)
    ____ Other
12. Sample pH appropriate for analysis requested Yes [ ] No [ ] NA [HC]
    (If acidification is necessary, then document sample ID, initial pH, amount of HNO_3 added and pH after addition on table overleaf)
    RPL ID # of preservative used :
13. Were any anomalies identified in sample receipt? Yes [ ] No [HC]
14. Description of anomalies (include sample numbers): NA [HC]

LS-023, Rev. 14, 06/11 See over for additional information.

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15. Sample Location, Sample Collector Listed on COC? * Yes [✓] No [ ]
*For documentation only. No corrective action needed.

16. Additional Information: _____

[ ] Client/Courier denied temperature check. [✓] Client/Courier unpack cooler.

Sample Custodian: Haylee Carmes Date: 7/12/11 @ 1130

Client Informed on _____ by _____ Person contacted _____

[✓] No action necessary; process as is

Project Manager _____ Date 7/12/11

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

7/13/2011 12:41:48 PM

Sample Preparation/Analysis

Balance Id:

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

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

Pipet #:

AnalyDueDate: 07/19/2011

Sep1 DT/Tm Tech:

Batch: 1194108 SOIL mg/kg PM, Quote: RW2, 27038

Sep2 DT/Tm Tech: JP0223

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 MKVEP-1-AA J1G120443-1-SAMP 07/11/2011 09:45		2.5006 AmtRec: 1X60MLAG	#Containers: 1					Scr:	Alpha:	Beta:
2 MKVEP-1-AC-S J1G120443-1-MS 07/11/2011 09:45		2.5032 AmtRec: 1X60MLAG	#Containers: 1					Scr:	Alpha:	Beta:
3 MKVEP-1-AD-X J1G120443-1-DUP 07/11/2011 09:45		2.5044 / pscrs 4: 2.5039 AmtRec: 1X60MLAG	#Containers: 1					Scr:	Alpha:	Beta:
4 MKVE1-1-AA J1G120443-2-SAMP 07/11/2011 09:50		2.5040 AmtRec: 1X60MLAG	#Containers: 1					Scr:	Alpha:	Beta:
5 MKVE3-1-AA J1G120443-3-SAMP 07/11/2011 09:55		2.5038 AmtRec: 1X60MLAG	#Containers: 1					Scr:	Alpha:	Beta:
6 MKVE7-1-AA J1G120443-4-SAMP 07/11/2011 10:00		2.5056 AmtRec: 1X60MLAG	#Containers: 1					Scr:	Alpha:	Beta:
7 MKVE8-1-AA J1G120443-5-SAMP 07/11/2011 10:05		2.5022 AmtRec: 1X60MLAG	#Containers: 1					Scr:	Alpha:	Beta:

TestAmerica Laboratories, Inc.

7/13/2011 12:41:48 PM

Sample Preparation/Analysis

127642, Washington Closure Hanford LLC
Bechtel Hanford, Inc.

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

AnalyDueDate: 07/19/2011

Batch: 1194108 SOIL mg/kg PM, Quote: RW2, 27038
SEQ Batch, Test: None

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

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 MKVE9-1-AA J1G120443-6-SAMP 07/11/2011 09:20		2.5038 AmtRec: 1X60MLAG	#Containers: 1					Scr:	Alpha:	Beta:
9 MKVFC-1-AA J1G120443-7-SAMP 07/11/2011 09:25		2.5085 AmtRec: 1X60MLAG	#Containers: 1					Scr:	Alpha:	Beta:
10 MKVFE-1-AA J1G120443-8-SAMP 07/11/2011 09:30		2.5055 AmtRec: 1X60MLAG	#Containers: 1					Scr:	Alpha:	Beta:
11 MKVFF-1-AA J1G120443-9-SAMP 07/11/2011 09:35		2.5038 AmtRec: 1X60MLAG	#Containers: 1					Scr:	Alpha:	Beta:
12 MKVFG-1-AA J1G120443-10-SAMP 07/11/2011 09:40		2.5037 AmtRec: 1X60MLAG	#Containers: 1					Scr:	Alpha:	Beta:
13 MKWDK-1-AA-B J1G130000-108-BLK 07/13/2011 12:41 pd		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:
14 MKWDK-1-AC-C J1G130000-108-LCS 07/13/2011 12:41 pd		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:

Test America Laboratories, Inc.

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: 07/19/2011

Batch: 1194108 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:

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

MKVEP1AA-SAMP Constituent List:
HEXCHROME RDL:0.1548 mg/kg LCL:80 UCL:120 RPD:20
MKVEP1AC-MS Constituent List:

MKWDK1AA-BLK:

MKWDK1AC-LCS:

MKVEP1AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MKVEP1AC-MS Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MKWDK1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MKWDK1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

TestAmerica Laboratories, Inc.

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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

RECEIVED JUL 2011

Job Number: 280-18024-1

SDG Number: JP0223

Job Description: SAF# RC-074

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

Attention: Joan H Kessner

Approved for release.
Kae E Yoder
Project Manager II
7/21/2011 11:14 AM

Kae E Yoder
Project Manager II
kae.yoder@testamericainc.com
07/21/2011

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: 280-18024-1

SDG #: JP0223
SAF#: RC-074

Date SDG Closed: July 14, 2011
Data Deliverable: 7 Day / Summary

CLIENT ID	LAB ID	ANALYSES REQUESTED	ANALYSES PERFORMED
J1K4L7	280-18024-1	6010/7471/1311-6010-7470	6010B/7471A/1311-6010B-7470A
J1K4L8	280-18024-2	6010/7471/1311-6010-7470	6010B/7471A/1311-6010B-7470A
J1K4L9	280-18024-3	6010/7471/1311-6010-7470	6010B/7471A/1311-6010B-7470A
J1K4M0	280-18024-4	6010/7471/1311-6010-7470	6010B/7471A/1311-6010B-7470A
J1K4M1	280-18024-5	6010/7471/1311-6010-7470	6010B/7471A/1311-6010B-7470A
J1K4M2	280-18024-6	6010/7471/1311-6010-7470	6010B/7471A/1311-6010B-7470A
J1K4M3	280-18024-7	6010/7471/1311-6010-7470	6010B/7471A/1311-6010B-7470A
J1K4M4	280-18024-8	6010/7471/1311-6010-7470	6010B/7471A/1311-6010B-7470A
J1K4M5	280-18024-9	6010/7471/1311-6010-7470	6010B/7471A/1311-6010B-7470A
J1K4M6	280-18024-10	6010/7471/1311-6010-7470	6010B/7471A/1311-6010B-7470A

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

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

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

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

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

RECEIPT
The samples were received on 7/14/2011; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 5.4 C.

TOTAL METALS - SW846 6010B/7471A
Serial dilution of a digestate in batch 280-76813 indicates that physical and chemical interferences are present for Cobalt, Nickel and Zinc. Results have been flagged with an "X".

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the methods. Samples J1K4M5 and J1K4M6 required 5X dilutions prior to the analysis of Beryllium, Cobalt, Copper, Lead and Vanadium to minimize the interference caused by Titanium concentrations greater than the linear range. The reporting limits have been adjusted relative to the dilution required.

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 J1K4L7; therefore, control limits are not applicable.

The SW846 6010B duplicate analysis of sample J1K4L7 exhibited RPD data outside the control limits for Barium, Chromium, Nickel and Silicon, 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.

The duplicate analysis of sample J1K4L9 exhibited RPD data outside the control limits for Mercury, 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.

TCLP METALS - SW846 1311/6010B/7470A

Low levels of Barium and Silver are present in the method blank associated with batch 280-76802. Because the concentrations in the method blank are not present at levels greater than the reporting limits, corrective action is deemed unnecessary.

No other anomalies were encountered.

DATA REPORTING QUALIFIERS

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

Lab Section	Qualifier	Description
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.
	M	Sample duplicate precision not met.
	X	Serial dilution in the analytical batch indicates that physical and chemical interferences are present.
	C	The analyte was detected in both the sample and the assoicated QC blank, and the sample concentration was </= 5X the blank concentration.

METHOD SUMMARY

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Metals (ICP)	TAL DEN	SW846 6010B	
Preparation, Metals			SW846 3050B
TCLP Metals (ICP)	TAL DEN	SW846 6010B	
TCLP Extraction			SW846 1311
Preparation, Total Metals			SW846 3010A
TCLP Mercury	TAL DEN	SW846 7470A	
TCLP Extraction			SW846 1311
Preparation, Mercury			SW846 7470A
Mercury (CVAA)	TAL DEN	SW846 7471A	
Preparation, Mercury			SW846 7471A
ASTM D-2216	TAL DEN	ASTM D-2216	

Lab References:

TAL DEN = TestAmerica Denver

Method References:

ASTM = ASTM International

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

METHOD / ANALYST SUMMARY

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

Method	Analyst	Analyst ID
SW846 6010B	Bowen, Heidi E	HEB
SW846 6010B	Harre, John K	JKH
SW846 7470A	Niman, Katie M	KMN
SW846 7471A	Niman, Katie M	KMN
ASTM D-2216	Berry III, Paul B	PBB

SAMPLE SUMMARY

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-18024-1	J1K4L7	Solid	07/11/2011 0920	07/14/2011 1000
280-18024-2	J1K4L8	Solid	07/11/2011 0925	07/14/2011 1000
280-18024-3	J1K4L9	Solid	07/11/2011 0930	07/14/2011 1000
280-18024-4	J1K4M0	Solid	07/11/2011 0935	07/14/2011 1000
280-18024-5	J1K4M1	Solid	07/11/2011 0940	07/14/2011 1000
280-18024-6	J1K4M2	Solid	07/11/2011 0945	07/14/2011 1000
280-18024-7	J1K4M3	Solid	07/11/2011 0950	07/14/2011 1000
280-18024-8	J1K4M4	Solid	07/11/2011 0955	07/14/2011 1000
280-18024-9	J1K4M5	Solid	07/11/2011 1000	07/14/2011 1000
280-18024-10	J1K4M6	Solid	07/11/2011 1005	07/14/2011 1000

SAMPLE RESULTS

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

Client Sample ID: **J1K4L7**

Lab Sample ID: 280-18024-1
Client Matrix: Solid
% Moisture: 17.5

Date Sampled: 07/11/2011 0920
Date Received: 07/14/2011 1000

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-77204	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-76813	Lab File ID:	25A2071811.asc
Dilution:	1.0			Initial Weight/Volume:	1.07 g
Analysis Date:	07/18/2011 1802			Final Weight/Volume:	100 mL
Prep Date:	07/18/2011 0730				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		6770		1.8	5.7
Antimony		0.43	U	0.43	0.68
Arsenic		3.1		0.75	1.1
Barium		93.1	M	0.086	0.57
Beryllium		0.14	B	0.037	0.23
Boron		1.1	U	1.1	2.3
Cadmium		0.082	B	0.046	0.23
Calcium		8310		16.0	56.6
Chromium		8.8	M	0.066	0.23
Cobalt		7.8	X	0.11	1.1
Copper		14.8		0.25	1.1
Iron		20900		4.3	5.7
Lead		4.5		0.31	0.57
Magnesium		4220		4.2	22.7
Manganese		294		0.11	1.1
Molybdenum		0.29	U	0.29	2.3
Nickel		10.5	X M	0.14	4.5
Potassium		1150		46.5	340
Selenium		0.97	U	0.97	1.1
Silicon		246	M	6.4	11.3
Silver		0.18	U	0.18	0.23
Sodium		302		66.8	136
Vanadium		51.1		0.11	2.3
Zinc		43.6	X	0.45	1.1

6010B TCLP Metals (ICP)-TCLP

Analysis Method:	6010B	Analysis Batch:	280-77225	Instrument ID:	MT_026
Prep Method:	3010A	Prep Batch:	280-76802	Lab File ID:	26a071811.asc
Dilution:	1.0	Leach Batch:	280-76688	Initial Weight/Volume:	10 mL
Analysis Date:	07/18/2011 1850			Final Weight/Volume:	50 mL
Prep Date:	07/18/2011 0730				
Leach Date:	07/14/2011 1904				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Arsenic		0.022	U	0.022	0.50
Barium		0.28	B	0.0020	1.0
Cadmium		0.0020	U	0.0020	0.10
Chromium		0.0030	B	0.0030	0.50
Lead		0.013	U	0.013	0.50
Selenium		0.024	B	0.024	0.10
Silver		0.0040	U	0.0040	0.50

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

Client Sample ID: **J1K4L7**

Lab Sample ID: 280-18024-1
Client Matrix: Solid

Date Sampled: 07/11/2011 0920
Date Received: 07/14/2011 1000

7470A TCLP Mercury-TCLP

Analysis Method:	7470A	Analysis Batch:	280-77405	Instrument ID:	MT_034
Prep Method:	7470A	Prep Batch:	280-77037	Lab File ID:	110719TD.txt
Dilution:	1.0	Leach Batch:	280-76688	Initial Weight/Volume:	30 mL
Analysis Date:	07/19/2011 2106			Final Weight/Volume:	30 mL
Prep Date:	07/19/2011 1130				
Leach Date:	07/14/2011 1904				

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

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-77004	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-76721	Lab File ID:	110715TA.txt
Dilution:	1.0			Initial Weight/Volume:	0.68 g
Analysis Date:	07/15/2011 2327			Final Weight/Volume:	50 mL
Prep Date:	07/15/2011 1435				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0080	B	0.0059	0.018

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

Client Sample ID: **J1K4L8**

Lab Sample ID: 280-18024-2
Client Matrix: Solid
% Moisture: 18.9

Date Sampled: 07/11/2011 0925
Date Received: 07/14/2011 1000

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-77204	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-76813	Lab File ID:	25A2071811.asc
Dilution:	1.0			Initial Weight/Volume:	1.14 g
Analysis Date:	07/18/2011 1812			Final Weight/Volume:	100 mL
Prep Date:	07/18/2011 0730				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8290		1.7	5.4
Antimony		0.41	U	0.41	0.65
Arsenic		3.4		0.71	1.1
Barium		80.2		0.082	0.54
Beryllium		0.17	B	0.036	0.22
Boron		1.1	U	1.1	2.2
Cadmium		0.10	B	0.044	0.22
Calcium		9460		15.3	54.1
Chromium		12.3		0.063	0.22
Cobalt		9.5	X	0.11	1.1
Copper		18.1		0.23	1.1
Iron		24700		4.1	5.4
Lead		7.0		0.29	0.54
Magnesium		5140		4.0	21.6
Manganese		361		0.11	1.1
Molybdenum		0.28	U	0.28	2.2
Nickel		12.1	X	0.13	4.3
Potassium		1380		44.4	325
Selenium		0.93	U	0.93	1.1
Silicon		249		6.1	10.8
Silver		0.17	U	0.17	0.22
Sodium		348		63.8	130
Vanadium		60.0		0.10	2.2
Zinc		54.8	X	0.43	1.1

6010B TCLP Metals (ICP)-TCLP

Analysis Method:	6010B	Analysis Batch:	280-77225	Instrument ID:	MT_026
Prep Method:	3010A	Prep Batch:	280-76802	Lab File ID:	26a071811.asc
Dilution:	1.0	Leach Batch:	280-76688	Initial Weight/Volume:	10 mL
Analysis Date:	07/18/2011 1853			Final Weight/Volume:	50 mL
Prep Date:	07/18/2011 0730				
Leach Date:	07/14/2011 1904				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Arsenic		0.022	U	0.022	0.50
Barium		0.29	B	0.0020	1.0
Cadmium		0.0020	U	0.0020	0.10
Chromium		0.0032	B	0.0030	0.50
Lead		0.045	B	0.013	0.50
Selenium		0.024	U	0.024	0.10
Silver		0.0040	U	0.0040	0.50

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

Client Sample ID: **J1K4L8**

Lab Sample ID: 280-18024-2
Client Matrix: Solid

Date Sampled: 07/11/2011 0925
Date Received: 07/14/2011 1000

7470A TCLP Mercury-TCLP

Analysis Method:	7470A	Analysis Batch:	280-77405	Instrument ID:	MT_034
Prep Method:	7470A	Prep Batch:	280-77037	Lab File ID:	110719TD.txt
Dilution:	1.0	Leach Batch:	280-76688	Initial Weight/Volume:	30 mL
Analysis Date:	07/19/2011 2109			Final Weight/Volume:	30 mL
Prep Date:	07/19/2011 1130				
Leach Date:	07/14/2011 1904				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Mercury		0.000095	B	0.000030	0.0020

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-77004	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-76721	Lab File ID:	110715TA.txt
Dilution:	1.0			Initial Weight/Volume:	0.68 g
Analysis Date:	07/15/2011 2329			Final Weight/Volume:	50 mL
Prep Date:	07/15/2011 1435				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.023		0.0060	0.019

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

Client Sample ID: **J1K4L9**

Lab Sample ID: 280-18024-3
Client Matrix: Solid
% Moisture: 2.9

Date Sampled: 07/11/2011 0930
Date Received: 07/14/2011 1000

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-77204	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-76813	Lab File ID:	25A2071811.asc
Dilution:	1.0			Initial Weight/Volume:	1.19 g
Analysis Date:	07/18/2011 1823			Final Weight/Volume:	100 mL
Prep Date:	07/18/2011 0730				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		6500		1.3	4.3
Antimony		0.33	U	0.33	0.52
Arsenic		2.5		0.57	0.87
Barium		64.0		0.066	0.43
Beryllium		0.12	B	0.029	0.17
Boron		0.85	U	0.85	1.7
Cadmium		0.11	B	0.035	0.17
Calcium		8850		12.2	43.3
Chromium		12.7		0.050	0.17
Cobalt		8.0	X	0.087	0.87
Copper		15.8		0.19	0.87
Iron		20700		3.3	4.3
Lead		5.3		0.23	0.43
Magnesium		4200		3.2	17.3
Manganese		282		0.087	0.87
Molybdenum		0.23	U	0.23	1.7
Nickel		9.7	X	0.11	3.5
Potassium		1020		35.5	260
Selenium		0.74	U	0.74	0.87
Silicon		265		4.9	8.7
Silver		0.14	U	0.14	0.17
Sodium		386		51.1	104
Vanadium		51.1		0.081	1.7
Zinc		47.6	X	0.34	0.87

6010B TCLP Metals (ICP)-TCLP

Analysis Method:	6010B	Analysis Batch:	280-77225	Instrument ID:	MT_026
Prep Method:	3010A	Prep Batch:	280-76802	Lab File ID:	26a071811.asc
Dilution:	1.0	Leach Batch:	280-76688	Initial Weight/Volume:	10 mL
Analysis Date:	07/18/2011 1856			Final Weight/Volume:	50 mL
Prep Date:	07/18/2011 0730				
Leach Date:	07/14/2011 1904				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Arsenic		0.022	U	0.022	0.50
Barium		0.36	B	0.0020	1.0
Cadmium		0.0021	B	0.0020	0.10
Chromium		0.0083	B	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

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

Client Sample ID: **J1K4L9**

Lab Sample ID: 280-18024-3
Client Matrix: Solid

Date Sampled: 07/11/2011 0930
Date Received: 07/14/2011 1000

7470A TCLP Mercury-TCLP

Analysis Method:	7470A	Analysis Batch:	280-77405	Instrument ID:	MT_034
Prep Method:	7470A	Prep Batch:	280-77037	Lab File ID:	110719TD.txt
Dilution:	1.0	Leach Batch:	280-76688	Initial Weight/Volume:	30 mL
Analysis Date:	07/19/2011 2111			Final Weight/Volume:	30 mL
Prep Date:	07/19/2011 1130				
Leach Date:	07/14/2011 1904				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Mercury		0.000039	B	0.000030	0.0020

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-77004	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-76721	Lab File ID:	110715TA.txt
Dilution:	1.0			Initial Weight/Volume:	0.61 g
Analysis Date:	07/15/2011 2331			Final Weight/Volume:	50 mL
Prep Date:	07/15/2011 1435				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.082	M	0.0056	0.017

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

Client Sample ID: **J1K4M0**

Lab Sample ID: 280-18024-4
Client Matrix: Solid
% Moisture: 1.6

Date Sampled: 07/11/2011 0935
Date Received: 07/14/2011 1000

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-77204	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-76813	Lab File ID:	25A2071811.asc
Dilution:	1.0			Initial Weight/Volume:	1.10 g
Analysis Date:	07/18/2011 1826			Final Weight/Volume:	100 mL
Prep Date:	07/18/2011 0730				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		6100		1.4	4.6
Antimony		0.35	U	0.35	0.55
Arsenic		2.5		0.61	0.92
Barium		65.3		0.070	0.46
Beryllium		0.097	B	0.030	0.18
Boron		0.95	B	0.91	1.8
Cadmium		0.10	B	0.038	0.18
Calcium		8430		13.0	46.2
Chromium		13.3		0.054	0.18
Cobalt		8.3	X	0.092	0.92
Copper		15.4		0.20	0.92
Iron		22600		3.5	4.6
Lead		10.6		0.25	0.46
Magnesium		4120		3.4	18.5
Manganese		302		0.092	0.92
Molybdenum		0.27	B	0.24	1.8
Nickel		9.5	X	0.11	3.7
Potassium		1010		37.9	277
Selenium		0.79	U	0.79	0.92
Silicon		224		5.2	9.2
Silver		0.15	U	0.15	0.18
Sodium		299		54.5	111
Vanadium		55.4		0.087	1.8
Zinc		43.1	X	0.37	0.92

6010B TCLP Metals (ICP)-TCLP

Analysis Method:	6010B	Analysis Batch:	280-77225	Instrument ID:	MT_026
Prep Method:	3010A	Prep Batch:	280-76802	Lab File ID:	26a071811.asc
Dilution:	1.0	Leach Batch:	280-76688	Initial Weight/Volume:	10 mL
Analysis Date:	07/18/2011 1858			Final Weight/Volume:	50 mL
Prep Date:	07/18/2011 0730				
Leach Date:	07/14/2011 1904				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Arsenic		0.022	U	0.022	0.50
Barium		0.29	B	0.0020	1.0
Cadmium		0.0020	B	0.0020	0.10
Chromium		0.0076	B	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

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

Client Sample ID: **J1K4M0**

Lab Sample ID: 280-18024-4
Client Matrix: Solid

Date Sampled: 07/11/2011 0935
Date Received: 07/14/2011 1000

7470A TCLP Mercury-TCLP

Analysis Method:	7470A	Analysis Batch:	280-77405	Instrument ID:	MT_034
Prep Method:	7470A	Prep Batch:	280-77037	Lab File ID:	110719TD.txt
Dilution:	1.0	Leach Batch:	280-76688	Initial Weight/Volume:	30 mL
Analysis Date:	07/19/2011 2113			Final Weight/Volume:	30 mL
Prep Date:	07/19/2011 1130				
Leach Date:	07/14/2011 1904				

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

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-77004	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-76721	Lab File ID:	110715TA.txt
Dilution:	1.0			Initial Weight/Volume:	0.69 g
Analysis Date:	07/15/2011 2338			Final Weight/Volume:	50 mL
Prep Date:	07/15/2011 1435				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.082		0.0049	0.015

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

Client Sample ID: **J1K4M1**

Lab Sample ID: 280-18024-5
Client Matrix: Solid
% Moisture: 16.8

Date Sampled: 07/11/2011 0940
Date Received: 07/14/2011 1000

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-77204	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-76813	Lab File ID:	25A2071811.asc
Dilution:	1.0			Initial Weight/Volume:	1.06 g
Analysis Date:	07/18/2011 1828			Final Weight/Volume:	100 mL
Prep Date:	07/18/2011 0730				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		6930		1.8	5.7
Antimony		0.43	U	0.43	0.68
Arsenic		3.1		0.75	1.1
Barium		77.2		0.086	0.57
Beryllium		0.11	B	0.037	0.23
Boron		1.1	U	1.1	2.3
Cadmium		0.18	B	0.047	0.23
Calcium		9330		16.0	56.7
Chromium		13.7		0.066	0.23
Cobalt		10.4	X	0.11	1.1
Copper		17.7		0.25	1.1
Iron		27100		4.3	5.7
Lead		6.0		0.31	0.57
Magnesium		4900		4.2	22.7
Manganese		362		0.11	1.1
Molybdenum		0.29	U	0.29	2.3
Nickel		10.7	X	0.14	4.5
Potassium		1150		46.5	340
Selenium		0.98	U	0.98	1.1
Silicon		309		6.4	11.3
Silver		0.18	U	0.18	0.23
Sodium		364		66.9	136
Vanadium		68.3		0.11	2.3
Zinc		53.8	X	0.45	1.1

6010B TCLP Metals (ICP)-TCLP

Analysis Method:	6010B	Analysis Batch:	280-77225	Instrument ID:	MT_026
Prep Method:	3010A	Prep Batch:	280-76802	Lab File ID:	26a071811.asc
Dilution:	1.0	Leach Batch:	280-76688	Initial Weight/Volume:	10 mL
Analysis Date:	07/18/2011 1901			Final Weight/Volume:	50 mL
Prep Date:	07/18/2011 0730				
Leach Date:	07/14/2011 1904				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Arsenic		0.022	U	0.022	0.50
Barium		0.29	B	0.0020	1.0
Cadmium		0.0020	U	0.0020	0.10
Chromium		0.0053	B	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

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

Client Sample ID: **J1K4M1**

Lab Sample ID: 280-18024-5
Client Matrix: Solid

Date Sampled: 07/11/2011 0940
Date Received: 07/14/2011 1000

7470A TCLP Mercury-TCLP

Analysis Method:	7470A	Analysis Batch:	280-77405	Instrument ID:	MT_034
Prep Method:	7470A	Prep Batch:	280-77037	Lab File ID:	110719TD.txt
Dilution:	1.0	Leach Batch:	280-76688	Initial Weight/Volume:	30 mL
Analysis Date:	07/19/2011 2120			Final Weight/Volume:	30 mL
Prep Date:	07/19/2011 1130				
Leach Date:	07/14/2011 1904				

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

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-77004	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-76721	Lab File ID:	110715TA.txt
Dilution:	1.0			Initial Weight/Volume:	0.65 g
Analysis Date:	07/15/2011 2341			Final Weight/Volume:	50 mL
Prep Date:	07/15/2011 1435				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.039		0.0061	0.019

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

Client Sample ID: **J1K4M2**

Lab Sample ID: 280-18024-6
Client Matrix: Solid
% Moisture: 4.4

Date Sampled: 07/11/2011 0945
Date Received: 07/14/2011 1000

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-77204	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-76813	Lab File ID:	25A2071811.asc
Dilution:	1.0			Initial Weight/Volume:	1.18 g
Analysis Date:	07/18/2011 1831			Final Weight/Volume:	100 mL
Prep Date:	07/18/2011 0730				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		4680		1.4	4.4
Antimony		0.34	U	0.34	0.53
Arsenic		4.8		0.59	0.89
Barium		47.8		0.067	0.44
Beryllium		0.067	B	0.029	0.18
Boron		1.0	B	0.87	1.8
Cadmium		0.099	B	0.036	0.18
Calcium		10400		12.5	44.3
Chromium		19.8		0.051	0.18
Cobalt		7.2	X	0.089	0.89
Copper		13.3		0.19	0.89
Iron		18300		3.4	4.4
Lead		3.9		0.24	0.44
Magnesium		3650		3.3	17.7
Manganese		236		0.089	0.89
Molybdenum		0.27	B	0.23	1.8
Nickel		8.5	X	0.11	3.5
Potassium		713		36.3	266
Selenium		0.76	U	0.76	0.89
Silicon		214		5.0	8.9
Silver		0.14	U	0.14	0.18
Sodium		334		52.3	106
Vanadium		46.5		0.083	1.8
Zinc		45.9	X	0.35	0.89

6010B TCLP Metals (ICP)-TCLP

Analysis Method:	6010B	Analysis Batch:	280-77225	Instrument ID:	MT_026
Prep Method:	3010A	Prep Batch:	280-76802	Lab File ID:	26a071811.asc
Dilution:	1.0	Leach Batch:	280-76688	Initial Weight/Volume:	10 mL
Analysis Date:	07/18/2011 1913			Final Weight/Volume:	50 mL
Prep Date:	07/18/2011 0730				
Leach Date:	07/14/2011 1904				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Arsenic		0.022	U	0.022	0.50
Barium		0.31	B	0.0020	1.0
Cadmium		0.0020	U	0.0020	0.10
Chromium		0.74		0.0030	0.50
Lead		0.013	U	0.013	0.50
Selenium		0.024	U	0.024	0.10
Silver		0.0045	B C	0.0040	0.50

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

Client Sample ID: **J1K4M2**

Lab Sample ID: 280-18024-6
Client Matrix: Solid

Date Sampled: 07/11/2011 0945
Date Received: 07/14/2011 1000

7470A TCLP Mercury-TCLP

Analysis Method:	7470A	Analysis Batch:	280-77405	Instrument ID:	MT_034
Prep Method:	7470A	Prep Batch:	280-77037	Lab File ID:	110719TD.txt
Dilution:	1.0	Leach Batch:	280-76688	Initial Weight/Volume:	30 mL
Analysis Date:	07/19/2011 2123			Final Weight/Volume:	30 mL
Prep Date:	07/19/2011 1130				
Leach Date:	07/14/2011 1904				

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

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-77004	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-76721	Lab File ID:	110715TA.txt
Dilution:	1.0			Initial Weight/Volume:	0.61 g
Analysis Date:	07/15/2011 2348			Final Weight/Volume:	50 mL
Prep Date:	07/15/2011 1435				

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

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

Client Sample ID: **J1K4M3**

Lab Sample ID: 280-18024-7
Client Matrix: Solid
% Moisture: 1.8

Date Sampled: 07/11/2011 0950
Date Received: 07/14/2011 1000

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-77204	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-76813	Lab File ID:	25A2071811.asc
Dilution:	1.0			Initial Weight/Volume:	1.15 g
Analysis Date:	07/18/2011 1833			Final Weight/Volume:	100 mL
Prep Date:	07/18/2011 0730				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		5130		1.4	4.4
Antimony		0.34	U	0.34	0.53
Arsenic		2.6		0.58	0.89
Barium		54.6		0.067	0.44
Beryllium		0.11	B	0.029	0.18
Boron		0.87	U	0.87	1.8
Cadmium		0.064	B	0.036	0.18
Calcium		6200		12.5	44.3
Chromium		12.9		0.051	0.18
Cobalt		6.9	X	0.089	0.89
Copper		12.4		0.19	0.89
Iron		17300		3.4	4.4
Lead		4.0		0.24	0.44
Magnesium		3300		3.3	17.7
Manganese		247		0.089	0.89
Molybdenum		0.23	U	0.23	1.8
Nickel		8.0	X	0.11	3.5
Potassium		887		36.3	266
Selenium		0.76	U	0.76	0.89
Silicon		247		5.0	8.9
Silver		0.14	U	0.14	0.18
Sodium		226		52.2	106
Vanadium		41.6		0.083	1.8
Zinc		34.4	X	0.35	0.89

6010B TCLP Metals (ICP)-TCLP

Analysis Method:	6010B	Analysis Batch:	280-77225	Instrument ID:	MT_026
Prep Method:	3010A	Prep Batch:	280-76802	Lab File ID:	26a071811.asc
Dilution:	1.0	Leach Batch:	280-76688	Initial Weight/Volume:	10 mL
Analysis Date:	07/18/2011 1916			Final Weight/Volume:	50 mL
Prep Date:	07/18/2011 0730				
Leach Date:	07/14/2011 1904				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Arsenic		0.022	U	0.022	0.50
Barium		0.33	B	0.0020	1.0
Cadmium		0.0020	U	0.0020	0.10
Chromium		0.040	B	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

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

Client Sample ID: **J1K4M3**

Lab Sample ID: 280-18024-7
Client Matrix: Solid

Date Sampled: 07/11/2011 0950
Date Received: 07/14/2011 1000

7470A TCLP Mercury-TCLP

Analysis Method:	7470A	Analysis Batch:	280-77405	Instrument ID:	MT_034
Prep Method:	7470A	Prep Batch:	280-77037	Lab File ID:	110719TD.txt
Dilution:	1.0	Leach Batch:	280-76688	Initial Weight/Volume:	30 mL
Analysis Date:	07/19/2011 2125			Final Weight/Volume:	30 mL
Prep Date:	07/19/2011 1130				
Leach Date:	07/14/2011 1904				

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

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-77004	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-76721	Lab File ID:	110715TA.txt
Dilution:	1.0			Initial Weight/Volume:	0.63 g
Analysis Date:	07/15/2011 2350			Final Weight/Volume:	50 mL
Prep Date:	07/15/2011 1435				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0064	B	0.0054	0.016

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

Client Sample ID: **J1K4M4**

Lab Sample ID: 280-18024-8
Client Matrix: Solid
% Moisture: 15.8

Date Sampled: 07/11/2011 0955
Date Received: 07/14/2011 1000

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-77204	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-76813	Lab File ID:	25A2071811.asc
Dilution:	1.0			Initial Weight/Volume:	1.11 g
Analysis Date:	07/18/2011 1836			Final Weight/Volume:	100 mL
Prep Date:	07/18/2011 0730				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		4720		1.7	5.4
Antimony		0.41	U	0.41	0.64
Arsenic		2.0		0.71	1.1
Barium		73.0		0.081	0.54
Beryllium		0.035	U	0.035	0.21
Boron		1.0	U	1.0	2.1
Cadmium		0.049	B	0.044	0.21
Calcium		6030		15.1	53.5
Chromium		4.7		0.062	0.21
Cobalt		10.4	X	0.11	1.1
Copper		14.5		0.23	1.1
Iron		26400		4.1	5.4
Lead		3.0		0.29	0.54
Magnesium		4370		4.0	21.4
Manganese		317		0.11	1.1
Molybdenum		0.28	U	0.28	2.1
Nickel		8.6	X	0.13	4.3
Potassium		695		43.9	321
Selenium		0.92	U	0.92	1.1
Silicon		228		6.1	10.7
Silver		0.17	U	0.17	0.21
Sodium		376		63.1	128
Vanadium		71.4		0.10	2.1
Zinc		44.4	X	0.43	1.1

6010B TCLP Metals (ICP)-TCLP

Analysis Method:	6010B	Analysis Batch:	280-77225	Instrument ID:	MT_026
Prep Method:	3010A	Prep Batch:	280-76802	Lab File ID:	26a071811.asc
Dilution:	1.0	Leach Batch:	280-76688	Initial Weight/Volume:	10 mL
Analysis Date:	07/18/2011 1918			Final Weight/Volume:	50 mL
Prep Date:	07/18/2011 0730				
Leach Date:	07/14/2011 1904				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Arsenic		0.022	U	0.022	0.50
Barium		0.28	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

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

Client Sample ID: **J1K4M4**

Lab Sample ID: 280-18024-8
Client Matrix: Solid

Date Sampled: 07/11/2011 0955
Date Received: 07/14/2011 1000

7470A TCLP Mercury-TCLP

Analysis Method:	7470A	Analysis Batch:	280-77405	Instrument ID:	MT_034
Prep Method:	7470A	Prep Batch:	280-77037	Lab File ID:	110719TD.txt
Dilution:	1.0	Leach Batch:	280-76688	Initial Weight/Volume:	30 mL
Analysis Date:	07/19/2011 2127			Final Weight/Volume:	30 mL
Prep Date:	07/19/2011 1130				
Leach Date:	07/14/2011 1904				

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

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-77004	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-76721	Lab File ID:	110715TA.txt
Dilution:	1.0			Initial Weight/Volume:	0.60 g
Analysis Date:	07/15/2011 2352			Final Weight/Volume:	50 mL
Prep Date:	07/15/2011 1435				

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

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

Client Sample ID: **J1K4M5**

Lab Sample ID: 280-18024-9
Client Matrix: Solid
% Moisture: 1.2

Date Sampled: 07/11/2011 1000
Date Received: 07/14/2011 1000

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-77204	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-76813	Lab File ID:	25A2071811.asc
Dilution:	1.0			Initial Weight/Volume:	1.17 g
Analysis Date:	07/18/2011 1838			Final Weight/Volume:	100 mL
Prep Date:	07/18/2011 0730				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		4300		1.3	4.3
Antimony		0.33	U	0.33	0.52
Arsenic		1.5		0.57	0.86
Barium		72.8		0.066	0.43
Boron		0.85	U	0.85	1.7
Cadmium		0.050	B	0.035	0.17
Calcium		5300		12.2	43.2
Chromium		4.8		0.050	0.17
Iron		24400		3.3	4.3
Magnesium		4160		3.2	17.3
Manganese		352		0.086	0.86
Molybdenum		0.23	B	0.22	1.7
Nickel		8.1	X	0.11	3.5
Potassium		639		35.5	259
Selenium		0.74	U	0.74	0.86
Silicon		185		4.9	8.6
Silver		0.14	U	0.14	0.17
Sodium		305		51.0	104
Zinc		40.1	X	0.34	0.86

Analysis Method:	6010B	Analysis Batch:	280-77238	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-76813	Lab File ID:	25A6071811.asc
Dilution:	5.0			Initial Weight/Volume:	1.17 g
Analysis Date:	07/19/2011 0718			Final Weight/Volume:	100 mL
Prep Date:	07/18/2011 0730				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Beryllium		0.14	U	0.14	0.86
Cobalt		11.0	X	0.43	4.3
Copper		14.5		0.94	4.3
Lead		3.0		1.2	2.2
Vanadium		71.3		0.41	8.6

6010B TCLP Metals (ICP)-TCLP

Analysis Method:	6010B	Analysis Batch:	280-77225	Instrument ID:	MT_026
Prep Method:	3010A	Prep Batch:	280-76802	Lab File ID:	26a071811.asc
Dilution:	1.0	Leach Batch:	280-76688	Initial Weight/Volume:	10 mL
Analysis Date:	07/18/2011 1921			Final Weight/Volume:	50 mL
Prep Date:	07/18/2011 0730				
Leach Date:	07/14/2011 1904				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

Client Sample ID: **J1K4M5**

Lab Sample ID: 280-18024-9
Client Matrix: Solid

Date Sampled: 07/11/2011 1000
Date Received: 07/14/2011 1000

6010B TCLP Metals (ICP)-TCLP

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Arsenic		0.022	U	0.022	0.50
Barium		0.19	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

7470A TCLP Mercury-TCLP

Analysis Method:	7470A	Analysis Batch:	280-77405	Instrument ID:	MT_034
Prep Method:	7470A	Prep Batch:	280-77037	Lab File ID:	110719TD.txt
Dilution:	1.0	Leach Batch:	280-76688	Initial Weight/Volume:	30 mL
Analysis Date:	07/19/2011 2129			Final Weight/Volume:	30 mL
Prep Date:	07/19/2011 1130				
Leach Date:	07/14/2011 1904				

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

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-77004	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-76721	Lab File ID:	110715TA.txt
Dilution:	1.0			Initial Weight/Volume:	0.64 g
Analysis Date:	07/15/2011 2355			Final Weight/Volume:	50 mL
Prep Date:	07/15/2011 1435				

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

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

Client Sample ID: **J1K4M6**

Lab Sample ID: 280-18024-10
Client Matrix: Solid
% Moisture: 1.1

Date Sampled: 07/11/2011 1005
Date Received: 07/14/2011 1000

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-77204	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-76813	Lab File ID:	25A2071811.asc
Dilution:	1.0			Initial Weight/Volume:	1.07 g
Analysis Date:	07/18/2011 1841			Final Weight/Volume:	100 mL
Prep Date:	07/18/2011 0730				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		4740		1.5	4.7
Antimony		0.36	U	0.36	0.57
Arsenic		2.1		0.62	0.95
Barium		66.4		0.072	0.47
Boron		0.93	U	0.93	1.9
Cadmium		0.058	B	0.039	0.19
Calcium		6080		13.3	47.3
Chromium		5.1		0.055	0.19
Iron		25700		3.6	4.7
Magnesium		4180		3.5	18.9
Manganese		310		0.095	0.95
Molybdenum		0.27	B	0.25	1.9
Nickel		8.4	X	0.12	3.8
Potassium		688		38.8	284
Selenium		0.81	U	0.81	0.95
Silicon		273		5.4	9.5
Silver		0.15	U	0.15	0.19
Sodium		317		55.8	113
Zinc		42.4	X	0.38	0.95

Analysis Method:	6010B	Analysis Batch:	280-77238	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-76813	Lab File ID:	25A6071811.asc
Dilution:	5.0			Initial Weight/Volume:	1.07 g
Analysis Date:	07/19/2011 0720			Final Weight/Volume:	100 mL
Prep Date:	07/18/2011 0730				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Beryllium		0.16	U	0.16	0.95
Cobalt		11.5	X	0.47	4.7
Copper		15.3		1.0	4.7
Lead		3.6		1.3	2.4
Vanadium		79.2		0.44	9.5

6010B TCLP Metals (ICP)-TCLP

Analysis Method:	6010B	Analysis Batch:	280-77225	Instrument ID:	MT_026
Prep Method:	3010A	Prep Batch:	280-76802	Lab File ID:	26a071811.asc
Dilution:	1.0	Leach Batch:	280-76688	Initial Weight/Volume:	10 mL
Analysis Date:	07/18/2011 1923			Final Weight/Volume:	50 mL
Prep Date:	07/18/2011 0730				
Leach Date:	07/14/2011 1904				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

Client Sample ID: **J1K4M6**

Lab Sample ID: 280-18024-10
Client Matrix: Solid

Date Sampled: 07/11/2011 1005
Date Received: 07/14/2011 1000

6010B TCLP Metals (ICP)-TCLP

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Arsenic		0.022	U	0.022	0.50
Barium		0.27	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

7470A TCLP Mercury-TCLP

Analysis Method:	7470A	Analysis Batch:	280-77405	Instrument ID:	MT_034
Prep Method:	7470A	Prep Batch:	280-77037	Lab File ID:	110719TD.txt
Dilution:	1.0	Leach Batch:	280-76688	Initial Weight/Volume:	30 mL
Analysis Date:	07/19/2011 2132			Final Weight/Volume:	30 mL
Prep Date:	07/19/2011 1130				
Leach Date:	07/14/2011 1904				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Mercury		0.000031	B	0.000030	0.0020

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-77004	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-76721	Lab File ID:	110715TA.txt
Dilution:	1.0			Initial Weight/Volume:	0.64 g
Analysis Date:	07/15/2011 2357			Final Weight/Volume:	50 mL
Prep Date:	07/15/2011 1435				

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

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

General Chemistry

Client Sample ID: **J1K4L7**

Lab Sample ID: 280-18024-1
Client Matrix: Solid

Date Sampled: 07/11/2011 0920
Date Received: 07/14/2011 1000

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	17.5		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-76631 Analysis Date: 07/14/2011 1413 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

General Chemistry

Client Sample ID: **J1K4L8**

Lab Sample ID: 280-18024-2
Client Matrix: Solid

Date Sampled: 07/11/2011 0925
Date Received: 07/14/2011 1000

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	18.9		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-76631 Analysis Date: 07/14/2011 1413 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

General Chemistry

Client Sample ID: **J1K4L9**

Lab Sample ID: 280-18024-3
Client Matrix: Solid

Date Sampled: 07/11/2011 0930
Date Received: 07/14/2011 1000

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

Analysis Batch: 280-76631 Analysis Date: 07/14/2011 1413 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

General Chemistry

Client Sample ID: **J1K4M0**

Lab Sample ID: 280-18024-4
Client Matrix: Solid

Date Sampled: 07/11/2011 0935
Date Received: 07/14/2011 1000

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	1.6		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-76631 Analysis Date: 07/14/2011 1413 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

General Chemistry

Client Sample ID: **J1K4M1**

Lab Sample ID: 280-18024-5
Client Matrix: Solid

Date Sampled: 07/11/2011 0940
Date Received: 07/14/2011 1000

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	16.8		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-76631 Analysis Date: 07/14/2011 1413 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

General Chemistry

Client Sample ID: **J1K4M2**

Lab Sample ID: 280-18024-6
Client Matrix: Solid

Date Sampled: 07/11/2011 0945
Date Received: 07/14/2011 1000

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

Analysis Batch: 280-76631 Analysis Date: 07/14/2011 1413 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

General Chemistry

Client Sample ID: **J1K4M3**

Lab Sample ID: 280-18024-7
Client Matrix: Solid

Date Sampled: 07/11/2011 0950
Date Received: 07/14/2011 1000

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	1.8		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-76631 Analysis Date: 07/14/2011 1413 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

General Chemistry

Client Sample ID: **J1K4M4**

Lab Sample ID: 280-18024-8
Client Matrix: Solid

Date Sampled: 07/11/2011 0955
Date Received: 07/14/2011 1000

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	15.8		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-76631 Analysis Date: 07/14/2011 1413 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

General Chemistry

Client Sample ID: **J1K4M5**

Lab Sample ID: 280-18024-9
Client Matrix: Solid

Date Sampled: 07/11/2011 1000
Date Received: 07/14/2011 1000

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	1.2		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-76631 Analysis Date: 07/14/2011 1413 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

General Chemistry

Client Sample ID: **J1K4M6**

Lab Sample ID: 280-18024-10
Client Matrix: Solid

Date Sampled: 07/11/2011 1005
Date Received: 07/14/2011 1000

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

Analysis Batch: 280-76631 Analysis Date: 07/14/2011 1413 DryWt Corrected: N

QUALITY CONTROL RESULTS

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-76688					
LCS 280-76688/2-B	Lab Control Sample	P	Solid	1311	
LCS 280-76688/2-C	Lab Control Sample	P	Solid	1311	
LB 280-76688/1-B	TCLP SPLPE Leachate Blank	P	Solid	1311	
LB 280-76688/1-C	TCLP SPLPE Leachate Blank	P	Solid	1311	
280-18024-1	J1K4L7	P	Solid	1311	
280-18024-2	J1K4L8	P	Solid	1311	
280-18024-3	J1K4L9	P	Solid	1311	
280-18024-4	J1K4M0	P	Solid	1311	
280-18024-5	J1K4M1	P	Solid	1311	
280-18024-6	J1K4M2	P	Solid	1311	
280-18024-7	J1K4M3	P	Solid	1311	
280-18024-8	J1K4M4	P	Solid	1311	
280-18024-9	J1K4M5	P	Solid	1311	
280-18024-10	J1K4M6	P	Solid	1311	
280-18024-10DU	Duplicate	P	Solid	1311	
280-18024-10MS	Matrix Spike	P	Solid	1311	
Prep Batch: 280-76721					
LCS 280-76721/2-A	Lab Control Sample	T	Solid	7471A	
MB 280-76721/1-A	Method Blank	T	Solid	7471A	
280-18024-1	J1K4L7	T	Solid	7471A	
280-18024-2	J1K4L8	T	Solid	7471A	
280-18024-3	J1K4L9	T	Solid	7471A	
280-18024-3DU	Duplicate	T	Solid	7471A	
280-18024-3MS	Matrix Spike	T	Solid	7471A	
280-18024-4	J1K4M0	T	Solid	7471A	
280-18024-5	J1K4M1	T	Solid	7471A	
280-18024-6	J1K4M2	T	Solid	7471A	
280-18024-7	J1K4M3	T	Solid	7471A	
280-18024-8	J1K4M4	T	Solid	7471A	
280-18024-9	J1K4M5	T	Solid	7471A	
280-18024-10	J1K4M6	T	Solid	7471A	

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-76802					
LCS 280-76688/2-B	Lab Control Sample	P	Solid	3010A	280-76688
LB 280-76688/1-B	TCLP SPLPE Leachate Blank	P	Solid	3010A	280-76688
280-18024-1	J1K4L7	P	Solid	3010A	280-76688
280-18024-2	J1K4L8	P	Solid	3010A	280-76688
280-18024-3	J1K4L9	P	Solid	3010A	280-76688
280-18024-4	J1K4M0	P	Solid	3010A	280-76688
280-18024-5	J1K4M1	P	Solid	3010A	280-76688
280-18024-6	J1K4M2	P	Solid	3010A	280-76688
280-18024-7	J1K4M3	P	Solid	3010A	280-76688
280-18024-8	J1K4M4	P	Solid	3010A	280-76688
280-18024-9	J1K4M5	P	Solid	3010A	280-76688
280-18024-10	J1K4M6	P	Solid	3010A	280-76688
280-18024-10DU	Duplicate	P	Solid	3010A	280-76688
280-18024-10MS	Matrix Spike	P	Solid	3010A	280-76688
Prep Batch: 280-76813					
LCS 280-76813/2-A	Lab Control Sample	T	Solid	3050B	
MB 280-76813/1-A	Method Blank	T	Solid	3050B	
280-18024-1	J1K4L7	T	Solid	3050B	
280-18024-1DU	Duplicate	T	Solid	3050B	
280-18024-1MS	Matrix Spike	T	Solid	3050B	
280-18024-2	J1K4L8	T	Solid	3050B	
280-18024-3	J1K4L9	T	Solid	3050B	
280-18024-4	J1K4M0	T	Solid	3050B	
280-18024-5	J1K4M1	T	Solid	3050B	
280-18024-6	J1K4M2	T	Solid	3050B	
280-18024-7	J1K4M3	T	Solid	3050B	
280-18024-8	J1K4M4	T	Solid	3050B	
280-18024-9	J1K4M5	T	Solid	3050B	
280-18024-10	J1K4M6	T	Solid	3050B	

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:280-77004					
LCS 280-76721/2-A	Lab Control Sample	T	Solid	7471A	280-76721
MB 280-76721/1-A	Method Blank	T	Solid	7471A	280-76721
280-18024-1	J1K4L7	T	Solid	7471A	280-76721
280-18024-2	J1K4L8	T	Solid	7471A	280-76721
280-18024-3	J1K4L9	T	Solid	7471A	280-76721
280-18024-3DU	Duplicate	T	Solid	7471A	280-76721
280-18024-3MS	Matrix Spike	T	Solid	7471A	280-76721
280-18024-4	J1K4M0	T	Solid	7471A	280-76721
280-18024-5	J1K4M1	T	Solid	7471A	280-76721
280-18024-6	J1K4M2	T	Solid	7471A	280-76721
280-18024-7	J1K4M3	T	Solid	7471A	280-76721
280-18024-8	J1K4M4	T	Solid	7471A	280-76721
280-18024-9	J1K4M5	T	Solid	7471A	280-76721
280-18024-10	J1K4M6	T	Solid	7471A	280-76721
Prep Batch: 280-77037					
LCS 280-76688/2-C	Lab Control Sample	P	Solid	7470A	280-76688
LB 280-76688/1-C	TCLP SPLPE Leachate Blank	P	Solid	7470A	280-76688
280-18024-1	J1K4L7	P	Solid	7470A	280-76688
280-18024-2	J1K4L8	P	Solid	7470A	280-76688
280-18024-3	J1K4L9	P	Solid	7470A	280-76688
280-18024-4	J1K4M0	P	Solid	7470A	280-76688
280-18024-5	J1K4M1	P	Solid	7470A	280-76688
280-18024-6	J1K4M2	P	Solid	7470A	280-76688
280-18024-7	J1K4M3	P	Solid	7470A	280-76688
280-18024-8	J1K4M4	P	Solid	7470A	280-76688
280-18024-9	J1K4M5	P	Solid	7470A	280-76688
280-18024-10	J1K4M6	P	Solid	7470A	280-76688
280-18024-10DU	Duplicate	P	Solid	7470A	280-76688
280-18024-10MS	Matrix Spike	P	Solid	7470A	280-76688

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:280-77204					
LCS 280-76813/2-A	Lab Control Sample	T	Solid	6010B	280-76813
MB 280-76813/1-A	Method Blank	T	Solid	6010B	280-76813
280-18024-1	J1K4L7	T	Solid	6010B	280-76813
280-18024-1DU	Duplicate	T	Solid	6010B	280-76813
280-18024-1MS	Matrix Spike	T	Solid	6010B	280-76813
280-18024-2	J1K4L8	T	Solid	6010B	280-76813
280-18024-3	J1K4L9	T	Solid	6010B	280-76813
280-18024-4	J1K4M0	T	Solid	6010B	280-76813
280-18024-5	J1K4M1	T	Solid	6010B	280-76813
280-18024-6	J1K4M2	T	Solid	6010B	280-76813
280-18024-7	J1K4M3	T	Solid	6010B	280-76813
280-18024-8	J1K4M4	T	Solid	6010B	280-76813
280-18024-9	J1K4M5	T	Solid	6010B	280-76813
280-18024-10	J1K4M6	T	Solid	6010B	280-76813
Analysis Batch:280-77225					
LCS 280-76688/2-B	Lab Control Sample	P	Solid	6010B	280-76802
LB 280-76688/1-B	TCLP SPLPE Leachate Blank	P	Solid	6010B	280-76802
280-18024-1	J1K4L7	P	Solid	6010B	280-76802
280-18024-2	J1K4L8	P	Solid	6010B	280-76802
280-18024-3	J1K4L9	P	Solid	6010B	280-76802
280-18024-4	J1K4M0	P	Solid	6010B	280-76802
280-18024-5	J1K4M1	P	Solid	6010B	280-76802
280-18024-6	J1K4M2	P	Solid	6010B	280-76802
280-18024-7	J1K4M3	P	Solid	6010B	280-76802
280-18024-8	J1K4M4	P	Solid	6010B	280-76802
280-18024-9	J1K4M5	P	Solid	6010B	280-76802
280-18024-10	J1K4M6	P	Solid	6010B	280-76802
280-18024-10DU	Duplicate	P	Solid	6010B	280-76802
280-18024-10MS	Matrix Spike	P	Solid	6010B	280-76802
Analysis Batch:280-77238					
280-18024-9	J1K4M5	T	Solid	6010B	280-76813
280-18024-10	J1K4M6	T	Solid	6010B	280-76813

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:280-77405					
LCS 280-76688/2-C	Lab Control Sample	P	Solid	7470A	280-77037
LB 280-76688/1-C	TCLP SPLPE Leachate Blank	P	Solid	7470A	280-77037
280-18024-1	J1K4L7	P	Solid	7470A	280-77037
280-18024-2	J1K4L8	P	Solid	7470A	280-77037
280-18024-3	J1K4L9	P	Solid	7470A	280-77037
280-18024-4	J1K4M0	P	Solid	7470A	280-77037
280-18024-5	J1K4M1	P	Solid	7470A	280-77037
280-18024-6	J1K4M2	P	Solid	7470A	280-77037
280-18024-7	J1K4M3	P	Solid	7470A	280-77037
280-18024-8	J1K4M4	P	Solid	7470A	280-77037
280-18024-9	J1K4M5	P	Solid	7470A	280-77037
280-18024-10	J1K4M6	P	Solid	7470A	280-77037
280-18024-10DU	Duplicate	P	Solid	7470A	280-77037
280-18024-10MS	Matrix Spike	P	Solid	7470A	280-77037

Report Basis
P = TCLP
T = Total

General Chemistry				
Analysis Batch:280-76631				
280-18024-1	J1K4L7	T	Solid	D-2216
280-18024-1DU	Duplicate	T	Solid	D-2216
280-18024-2	J1K4L8	T	Solid	D-2216
280-18024-3	J1K4L9	T	Solid	D-2216
280-18024-4	J1K4M0	T	Solid	D-2216
280-18024-5	J1K4M1	T	Solid	D-2216
280-18024-6	J1K4M2	T	Solid	D-2216
280-18024-7	J1K4M3	T	Solid	D-2216
280-18024-8	J1K4M4	T	Solid	D-2216
280-18024-9	J1K4M5	T	Solid	D-2216
280-18024-10	J1K4M6	T	Solid	D-2216

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

TCLP SPLPE Leachate Blank - Batch: 280-76802

Method: 6010B
Preparation: 3010A
TCLP

Lab Sample ID:	LB 280-76688/1-B	Analysis Batch:	280-77225	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-76802	Lab File ID:	26a071811.asc
Dilution:	1.0	Leach Batch:	280-76688	Initial Weight/Volume:	10 mL
Analysis Date:	07/18/2011 1845	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	07/18/2011 0730				
Leach Date:	07/14/2011 1904				

Analyte	Result	Qual	MDL	RL
Arsenic	0.022	U	0.022	0.50
Barium	0.0126	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	0.00635	B	0.0040	0.50

Lab Control Sample - Batch: 280-76802

Method: 6010B
Preparation: 3010A
TCLP

Lab Sample ID:	LCS 280-76688/2-B	Analysis Batch:	280-77225	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-76802	Lab File ID:	26a071811.asc
Dilution:	1.0	Leach Batch:	280-76688	Initial Weight/Volume:	10 mL
Analysis Date:	07/18/2011 1848	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	07/18/2011 0730				
Leach Date:	07/14/2011 1904				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Arsenic	4.00	3.61	90	80 - 120	
Barium	12.0	10.86	90	80 - 120	
Cadmium	1.10	1.01	91	80 - 120	
Chromium	5.20	4.31	83	80 - 120	
Lead	5.50	4.85	88	80 - 120	
Selenium	3.00	2.65	88	80 - 120	
Silver	1.05	0.880	84	80 - 120	

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

Matrix Spike - Batch: 280-76802

Method: 6010B
Preparation: 3010A
TCLP

Lab Sample ID:	280-18024-10	Analysis Batch:	280-77225	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-76802	Lab File ID:	26a071811.asc
Dilution:	1.0	Leach Batch:	280-76688	Initial Weight/Volume:	10 mL
Analysis Date:	07/18/2011 1928	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	07/18/2011 0730				
Leach Date:	07/14/2011 1904				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Arsenic	0.022	U	4.00	3.75	94	80 - 120	
Barium	0.27	B	12.0	11.49	94	80 - 120	
Cadmium	0.0020	U	1.10	1.05	95	80 - 120	
Chromium	0.0030	U	5.20	4.48	86	80 - 120	
Lead	0.013	U	5.50	5.03	91	80 - 120	
Selenium	0.024	U	3.00	2.74	91	80 - 120	
Silver	0.0040	U	1.05	0.915	87	80 - 120	

Duplicate - Batch: 280-76802

Method: 6010B
Preparation: 3010A
TCLP

Lab Sample ID:	280-18024-10	Analysis Batch:	280-77225	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-76802	Lab File ID:	26a071811.asc
Dilution:	1.0	Leach Batch:	280-76688	Initial Weight/Volume:	10 mL
Analysis Date:	07/18/2011 1931	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	07/18/2011 0730				
Leach Date:	07/14/2011 1904				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Arsenic	0.022	U	0.022	NC	20	U
Barium	0.27	B	0.266	2	20	B
Cadmium	0.0020	U	0.0020	NC	20	U
Chromium	0.0030	U	0.0030	NC	20	U
Lead	0.013	U	0.013	NC	20	U
Selenium	0.024	U	0.024	NC	20	U
Silver	0.0040	U	0.0040	NC	20	U

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

Method Blank - Batch: 280-76813

Method: 6010B
Preparation: 3050B

Lab Sample ID:	MB 280-76813/1-A	Analysis Batch:	280-77204	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-76813	Lab File ID:	25A2071811.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	07/18/2011 1758	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	07/18/2011 0730				
Leach Date:	N/A				

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

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

Lab Control Sample - Batch: 280-76813

Method: 6010B
Preparation: 3050B

Lab Sample ID:	LCS 280-76813/2-A	Analysis Batch:	280-77204	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-76813	Lab File ID:	25A2071811.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	07/18/2011 1800	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	07/18/2011 0730				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	200	197.6	99	82 - 116	
Antimony	50.0	44.43	89	82 - 110	
Arsenic	100	101.5	101	85 - 110	
Barium	200	206.7	103	87 - 112	
Beryllium	5.00	4.82	96	84 - 114	
Boron	100	85.72	86	81 - 110	
Cadmium	10.0	10.27	103	87 - 110	
Calcium	5000	4793	96	82 - 114	
Chromium	20.0	20.48	102	84 - 114	
Cobalt	50.0	49.57	99	87 - 110	
Copper	25.0	25.89	104	88 - 110	
Iron	100	100.6	101	87 - 120	
Lead	50.0	50.33	101	86 - 110	
Magnesium	5000	4832	97	90 - 110	
Manganese	50.0	50.25	101	88 - 110	
Molybdenum	100	92.81	93	86 - 110	
Nickel	50.0	49.57	99	87 - 110	
Potassium	5000	5116	102	89 - 110	
Selenium	200	197.9	99	83 - 110	
Silicon	1000	208.0	21	10 - 70	
Silver	5.00	5.20	104	87 - 114	
Sodium	5000	5193	104	90 - 112	
Vanadium	50.0	51.49	103	88 - 110	
Zinc	50.0	48.74	97	76 - 114	

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

Matrix Spike - Batch: 280-76813

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-18024-1	Analysis Batch:	280-77204	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-76813	Lab File ID:	25A2071811.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.04 g
Analysis Date:	07/18/2011 1807	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	07/18/2011 0730				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	6770		233	8711	831	50 - 200	4
Antimony	0.43	U	58.3	32.97	57	20 - 200	
Arsenic	3.1		117	106.9	89	76 - 111	
Barium	93.1		233	287.0	83	52 - 159	
Beryllium	0.14	B	5.83	5.07	85	72 - 105	
Boron	1.1	U	117	94.28	81	75 - 107	
Cadmium	0.082	B	11.7	10.60	90	40 - 130	
Calcium	8310		5830	13840	95	43 - 165	
Chromium	8.8		23.3	31.00	95	70 - 200	
Cobalt	7.8		58.3	58.21	86	72 - 106	
Copper	14.8		29.1	41.08	90	37 - 187	
Iron	20900		117	22300	1218	70 - 200	4
Lead	4.5		58.3	55.02	87	70 - 200	
Magnesium	4220		5830	9576	92	64 - 145	
Manganese	294		58.3	375.1	139	40 - 200	4
Molybdenum	0.29	U	117	101.1	87	75 - 103	
Nickel	10.5		58.3	60.05	85	61 - 126	
Potassium	1150		5830	6636	94	56 - 172	
Selenium	0.97	U	233	199.8	86	76 - 104	
Silicon	246		1170	542.8	25	20 - 200	
Silver	0.18	U	5.83	5.34	92	75 - 141	
Sodium	302		5830	6044	99	78 - 111	
Vanadium	51.1		58.3	112.8	106	50 - 169	
Zinc	43.6		58.3	91.28	82	70 - 200	

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

Duplicate - Batch: 280-76813

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-18024-1	Analysis Batch:	280-77204	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-76813	Lab File ID:	25A2071811.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.03 g
Analysis Date:	07/18/2011 1809	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	07/18/2011 0730				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Aluminum	6770		6489	4	40	
Antimony	0.43	U	0.45	NC	40	U
Arsenic	3.1		2.93	5	30	
Barium	93.1		65.91	34	30	M
Beryllium	0.14	B	0.127	11	30	B
Boron	1.1	U	1.2	NC	30	U
Cadmium	0.082	B	0.0965	17	30	B
Calcium	8310		7407	11	30	
Chromium	8.8		22.37	87	40	M
Cobalt	7.8		8.02	2	30	
Copper	14.8		15.48	5	30	
Iron	20900		21120	1	40	
Lead	4.5		4.24	5	40	
Magnesium	4220		4140	2	30	
Manganese	294		310.7	5	40	
Molybdenum	0.29	U	0.468	NC	30	B
Nickel	10.5		16.58	45	30	M
Potassium	1150		1058	9	40	
Selenium	0.97	U	1.0	NC	30	U
Silicon	246		414.8	51	40	M
Silver	0.18	U	0.19	NC	30	U
Sodium	302		288.8	4	30	
Vanadium	51.1		52.11	2	30	
Zinc	43.6		40.41	8	40	

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

TCLP SPLPE Leachate Blank - Batch: 280-77037

Method: 7470A
Preparation: 7470A
TCLP

Lab Sample ID:	LB 280-76688/1-C	Analysis Batch:	280-77405	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-77037	Lab File ID:	110719TD.txt
Dilution:	1.0	Leach Batch:	280-76688	Initial Weight/Volume:	30 mL
Analysis Date:	07/19/2011 2102	Units:	mg/L	Final Weight/Volume:	30 mL
Prep Date:	07/19/2011 1130				
Leach Date:	07/14/2011 1904				

Analyte	Result	Qual	MDL	RL
Mercury	0.000030	U	0.000030	0.0020

Lab Control Sample - Batch: 280-77037

Method: 7470A
Preparation: 7470A
TCLP

Lab Sample ID:	LCS 280-76688/2-C	Analysis Batch:	280-77405	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-77037	Lab File ID:	110719TD.txt
Dilution:	1.0	Leach Batch:	280-76688	Initial Weight/Volume:	30 mL
Analysis Date:	07/19/2011 2156	Units:	mg/L	Final Weight/Volume:	30 mL
Prep Date:	07/19/2011 1130				
Leach Date:	07/14/2011 1904				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.00500	0.00557	111	90 - 116	

Matrix Spike - Batch: 280-77037

Method: 7470A
Preparation: 7470A
TCLP

Lab Sample ID:	280-18024-10	Analysis Batch:	280-77405	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-77037	Lab File ID:	110719TD.txt
Dilution:	1.0	Leach Batch:	280-76688	Initial Weight/Volume:	30 mL
Analysis Date:	07/19/2011 2136	Units:	mg/L	Final Weight/Volume:	30 mL
Prep Date:	07/19/2011 1130				
Leach Date:	07/14/2011 1904				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.000031	B	0.00500	0.00575	114	90 - 116	

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

Duplicate - Batch: 280-77037

Method: 7470A
Preparation: 7470A
TCLP

Lab Sample ID:	280-18024-10	Analysis Batch:	280-77405	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-77037	Lab File ID:	110719TD.txt
Dilution:	1.0	Leach Batch:	280-76688	Initial Weight/Volume:	30 mL
Analysis Date:	07/19/2011 2134	Units:	mg/L	Final Weight/Volume:	30 mL
Prep Date:	07/19/2011 1130				
Leach Date:	07/14/2011 1904				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Mercury	0.000031	B	0.000030	NC	20	U

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

Method Blank - Batch: 280-76721

Method: 7471A
Preparation: 7471A

Lab Sample ID:	MB 280-76721/1-A	Analysis Batch:	280-77004	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-76721	Lab File ID:	110715TA.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.6 g
Analysis Date:	07/15/2011 2322	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	07/15/2011 1435				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	0.0055	U	0.0055	0.017

Lab Control Sample - Batch: 280-76721

Method: 7471A
Preparation: 7471A

Lab Sample ID:	LCS 280-76721/2-A	Analysis Batch:	280-77004	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-76721	Lab File ID:	110715TA.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.6 g
Analysis Date:	07/15/2011 2324	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	07/15/2011 1435				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.417	0.416	100	87 - 111	

Matrix Spike - Batch: 280-76721

Method: 7471A
Preparation: 7471A

Lab Sample ID:	280-18024-3	Analysis Batch:	280-77004	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-76721	Lab File ID:	110715TA.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.61 g
Analysis Date:	07/15/2011 2336	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	07/15/2011 1435				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.082	0.422	0.470	92	87 - 111	

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

Duplicate - Batch: 280-76721

Method: 7471A
Preparation: 7471A

Lab Sample ID:	280-18024-3	Analysis Batch:	280-77004	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-76721	Lab File ID:	110715TA.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.67 g
Analysis Date:	07/15/2011 2334	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	07/15/2011 1435				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Mercury	0.082	0.0613	29	20	M

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-18024-1
Sdg Number: JP0223

Duplicate - Batch: 280-76631

Method: D-2216
Preparation: N/A

Lab Sample ID:	280-18024-1	Analysis Batch:	280-76631	Instrument ID:	No Equipment
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	07/14/2011 1413	Units:	%	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Moisture	17.5	17.5	0.1	20	

5.4 IR2 SC 7/14

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-074-231	Page 1 of 2

Collector K Lucas	Company Contact Joan Kessner	Telephone No. 509-375-4688	Project Coordinator KESSNER, JH
Price Code ~~8L~~ 8B	Data Turnaround ~~21~~ 7 Days	D 7/11/11	
Project Designation 100-D/DR Burial Grounds & Remaining Sites - Soil In-Proce	Sampling Location 100-D-73 & 100-D-76 Tier 1 Pre-Verification	SAF No. RC-074	
Ice Chest No. ERC-96-511 D 7-11-11	Field Logbook No. EL-1607-10	COA 010D762600	Method of Shipment FED EX D 7-11-11
Shipped To TestAmerica Incorporated, ~~Richland~~ DENVER	Offsite Property No. A100663		Bill of Lading/Air Bill No. See OSPC

POSSIBLE SAMPLE HAZARDS/REMARKS

~~Potential Rad <DOT~~ NONE

D 7-11-11

Special Handling and/or Storage

Cool 4 Deg C

Preservation	Cool 4C	None	Cool 4C	Cool 4C	None						
Type of Container	G/P	G	G/P	G/P	G/P						
No. of Container(s)	1	1	1	1	1						
Volume	60mL	60mL	60mL	60mL	60g						
SAMPLE ANALYSIS	See item (1) in Special Instructions.	See item (2) in Special Instructions.	Chromium Hex - 7196	IC Anions - 9056 Modified; NO2/NO3 - 353.1; pH (Soil) - 9045	RCF GEA Shipping Screen						
Sample No. / Matrix * / Sample Date / Sample Time											
J1K4L7 / SOIL / 7-11-11 / 0920	X	X									
J1K4L8 / SOIL / 7-11-11 / 0925	X	X									
J1K4L9 / SOIL / 7-11-11 / 0930	X	X									
J1K4M0 / SOIL / 7-11-11 / 0935	X	X									
J1K4M1 / SOIL / 7-11-11 / 0940	X	X									

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

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
K Lucas Kessner Lucas	7-11-11 1020	D WOOLERY	7-11-11 1020
D WOOLERY	7-11-11 1630	A. Freier 1060, #1	7-11-11 1630
A. Freier 1060, #1 WCH	7-12-11 0935	Fed Ex	
		7/11/11 1000	

SPECIAL INSTRUCTIONS

(1) ICP Metals - 6010TR (Client List) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Molybdenum, Nickel, Potassium, Selenium, Silicon, Silver, Sodium, Vanadium, Zinc}; Mercury - 7471 - (CV)
(2) Metals by ICP (TCLP) - 1311/6010 {Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver}; Mercury (TCLP) - 1311/7470 {Mercury}

REVIEWED BY DATE 7-12-11

JP0223

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

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

WCH-EE-011

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-074-231	Page 2 of 2
Collector: K Lucas	Company Contact: Joan Kessner; Telephone No.: 509-375-4688	Project Coordinator: KESSNER, JH	Price Code: ~~8L~~ 8B D 7/11/11
Project Designation: 100-D/DR Burial Grounds & Remaining Sites - Soil In-Proce	Sampling Location: 100-D-73 & 100-D-76 Tier 1 Pre-Verification	SAF No.: RC-074	Data Turnaround: ~~21~~ 7 Days D 7-11-11
Ice Chest No.: ERC-96-511	Field Logbook No.: EL-1607-10; COA: 010D762600	Method of Shipment: FEDEX	
Shipped To: D 7-11-11 TestAmerica Incorporated, ~~Richland~~ DENVER	Offsite Property No.: A-100663	Bill of Lading/Air Bill No.: See OSPC	

POSSIBLE SAMPLE HAZARDS/REMARKS

~~Potential Rad <DOT~~ NONE

D 7-11-11

Special Handling and/or Storage

Cool 4 Deg C

Preservation	Cool 4C	None	Cool 4C	Cool 4C	None						
Type of Container	G/P	G	G/P	G/P	G/P						
No. of Container(s)	1	1	1	1	1						
Volume	60mL	60mL	60mL	60mL	60g						
SAMPLE ANALYSIS	See item (1) in Special Instructions.	See item (2) in Special Instructions.	Chromium Hex - 7196	IC Anions - 9056 Modified; NO2/NO3 - 353.1; pH (Soil) - 9045	RCF GEA Shipping Screen						
Sample No.	Matrix *	Sample Date	Sample Time								
J1K4M2	SOIL	7-11-11	0945	X	X						
J1K4M3	SOIL	7-11-11	0950	X	X						
J1K4M4	SOIL	7-11-11	0955	X	X						
J1K4M5	SOIL	7-11-11	1000	X	X						
J1K4M6	SOIL	7-11-11	1005	X	X						

CHAIN OF POSSESSION	Sign/Print Names		
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
K Lucas Kenneth Lucas	7-11-11 1020	DWOOLFORD	7-11-11 1020
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
DWOOLFORD	7-11-11 1630	1060, #1 A. Freier	7-11-11 1630
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
WCH 1060, #1 A. Freier	0935 7-12-11	Fed Ex	
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
			7/11 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 (Client List) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Molybdenum, Nickel, Potassium, Selenium, Silicon, Silver, Sodium, Vanadium, Zinc}; Mercury - 7471 - (CV)
(2) Metals by ICP (TCLP) - 1311/6010 {Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver}; Mercury (TCLP) - 1311/7470 {Mercury}

REVIEWED BY DATE 1-12-11

JP0223

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 - 6010 - Solid

Analytical Due:

Report Due: 7/20/11 (Rush Sdy TAT)

SV

Sample Check-in List

Date/Time Received: 7/14/11 1000 GM Screen Result 12 microR/hr

Client: Washington Closure Hanford SDG #: JP0223 NA[ ] SAF #: RC-074 NA [ ]

Job Number: 18024 Chain of Custody # RC-074-231

Shipping Container ID: ERC-96-511 Air Bill # 7572939863 47

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: 5.4 NA [ ] 5. Vermiculite/packing materials is NA [ ] Wet [ ] Dry [✓]
6. Number of samples in shipping container: 10
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: 7/14/11

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[ ] No action necessary; process as is.

Project Manager [signature] Date 7/14/11

LS-023, Rev. 7, 1/08

From: (509) 376-7768
1162 SHIPPING DEPT
US DOE
2355 STEVENS DR

RICHLAND, WA 99354

Origin ID: PSCA

FedEx. Express

J11201104290225

Ship Date: 12JUL11
ActWgt: 65.0 LB
CAD: 5851986/INET3180

Delivery Address Bar Code

Ref # S11FX1 Y000
Invoice #
PO #
Dept #

SHIP TO: (303) 736-1000 BILL THIRD PARTY

KAE YODER
TEST AMERICA
4955 YARROW ST # A100662

ARVADA, CO 80002

WED - 13 JUL A1
PRIORITY OVERNIGHT

TRK# 0201 7972 9398 6347

XH WHHA

80002
CO-US
DEN

50FG2/F556/F5F4

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

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

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