0095875

SAF-RC-073
100-D/DR Burial Grounds & Remaining Sites – Other In-Process
FINAL DATA PACKAGE

COMPLETE COPY OF DATA PACKAGE TO:

No Distribution Required

COMMENTS:

SDG JP0155 SAF RC-073

Rad only Chem only ☑ Rad & Chem

☑ Complete Partial

Waste Site: 118-D-4 (100D-AN-07-083)

RECEIVED
APR 21 2011
EDMC

Analytical Data Package Prepared For

Washington Closure Hanford

Radiochemical Analysis By

TestAmerica

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

Assigned Laboratory Code: TARL

Data Package Contains 30 *Pages*

Report No.: 46219

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.
JP0155	RC-073	J1H077	J1D070451-1	MGNH71AD	9MGNH710	1097258
		J1H077	J1D070451-1	MGNH71AA	9MGNH710	1097259
		J1H077	J1D070451-1	MGNH71AC	9MGNH710	1097260

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

Washington Hanford Closure
2620 Fermi Avenue
Richland, WA 99354

TestAmerica Laboratories, Inc.

April 15, 2011

Attention: Joan Kessner

SAF Number	:	RC-073
Date SDG Closed	:	April 6, 2011
Number of Samples	:	One (1)
Sample Type	:	Other
SDG Number	:	JP0155
Data Deliverable	:	7– Day / Summary

CASE NARRATIVE

I. Introduction

On April 6, 2011 one sample was received at TestAmerica for radiochemical analysis. Upon receipt, the sample was assigned the following laboratory ID number to correspond with the Washington Closure Hanford (WCH) specific ID:

WCH ID#	TARL ID#	MATRIX	DATE OF RECEIPT
J1H077	MGNH7	OTHER	04/06/11

II. Sample Receipt

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

III. Analytical Results/Methodology

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

The requested analyses were:

Gas Proportional Counting
Gross Alpha by method RL-GPC-001
Gross Beta by method RL-GPC-001
Gamma Spectroscopy
Gamma Spec by method RL-GAM-001

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

Gas Proportional Counting

Gross Alpha by method RL-GPC-001:
The LCS, batch blank, sample and sample duplicate (J1H077) results are within contractual requirements.

Gross Beta by method RL-GPC-001:
The LCS, batch blank, sample and sample duplicate (J1H077) results are within contractual requirements.

Gamma Spec by method RL-GAM-001 :
There was insufficient volume for a duplicate. Sample J1H077 was recounted on a different detector for the duplicate (J1H077 DUP). Except as noted, the LCS, batch blank, sample and sample duplicate (J1H077) results are within contractual requirements.

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

Reviewed and approved:

Rhonda Wagar
Project Manager

Drinking Water Method Cross References

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

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

Uncertainty Estimation

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

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

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

Report Definitions

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

Sample Results Summary

Date: 15-Apr-11

TestAmerica TARL

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

Report No. : 46219

SDG No: JP0155

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDC or MDA	CRDL	RPD
1097258 GAMMA_GS									
J1H077									
	MGNH71AD	AMERICIUM 241	1.28E-02 +- 1.9E-02	U	pCi/g		3.45E-02		
		CO-60	-4.84E-04 +- 3.5E-03	U	pCi/g		6.54E-03	5.00E-02	
		CS-137	1.59E-02 +- 6.3E-03		pCi/g		6.26E-03	1.00E-01	
		EU-152	2.02E-03 +- 8.0E-03	U	pCi/g		1.45E-02	1.00E-01	
		EU-154	-1.93E-03 +- 1.0E-02	U	pCi/g		1.85E-02	1.00E-01	
		EU-155	-3.13E-03 +- 7.0E-03	U	pCi/g		1.19E-02	1.00E-01	
J1H077 DUP									
	MGNH71AE	AMERICIUM 241	2.72E-03 +- 8.6E-03	U	pCi/g		1.50E-02		129.8
		CO-60	-5.79E-04 +- 6.4E-03	U	pCi/g		1.16E-02	5.00E-02	-17.9
		CS-137	1.06E-02 +- 7.9E-03	U	pCi/g		1.50E-02	1.00E-01	40.4
		EU-152	-1.69E-03 +- 1.7E-02	U	pCi/g		2.91E-02	1.00E-01	2312.0
		EU-154	-5.56E-03 +- 1.9E-02	U	pCi/g		3.31E-02	1.00E-01	-97.1
		EU-155	3.96E-03 +- 1.2E-02	U	pCi/g		2.09E-02	1.00E-01	1716.8
1097259 9310_ALPHABETA_GPC									
J1H077									
	MGNH71AA	ALPHA	5.84E-01 +- 1.5E+00	U	pCi/g	100%	3.27E+00	1.00E+01	
J1H077 DUP									
	MGNH71AF	ALPHA	1.99E-01 +- 1.6E+00	U	pCi/g	100%	4.00E+00	1.00E+01	98.4
1097260 9310_ALPHABETA_GPC									
J1H077									
	MGNH71AC	BETA	-1.06E+00 +- 2.0E+00	U	pCi/g	100%	5.12E+00	1.50E+01	
J1H077 DUP									
	MGNH71AG	BETA	1.49E+00 +- 2.2E+00	U	pCi/g	100%	4.79E+00	1.50E+01	1193.6

No. of Results: 16

TestAmerica
rptSTLRchSaSummary2 V5.2.12
A2002

RPD - Relative Percent Difference.

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

QC Results Summary

TestAmerica TARL

Ordered by Method, Batch No, QC Type,.

Date: 15-Apr-11

Report No. : 46219

SDG No.: JP0155

Batch Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDC|MDA
GAMMA_GS								
1097258 BLANK QC,								
MGN4G1AA	AMERICIUM 241	-2.40E-02 +- 4.1E-02	U	pCi/g				6.89E-02
	CO-60	-8.14E-03 +- 1.1E-02	U	pCi/g				1.89E-02
	CS-137	-6.71E-03 +- 1.1E-02	U	pCi/g				1.85E-02
	EU-152	3.41E-03 +- 3.6E-02	U	pCi/g				5.38E-02
	EU-154	-1.19E-02 +- 2.9E-02	U	pCi/g				5.11E-02
	EU-155	-1.99E-02 +- 3.1E-02	U	pCi/g				5.16E-02
1097258 LCS,								
MGN4G1AC	CS-137	1.12E+00 +- 1.5E-01		pCi/g		103%	0.0	3.07E-02
9310_ALPHABETA_GPC								
1097259 BLANK QC,								
MGN4K1AA	ALPHA	2.98E-01 +- 1.3E+00	U	pCi/g	100%			2.89E+00
1097259 LCS,								
MGN4K1AC	ALPHA	8.12E+01 +- 1.9E+01		pCi/g	100%	87%	-0.1	2.60E+00
9310_ALPHABETA_GPC								
1097260 BLANK QC,								
MGN4M1AA	BETA	4.78E-01 +- 1.5E+00	U	pCi/g	100%			3.56E+00
1097260 LCS,								
MGN4M1AC	BETA	6.03E+01 +- 9.3E+00		pCi/g	100%	89%	-0.1	3.44E+00

No. of Results: 11

TestAmerica
rptSTLRchQcSummary V5.2.12
A2002

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

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

TestAmerica Laboratories, Inc.

FORM I

SAMPLE RESULTS

Date: 15-Apr-11

Lab Name:	TestAmerica	**SDG:**	JP0155	**Collection Date:**	4/1/2011 9:30:00 AM
Lot-Sample No.:	J1D070451-1	**Report No. :**	46219	**Received Date:**	4/6/2011 3:20:00 PM
Client Sample ID:	J1H077	**COC No. :**	RC-073-133	**Matrix:**	OTHER OTHERSOLID

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: 1097258	GAMMA_GS			**Work Order:**	MGNH71AD		**Report DB ID:**	9MGNH710				
AMERICIUM 241	***1.28E-02***	U	1.9E-02	1.9E-02	3.45E-02	pCi/g		*0.37*	4/11/11 11:41 a		802.1	GER11$1
								(1.4)			g	
CO-60	***-4.84E-04***	U	3.5E-03	3.5E-03	6.54E-03	pCi/g		*-0.07*	4/11/11 11:41 a		802.1	GER11$1
							5.00E-02	*-0.27*			g	
CS-137	***1.59E-02***		6.3E-03	6.3E-03	6.26E-03	pCi/g		*(2.5)*	4/11/11 11:41 a		802.1	GER11$1
							1.00E-01	*(5.1)*			g	
EU-152	***2.02E-03***	U	8.0E-03	8.0E-03	1.45E-02	pCi/g		*0.14*	4/11/11 11:41 a		802.1	GER11$1
							1.00E-01	*0.5*			g	
EU-154	***-1.93E-03***	U	1.0E-02	1.0E-02	1.85E-02	pCi/g		*-0.1*	4/11/11 11:41 a		802.1	GER11$1
							1.00E-01	*-0.38*			g	
EU-155	***-3.13E-03***	U	7.0E-03	7.0E-03	1.19E-02	pCi/g		*-0.26*	4/11/11 11:41 a		802.1	GER11$1
							1.00E-01	*-0.89*			g	
Batch: 1097259	9310_ALPHABETA_GPC			**Work Order:**	MGNH71AA		**Report DB ID:**	9MGNH710				
ALPHA	***5.84E-01***	U	1.5E+00	1.5E+00	3.27E+00	pCi/g	100%	*0.18*	4/15/11 04:23 a		0.0507	GPC10A
						1.11E+00	1.00E+01	*0.77*			g	
Batch: 1097260	9310_ALPHABETA_GPC			**Work Order:**	MGNH71AC		**Report DB ID:**	9MGNH710				
BETA	***-1.06E+00***	U	2.0E+00	2.0E+00	5.12E+00	pCi/g	100%	*-0.21*	4/12/11 03:05 p		0.2005	GPC26A
						2.39E+00	1.50E+01	*-(1.)*			g	

No. of Results: 8 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.12 A2002

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

FORM I

SAMPLE RESULTS

Date: 15-Apr-11

Lab Name:	TestAmerica	SDG:	JP0155	Collection Date:	4/1/2011 9:30:00 AM
Lot-Sample No.:	J1D070451-1	Report No. :	46219	Received Date:	4/6/2011 3:20:00 PM
Client Sample ID:	J1H077	COC No. :	RC-073-133	Matrix:	OTHER OTHERSOLID

Ordered by Client Sample ID. Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector

TestAmerica Laboratories, Inc.

TestAmerica
rptSTLRchSample
V5.2.12 A2002

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

FORM II

Date: 15-Apr-11

DUPLICATE RESULTS

Lab Name:	TestAmerica	SDG:	JP0155	Collection Date:	4/1/2011 9:30:00 AM
Lot-Sample No.:	J1D070451-1	Report No. :	46219	Received Date:	4/6/2011 3:20:00 PM
Client Sample ID:	J1H077 DUP	COC No. :	RC-073-133	Matrix:	OTHER OTHERSOLID

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: 1097258	GAMMA_GS			Work Order:	MGNH71AE	Report DB ID:	MGNH71ER		Orig Sa DB ID: 9MGNH710			
AMERICIUM 241	2.72E-03	U	8.6E-03	8.6E-03	1.50E-02	pCi/g		0.18	4/11/11 03:40 p		802.1	GER14$1
	1.28E-02	U	RPD	129.8				0.63			g	
CO-60	-5.79E-04	U	6.4E-03	6.4E-03	1.16E-02	pCi/g		-0.05	4/11/11 03:40 p		802.1	GER14$1
	-4.84E-04	U	RPD	-17.9		5.00E-02		-0.18			g	
CS-137	1.06E-02	U	7.9E-03	7.9E-03	1.50E-02	pCi/g		0.7	4/11/11 03:40 p		802.1	GER14$1
	1.59E-02		RPD	40.4		1.00E-01		(2.7)			g	
EU-152	-1.69E-03	U	1.7E-02	1.7E-02	2.91E-02	pCi/g		-0.06	4/11/11 03:40 p		802.1	GER14$1
	2.02E-03	U	RPD	2312.0		1.00E-01		-0.2			g	
EU-154	-5.56E-03	U	1.9E-02	1.9E-02	3.31E-02	pCi/g		-0.17	4/11/11 03:40 p		802.1	GER14$1
	-1.93E-03	U	RPD	-97.1		1.00E-01		-0.59			g	
EU-155	3.96E-03	U	1.2E-02	1.2E-02	2.09E-02	pCi/g		0.19	4/11/11 03:40 p		802.1	GER14$1
	-3.13E-03	U	RPD	1716.8		1.00E-01		0.66			g	
Batch: 1097259	9310_ALPHABETA_GPC			Work Order:	MGNH71AF	Report DB ID:	MGNH71FR		Orig Sa DB ID: 9MGNH710			
ALPHA	1.99E-01	U	1.6E+00	1.6E+00	4.00E+00	pCi/g	100%	0.05	4/15/11 04:23 a		0.0506	GPC10B
	5.84E-01	U	RPD	98.4		1.00E+01		0.24			g	
Batch: 1097260	9310_ALPHABETA_GPC			Work Order:	MGNH71AG	Report DB ID:	MGNH71GR		Orig Sa DB ID: 9MGNH710			
BETA	1.49E+00	U	2.2E+00	2.2E+00	4.79E+00	pCi/g	100%	0.31	4/12/11 03:05 p		0.2004	GPC26B
	-1.06E+00	U	RPD	1193.6		1.50E+01		(1.4)			g	

No. of Results: 8 Comments:

TestAmerica
rptSTLRchDupV5.2
.12 A2002

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

TestAmerica Laboratories, Inc.

FORM II
BLANK RESULTS

Date: 15-Apr-11

Lab Name: TestAmerica
Matrix: OTHER

SDG: JP0155
Report No. : 46219

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: 1097258	GAMMA_GS			**Work Order:** MGN4G1AA			**Report DB ID:** MGN4G1AB					
AMERICIUM 241	-2.40E-02	U	4.1E-02	4.1E-02	6.89E-02	pCi/g		-0.35	4/11/11 11:41 a		348.0	GER10$1
								-(1.2)			g	
CO-60	-8.14E-03	U	1.1E-02	1.1E-02	1.89E-02	pCi/g		-0.43	4/11/11 11:41 a		348.0	GER10$1
						5.00E-02		-(1.4)			g	
CS-137	-6.71E-03	U	1.1E-02	1.1E-02	1.85E-02	pCi/g		-0.36	4/11/11 11:41 a		348.0	GER10$1
						1.00E-01		-(1.2)			g	
EU-152	3.41E-03	U	3.6E-02	3.6E-02	5.38E-02	pCi/g		0.06	4/11/11 11:41 a		348.0	GER10$1
						1.00E-01		0.19			g	
EU-154	-1.19E-02	U	2.9E-02	2.9E-02	5.11E-02	pCi/g		-0.23	4/11/11 11:41 a		348.0	GER10$1
						1.00E-01		-0.81			g	
EU-155	-1.99E-02	U	3.1E-02	3.1E-02	5.16E-02	pCi/g		-0.39	4/11/11 11:41 a		348.0	GER10$1
						1.00E-01		-(1.3)			g	
Batch: 1097259	9310_ALPHABETA_GPC			**Work Order:** MGN4K1AA			**Report DB ID:** MGN4K1AB					
ALPHA	2.98E-01	U	1.3E+00	1.3E+00	2.89E+00	pCi/g	100%	0.1	4/15/11 04:23 a		0.0503	GPC10C
					1.18E+00	1.00E+01		0.45			g	
Batch: 1097260	9310_ALPHABETA_GPC			**Work Order:** MGN4M1AA			**Report DB ID:** MGN4M1AB					
BETA	4.78E-01	U	1.5E+00	1.5E+00	3.56E+00	pCi/g	100%	0.13	4/12/11 03:05 p		0.2003	GPC26C
					1.64E+00	1.50E+01		0.62			g	

No. of Results: 8 **Comments:**

TestAmerica
rptSTLRchBlank
V5.2.12 A2002

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

FORM II

LCS RESULTS

Date: 15-Apr-11

Lab Name: TestAmerica

Matrix: OTHER

SDG: JP0155

Report No. : 46219

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: 1097258	GAMMA_GS			**Work Order:**	MGN4G1AC		**Report DB ID:**	MGN4G1CS					
CS-137	1.12E+00		1.5E-01	1.5E-01	3.07E-02	pCi/g		1.08E+00	1.1E-02	103%	4/11/11 03:41 p	350.1	GER10$1
							Rec Limits:	70	130	0.0		g	
Batch: 1097259	9310_ALPHABETA_GPC			**Work Order:**	MGN4K1AC		**Report DB ID:**	MGN4K1CS					
ALPHA	8.12E+01		8.3E+00	1.9E+01	2.60E+00	pCi/g	100%	9.29E+01	9.4E-01	87%	4/15/11 04:23 a	0.05	GPC10D
							Rec Limits:	70	130	-0.1		g	
Batch: 1097260	9310_ALPHABETA_GPC			**Work Order:**	MGN4M1AC		**Report DB ID:**	MGN4M1CS					
BETA	6.03E+01		5.0E+00	9.3E+00	3.44E+00	pCi/g	100%	6.79E+01	2.6E+00	89%	4/12/11 03:05 p	0.2007	GPC26D
							Rec Limits:	70	130	-0.1		g	

No. of Results: 3 **Comments:**

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

rptSTLRchLcs
V5.2.12 A2002

TestAmerica

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

4/15/2011 9:31:45 AM

Lot No., Due Date: J1D070451; 04/13/2011
Client, Site: 127642; S00N063A00 HANFORD
QC Batch No., Method Test: 1097259; RALPHA-A Alpha by GPC-Am
SDG, Matrix: JP0155; OTHER

1.0 COC

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

2.0 QC Batch

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

3.0 QC & Samples

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

4.0 Raw Data

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

5.0 Other

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

6.0 Comments on any No response:

Thomas D M

First Level _____ **Date** 4/15/11

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 1097259

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

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

Second Level Review: Rhonda [illegible] Date: 4/15/11

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

4/13/2011 3:06:28 PM

Lot No., Due Date: J1D070451; 04/13/2011
Client, Site: 127642; S00N063A00 HANFORD
QC Batch No., Method Test: 1097260; RBETA-SR Beta by GPC-Sr/Y
SDG, Matrix: JP0155; OTHER

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

Thomas D M

First Level _____ **Date** 4/13/11

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 1097260

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

Comments on any "No" response: CRDL = 15.0 pCi/g

Second Level Review: Rhonda [illegible] Date: 4/13/11

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

TestAmerica

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

4/12/2011 2:34:47 PM

Lot No., Due Date: J1D070451; 04/13/2011
Client, Site: 127642; S00N063A00 HANFORD
QC Batch No., Method Test: 1097258; RGAMMA Gamma by GER
SDG, Matrix: JP0155; OTHER

1.0 COC

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

2.0 QC Batch

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

3.0 QC & Samples

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

4.0 Raw Data

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

5.0 Other

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

6.0 Comments on any No response:

First Level [signature] Date 4-12-11

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 1097258

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

Comments on any "No" response: CRDL = 0.1 pCi/g

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

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

TestAmerica Laboratories, Inc.

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Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-073-133	Page 1 of 1
Collector: Blankingship / Lucas	Company Contact: Joan Kessner; Telephone No.: 375-4688	Project Coordinator: KESSNER, JH	Price Code: ~~9L~~ 9B JED 4/1/11; Data Turnaround: ~~21~~ 7 Days
Project Designation: 100-D/DR Burial Grounds & Remaining Sites - Other Quick	Sampling Location: 118-D-4 (100D-AN-07-083)	SAF No.: RC-073	
Ice Chest No.: NA	Field Logbook No.: EL-1657; COA: R118D42600	Method of Shipment: Hand Deliver	
Shipped To: TestAmerica Incorporated, Richland ~~RCF~~ JEB 4-6-11	Offsite Property No.: NA	Bill of Lading/Air Bill No.: NA	

POSSIBLE SAMPLE HAZARDS/REMARKS

Radioactive LOOT Limits JEB 4-6-11

SDG#JP0155 Lot#J1D070451 Due 4.13.11

Special Handling and/or Storage

~~Cool 4 Deg C~~ JED 4/1/11

NONE JEB 4-6-11

Preservation	Cool 4C	None	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	None	None	None
Type of Container	G/P	G	G/P	G	aG	aG	aG	G/P	G/P	G P
No. of Container(s)	1	1	1	1	1	1	1	1	~~4~~ 3 JED 4/1/11	1
Volume	60mL	125mL	60mL	60mL	60mL	60mL	125mL	500mL	60mL	~~1L~~ 500mL JED 4/1/11
SAMPLE ANALYSIS	See item (1) in Special Instructions.	See item (2) in Special Instructions.	IC Anions - 9056 Modified; NO2/NO3 - 353.1; pH - 9045	Total Cyanide - 9010; Sulfides - 9030	Semi-VOA - 8270A (TCL)	PCBs - 8082	TCLP Semi-VOA - 1311/8270A	See item (3) in Special Instructions.	Gross Alpha & Gross Beta	RCF GEA Shipping Screen JEB 4-6-11

Sample No.	Matrix *	Sample Date	Sample Time	RCF		1/28/11						
J1H077	OTHER	4/1/11	0930	27498	JED	11379		MGNH7			✓	✓	✓

CHAIN OF POSSESSION	Date/Time	Sign/Print Names	Date/Time
Relinquished By/Removed From: K. Lucas Kevin Lucas	4-1-11 1330	Received By/Stored In: JEDebrigne JEDebrigne	1330 4/1/11
Relinquished By/Removed From: J. E. Bell	0945 4-4-11	Received By/Stored In: RCF M. K. Rodriguez	4-4-11/0945
Relinquished By/Removed From: RCF M. K. Rodriguez	4-5-11/0840	Received By/Stored In: J. E. Bell	0840 4-5-11
Relinquished By/Removed From: J. E. Bell	1520 4-6-11	Received By/Stored In: TALR Lucas Velazquez	1520 4/6/11
Relinquished By/Removed From		Received By/Stored In	
Relinquished By/Removed From		Received By/Stored In	

SPECIAL INSTRUCTIONS

~~Screen for oxidizer with Spilfyter test strip.~~ JED 4/1/11

(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) {Mercury}

(2) Metals by ICP (TCLP) - 1311/6010 {Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver}; Mercury (TCLP) - 1311/7470 {Mercury}

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

*J. Debrigne unavailable to relinquish samples 4-4-11. JEB 4-4-11

JP0155

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 JC DATE 4/6/11

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

WCH-EE-011

Sampler unavailable to remove samples from controlled storage. Shipper removed samples from storage location taking custody of samples for shipment to lab.

Apex™ Non-Rea

Analysis Report for RCF27498

J1H077 SAF:RC-073 100D/118-D-4 (100D-AN-07-083)

GAMMA SPECTRUM ANALYSIS

Sample Identification	: RCF27498
Sample Description	: J1H077 SAF:RC-073 100D/118-D-4 (100D-AN-07-083)
Sample Type	: Non Standard Geometry
Sample Size	: 1.137E+03 grams
Facility	: Default
Sample Taken On	: 4/1/2011 9:30:00AM
Acquisition Started	: 4/4/2011 2:26:59PM
Procedure	: Non Standard Geometry
Operator	: RCT
Detector Name	: GEA2703
Geometry	: Non Standard Geometry
Live Time	: 3600.0 seconds
Real Time	: 3601.6 seconds
Dead Time	: 0.04 %
Peak Locate Threshold	: 3.00
Peak Locate Range (in channels)	: 40 - 4096
Peak Area Range (in channels)	: 40 - 4096
Identification Energy Tolerance	: 1.000 keV
Energy Calibration Used Done On	: 2/2/2011
Efficiency Calibration Used Done On	: 2/2/2011
Efficiency Calibration Description	: GEA2703 NSTD EC 020211 SN82751A-238
Sample Number	: 13183

"Qualitative Only"

INTERFERENCE CORRECTED REPORT

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/grams)	Wt mean Activity Uncertainty	Comments
K-40	0.954	1.03E-01	5.56E-02	

J1D070451

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 4·6·11 1520 GM Screen Result (out) .3 (in) .8 Initials [CK]

Client: WCH SDG #: JP0155 NA [ ] SAF #: RC-073 NA [ ]

Work Order Number: J1D070451 Chain of Custody # RC-073-133

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

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

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

Item 6 through 10 for samples. Initial appropriate response.

6. Number of samples in shipping container (Each sample may contain multiple bottles): 1 sample @ 1X500 MLP
7. Sample holding times exceeded? NA [ ] Yes [ ] No [CK]
8. Samples have:
   ___ tape
   CK custody seals (other)
   ___ hazard labels
   CK appropriate sample labels
9. Samples:
   CK are in good condition
   ___ are broken
   ___ are leaking
   ___ have air bubbles (Only for samples requiring no head space)
10. Sample pH appropriate for analysis requested Yes [ ] No [ ] N/A [CK] (Note discrepancies in #13)
    (If acidification necessary, then document sample ID, initial pH, amount of HNO_3 added and pH after addition)

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

See other side for additional comments

Sample Custodian: Cameron J. Knapp Date: 4·6·11 1520

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

[CK] No action necessary; process as is

Project Manager Whitney Pitari Date 4/7/11

LS-023, Rev. 12, 10/10

TestAmerica Laboratories, Inc.

4/12/2011 12:22:53 PM

Sample Preparation/Analysis

Balance Id:1117411003

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

AY Gross Alpha Prp PRP003/GPC007
S7 Gross Alpha by GPC using Am-241 curve
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 04/13/2011

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Batch: 1097259 OTHER pCi/g PM, Quote: RW2, 27038

SEQ Batch, Test: None All Tests: 1097258 AXTA, 1097259 AYS7, 1097260 BBS8,

Prep Tech: ~~SannohS,Bockd~~ BaughB

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 MGNH7-1-AA J1D070451-1-SAMP 04/01/2011 09:30	AmtRec: 1X500MLP	0.0507g,in	#Containers: 1		50.7	100	1A Scr:	0514 Alpha:	4/15/11 S Beta:	
2 MGNH7-1-AF-X J1D070451-1-DUP 04/01/2011 09:30	AmtRec: 1X500MLP	0.0506g,in	#Containers: 1		50.6		1B Scr:	Alpha:	Beta:	
3 MGN4K-1-AA-B J1D070000-259-BLK 04/07/2011 12:05 pd	AmtRec:	0.0503g,in	#Containers: 1		1.3721g 1.3713g 0.8mg		1C Scr:	Alpha:	Beta:	
4 MGN4K-1-AC-C J1D070000-259-LCS 04/07/2011 12:05 pd	AmtRec:	0.05g,in	ASD5095 01/25/11,pd 04/04/05 r #Containers: 1		1.4091g 1.4080g 1.1mg		1D Scr:	Alpha:	Beta:	

Comments: ~~MGNH7-SAMP "ISV: Recount DUP on a different detector."~~ PJB 4-12-11.

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

MGNH71AA-SAMP Constituent List:

ALPHA	RDL:1.00E+01	pCi/g	LCL:	UCL:	RPD:

MGN4K1AA-BLK:

ALPHA	RDL:1.00E+01	pCi/g	LCL:	UCL:	RPD:

MGN4K1AC-LCS:

Am-241	RDL:	pCi/g	LCL:70	UCL:130	RPD:35

Sample Preparation/Analysis

AY Gross Alpha Prp PRP003/GPC007
S7 Gross Alpha by GPC using Am-241 curve
5I CLIENT: HANFORD

Balance Id:1117411003
Pipet #: _____
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech: ,BockJ

AnalyDueDate: 04/13/2011

Batch: 1097259 pCi/g
SEQ Batch, Test: None

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

```
MGNH71AA-SAMP Calc Info:
    Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
MGN4K1AA-BLK:
    Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
MGN4K1AC-LCS:
    Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
```


TestAmerica Laboratories, Inc.

4/15/2011 9:31:14 AM

ICOC Fraction Transfer/Status Report

ByDate: 4/15/2010, 4/20/2011, Batch: '1097259', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
1097259						
AC		Rev1C	**BouslaughP**	4/7/2011 3:08:54 PM		
SC			Maucieris	IsBatched	4/7/2011 12:10:25 PM	ICOC _RADCALC v4.8.49
SC			BouslaughP	Prep1C	4/7/2011 3:08:54 PM	RL-PRP-003 REVISION 1
SC			BockJ	InPrep	4/12/2011 12:21:06 PM	RL-PRP-004 REVISION 1
SC			BockJ	Prep2C	4/12/2011 12:47:40 PM	RL-GPC-007 REVISION 1
SC			ClarkR	InCnt1	4/12/2011 1:05:37 PM	RL-CI-006 REVISION 1
SC			BlackCL	CalcC	4/15/2011 8:19:42 AM	RL-CI-006 REVISION 1
SC			mcginnist	Rev1C	4/15/2011 9:31:10 AM	RL-DR-001 Rev 2
AC			**BockJ**	4/12/2011 12:21:06		
AC			**BockJ**	4/12/2011 12:47:40		
AC			**ClarkR**	4/12/2011 1:05:37 PM		
AC			**BlackCL**	4/15/2011 8:19:42		
AC			**mcginnist**	4/15/2011 9:31:10		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

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Grp Rec Cnt: 6

ICOCFractions v4.8.44

4/12/2011 12:28:24 PM

Sample Preparation/Analysis

Balance Id:1120421763,1117411003

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

BB Gross Beta Prp PRP003/GPC007
S8 Gross Beta by GPC using Sr/Y-90 curve
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 04/13/2011

Sep1 DT/Tm Tech:

Batch: 1097260 OTHER pCi/g PM, Quote: RW2, 27038

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ~~Bock~~ Baughb

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 MGNH7-1-AC J1D070451-1-SAMP 04/01/2011 09:30	AmtRec: 1X500MLP	0.2005g,in #Containers: 1			200.5	60	21A Scr:	1529 Alpha:	4/12/11 m Beta:	
2 MGNH7-1-AG-X J1D070451-1-DUP 04/01/2011 09:30	AmtRec: 1X500MLP	0.2004g,in #Containers: 1			200.4		26B Scr:	Alpha:	Beta:	
3 MGN4M-1-AA-B J1D070000-260-BLK 04/07/2011 12:05 pd	AmtRec:	0.2003g,in #Containers: 1			1.39339 1.39339 0mg		26C Scr:	Alpha:	Beta:	
4 MGN4M-1-AC-C J1D070000-260-LCS 04/07/2011 12:05 pd	AmtRec:	0.2007g,in #Containers: 1	BESD1721 03/31/11,pd 10/01/01 c		1.38739 1.38719 0.2mg		26D Scr:	Alpha:	Beta:	

Comments: MGNH7-SAMP ""

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

MGNH71AC-SAMP Constituent List:

BETA	RDL:1.50E+01	pCi/g	LCL:	UCL:	RPD:

MGN4M1AA-BLK:

BETA	RDL:1.50E+01	pCi/g	LCL:	UCL:	RPD:

MGN4M1AC-LCS:

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

TestAmerica Laboratories, Inc.

Sample Preparation/Analysis

BB Gross Beta Prp PRP003/GPC007
S8 Gross Beta by GPC using Sr/Y-90 curve
5I CLIENT: HANFORD

Balance Id:1120421763,1117411003
Pipet #: _____

AnalyDueDate: 04/13/2011

Sep1 DT/Tm Tech:

Batch: 1097260 pCi/g

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

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:

```
MGNH71AC-SAMP Calc Info:
    Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
MGN4M1AA-BLK:
    Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
MGN4M1AC-LCS:
    Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
```


TestAmerica Laboratories, Inc.

4/13/2011 3:05:45 PM

ICOC Fraction Transfer/Status Report

ByDate: 4/13/2010, 4/18/2011, Batch: '1097260', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
1097260						
AC		Rev1C	**BouslaughP**	4/7/2011 3:09:06 PM		
SC			Maucieris	IsBatched	4/7/2011 12:10:29 PM	ICOC_RADCALC v4.8.49
SC			BouslaughP	Prep1C	4/7/2011 3:09:06 PM	RL-PRP-003 REVISION 1
SC			BockJ	InPrep	4/12/2011 12:26:19 PM	RL-PRP-004 REVISION 1
SC			BockJ	Prep2C	4/12/2011 12:47:51 PM	RL-GPC-007 REVISION 1
SC			ClarkR	InCnt1	4/12/2011 1:09:03 PM	RL-CI-006 REVISION 1
SC			DawkinsO	CalcC	4/13/2011 12:33:10 AM	RL-CI-006 REVISION 1
SC			mcginnist	Rev1C	4/13/2011 3:05:39 PM	RL-DR-001 Rev 2
AC			**BockJ**	4/12/2011 12:26:19		
AC			**BockJ**	4/12/2011 12:47:51		
AC			**ClarkR**	4/12/2011 1:09:03 PM		
AC			**DawkinsO**	4/13/2011 12:33:10		
AC			**mcginnist**	4/13/2011 3:05:39 PM		

AC: Accepting Entry; SC: Status Change

WCH OTHER [NuclBR]TRL.NLB

4/7/2011 4:24:54 PM

Sample Preparation/Analysis

Balance Id:1120421763

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

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

Pipet #: _____

AnalyDueDate: 04/13/2011

Sep1 DT/Tm Tech:

Batch: 1097258 OTHER pCi/g PM, Quote: RW2, 27038

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: SannohS

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MGNH7-1-AD J1D070451-1-SAMP 04/01/2011 09:30			802.10g,in AmtRec: 1X500MLP	802.10g #Containers: 1		S200	200min	G11 Scr:	1501 Alpha:	4/8/11 m Beta:	
2 MGNH7-1-AE-X J1D070451-1-DUP 04/01/2011 09:30			AmtRec: 1X500MLP	#Containers: 1				G14 Scr:	1900 Alpha:	4/6/11 m Beta:	
3 MGN4G-1-AA-B J1D070000-258-BLK 04/07/2011 12:05 pd			348.00g,in AmtRec:	348.00g #Containers: 1				G10 Scr:	1501 Alpha:	4/11/11 m Beta:	
4 MGN4G-1-AC-C J1D070000-258-LCS 04/07/2011 12:05 pd			350.10g,in AmtRec:	350.10g #Containers: 1	QC20009 08/04/09,pd 09/01/09,r			G10 Scr:	1901 Alpha:	4/11/11 m Beta:	

Comments: MGNH7-SAMP "ISV. Recount DUP on a different detector."

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

MGNH71AD-SAMP Constituent List:

MGN4G1AA-BLK:

MGN4G1AC-LCS:

TestAmerica Laboratories, Inc.

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Sample Preparation/Analysis

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

Balance Id:1120373922
Pipet #: _____

AnalyDueDate: 04/13/2011

Sep1 DT/Tm Tech:

Batch: 1097258 pCi/g
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,SannohS

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

```
MGNH71AD-SAMP Calc Info:
    Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
MGN4G1AA-BLK:
    Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
MGN4G1AC-LCS:
    Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
```


TestAmerica Laboratories, Inc.

4/12/2011 2:32:39 PM

ICOC Fraction Transfer/Status Report

ByDate: 4/12/2010, 4/17/2011, Batch: '1097258', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus		Accepting		Comments
1097258						
AC		**Rev1C**	**SannohS**	4/7/2011 2:26:30 PM		
SC			Maucieris	IsBatched	4/7/2011 12:10:20 PM	ICOC _RADCALC v4.8.49
SC			SannohS	InPrep	4/7/2011 2:26:30 PM	RL-GAM-001 REVISION 1
SC			DawkinsO	InCnt1	4/7/2011 5:09:18 PM	RL-CI-007 REVISION 1
SC			DawkinsO	CalcC	4/11/2011 11:21:37 PM	RL-CI-007 REVISION 1
SC			nortonj	Rev1C	4/12/2011 2:32:29 PM	RL-DR-001 Rev 2
AC			**DawkinsO**	4/7/2011 5:09:18 PM		
AC			**DawkinsO**	4/11/2011 11:21:37		
AC			**nortonj**	4/12/2011 2:32:29 PM		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

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Grp Rec Cnt: 4

ICOCFractions v4.8.44

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 280-14330-1

SDG Number: JP0155

Job Description: SAF# RC-073

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

Attention: Joan H Kessner

Approved for release.
Kae E Yoder
Project Manager II
4/14/2011 2:49 PM

Kae E Yoder
Project Manager II
kae.yoder@testamericainc.com
04/14/2011

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: 280-14330-1

SDG #: JP0155
SAF#: RC-073

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

CLIENT ID	LAB ID	ANALYSES REQUESTED	ANALYSES PERFORMED
J1H077	280-14330-1	6010/7471/1311-6010-7470/9045/9010/ 9030/8270A/8082/1311-8270A/Oxidizer test	6010B/7471A/1311-6010B-7470A/9045C/9012A/ 9034/8270C/8082/1311-8270C/Oxidizer test

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 sample was received on 4/7/2011; the sample arrived in good condition, properly preserved and on ice. The temperatures of the coolers at receipt were 5.6 C and 3.4 C.

The laboratory noted that sample J1H077 had to be run through the jar crusher prior to any aliquoting or extraction.

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

TCLP SEMIVOLATILES - SW846 1311/8270C
Low levels of 1,4-Dichlorobenzene and 3-Methylphenol & 4-Methylphenol are present in the method blank associated with batch 280-61480. Because the concentrations in the method blank are not present at levels greater than the reporting limits, corrective action is deemed unnecessary. Associated sample results present above the MDL and/or RL have been flagged with a "B".

No other anomalies were encountered.

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

TOTAL METALS - SW846 6010B/7471A
Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the methods. Due to high constituent concentration, the Lead analysis of sample J1H077 had to be performed at a dilution. The reporting limit has been adjusted relative to the dilution required.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the methods. Sample J1H077 required a 10X dilution prior to the analysis of Silicon to minimize the interference caused by the high Lead concentration. The reporting limit has been adjusted relative to the dilution required.

Lead is present at a level greater than the reporting limit in the method blank associated with batch 280-61308. As the associated sample amount is ten times greater than the method blank concentration, corrective action is deemed unnecessary.

It can be noted that the sample amount was greater than four times the spike amount for Aluminum, Antimony, Arsenic and Lead in the Matrix Spike performed on sample J1H077; therefore, control limits are not applicable.

Mercury was recovered outside the control limits in the Matrix Spike performed on sample J1H077, and the associated sample result has been flagged "N". There is no indication that the analytical system was operating out of control, and method accuracy has been verified by the acceptable LCS analysis data; therefore, corrective action is deemed unnecessary.

No other anomalies were encountered.

TCLP METALS - SW846 1311/6010B/7470A

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the methods. Due to high constituent concentration, the Lead analysis of sample J1H077 had to be performed at a dilution. The reporting limit has been adjusted relative to the dilution required.

Lead is present at a level greater than the reporting limit in the method blank associated with batch 280-61551. As the associated sample amount is ten times greater than the method blank concentration, corrective action is deemed unnecessary.

Low levels of Barium and Silver are present in the method blank associated with batch 280-61551. Because the concentrations in the method blank are not present at levels greater than the reporting limits, corrective action is deemed unnecessary.

It can be noted that the sample amount was greater than four times the spike amount for Lead in the Matrix Spike performed on sample J1H077; therefore, control limits are not applicable.

No other anomalies were encountered.

GENERAL CHEMISTRY - SW846 9012A - TOTAL CYANIDE

The Matrix Spike performed on sample J1H077 exhibited the percent recovery outside the control limits, and the associated sample result has been flagged "N". There is no indication that the analytical system was operating out of control, and method accuracy has been verified by the acceptable LCS analysis data; therefore, corrective action is deemed unnecessary.

No other anomalies were encountered.

GENERAL CHEMISTRY - SW846 9034 - SULFIDE

No anomalies were encountered.

GENERAL CHEMISTRY - SW846 9045C - PH

No anomalies were encountered.

DATA REPORTING QUALIFIERS

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

Lab Section	Qualifier	Description
GC/MS Semi VOA		
	B	Analyte was found in the associated method blank as well as in the sample.
	U	Analyzed for but not detected.
	J	Indicates an Estimated Value for TICs
	N	Presumptive evidence of material.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
GC Semi VOA		
	U	Analyzed for but not detected.
Metals		
	U	Analyzed for but not detected.
	B	Estimated result. Result is less than the RL, but greater than MDL
	4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
	N	Recovery exceeds upper or lower control limits
	C	The analyte was detected in both the sample and the assoicated QC blank, and the sample concentration was </= 5X the blank concentration.
General Chemistry		
	U	Analyzed for but not detected.
	B	Estimated result. Result is less than the RL, but greater than MDL
	N	MS, MSD: Spike recovery exceeds upper or lower control limits.

METHOD SUMMARY

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Semivolatile Organic Compounds (GC/MS)	TAL DEN	SW846 8270C	
Ultrasonic Extraction	TAL DEN		SW846 3550C
TCLP Semivolatiles	TAL DEN	SW846 8270C	
TCLP Extraction	TAL DEN		SW846 1311
Liquid-Liquid Extraction (Separatory Funnel)	TAL DEN		SW846 3510C
Polychlorinated Biphenyls (PCBs) by Gas Chromatography	TAL DEN	SW846 8082	
Ultrasonic Extraction	TAL DEN		SW846 3550C
Metals (ICP)	TAL DEN	SW846 6010B	
Preparation, Metals	TAL DEN		SW846 3050B
TCLP Metals (ICP)	TAL DEN	SW846 6010B	
TCLP Extraction	TAL DEN		SW846 1311
Preparation, Total Metals	TAL DEN		SW846 3010A
TCLP Mercury	TAL DEN	SW846 7470A	
TCLP Extraction	TAL DEN		SW846 1311
Preparation, Mercury	TAL DEN		SW846 7470A
Mercury (CVAA)	TAL DEN	SW846 7471A	
Preparation, Mercury	TAL DEN		SW846 7471A
Total Cyanide (Automated Colorimetric]	TAL DEN	SW846 9012A	
Cyanide, Total and/or Amenable, Distillation	TAL DEN		SW846 9012A
Sulfide, Acid Soluble and Insoluble (Titrimetric)	TAL DEN	SW846 9034	
Sulfide, Distillation (Acid Soluble and Insoluble)	TAL DEN		SW846 9030B
pH	TAL DEN	SW846 9045C	
Deionized Water Leaching Procedure	TAL DEN		ASTM DI Leach
ASTM D-2216	TAL DEN	ASTM D-2216	

Lab References:

TAL DEN = TestAmerica Denver

Method References:

ASTM = ASTM International

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: 280-14330-1
Sdg Number: JP0155

Method	Analyst	Analyst ID
SW846 8270C	Kiekel, Daniel C	DCK
SW846 8270C	Tinkham, Sarah A	SAT
SW846 8082	Pavlakovich, Adam M	AMP
SW846 6010B	Harre, John K	JKH
SW846 7470A	Stoltz, Katie	KS
SW846 7471A	Stoltz, Katie	KS
SW846 9012A	Kilker, Lorelei M	LMK
SW846 9034	Plumb, Paul M	PMP
SW846 9045C	Taylor, Juli M	JMT
ASTM D-2216	Berry III, Paul B	PBB

SAMPLE SUMMARY

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-14330-1	J1H077	Solid	04/01/2011 0930	04/07/2011 0930

SAMPLE RESULTS

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

Client Sample ID: **J1H077**

Lab Sample ID: 280-14330-1
Client Matrix: Solid
% Moisture: 0.0

Date Sampled: 04/01/2011 0930
Date Received: 04/07/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-61698	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-61271	Lab File ID:	Y9413.D
Dilution:	1.0			Initial Weight/Volume:	33.0 g
Analysis Date:	04/08/2011 1959			Final Weight/Volume:	1000 uL
Prep Date:	04/07/2011 2315			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		9.4	U	9.4	300
Acenaphthylene		15	U	15	300
Anthracene		15	U	15	300
Benzo[a]anthracene		18	U	18	300
Benzo[a]pyrene		18	U	18	300
Benzo[b]fluoranthene		24	U	24	300
Benzo[ghi]perylene		15	U	15	300
Benzo[k]fluoranthene		36	U	36	300
Bis(2-chloroethoxy)methane		21	U	21	300
Bis(2-chloroethyl)ether		15	U	15	300
bis (2-chloroisopropyl) ether		21	U	21	300
Bis(2-ethylhexyl) phthalate		76	J	42	300
4-Bromophenyl phenyl ether		17	U	17	300
Butyl benzyl phthalate		39	U	39	300
Carbazole		33	U	33	300
4-Chloroaniline		74	U	74	300
4-Chloro-3-methylphenol		60	U	60	300
2-Chloronaphthalene		9.1	U	9.1	300
2-Chlorophenol		19	U	19	300
4-Chlorophenyl phenyl ether		19	U	19	300
Chrysene		25	U	25	300
Dibenz(a,h)anthracene		17	U	17	300
Dibenzofuran		18	U	18	300
1,2-Dichlorobenzene		20	U	20	300
1,3-Dichlorobenzene		11	U	11	300
1,4-Dichlorobenzene		12	U	12	300
3,3'-Dichlorobenzidine		82	U	82	600
2,4-Dichlorophenol		9.1	U	9.1	300
Diethyl phthalate		24	U	24	300
2,4-Dimethylphenol		60	U	60	300
Dimethyl phthalate		21	U	21	300
Di-n-butyl phthalate		26	U	26	300
4,6-Dinitro-2-methylphenol		300	U	300	600
2,4-Dinitrophenol		300	U	300	750
2,4-Dinitrotoluene		60	U	60	300
2,6-Dinitrotoluene		25	U	25	300
Di-n-octyl phthalate		13	U	13	300
Fluoranthene		33	U	33	300
Fluorene		16	U	16	300
Hexachlorobenzene		26	U	26	300
Hexachlorobutadiene		9.1	U	9.1	300
Hexachlorocyclopentadiene		45	U	45	300
Hexachloroethane		19	U	19	300
Indeno[1,2,3-cd]pyrene		20	U	20	300
Isophorone		15	U	15	300
2-Methylnaphthalene		17	U	17	300

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

Client Sample ID: **J1H077**

Lab Sample ID: 280-14330-1
Client Matrix: Solid

% Moisture: 0.0

Date Sampled: 04/01/2011 0930
Date Received: 04/07/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-61698	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-61271	Lab File ID:	Y9413.D
Dilution:	1.0			Initial Weight/Volume:	33.0 g
Analysis Date:	04/08/2011 1959			Final Weight/Volume:	1000 uL
Prep Date:	04/07/2011 2315			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2-Methylphenol		12	U	12	300
3 & 4 Methylphenol		30	U	30	300
Naphthalene		28	U	28	300
2-Nitroaniline		45	U	45	300
3-Nitroaniline		66	U	66	300
4-Nitroaniline		66	U	66	300
Nitrobenzene		20	U	20	300
2-Nitrophenol		9.1	U	9.1	300
4-Nitrophenol		88	U	88	600
N-Nitrosodi-n-propylamine		28	U	28	300
N-Nitrosodiphenylamine		19	U	19	300
Pentachlorophenol		300	U	300	600
Phenanthrene		15	U	15	300
Phenol		16	U	16	300
Pyrene		11	U	11	300
1,2,4-Trichlorobenzene		25	U	25	300
2,4,5-Trichlorophenol		9.1	U	9.1	300
2,4,6-Trichlorophenol		9.1	U	9.1	300

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	69		50 - 120
2-Fluorophenol	77		53 - 120
Nitrobenzene-d5	73		50 - 120
Phenol-d5	79		52 - 120
Terphenyl-d14	104		55 - 120
2,4,6-Tribromophenol	82		51 - 120

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

Client Sample ID: **J1H077**

Lab Sample ID: 280-14330-1
Client Matrix: Solid % Moisture: 0.0

Date Sampled: 04/01/2011 0930
Date Received: 04/07/2011 0930

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-61698	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-61271	Lab File ID:	Y9413.D
Dilution:	1.0			Initial Weight/Volume:	33.0 g
Analysis Date:	04/08/2011 1959			Final Weight/Volume:	1000 uL
Prep Date:	04/07/2011 2315			Injection Volume:	0.5 uL

Tentatively Identified Compounds **Number TIC's Found:** 7

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	2.68	1200	N J
	Unknown	2.90	140	N J
	Unknown	2.95	180	N J
2216-30-0	Heptane, 2,5-dimethyl-	3.08	200	N J
	Unknown	3.16	2700	N J
100-51-6	Benzyl alcohol	4.78	16	J N
584-84-9	Benzene, 2,4-diisocyanato-1-methyl-	6.81	1100	N J

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

Client Sample ID: **J1H077**

Lab Sample ID: 280-14330-1
Client Matrix: Solid

Date Sampled: 04/01/2011 0930
Date Received: 04/07/2011 0930

8270C TCLP Semivolatiles-TCLP

Analysis Method:	8270C	Analysis Batch:	280-61778	Instrument ID:	MSS_G6
Prep Method:	3510C	Prep Batch:	280-61480	Lab File ID:	G6_1992.D
Dilution:	1.0	Leach Batch:	280-61288	Initial Weight/Volume:	202 mL
Analysis Date:	04/11/2011 1744			Final Weight/Volume:	1000 uL
Prep Date:	04/08/2011 1924			Injection Volume:	0.5 uL
Leach Date:	04/07/2011 2305				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
2-Methylphenol		0.0049	U	0.0049	0.050
3-Methylphenol & 4-Methylphenol		0.0018	J B	0.0012	0.050
1,4-Dichlorobenzene		0.0016	U	0.0016	0.020
2,4-Dinitrotoluene		0.0082	U	0.0082	0.050
Hexachlorobenzene		0.0033	U	0.0033	0.050
Hexachlorobutadiene		0.016	U	0.016	0.050
Hexachloroethane		0.010	U	0.010	0.050
Nitrobenzene		0.0040	U	0.0040	0.050
Pentachlorophenol		0.0050	U	0.0050	0.25
Pyridine		0.0056	U	0.0056	0.099
2,4,6-Trichlorophenol		0.0014	U	0.0014	0.025
2,4,5-Trichlorophenol		0.0022	U	0.0022	0.050

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	71		49 - 120
2-Fluorophenol	80		50 - 120
Phenol-d5	81		47 - 120
2,4,6-Tribromophenol	96		51 - 120
Terphenyl-d14	98		56 - 120
Nitrobenzene-d5	91		51 - 120

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

Client Sample ID: **J1H077**

Lab Sample ID: 280-14330-1
Client Matrix: Solid
% Moisture: 0.0

Date Sampled: 04/01/2011 0930
Date Received: 04/07/2011 0930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-61765	Instrument ID:	GCS_P3
Prep Method:	3550C	Prep Batch:	280-61281	Initial Weight/Volume:	30.9 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	04/09/2011 1204			Injection Volume:	1 uL
Prep Date:	04/07/2011 2350			Result Type:	PRIMARY

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

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	94		59 - 130
Tetrachloro-m-xylene	90		53 - 128

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

Client Sample ID: **J1H077**

Lab Sample ID: 280-14330-1
Client Matrix: Solid
% Moisture: 0.0

Date Sampled: 04/01/2011 0930
Date Received: 04/07/2011 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-61747	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-61308	Lab File ID:	25A1041111.asc
Dilution:	1.0			Initial Weight/Volume:	1.11 g
Analysis Date:	04/11/2011 1209			Final Weight/Volume:	100 mL
Prep Date:	04/08/2011 1430				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		5100		1.4	4.5
Antimony		612		0.34	0.54
Arsenic		2120		0.59	0.90
Barium		0.69		0.068	0.45
Beryllium		0.030	U	0.030	0.18
Boron		0.88	U	0.88	1.8
Cadmium		12.7		0.037	0.18
Calcium		12.7	U	12.7	45.0
Chromium		0.56		0.052	0.18
Cobalt		0.090	U	0.090	0.90
Copper		2.3		0.20	0.90
Iron		33.8		3.4	4.5
Magnesium		3.3	U	3.3	18.0
Manganese		0.51	B	0.090	0.90
Molybdenum		0.23	U	0.23	1.8
Nickel		0.93	B	0.11	3.6
Potassium		36.9	U	36.9	270
Selenium		0.77	U	0.77	0.90
Silver		2.0		0.14	0.18
Sodium		75.6	B	53.2	108
Vanadium		0.085	U	0.085	1.8
Zinc		1.3		0.36	0.90

Analysis Method:	6010B	Analysis Batch:	280-61966	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-61308	Lab File ID:	N/A
Dilution:	10			Initial Weight/Volume:	1.11 g
Analysis Date:	04/12/2011 1615			Final Weight/Volume:	100 mL
Prep Date:	04/08/2011 1430				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Lead		98400		2.4	4.5
Silicon		179		51.0	90.1

6010B TCLP Metals (ICP)-TCLP

Analysis Method:	6010B	Analysis Batch:	280-61790	Instrument ID:	MT_025
Prep Method:	3010A	Prep Batch:	280-61551	Lab File ID:	25A6041111.asc
Dilution:	1.0	Leach Batch:	280-61288	Initial Weight/Volume:	10 mL
Analysis Date:	04/12/2011 0701			Final Weight/Volume:	50 mL
Prep Date:	04/11/2011 1500				
Leach Date:	04/07/2011 2305				

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

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

Client Sample ID: J1H077

Lab Sample ID: 280-14330-1
Client Matrix: Solid

Date Sampled: 04/01/2011 0930
Date Received: 04/07/2011 0930

6010B TCLP Metals (ICP)-TCLP

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Arsenic		0.022	U	0.022	0.50
Barium		0.015	B C	0.0020	1.0
Cadmium		0.0020	U	0.0020	0.10
Chromium		0.0030	U	0.0030	0.50
Selenium		0.024	U	0.024	0.10
Silver		0.019	B C	0.0040	0.50

Analysis Method:	6010B	Analysis Batch:	280-61967	Instrument ID:	MT_025
Prep Method:	3010A	Prep Batch:	280-61551	Lab File ID:	N/A
Dilution:	10	Leach Batch:	280-61288	Initial Weight/Volume:	10 mL
Analysis Date:	04/12/2011 1732			Final Weight/Volume:	50 mL
Prep Date:	04/11/2011 1500				
Leach Date:	04/07/2011 2305				

Analyte	DryWt Corrected: N	Result (mg/L)	Qualifier	MDL	RL
Lead		3200		0.13	5.0

7470A TCLP Mercury-TCLP

Analysis Method:	7470A	Analysis Batch:	280-61799	Instrument ID:	MT_033
Prep Method:	7470A	Prep Batch:	280-61584	Lab File ID:	110412AA.txt
Dilution:	1.0	Leach Batch:	280-61288	Initial Weight/Volume:	30 mL
Analysis Date:	04/12/2011 0943			Final Weight/Volume:	30 mL
Prep Date:	04/11/2011 1115				
Leach Date:	04/07/2011 2305				

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:	280-61553	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-61321	Lab File ID:	110408AA.txt
Dilution:	1.0			Initial Weight/Volume:	0.61 g
Analysis Date:	04/08/2011 1409			Final Weight/Volume:	50 mL
Prep Date:	04/08/2011 1110				

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

General Chemistry

Client Sample ID: **J1H077**

Lab Sample ID: 280-14330-1
Client Matrix: Solid
% Moisture: 0.0

Date Sampled: 04/01/2011 0930
Date Received: 04/07/2011 0930

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Total Cyanide	0.20	B N	mg/Kg	0.11	0.51	1.0	9012A
Analysis Batch: 280-61529	Analysis Date: 04/09/2011 1232						DryWt Corrected: Y
Prep Batch: 280-61342	Prep Date: 04/08/2011 0900						
Sulfide	2.3	U	mg/Kg	2.3	4.9	1.0	9034
Analysis Batch: 280-61448	Analysis Date: 04/08/2011 1442						DryWt Corrected: Y
Prep Batch: 280-61385	Prep Date: 04/08/2011 1046						

Analyte	Result	Qual	Units	RL	RL	Dil	Method
pH adj. to 25 deg C-Soluble	7.46		SU	0.0100	0.0100	1.0	9045C
Analysis Batch: 280-61507	Analysis Date: 04/08/2011 1049						DryWt Corrected: N
Percent Moisture	0.10	U	%	0.10	0.10	1.0	D-2216
Analysis Batch: 280-61331	Analysis Date: 04/08/2011 0834						DryWt Corrected: N

Inorganic Data Summary Report
Physical Testing Observation

Client: WC-HANFORD RC-073
SDG#: JP0155

JOB#: 280-14330-1
Date Received: 4/7/2011

Analyte:	Observation:
Oxidizer	The presence of oxidizers were not indicated using the Spilfyter Chemical Classifier Strips for sample J1H077.

QUALITY CONTROL RESULTS

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 280-61271					
LCS 280-61271/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-61271/1-A	Method Blank	T	Solid	3550C	
280-14330-1	J1H077	T	Solid	3550C	
280-14330-1MS	Matrix Spike	T	Solid	3550C	
280-14330-1MSD	Matrix Spike Duplicate	T	Solid	3550C	
Prep Batch: 280-61288					
LCS 280-61288/2-B	Lab Control Sample	P	Solid	1311	
LB 280-61288/1-B	TCLP SPLPE Leachate Blank	P	Solid	1311	
280-14330-1	J1H077	P	Solid	1311	
280-14330-1MS	Matrix Spike	P	Solid	1311	
280-14330-1MSD	Matrix Spike Duplicate	P	Solid	1311	
Prep Batch: 280-61480					
LCS 280-61288/2-B	Lab Control Sample	P	Solid	3510C	280-61288
LB 280-61288/1-B	TCLP SPLPE Leachate Blank	P	Solid	3510C	280-61288
280-14330-1	J1H077	P	Solid	3510C	280-61288
280-14330-1MS	Matrix Spike	P	Solid	3510C	280-61288
280-14330-1MSD	Matrix Spike Duplicate	P	Solid	3510C	280-61288
Analysis Batch:280-61698					
LCS 280-61271/2-A	Lab Control Sample	T	Solid	8270C	280-61271
MB 280-61271/1-A	Method Blank	T	Solid	8270C	280-61271
280-14330-1	J1H077	T	Solid	8270C	280-61271
280-14330-1MS	Matrix Spike	T	Solid	8270C	280-61271
280-14330-1MSD	Matrix Spike Duplicate	T	Solid	8270C	280-61271
Analysis Batch:280-61778					
LCS 280-61288/2-B	Lab Control Sample	P	Solid	8270C	280-61480
LB 280-61288/1-B	TCLP SPLPE Leachate Blank	P	Solid	8270C	280-61480
280-14330-1	J1H077	P	Solid	8270C	280-61480
280-14330-1MS	Matrix Spike	P	Solid	8270C	280-61480
280-14330-1MSD	Matrix Spike Duplicate	P	Solid	8270C	280-61480

Report Basis
P = TCLP
T = Total

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 280-61281					
LCS 280-61281/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-61281/1-A	Method Blank	T	Solid	3550C	
280-14330-1	J1H077	T	Solid	3550C	
280-14330-1MS	Matrix Spike	T	Solid	3550C	
280-14330-1MSD	Matrix Spike Duplicate	T	Solid	3550C	
Analysis Batch:280-61765					
LCS 280-61281/2-A	Lab Control Sample	T	Solid	8082	280-61281
MB 280-61281/1-A	Method Blank	T	Solid	8082	280-61281
280-14330-1	J1H077	T	Solid	8082	280-61281
280-14330-1MS	Matrix Spike	T	Solid	8082	280-61281
280-14330-1MSD	Matrix Spike Duplicate	T	Solid	8082	280-61281

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-61288					
LCS 280-61288/2-C	Lab Control Sample	P	Solid	1311	
LCS 280-61288/2-D	Lab Control Sample	P	Solid	1311	
LB 280-61288/1-C	TCLP SPLPE Leachate Blank	P	Solid	1311	
LB 280-61288/1-D	TCLP SPLPE Leachate Blank	P	Solid	1311	
280-14330-1	J1H077	P	Solid	1311	
280-14330-1DU	Duplicate	P	Solid	1311	
280-14330-1MS	Matrix Spike	P	Solid	1311	
Prep Batch: 280-61308					
LCS 280-61308/2-A	Lab Control Sample	T	Solid	3050B	
MB 280-61308/1-A	Method Blank	T	Solid	3050B	
280-14330-1	J1H077	T	Solid	3050B	
280-14330-1DU	Duplicate	T	Solid	3050B	
280-14330-1MS	Matrix Spike	T	Solid	3050B	
Prep Batch: 280-61321					
LCS 280-61321/2-A	Lab Control Sample	T	Solid	7471A	
MB 280-61321/1-A	Method Blank	T	Solid	7471A	
280-14330-1	J1H077	T	Solid	7471A	
280-14330-1DU	Duplicate	T	Solid	7471A	
280-14330-1MS	Matrix Spike	T	Solid	7471A	
Prep Batch: 280-61551					
LCS 280-61288/2-C	Lab Control Sample	P	Solid	3010A	280-61288
LB 280-61288/1-C	TCLP SPLPE Leachate Blank	P	Solid	3010A	280-61288
280-14330-1	J1H077	P	Solid	3010A	280-61288
280-14330-1DU	Duplicate	P	Solid	3010A	280-61288
280-14330-1MS	Matrix Spike	P	Solid	3010A	280-61288
Analysis Batch:280-61553					
LCS 280-61321/2-A	Lab Control Sample	T	Solid	7471A	280-61321
MB 280-61321/1-A	Method Blank	T	Solid	7471A	280-61321
280-14330-1	J1H077	T	Solid	7471A	280-61321
280-14330-1DU	Duplicate	T	Solid	7471A	280-61321
280-14330-1MS	Matrix Spike	T	Solid	7471A	280-61321
Prep Batch: 280-61584					
LCS 280-61288/2-D	Lab Control Sample	P	Solid	7470A	280-61288
LB 280-61288/1-D	TCLP SPLPE Leachate Blank	P	Solid	7470A	280-61288
280-14330-1	J1H077	P	Solid	7470A	280-61288
280-14330-1DU	Duplicate	P	Solid	7470A	280-61288
280-14330-1MS	Matrix Spike	P	Solid	7470A	280-61288

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:280-61747					
LCS 280-61308/2-A	Lab Control Sample	T	Solid	6010B	280-61308
MB 280-61308/1-A	Method Blank	T	Solid	6010B	280-61308
280-14330-1	J1H077	T	Solid	6010B	280-61308
280-14330-1DU	Duplicate	T	Solid	6010B	280-61308
280-14330-1MS	Matrix Spike	T	Solid	6010B	280-61308
Analysis Batch:280-61790					
LCS 280-61288/2-C	Lab Control Sample	P	Solid	6010B	280-61551
LB 280-61288/1-C	TCLP SPLPE Leachate Blank	P	Solid	6010B	280-61551
280-14330-1	J1H077	P	Solid	6010B	280-61551
280-14330-1DU	Duplicate	P	Solid	6010B	280-61551
280-14330-1MS	Matrix Spike	P	Solid	6010B	280-61551
Analysis Batch:280-61799					
LCS 280-61288/2-D	Lab Control Sample	P	Solid	7470A	280-61584
LB 280-61288/1-D	TCLP SPLPE Leachate Blank	P	Solid	7470A	280-61584
280-14330-1	J1H077	P	Solid	7470A	280-61584
280-14330-1DU	Duplicate	P	Solid	7470A	280-61584
280-14330-1MS	Matrix Spike	P	Solid	7470A	280-61584
Analysis Batch:280-61966					
LCS 280-61308/2-A	Lab Control Sample	T	Solid	6010B	280-61308
MB 280-61308/1-A	Method Blank	T	Solid	6010B	280-61308
280-14330-1	J1H077	T	Solid	6010B	280-61308
280-14330-1DU	Duplicate	T	Solid	6010B	280-61308
280-14330-1MS	Matrix Spike	T	Solid	6010B	280-61308
Analysis Batch:280-61967					
LCS 280-61288/2-C	Lab Control Sample	P	Solid	6010B	280-61551
LB 280-61288/1-C	TCLP SPLPE Leachate Blank	P	Solid	6010B	280-61551
280-14330-1	J1H077	P	Solid	6010B	280-61551
280-14330-1DU	Duplicate	P	Solid	6010B	280-61551
280-14330-1MS	Matrix Spike	P	Solid	6010B	280-61551

Report Basis
P = TCLP
T = Total

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Prep Batch: 280-61318					
280-14330-1	J1H077	S	Solid	DI Leach	
280-14330-1DU	Duplicate	S	Solid	DI Leach	
Analysis Batch:280-61331					
280-14330-1	J1H077	T	Solid	D-2216	
280-14330-1DU	Duplicate	T	Solid	D-2216	
Prep Batch: 280-61342					
HLCS 280-61342/1-A	High Level Control Sample	T	Solid	9012A	
LCS 280-61342/3-A	Lab Control Sample	T	Solid	9012A	
LLCS 280-61342/2-A	Low Level Control Sample	T	Solid	9012A	
MB 280-61342/4-A	Method Blank	T	Solid	9012A	
280-14330-1	J1H077	T	Solid	9012A	
280-14330-1DU	Duplicate	T	Solid	9012A	
280-14330-1MS	Matrix Spike	T	Solid	9012A	
Prep Batch: 280-61385					
LCS 280-61385/4-A	Lab Control Sample	T	Solid	9030B	
MB 280-61385/5-A	Method Blank	T	Solid	9030B	
280-14330-1	J1H077	T	Solid	9030B	
280-14330-1DU	Duplicate	T	Solid	9030B	
280-14330-1MS	Matrix Spike	T	Solid	9030B	
Analysis Batch:280-61448					
LCS 280-61385/4-A	Lab Control Sample	T	Solid	9034	280-61385
MB 280-61385/5-A	Method Blank	T	Solid	9034	280-61385
280-14330-1	J1H077	T	Solid	9034	280-61385
280-14330-1DU	Duplicate	T	Solid	9034	280-61385
280-14330-1MS	Matrix Spike	T	Solid	9034	280-61385
Analysis Batch:280-61507					
LCS 280-61507/4	Lab Control Sample	T	Water	9045C	
LCSD 280-61507/5	Lab Control Sample Duplicate	T	Water	9045C	
280-14330-1	J1H077	S	Solid	9045C	
280-14330-1DU	Duplicate	S	Solid	9045C	
Analysis Batch:280-61529					
HLCS 280-61342/1-A	High Level Control Sample	T	Solid	9012A	280-61342
LCS 280-61342/3-A	Lab Control Sample	T	Solid	9012A	280-61342
LLCS 280-61342/2-A	Low Level Control Sample	T	Solid	9012A	280-61342
MB 280-61342/4-A	Method Blank	T	Solid	9012A	280-61342
280-14330-1	J1H077	T	Solid	9012A	280-61342
280-14330-1DU	Duplicate	T	Solid	9012A	280-61342
280-14330-1MS	Matrix Spike	T	Solid	9012A	280-61342

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

QC Association Summary

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

Report Basis
S = Soluble
T = Total

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

Method Blank - Batch: 280-61271

Method: 8270C
Preparation: 3550C

Lab Sample ID:	MB 280-61271/1-A	Analysis Batch:	280-61698	Instrument ID:	MSS_Y
Client Matrix:	Solid	Prep Batch:	280-61271	Lab File ID:	Y9402.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.6 g
Analysis Date:	04/08/2011 1614	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	04/07/2011 2315			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acenaphthene	10	U	10	320
Acenaphthylene	17	U	17	320
Anthracene	17	U	17	320
Benzo[a]anthracene	20	U	20	320
Benzo[a]pyrene	20	U	20	320
Benzo[b]fluoranthene	26	U	26	320
Benzo[ghi]perylene	16	U	16	320
Benzo[k]fluoranthene	39	U	39	320
Bis(2-chloroethoxy)methane	23	U	23	320
Bis(2-chloroethyl)ether	16	U	16	320
bis (2-chloroisopropyl) ether	23	U	23	320
Bis(2-ethylhexyl) phthalate	45	U	45	320
4-Bromophenyl phenyl ether	19	U	19	320
Butyl benzyl phthalate	42	U	42	320
Carbazole	35	U	35	320
4-Chloroaniline	80	U	80	320
4-Chloro-3-methylphenol	65	U	65	320
2-Chloronaphthalene	9.8	U	9.8	320
2-Chlorophenol	21	U	21	320
4-Chlorophenyl phenyl ether	21	U	21	320
Chrysene	26	U	26	320
Dibenz(a,h)anthracene	19	U	19	320
Dibenzofuran	20	U	20	320
1,2-Dichlorobenzene	22	U	22	320
1,3-Dichlorobenzene	12	U	12	320
1,4-Dichlorobenzene	13	U	13	320
3,3'-Dichlorobenzidine	88	U	88	650
2,4-Dichlorophenol	9.8	U	9.8	320
Diethyl phthalate	25	U	25	320
2,4-Dimethylphenol	65	U	65	320
Dimethyl phthalate	23	U	23	320
Di-n-butyl phthalate	28	U	28	320
4,6-Dinitro-2-methylphenol	320	U	320	650
2,4-Dinitrophenol	330	U	330	810
2,4-Dinitrotoluene	65	U	65	320
2,6-Dinitrotoluene	27	U	27	320
Di-n-octyl phthalate	14	U	14	320
Fluoranthene	35	U	35	320
Fluorene	18	U	18	320
Hexachlorobenzene	28	U	28	320
Hexachlorobutadiene	9.8	U	9.8	320
Hexachlorocyclopentadiene	49	U	49	320
Hexachloroethane	21	U	21	320
Indeno[1,2,3-cd]pyrene	22	U	22	320
Isophorone	17	U	17	320

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

Method Blank - Batch: 280-61271

Method: 8270C
Preparation: 3550C

Lab Sample ID:	MB 280-61271/1-A	Analysis Batch:	280-61698	Instrument ID:	MSS_Y
Client Matrix:	Solid	Prep Batch:	280-61271	Lab File ID:	Y9402.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.6 g
Analysis Date:	04/08/2011 1614	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	04/07/2011 2315			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
2-Methylnaphthalene	19	U	19	320
2-Methylphenol	13	U	13	320
3 & 4 Methylphenol	32	U	32	320
Naphthalene	30	U	30	320
2-Nitroaniline	49	U	49	320
3-Nitroaniline	72	U	72	320
4-Nitroaniline	71	U	71	320
Nitrobenzene	22	U	22	320
2-Nitrophenol	9.8	U	9.8	320
4-Nitrophenol	95	U	95	650
N-Nitrosodi-n-propylamine	30	U	30	320
N-Nitrosodiphenylamine	21	U	21	320
Pentachlorophenol	320	U	320	650
Phenanthrene	17	U	17	320
Phenol	18	U	18	320
Pyrene	12	U	12	320
1,2,4-Trichlorobenzene	27	U	27	320
2,4,5-Trichlorophenol	9.8	U	9.8	320
2,4,6-Trichlorophenol	9.8	U	9.8	320

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	84	50 - 120
2-Fluorophenol	87	53 - 120
Nitrobenzene-d5	86	50 - 120
Phenol-d5	88	52 - 120
Terphenyl-d14	98	55 - 120
2,4,6-Tribromophenol	77	51 - 120

Method Blank TICs- Batch: 280-61271

Cas Number	Analyte	RT	Est. Result	Qual
2216-30-0	Heptane, 2,5-dimethyl-	3.08	290	N J
	Unknown	2.90	167	N J
	Unknown	2.96	208	N J
	Unknown	3.16	3940	N J

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

Lab Control Sample - Batch: 280-61271

Method: 8270C
Preparation: 3550C

Lab Sample ID:	LCS 280-61271/2-A	Analysis Batch:	280-61698	Instrument ID:	MSS_Y
Client Matrix:	Solid	Prep Batch:	280-61271	Lab File ID:	Y9403.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0 g
Analysis Date:	04/08/2011 1635	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	04/07/2011 2315			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acenaphthene	2670	2270	85	52 - 120	
Anthracene	2670	2560	96	57 - 120	
Carbazole	2670	2530	95	54 - 120	
4-Chloro-3-methylphenol	2670	2500	94	57 - 120	
2-Chlorophenol	2670	2210	83	53 - 120	
1,4-Dichlorobenzene	2670	2030	76	46 - 120	
2,4-Dinitrotoluene	2670	2610	98	53 - 120	
2-Methylnaphthalene	2670	2190	82	55 - 120	
2-Methylphenol	2670	2310	87	51 - 120	
4-Nitrophenol	2670	2520	95	41 - 120	
N-Nitrosodi-n-propylamine	2670	2240	84	51 - 120	
Pentachlorophenol	2670	2230	84	30 - 120	
Phenol	2670	2360	89	54 - 120	
Pyrene	2670	2540	95	50 - 120	
1,2,4-Trichlorobenzene	2670	1970	74	50 - 120	
2,4,6-Trichlorophenol	2670	2430	91	50 - 120	

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	82	50 - 120
2-Fluorophenol	83	53 - 120
Nitrobenzene-d5	83	50 - 120
Phenol-d5	86	52 - 120
Terphenyl-d14	93	55 - 120
2,4,6-Tribromophenol	87	51 - 120

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-61271

Method: 8270C
Preparation: 3550C

MS Lab Sample ID:	280-14330-1	Analysis Batch:	280-61698	Instrument ID:	MSS_Y
Client Matrix:	Solid	Prep Batch:	280-61271	Lab File ID:	Y9414.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.4 g
Analysis Date:	04/08/2011 2019			Final Weight/Volume:	1000 uL
Prep Date:	04/07/2011 2315			Injection Volume:	0.5 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-14330-1	Analysis Batch:	280-61698	Instrument ID:	MSS_Y
Client Matrix:	Solid	Prep Batch:	280-61271	Lab File ID:	Y9415.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.2 g
Analysis Date:	04/08/2011 2039			Final Weight/Volume:	1000 uL
Prep Date:	04/07/2011 2315			Injection Volume:	0.5 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acenaphthene	86	87	52 - 120	2	30		
Anthracene	97	96	57 - 120	3	30		
Carbazole	96	96	54 - 120	3	30		
4-Chloro-3-methylphenol	95	96	57 - 120	1	30		
2-Chlorophenol	86	85	53 - 120	4	30		
1,4-Dichlorobenzene	77	77	46 - 120	3	30		
2,4-Dinitrotoluene	99	99	53 - 120	3	30		
2-Methylnaphthalene	82	82	55 - 120	2	30		
2-Methylphenol	89	89	51 - 120	3	30		
4-Nitrophenol	94	93	41 - 120	4	30		
N-Nitrosodi-n-propylamine	86	87	51 - 120	2	30		
Pentachlorophenol	84	78	30 - 120	10	30		
Phenol	88	89	54 - 120	2	30		
Pyrene	103	104	50 - 120	2	38		
1,2,4-Trichlorobenzene	75	74	50 - 120	4	30		
2,4,6-Trichlorophenol	92	94	50 - 120	0	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
2-Fluorobiphenyl	80	83	50 - 120
2-Fluorophenol	84	85	53 - 120
Nitrobenzene-d5	83	83	50 - 120
Phenol-d5	88	87	52 - 120
Terphenyl-d14	100	100	55 - 120
2,4,6-Tribromophenol	89	91	51 - 120

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

TCLP SPLPE Leachate Blank - Batch: 280-61480

Method: 8270C
Preparation: 3510C
TCLP

Lab Sample ID:	LB 280-61288/1-B	Analysis Batch:	280-61778	Instrument ID:	MSS_G6
Client Matrix:	Solid	Prep Batch:	280-61480	Lab File ID:	G6_1980.D
Dilution:	1.0	Leach Batch:	280-61288	Initial Weight/Volume:	202 mL
Analysis Date:	04/11/2011 1358	Units:	mg/L	Final Weight/Volume:	1000 uL
Prep Date:	04/08/2011 1924			Injection Volume:	0.5 uL
Leach Date:	04/07/2011 2305				

Analyte	Result	Qual	MDL	RL
Pyridine	0.0056	U	0.0056	0.099
1,4-Dichlorobenzene	0.00161	J	0.0016	0.020
2,4-Dinitrotoluene	0.0082	U	0.0082	0.050
Hexachlorobenzene	0.0033	U	0.0033	0.050
Hexachlorobutadiene	0.016	U	0.016	0.050
Hexachloroethane	0.010	U	0.010	0.050
2-Methylphenol	0.0049	U	0.0049	0.050
3-Methylphenol & 4-Methylphenol	0.00145	J	0.0012	0.050
Nitrobenzene	0.0040	U	0.0040	0.050
Pentachlorophenol	0.0050	U	0.0050	0.25
2,4,5-Trichlorophenol	0.0022	U	0.0022	0.050
2,4,6-Trichlorophenol	0.0014	U	0.0014	0.025

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	77	49 - 120
2-Fluorophenol	82	50 - 120
Nitrobenzene-d5	94	51 - 120
Phenol-d5	83	47 - 120
Terphenyl-d14	97	56 - 120
2,4,6-Tribromophenol	98	51 - 120

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

Lab Control Sample - Batch: 280-61480

Method: 8270C
Preparation: 3510C
TCLP

Lab Sample ID:	LCS 280-61288/2-B	Analysis Batch:	280-61778	Instrument ID:	MSS_G6
Client Matrix:	Solid	Prep Batch:	280-61480	Lab File ID:	G6_1981.D
Dilution:	1.0	Leach Batch:	280-61288	Initial Weight/Volume:	206 mL
Analysis Date:	04/11/2011 1417	Units:	mg/L	Final Weight/Volume:	1000 uL
Prep Date:	04/08/2011 1924			Injection Volume:	0.5 uL
Leach Date:	04/07/2011 2305				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Pyridine	0.243	0.147	61	10 - 121	
1,4-Dichlorobenzene	0.243	0.142	59	36 - 120	
2,4-Dinitrotoluene	0.0971	0.0790	81	36 - 120	
Hexachlorobenzene	0.0971	0.0935	96	52 - 120	
Hexachlorobutadiene	0.243	0.129	53	35 - 120	
Hexachloroethane	0.243	0.129	53	35 - 120	
2-Methylphenol	0.243	0.230	95	45 - 120	
3-Methylphenol & 4-Methylphenol	0.485	0.439	90	44 - 120	
Nitrobenzene	0.243	0.229	94	50 - 120	
Pentachlorophenol	0.485	0.504	104	39 - 120	
2,4,5-Trichlorophenol	0.243	0.228	94	46 - 120	
2,4,6-Trichlorophenol	0.243	0.234	96	43 - 120	

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	75	49 - 120
2-Fluorophenol	82	50 - 120
Nitrobenzene-d5	94	51 - 120
Phenol-d5	83	47 - 120
Terphenyl-d14	99	56 - 120
2,4,6-Tribromophenol	106	51 - 120

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-61480

Method: 8270C
Preparation: 3510C
TCLP

MS Lab Sample ID:	280-14330-1	Analysis Batch:	280-61778	Instrument ID:	MSS_G6
Client Matrix:	Solid	Prep Batch:	280-61480	Lab File ID:	G6_1993.D
Dilution:	1.0	Leach Batch:	280-61288	Initial Weight/Volume:	198 mL
Analysis Date:	04/11/2011 1803			Final Weight/Volume:	1000 uL
Prep Date:	04/08/2011 1924			Injection Volume:	0.5 uL
Leach Date:	04/07/2011 2305				

MSD Lab Sample ID:	280-14330-1	Analysis Batch:	280-61778	Instrument ID:	MSS_G6
Client Matrix:	Solid	Prep Batch:	280-61480	Lab File ID:	G6_1994.D
Dilution:	1.0	Leach Batch:	280-61288	Initial Weight/Volume:	202 mL
Analysis Date:	04/11/2011 1822			Final Weight/Volume:	1000 uL
Prep Date:	04/08/2011 1924			Injection Volume:	0.5 uL
Leach Date:	04/07/2011 2305				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Pyridine	36	48	10 - 121	26	30	J	
1,4-Dichlorobenzene	65	62	36 - 120	7	30		
2,4-Dinitrotoluene	75	72	36 - 120	6	30		
Hexachlorobenzene	89	86	52 - 120	6	30		
Hexachlorobutadiene	60	58	35 - 120	5	30		
Hexachloroethane	60	58	35 - 120	6	30		
2-Methylphenol	95	93	45 - 120	4	30		
3-Methylphenol & 4-Methylphenol	91	90	44 - 120	4	30		
Nitrobenzene	93	91	50 - 120	5	30		
Pentachlorophenol	97	94	39 - 120	6	30		
2,4,5-Trichlorophenol	92	88	46 - 120	6	30		
2,4,6-Trichlorophenol	96	93	43 - 120	5	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
2-Fluorobiphenyl	78	74	49 - 120
2-Fluorophenol	82	82	50 - 120
Nitrobenzene-d5	93	91	51 - 120
Phenol-d5	82	83	47 - 120
Terphenyl-d14	102	97	56 - 120
2,4,6-Tribromophenol	102	98	51 - 120

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

Method Blank - Batch: 280-61281

Method: 8082
Preparation: 3550C

Lab Sample ID:	MB 280-61281/1-A	Analysis Batch:	280-61765	Instrument ID:	GCS_P3
Client Matrix:	Solid	Prep Batch:	280-61281	Lab File ID:	050F5001.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	32.1 g
Analysis Date:	04/09/2011 1121	Units:	ug/Kg	Final Weight/Volume:	5000 uL
Prep Date:	04/07/2011 2350			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Aroclor 1016	2.6	U	2.6	9.3
Aroclor 1221	7.5	U	7.5	15
Aroclor 1232	1.9	U	1.9	9.3
Aroclor 1242	4.4	U	4.4	9.3
Aroclor 1248	4.4	U	4.4	9.3
Aroclor 1254	2.4	U	2.4	9.3
Aroclor 1260	2.4	U	2.4	9.3

Surrogate	% Rec	Acceptance Limits
Decachlorobiphenyl	90	59 - 130
Tetrachloro-m-xylene	85	53 - 128

Lab Control Sample - Batch: 280-61281

Method: 8082
Preparation: 3550C

Lab Sample ID:	LCS 280-61281/2-A	Analysis Batch:	280-61765	Instrument ID:	GCS_P3
Client Matrix:	Solid	Prep Batch:	280-61281	Lab File ID:	051F5101.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.8 g
Analysis Date:	04/09/2011 1142	Units:	ug/Kg	Final Weight/Volume:	5000 uL
Prep Date:	04/07/2011 2350			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aroclor 1016	64.9	58.4	90	54 - 132	
Aroclor 1260	64.9	62.7	97	62 - 129	

Surrogate	% Rec	Acceptance Limits
Decachlorobiphenyl	90	59 - 130
Tetrachloro-m-xylene	82	53 - 128

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-61281

Method: 8082
Preparation: 3550C

MS Lab Sample ID:	280-14330-1	Analysis Batch:	280-61765	Instrument ID:	GCS_P3
Client Matrix:	Solid	Prep Batch:	280-61281	Lab File ID:	054F5401.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.2 g
Analysis Date:	04/09/2011 1247			Final Weight/Volume:	5000 uL
Prep Date:	04/07/2011 2350			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-14330-1	Analysis Batch:	280-61765	Instrument ID:	GCS_P3
Client Matrix:	Solid	Prep Batch:	280-61281	Lab File ID:	055F5501.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.9 g
Analysis Date:	04/09/2011 1308			Final Weight/Volume:	5000 uL
Prep Date:	04/07/2011 2350			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Aroclor 1016	98	95	54 - 132	5	26		
Aroclor 1260	122	99	62 - 129	23	26		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Decachlorobiphenyl	94	92	59 - 130
Tetrachloro-m-xylene	93	89	53 - 128

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

Method Blank - Batch: 280-61308

Method: 6010B
Preparation: 3050B

Lab Sample ID:	MB 280-61308/1-A	Analysis Batch:	280-61747	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-61308	Lab File ID:	25A1041111.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	04/11/2011 1204	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/08/2011 1430				
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
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
Silver	0.16	U	0.16	0.20
Sodium	59.0	U	59.0	120
Vanadium	0.094	U	0.094	2.0
Zinc	0.40	U	0.40	1.0

Method Blank - Batch: 280-61308

Method: 6010B
Preparation: 3050B

Lab Sample ID:	MB 280-61308/1-A	Analysis Batch:	280-61966	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-61308	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	04/12/2011 1611	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/08/2011 1430				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Lead	2.84		0.27	0.50
Silicon	5.7	U	5.7	10.0

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

Lab Control Sample - Batch: 280-61308

Method: 6010B
Preparation: 3050B

Lab Sample ID:	LCS 280-61308/2-A	Analysis Batch:	280-61747	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-61308	Lab File ID:	25A1041111.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	04/11/2011 1206	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/08/2011 1430				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	200	189.6	95	82 - 116	
Antimony	50.0	50.04	100	82 - 110	
Arsenic	100	98.92	99	85 - 110	
Barium	200	199.5	100	87 - 112	
Beryllium	5.00	4.84	97	84 - 114	
Boron	100	94.76	95	81 - 110	
Cadmium	10.0	10.49	105	87 - 110	
Calcium	5000	4887	98	82 - 114	
Chromium	20.0	20.12	101	84 - 114	
Cobalt	50.0	49.21	98	87 - 110	
Copper	25.0	24.97	100	88 - 110	
Iron	100	98.69	99	87 - 120	
Magnesium	5000	4843	97	90 - 110	
Manganese	50.0	48.93	98	88 - 110	
Molybdenum	100	100.8	101	86 - 110	
Nickel	50.0	49.21	98	87 - 110	
Potassium	5000	5021	100	89 - 110	
Selenium	200	200.3	100	83 - 110	
Silver	5.00	5.22	104	87 - 114	
Sodium	5000	5151	103	90 - 112	
Vanadium	50.0	49.66	99	88 - 110	
Zinc	50.0	47.76	96	76 - 114	

Lab Control Sample - Batch: 280-61308

Method: 6010B
Preparation: 3050B

Lab Sample ID:	LCS 280-61308/2-A	Analysis Batch:	280-61966	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-61308	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	04/12/2011 1613	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/08/2011 1430				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Lead	50.0	50.34	101	86 - 110	
Silicon	1000	110.2	11	10 - 70	

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

Matrix Spike - Batch: 280-61308

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-14330-1	Analysis Batch:	280-61747	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-61308	Lab File ID:	25A1041111.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.13 g
Analysis Date:	04/11/2011 1216	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/08/2011 1430				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	5100		177	5345	136	50 - 200	4
Antimony	612		44.2	630.2	42	20 - 200	4
Arsenic	2120		88.5	2228	122	76 - 111	4
Barium	0.69		177	152.1	86	52 - 159	
Beryllium	0.030	U	4.42	4.18	94	72 - 105	
Boron	0.88	U	88.5	78.00	88	75 - 107	
Cadmium	12.7		8.85	20.92	93	40 - 130	
Calcium	12.7	U	4420	4296	97	43 - 165	
Chromium	0.56		17.7	17.77	97	70 - 200	
Cobalt	0.090	U	44.2	41.94	95	72 - 106	
Copper	2.3		22.1	21.02	84	37 - 187	
Iron	33.8		88.5	115.2	92	70 - 200	
Magnesium	3.3	U	4420	3613	82	64 - 145	
Manganese	0.51	B	44.2	37.44	83	40 - 200	
Molybdenum	0.23	U	88.5	78.17	88	75 - 103	
Nickel	0.93	B	44.2	42.67	94	61 - 126	
Potassium	36.9	U	4420	4395	99	56 - 172	
Selenium	0.77	U	177	167.2	94	76 - 104	
Silver	2.0		4.42	5.92	88	75 - 141	
Sodium	75.6	B	4420	4547	101	78 - 111	
Vanadium	0.085	U	44.2	36.95	83	50 - 169	
Zinc	1.3		44.2	38.22	83	70 - 200	

Matrix Spike - Batch: 280-61308

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-14330-1	Analysis Batch:	280-61966	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-61308	Lab File ID:	N/A
Dilution:	10	Leach Batch:	N/A	Initial Weight/Volume:	1.13 g
Analysis Date:	04/12/2011 1622	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/08/2011 1430				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Lead	98400	44.2	85440	-29233	70 - 200	4
Silicon	179	885	388.0	24	20 - 200	

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

Duplicate - Batch: 280-61308

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-14330-1	Analysis Batch:	280-61747	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-61308	Lab File ID:	25A1041111.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.06 g
Analysis Date:	04/11/2011 1213	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/08/2011 1430				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Aluminum	5100		5129	0.5	40	
Antimony	612		607.5	0.7	40	
Arsenic	2120		2103	0.8	30	
Barium	0.69		0.701	1	30	
Beryllium	0.030	U	0.031	NC	30	U
Boron	0.88	U	0.92	NC	30	U
Cadmium	12.7		12.44	2	30	
Calcium	12.7	U	13.68	NC	30	B
Chromium	0.56		0.551	2	40	
Cobalt	0.090	U	0.094	NC	30	U
Copper	2.3		2.34	0.5	30	
Iron	33.8		31.40	7	40	
Magnesium	3.3	U	3.5	NC	30	U
Manganese	0.51	B	0.486	4	40	B
Molybdenum	0.23	U	0.25	NC	30	U
Nickel	0.93	B	0.937	0.7	30	B
Potassium	36.9	U	38.7	NC	40	U
Selenium	0.77	U	0.81	NC	30	U
Silver	2.0		2.07	2	30	
Sodium	75.6	B	72.73	4	30	B
Vanadium	0.085	U	0.089	NC	30	U
Zinc	1.3		1.21	11	40	

Duplicate - Batch: 280-61308

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-14330-1	Analysis Batch:	280-61966	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-61308	Lab File ID:	N/A
Dilution:	10	Leach Batch:	N/A	Initial Weight/Volume:	1.06 g
Analysis Date:	04/12/2011 1620	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/08/2011 1430				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Lead	98400	103500	5	40	
Silicon	179	153.1	15	40	

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

TCLP SPLPE Leachate Blank - Batch: 280-61551

Method: 6010B
Preparation: 3010A
TCLP

Lab Sample ID:	LB 280-61288/1-C	Analysis Batch:	280-61790	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-61551	Lab File ID:	25A6041111.asc
Dilution:	1.0	Leach Batch:	280-61288	Initial Weight/Volume:	10 mL
Analysis Date:	04/12/2011 0647	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	04/11/2011 1500				
Leach Date:	04/07/2011 2305				

Analyte	Result	Qual	MDL	RL
Arsenic	0.022	U	0.022	0.50
Barium	0.00830	B	0.0020	1.0
Cadmium	0.0020	U	0.0020	0.10
Chromium	0.0030	U	0.0030	0.50
Selenium	0.024	U	0.024	0.10
Silver	0.00740	B	0.0040	0.50

TCLP SPLPE Leachate Blank - Batch: 280-61551

Method: 6010B
Preparation: 3010A
TCLP

Lab Sample ID:	LB 280-61288/1-C	Analysis Batch:	280-61967	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-61551	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	280-61288	Initial Weight/Volume:	10 mL
Analysis Date:	04/12/2011 1727	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	04/11/2011 1500				
Leach Date:	04/07/2011 2305				

Analyte	Result	Qual	MDL	RL
Lead	2.97		0.013	0.50

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

Lab Control Sample - Batch: 280-61551

Method: 6010B
Preparation: 3010A
TCLP

Lab Sample ID:	LCS 280-61288/2-C	Analysis Batch:	280-61790	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-61551	Lab File ID:	25A6041111.asc
Dilution:	1.0	Leach Batch:	280-61288	Initial Weight/Volume:	10 mL
Analysis Date:	04/12/2011 0649	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	04/11/2011 1500				
Leach Date:	04/07/2011 2305				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Arsenic	4.00	3.87	97	80 - 120	
Barium	12.0	13.44	112	80 - 120	
Cadmium	1.10	1.13	103	80 - 120	
Chromium	5.20	5.49	106	80 - 120	
Selenium	3.00	3.15	105	80 - 120	
Silver	1.05	1.16	111	80 - 120	

Lab Control Sample - Batch: 280-61551

Method: 6010B
Preparation: 3010A
TCLP

Lab Sample ID:	LCS 280-61288/2-C	Analysis Batch:	280-61967	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-61551	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	280-61288	Initial Weight/Volume:	10 mL
Analysis Date:	04/12/2011 1729	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	04/11/2011 1500				
Leach Date:	04/07/2011 2305				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Lead	5.50	5.63	102	80 - 120	

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

Matrix Spike - Batch: 280-61551

Method: 6010B
Preparation: 3010A
TCLP

Lab Sample ID:	280-14330-1	Analysis Batch:	280-61790	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-61551	Lab File ID:	25A6041111.asc
Dilution:	1.0	Leach Batch:	280-61288	Initial Weight/Volume:	10 mL
Analysis Date:	04/12/2011 0709	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	04/11/2011 1500				
Leach Date:	04/07/2011 2305				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Arsenic	0.022	U	4.00	3.43	86	80 - 120	
Barium	0.015	B	12.0	14.01	117	80 - 120	
Cadmium	0.0020	U	1.10	1.18	107	80 - 120	
Chromium	0.0030	U	5.20	5.49	106	80 - 120	
Selenium	0.024	U	3.00	2.79	93	80 - 120	
Silver	0.019	B	1.05	1.11	104	80 - 120	

Matrix Spike - Batch: 280-61551

Method: 6010B
Preparation: 3010A
TCLP

Lab Sample ID:	280-14330-1	Analysis Batch:	280-61967	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-61551	Lab File ID:	N/A
Dilution:	10	Leach Batch:	280-61288	Initial Weight/Volume:	10 mL
Analysis Date:	04/12/2011 1739	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	04/11/2011 1500				
Leach Date:	04/07/2011 2305				

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Lead	3200	5.50	3155	-775	80 - 120	4

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

Duplicate - Batch: 280-61551

Method: 6010B
Preparation: 3010A
TCLP

Lab Sample ID:	280-14330-1	Analysis Batch:	280-61790	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-61551	Lab File ID:	25A6041111.asc
Dilution:	1.0	Leach Batch:	280-61288	Initial Weight/Volume:	10 mL
Analysis Date:	04/12/2011 0706	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	04/11/2011 1500				
Leach Date:	04/07/2011 2305				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Arsenic	0.022	U	0.022	NC	20	U
Barium	0.015	B	0.0146	2	20	B
Cadmium	0.0020	U	0.0020	NC	20	U
Chromium	0.0030	U	0.0030	NC	20	U
Selenium	0.024	U	0.024	NC	20	U
Silver	0.019	B	0.0200	6	20	B

Duplicate - Batch: 280-61551

Method: 6010B
Preparation: 3010A
TCLP

Lab Sample ID:	280-14330-1	Analysis Batch:	280-61967	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-61551	Lab File ID:	N/A
Dilution:	10	Leach Batch:	280-61288	Initial Weight/Volume:	10 mL
Analysis Date:	04/12/2011 1737	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	04/11/2011 1500				
Leach Date:	04/07/2011 2305				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Lead	3200	3366	5	20	

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

TCLP SPLPE Leachate Blank - Batch: 280-61584

Method: 7470A
Preparation: 7470A
TCLP

Lab Sample ID:	LB 280-61288/1-D	Analysis Batch:	280-61799	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-61584	Lab File ID:	110412AA.txt
Dilution:	1.0	Leach Batch:	280-61288	Initial Weight/Volume:	30 mL
Analysis Date:	04/12/2011 0939	Units:	mg/L	Final Weight/Volume:	30 mL
Prep Date:	04/11/2011 1115				
Leach Date:	04/07/2011 2305				

Analyte	Result	Qual	MDL	RL
Mercury	0.000030	U	0.000030	0.0020

Lab Control Sample - Batch: 280-61584

Method: 7470A
Preparation: 7470A
TCLP

Lab Sample ID:	LCS 280-61288/2-D	Analysis Batch:	280-61799	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-61584	Lab File ID:	110412AA.txt
Dilution:	1.0	Leach Batch:	280-61288	Initial Weight/Volume:	30 mL
Analysis Date:	04/12/2011 0941	Units:	mg/L	Final Weight/Volume:	30 mL
Prep Date:	04/11/2011 1115				
Leach Date:	04/07/2011 2305				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.00500	0.00574	115	90 - 116	

Matrix Spike - Batch: 280-61584

Method: 7470A
Preparation: 7470A
TCLP

Lab Sample ID:	280-14330-1	Analysis Batch:	280-61799	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-61584	Lab File ID:	110412AA.txt
Dilution:	1.0	Leach Batch:	280-61288	Initial Weight/Volume:	30 mL
Analysis Date:	04/12/2011 0948	Units:	mg/L	Final Weight/Volume:	30 mL
Prep Date:	04/11/2011 1115				
Leach Date:	04/07/2011 2305				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.000030	U	0.00500	0.00520	104	90 - 116	

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

Duplicate - Batch: 280-61584

Method: 7470A
Preparation: 7470A
TCLP

Lab Sample ID:	280-14330-1	Analysis Batch:	280-61799	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-61584	Lab File ID:	110412AA.txt
Dilution:	1.0	Leach Batch:	280-61288	Initial Weight/Volume:	30 mL
Analysis Date:	04/12/2011 0946	Units:	mg/L	Final Weight/Volume:	30 mL
Prep Date:	04/11/2011 1115				
Leach Date:	04/07/2011 2305				

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

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

Method Blank - Batch: 280-61321

Method: 7471A
Preparation: 7471A

Lab Sample ID:	MB 280-61321/1-A	Analysis Batch:	280-61553	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-61321	Lab File ID:	110408AA.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	04/08/2011 1405	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	04/08/2011 1110				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	0.0055	U	0.0055	0.017

Lab Control Sample - Batch: 280-61321

Method: 7471A
Preparation: 7471A

Lab Sample ID:	LCS 280-61321/2-A	Analysis Batch:	280-61553	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-61321	Lab File ID:	110408AA.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	04/08/2011 1407	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	04/08/2011 1110				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.417	0.433	104	87 - 111	

Matrix Spike - Batch: 280-61321

Method: 7471A
Preparation: 7471A

Lab Sample ID:	280-14330-1	Analysis Batch:	280-61553	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-61321	Lab File ID:	110408AA.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.67 g
Analysis Date:	04/08/2011 1414	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	04/08/2011 1110				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.0054	U	0.373	0.282	76	87 - 111	N

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

Duplicate - Batch: 280-61321

Method: 7471A
Preparation: 7471A

Lab Sample ID:	280-14330-1	Analysis Batch:	280-61553	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-61321	Lab File ID:	110408AA.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.61 g
Analysis Date:	04/08/2011 1411	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	04/08/2011 1110				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Mercury	0.0054	U	0.0054	NC	20	U

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

Method Blank - Batch: 280-61342

Method: 9012A
Preparation: 9012A

Lab Sample ID:	MB 280-61342/4-A	Analysis Batch:	280-61529	Instrument ID:	WC_Alp 1
Client Matrix:	Solid	Prep Batch:	280-61342	Lab File ID:	C:\FLOW_4\CN040911
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	04/09/2011 1230	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	04/08/2011 0900				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Total Cyanide	0.10	U	0.10	0.50

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

High Level Control Sample - Batch: 280-61342

Method: 9012A
Preparation: 9012A

Lab Sample ID:	HLCS 280-61342/1-A	Analysis Batch:	280-61529	Instrument ID:	WC_Alp 1
Client Matrix:	Solid	Prep Batch:	280-61342	Lab File ID:	C:\FLOW_4\CN040911
Dilution:	2.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	04/09/2011 1226	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	04/08/2011 0900				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Total Cyanide	20.0	20.16	101	90 - 110	

Low Level Control Sample - Batch: 280-61342

Method: 9012A
Preparation: 9012A

Lab Sample ID:	LLCS 280-61342/2-A	Analysis Batch:	280-61529	Instrument ID:	WC_Alp 1
Client Matrix:	Solid	Prep Batch:	280-61342	Lab File ID:	C:\FLOW_4\CN040911
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	04/09/2011 1227	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	04/08/2011 0900				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Total Cyanide	5.00	5.12	102	90 - 110	

Lab Control Sample - Batch: 280-61342

Method: 9012A
Preparation: 9012A

Lab Sample ID:	LCS 280-61342/3-A	Analysis Batch:	280-61529	Instrument ID:	WC_Alp 1
Client Matrix:	Solid	Prep Batch:	280-61342	Lab File ID:	C:\FLOW_4\CN040911
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	04/09/2011 1229	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	04/08/2011 0900				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Total Cyanide	5.00	5.11	102	90 - 110	

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

Matrix Spike - Batch: 280-61342

Method: 9012A
Preparation: 9012A

Lab Sample ID:	280-14330-1	Analysis Batch:	280-61529	Instrument ID:	WC_Alp 1
Client Matrix:	Solid	Prep Batch:	280-61342	Lab File ID:	C:\FLOW_4\CN040911
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.95 g
Analysis Date:	04/09/2011 1233	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	04/08/2011 0900				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Total Cyanide	0.20	B	5.26	4.79	87	90 - 110	N

Duplicate - Batch: 280-61342

Method: 9012A
Preparation: 9012A

Lab Sample ID:	280-14330-1	Analysis Batch:	280-61529	Instrument ID:	WC_Alp 1
Client Matrix:	Solid	Prep Batch:	280-61342	Lab File ID:	C:\FLOW_4\CN040911
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.98 g
Analysis Date:	04/09/2011 1235	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	04/08/2011 0900				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Total Cyanide	0.20	B	0.197	2	10	B

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

Method Blank - Batch: 280-61385

Method: 9034
Preparation: 9030B

Lab Sample ID:	MB 280-61385/5-A	Analysis Batch:	280-61448	Instrument ID:	No Equipment
Client Matrix:	Solid	Prep Batch:	280-61385	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	49.96 g
Analysis Date:	04/08/2011 1442	Units:	mg/Kg	Final Weight/Volume:	250 mL
Prep Date:	04/08/2011 1046				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Sulfide	2.4	U	2.4	5.0

Lab Control Sample - Batch: 280-61385

Method: 9034
Preparation: 9030B

Lab Sample ID:	LCS 280-61385/4-A	Analysis Batch:	280-61448	Instrument ID:	No Equipment
Client Matrix:	Solid	Prep Batch:	280-61385	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	51.73 g
Analysis Date:	04/08/2011 1442	Units:	mg/Kg	Final Weight/Volume:	250 mL
Prep Date:	04/08/2011 1046				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Sulfide	99.0	79.64	80	47 - 100	

Matrix Spike - Batch: 280-61385

Method: 9034
Preparation: 9030B

Lab Sample ID:	280-14330-1	Analysis Batch:	280-61448	Instrument ID:	No Equipment
Client Matrix:	Solid	Prep Batch:	280-61385	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50.13 g
Analysis Date:	04/08/2011 1442	Units:	mg/Kg	Final Weight/Volume:	250 mL
Prep Date:	04/08/2011 1046				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Sulfide	2.3	U	102	65.43	64	57 - 136	

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

Duplicate - Batch: 280-61385

Method: 9034
Preparation: 9030B

Lab Sample ID:	280-14330-1	Analysis Batch:	280-61448	Instrument ID:	No Equipment
Client Matrix:	Solid	Prep Batch:	280-61385	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50.14 g
Analysis Date:	04/08/2011 1442	Units:	mg/Kg	Final Weight/Volume:	250 mL
Prep Date:	04/08/2011 1046				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Sulfide	2.3	U	2.4	NC	35	U

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-61507

Method: 9045C
Preparation: N/A

LCS Lab Sample ID:	LCS 280-61507/4	Analysis Batch:	280-61507	Instrument ID:	WC_pH Probe
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/08/2011 1034	Units:	SU	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-61507/5	Analysis Batch:	280-61507	Instrument ID:	WC_pH Probe
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/08/2011 1035	Units:	SU	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

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

Duplicate - Batch: 280-61507

Method: 9045C
Preparation: N/A

Lab Sample ID:	280-14330-1	Analysis Batch:	280-61507	Instrument ID:	WC_pH Probe
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	280-61318	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/08/2011 1049	Units:	SU	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	04/08/2011 0822				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
pH adj. to 25 deg C-Soluble	7.46	7.490	0.4	5	

Client: Washington Closure Hanford

Job Number: 280-14330-1
Sdg Number: JP0155

Duplicate - Batch: 280-61331

Method: D-2216
Preparation: N/A

Lab Sample ID:	280-14330-1	Analysis Batch:	280-61331	Instrument ID:	No Equipment
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	04/08/2011 0834	Units:	%	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Percent Moisture	0.10	U	0.10	NC	20	U

5.6
3.4

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-073-133	Page 1 of 1

Collector: Blankingship / Lucas	Company Contact: Joan Kessner	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Price Code: ~~9L~~ 9B	Data Turnaround: ~~21~~ 7 Days		
Project Designation: 100-D/DR Burial Grounds & Remaining Sites - Other Quick	Sampling Location: 118-D-4 (100D-AN-07-083)		SAF No.: RC-073
Ice Chest No.: WCH-08-070 ~~NA~~ JEB 4-6-11	Field Logbook No.: EL-1657	COA: R118D42600	Method of Shipment: Fed Ex
Shipped To: TestAmerica Incorporated, ~~Richland~~ Denver	Offsite Property No.: NA		Bill of Lading/Air Bill No.: 7946 2016 3763

POSSIBLE SAMPLE HAZARDS/REMARKS
Radioactive CDOT limits JEB 4-6-11

Special Handling and/or Storage
Cool 4 Deg C

Preservation	Cool 4C	None	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	None	None	None
Type of Container	G/P	G	G/P	G	aG	aG	aG	G/P	G/P	G/P
No. of Container(s)	1	1	1	1	1	1	1	1	1	1
Volume	~~60mL~~ 250mL	~~125mL~~ 250mL	~~60mL~~ 250mL	~~60mL~~ 250mL	~~60mL~~ 250mL	~~60mL~~ 250mL	~~125mL~~ 250mL	500mL	60mL	60g
SAMPLE ANALYSIS	See item (1) in Special Instructions.	See item (2) in Special Instructions.	~~IC Anions - 9056 Modified; NO2/NO3 - 353.1~~; pH - 9045 JRD 4/7/11	Total Cyanide - 9010; Sulfides - 9030	Semi-VOA - 8270A (TCL)	PCBs - 8082	TCLP Semi-VOA - 1311/8270A	See item (3) in Special Instructions.	Gross Alpha & Gross Beta	RCF GEA Shipping Screen

Sample No.	Matrix *	Sample Date	Sample Time										
J1H077	OTHER	4/1/11	0930	✓	✓	✓	✓	✓	✓	✓			

CHAIN OF POSSESSION	Date/Time	Sign/Print Names: Received By/Stored In	Date/Time
Relinquished By/Removed From: K. Lucas	4-1-11 1330	Received By/Stored In: JH DeBruijne	1330 4/1/11
Relinquished By/Removed From: JH DeBruijne	1700 4/4/11	Received By/Stored In: J. E. Beck	1700 4-4-11
Relinquished By/Removed From: J. E. Beck WCH	1245 4-6-11	Received By/Stored In: FED EX	
Relinquished By/Removed From		Received By/Stored In: [signature]	4/7/11 0930
Relinquished By/Removed From		Received By/Stored In	
Relinquished By/Removed From		Received By/Stored In	

SPECIAL INSTRUCTIONS
Screen for oxidizer with Spilfyter test strip.

(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) {Mercury}
(2) Metals by ICP (TCLP) - 1311/6010 {Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver}; Mercury (TCLP) - 1311/7470 {Mercury}
(3) Gamma Spec (Client List) {Americium-241, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155}

REVIEWED BY IRE
DATE 4-6-11

JP0155

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 - 160 GTE - Solid

Analytical Due:

Report Due: 4/14/11 (Rush, 5d TAT)

Sample Check-in List

Date/Time Received: 4/7/11 0930 **GM Screen Result** 13 **microR/hr**

Client: Washington Closure Hanford **SDG #:** JP0155 NA[ ] **SAF #:** RC-073 NA [ ]

Job Number: ~~4/7/11 444~~ 14330 **Chain of Custody #** RC-073-133

Shipping Container ID: AFS-04-121 WCH-08-070 **Air Bill #** 7946 2016 3763, 7946 2016 4050

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: 5.6, 3.4 NA [ ] 5. Vermiculite/packing materials is NA [ ] Wet [✓] Dry [ ]
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA [ ] Yes [ ] No [✓]
8. Samples have:
   - ✓ Tape
   - ✓ Custody Seals
   - ✓ Hazard Lables
   - ✓ Appropriate Sample Lables
9. Samples are:
   - ✓ In Good Condition
   - ___ Broken
   - ___ Leaking
   - ___ Have Air Bubbles
   - (Only for samples requiring no head space.)
10. Sample pH taken? NA [✓] pH<2 [ ] pH>2 [ ] pH>9 [ ] **Amount HNO_3 Added** ___
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): ___

Sample Custodian: [signature] **Date:** 4/7/11

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on ___ by ___ Person Contacted ___

[ ] No action necessary; process as is.

Project Manager [signature] Date 4/8/11

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

RICHLAND, WA 99354

FedEx Express

J11151102250225

Ship Date: 06APR11
ActWgt: 69.0 LB
CAD: 8897843/INET3130

Delivery Address Bar Code

Ref #
Invoice #
PO #
Dept #

SHIP TO: (303) 736-0100 BILL SENDER

Sample Recieving
Test America Denver
4955 YARROW ST

ARVADA, CO 80002

1 of 2

TRK# 0201 7946 2016 3763

MASTER

XH WHHA

THU - 07 APR A1
PRIORITY OVERNIGHT

80002
CO-US
DEN

50DG3/26A8/7EF8

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

RICHLAND, WA 99354

FedEx. Express

J11151102250225

Ship Date: 06APR11
ActWgt: 77.0 LB
CAD: 8897843/INET3130

Delivery Address Bar Code

Ref #
Invoice #
PO #
Dept #

SHIP TO: (303) 736-0100 BILL SENDER

Sample Recieving
Test America Denver
4955 YARROW ST

ARVADA, CO 80002

2 of 2

THU - 07 APR A1
PRIORITY OVERNIGHT

MPS# 7946 2016 4050
0263
Mstr# 7946 2016 3763 0201

XH WHHA

80002
CO-US
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50DG3/26A8/7EF8

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