0095199

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

COMPLETE COPY OF DATA PACKAGE TO:

Kathy Wendt H4-21 KW 3/24/11
NITIAL/DATE

COMMENTS:

SDG JP0110 SAF-RC-107

Rad only Chem only ☑ Rad & Chem

☑ Complete Partial

Waste Site: 126-H-2 Verification Sampling

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APR 05 2011
EDMC

Analytical Data Package Prepared For

Washington Closure Hanford

RECEIVED
MAR 2011

Radiochemical Analysis By

TestAmerica

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

Assigned Laboratory Code: TARL

Data Package Contains 70 *Pages*

Report No.: 46021

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.
JP0110	RC-107	J1DX64	J1C090552-1	MFET61AA	9MFET610	1068405
		J1DX65	J1C090552-2	MFEVC1AA	9MFEVC10	1068405
		J1DX66	J1C090552-3	MFEVF1AA	9MFEVF10	1068405
		J1DX67	J1C090552-4	MFEVG1AA	9MFEVG10	1068405
		J1DX91	J1C090616-1	MFFDW1AE	9MFFDW10	1068427
		J1DX91	J1C090616-1	MFFDW1AC	9MFFDW10	1068429
		J1DX91	J1C090616-1	MFFDW1AA	9MFFDW10	1068430
		J1DX91	J1C090616-1	MFFDW1AD	9MFFDW10	1068431
		J1DX92	J1C090616-2	MFFEX1AE	9MFFEX10	1068427
		J1DX92	J1C090616-2	MFFEX1AC	9MFFEX10	1068429
		J1DX92	J1C090616-2	MFFEX1AA	9MFFEX10	1068430
		J1DX92	J1C090616-2	MFFEX1AD	9MFFEX10	1068431
		J1DX93	J1C090616-3	MFFE11AE	9MFFE110	1068427
		J1DX93	J1C090616-3	MFFE11AC	9MFFE110	1068429
		J1DX93	J1C090616-3	MFFE11AA	9MFFE110	1068430
		J1DX93	J1C090616-3	MFFE11AD	9MFFE110	1068431
		J1DX94	J1C090616-4	MFFE21AE	9MFFE210	1068427
		J1DX94	J1C090616-4	MFFE21AC	9MFFE210	1068429
		J1DX94	J1C090616-4	MFFE21AA	9MFFE210	1068430
		J1DX94	J1C090616-4	MFFE21AD	9MFFE210	1068431

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

Washington Hanford Closure
2620 Fermi Avenue
Richland, WA 99354

TestAmerica Laboratories, Inc.

March 22, 2011

Attention: Joan Kessner

SAF Number	:	RC-107
Date SDG Closed	:	March 9, 2011
Number of Samples	:	Eight (8)
Sample Type	:	Other
SDG Number	:	JP0110
Data Deliverable	:	7– Day / Summary

CASE NARRATIVE

I. Introduction

On March 9, 2011 eight samples were received at TestAmerica for radiochemical analysis. Upon receipt, the samples were assigned the following laboratory ID number to correspond with the Washington Closure Hanford (WCH) specific ID:

WCH ID#	TARL ID#	MATRIX	DATE OF RECEIPT
J1DX64	MFET6	OTHER	3/9/11
J1DX65	MFEVC	OTHER	3/9/11
J1DX66	MFEVF	OTHER	3/9/11
J1DX67	MFEVG	OTHER	3/9/11
J1DX91	MFFDW	OTHER	3/9/11
J1DX92	MFFEX	OTHER	3/9/11
J1DX93	MFFE1	OTHER	3/9/11
J1DX94	MFFE2	OTHER	3/9/11

II. Sample Receipt

The samples were received in good condition and no anomalies were noted during check-in.
The client was contacted on March 10, 2011 about the sample matrix listed as soil on some of the COC request forms. TestAmerica was instructed to treat all of the samples under SDG JP0110 as other matrix.

III. Analytical Results/Methodology

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

The requested analyses were:

Alpha Spectroscopy
Plutonium-238, -239/240 by method RL-ALP-002
Gas Proportional Counting
Strontium-90 by method RL-GPC-003
Liquid Scintillation Counting
Technetium-99 by method RL-LSC-013
Gamma Spectroscopy
Gamma Spec by method RL-GAM-001
Chemical Analysis
Hexavalent Chromium by EPA method 7196A

IV. Quality Control

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

QC and sample results are reported in the same units.

V. Comments

Alpha Spectroscopy
Plutonium-238, -239/240 by method RL-ALP-002:
The LCS, batch blank, sample and sample duplicate (J1DX91) results are within contractual requirements

Gas Proportional Counting
Strontium-90 by method RL-GPC-003:
The LCS recovery was not within the acceptance limits on the original count. The LCS was recounted for an acceptable recovery. Except as noted; the LCS, batch blank, sample and sample duplicate (J1DX94) results are within contractual requirements.

Gamma Spectroscopy
Gamma Spec by method RL-GAM-001 :
There was insufficient volume for a duplicate. Sample J1DX91 was recounted on a different detector for the duplicate (J1DX91DUP). The CRDL was not met on some analytes due to reduced count time. The count time was reduced to meet the priority turn around time. Except as noted, the LCS, batch blank, samples and sample duplicate (J1DX91) results are within contractual requirements

Liquid Scintillation Counting
Technetium-99 by method RL-LSC-013:
The LCS, batch blank, samples, sample duplicate (J1DX92), and sample matrix spike (J1DX93) results are within contractual requirements.

Chemical Analysis
Hexavalent Chromium by EPA method 7196A

Washington Closure Hanford
March 22, 2011

The LCS, batch blank, samples, sample duplicate (J1DX64), sample matrix spike (J1DX64) 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: 22-Mar-11

TestAmerica TARL

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

Report No. : 46021 **SDG No:** JP0110

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDC or MDA	CRDL	RPD
1068427 PUISO_PLATE_AEA									
J1DX91									
	MFFDW1AE	PU-238	0.00E+00 +- 7.3E-02	U	pCi/g	75%	1.37E-01	1.00E+00	
		PU239/40	0.00E+00 +- 7.3E-02	U	pCi/g	75%	1.37E-01	1.00E+00	
J1DX91 DUP									
	MFFDW1AF	PU-238	0.00E+00 +- 1.1E-01	U	pCi/g	52%	2.01E-01	1.00E+00	
		PU239/40	-2.68E-03 +- 1.1E-01	U	pCi/g	52%	2.01E-01	1.00E+00	-200.0
J1DX92									
	MFFEX1AE	PU-238	-1.84E-03 +- 7.4E-02	U	pCi/g	75%	1.38E-01	1.00E+00	
		PU239/40	-1.84E-03 +- 7.4E-02	U	pCi/g	75%	1.38E-01	1.00E+00	
J1DX93									
	MFFE11AE	PU-238	-9.18E-03 +- 9.2E-02	U	pCi/g	55%	2.19E-01	1.00E+00	
		PU239/40	-4.59E-03 +- 9.2E-02	U	pCi/g	55%	1.91E-01	1.00E+00	
J1DX94									
	MFFE21AE	PU-238	-2.50E-03 +- 1.0E-01	U	pCi/g	53%	1.87E-01	1.00E+00	
		PU239/40	-2.50E-03 +- 1.0E-01	U	pCi/g	53%	1.87E-01	1.00E+00	
1068431 GAMMA_GS									
J1DX91									
	MFFDW1AD	AG-108M	6.13E-03 +- 2.9E-02	U	pCi/g		5.22E-02		
		AMERICIUM 241	-1.77E-02 +- 9.9E-02	U	pCi/g		1.66E-01		
		BA-133	1.41E-02 +- 4.9E-02	U	pCi/g		7.57E-02		
		CO-60	-2.02E-02 +- 4.6E-02	U	pCi/g		7.87E-02	5.00E-02	
		CS-137	3.87E-02 +- 4.1E-02	U	pCi/g		7.83E-02	1.00E-01	
		EU-152	-5.97E-02 +- 1.0E-01	U	pCi/g		1.64E-01	1.00E-01	
		EU-154	1.98E-02 +- 1.3E-01	U	pCi/g		2.36E-01	1.00E-01	
		EU-155	5.25E-02 +- 7.9E-02	U	pCi/g		1.40E-01	1.00E-01	
J1DX91 DUP									
	MFFDW1AG	AG-108M	1.03E-02 +- 1.8E-02	U	pCi/g		3.36E-02		51.2
		AMERICIUM 241	1.68E-02 +- 1.3E-01	U	pCi/g		2.26E-01		-8288.5
		BA-133	8.97E-03 +- 2.5E-02	U	pCi/g		4.40E-02		44.8
		CO-60	-9.60E-04 +- 2.7E-02	U	pCi/g		4.99E-02	5.00E-02	-181.9
		CS-137	9.64E-03 +- 2.8E-02	U	pCi/g		4.95E-02	1.00E-01	120.2
		EU-152	-3.70E-02 +- 6.2E-02	U	pCi/g		1.02E-01	1.00E-01	-46.9
		EU-154	-7.62E-03 +- 9.4E-02	U	pCi/g		1.67E-01	1.00E-01	449.3
		EU-155	2.56E-02 +- 5.1E-02	U	pCi/g		9.21E-02	1.00E-01	68.8
J1DX92									
	MFFEX1AD	AG-108M	1.66E-04 +- 2.2E-02	U	pCi/g		3.91E-02		
		AMERICIUM 241	-1.29E-01 +- 1.5E-01	U	pCi/g		2.39E-01		
		BA-133	9.27E-03 +- 3.1E-02	U	pCi/g		5.00E-02		

TestAmerica **RPD - Relative Percent Difference.**

rptSTLRchSaSummary2 V5.2.12 A2002

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

Sample Results Summary

TestAmerica TARL

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

Date: 22-Mar-11

Report No. : 46021

SDG No: JP0110

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDC or MDA	CRDL	RPD
1068431 GAMMA_GS									
J1DX92									
	MFFEX1AD	CO-60	2.66E-03 +- 3.7E-02	U	pCi/g		6.85E-02	5.00E-02	
		CS-137	6.45E-03 +- 3.1E-02	U	pCi/g		5.56E-02	1.00E-01	
		EU-152	-1.26E-02 +- 6.7E-02	U	pCi/g		1.14E-01	1.00E-01	
		EU-154	3.41E-03 +- 1.0E-01	U	pCi/g		1.86E-01	1.00E-01	
		EU-155	2.05E-02 +- 6.0E-02	U	pCi/g		1.08E-01	1.00E-01	
J1DX93									
	MFFE11AD	AG-108M	-8.46E-04 +- 2.2E-02	U	pCi/g		3.78E-02		
		AMERICIUM 241	-3.08E-02 +- 1.5E-01	U	pCi/g		2.59E-01		
		BA-133	-4.43E-03 +- 3.2E-02	U	pCi/g		5.13E-02		
		CO-60	-2.76E-02 +- 3.4E-02	U	pCi/g		5.66E-02	5.00E-02	
		CS-137	4.19E-02 +- 3.2E-02	U	pCi/g		6.16E-02	1.00E-01	
		EU-152	-9.96E-03 +- 7.0E-02	U	pCi/g		1.19E-01	1.00E-01	
		EU-154	-2.07E-02 +- 1.1E-01	U	pCi/g		1.95E-01	1.00E-01	
		EU-155	-3.94E-02 +- 5.8E-02	U	pCi/g		9.68E-02	1.00E-01	
J1DX94									
	MFFE21AD	AG-108M	-1.71E-02 +- 3.4E-02	U	pCi/g		5.77E-02		
		AMERICIUM 241	-2.18E-02 +- 1.0E-01	U	pCi/g		1.73E-01		
		BA-133	-1.18E-02 +- 5.4E-02	U	pCi/g		7.94E-02		
		CO-60	6.76E-03 +- 4.8E-02	U	pCi/g		8.98E-02	5.00E-02	
		CS-137	-2.77E-03 +- 4.8E-02	U	pCi/g		8.47E-02	1.00E-01	
		EU-152	5.71E-02 +- 1.1E-01	U	pCi/g		1.90E-01	1.00E-01	
		EU-154	-4.50E-02 +- 1.4E-01	U	pCi/g		2.49E-01	1.00E-01	
		EU-155	-7.60E-02 +- 8.6E-02	U	pCi/g		1.42E-01	1.00E-01	
1068430 SRTOT_SEP_PRECIP_GPC									
J1DX91									
	MFFDW1AA	STRONTIUM	8.42E-02 +- 7.4E-02	U	pCi/g	84%	1.46E-01		
J1DX92									
	MFFEX1AA	STRONTIUM	1.56E-01 +- 8.6E-02		pCi/g	81%	1.42E-01		
J1DX93									
	MFFE11AA	STRONTIUM	2.21E-01 +- 9.6E-02		pCi/g	81%	1.29E-01		
J1DX94									
	MFFE21AA	STRONTIUM	1.27E-01 +- 7.8E-02	U	pCi/g	80%	1.34E-01		
J1DX94 DUP									
	MFFE21AF	STRONTIUM	2.53E-01 +- 1.0E-01		pCi/g	83%	1.27E-01		66.7
1068405 7196_CR6									
J1DX64									
	MFET61AA	HEXCHROME	2.44E+00 +- 0.0E+00		mg/kg	N/A	1.53E-01	1.55E-01	

TestAmerica RPD - Relative Percent Difference.

rptSTLRchSaSummary2 V5.2.12 A2002

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

Sample Results Summary

Date: 22-Mar-11

TestAmerica TARL

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

Report No. : 46021

SDG No: JP0110

Batch	Client Id / Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDC or MDA	CRDL	RPD
1068405	7196_CR6								
	J1DX64								
	MFEV61AA	HEXCHROME	2.39E+00 +- 0.0E+00		mg/kg	N/A	1.54E-01		
	J1DX65								
	MFEVC1AA	HEXCHROME	2.07E+00 +- 0.0E+00		mg/kg	N/A	1.53E-01	1.55E-01	
	J1DX66								
	MFEVF1AA	HEXCHROME	3.67E+00 +- 0.0E+00		mg/kg	N/A	1.44E-01	1.55E-01	
	J1DX67								
	MFEVG1AA	HEXCHROME	2.79E+00 +- 0.0E+00		mg/kg	N/A	1.51E-01	1.55E-01	
1068429	TC99_ETVDSK_LSC								
	J1DX91								
	MFFDW1AC	TC-99	7.38E-01 +- 4.3E-01		pCi/g	100%	6.62E-01	1.50E+01	
	J1DX92								
	MFFEX1AC	TC-99	-1.75E-02 +- 3.8E-01	U	pCi/g	100%	6.43E-01	1.50E+01	
	J1DX92 DUP								
	MFFEX1AF	TC-99	1.05E+00 +- 4.6E-01		pCi/g	100%	7.05E-01	1.50E+01	206.8
	J1DX93								
	MFFE11AC	TC-99	1.02E-01 +- 3.9E-01	U	pCi/g	100%	6.59E-01	1.50E+01	
	J1DX94								
	MFFE21AC	TC-99	2.47E-01 +- 3.9E-01	U	pCi/g	100%	6.36E-01	1.50E+01	

No. of Results: 65

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: 22-Mar-11

Report No. : 46021

SDG No.: JP0110

Batch Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDC|MDA
PUISO_PLATE_AEA								
1068427 BLANK QC,								
MFFVN1AA	PU-238	-1.92E-03 +- 7.7E-02	U	pCi/g	66%			1.44E-01
	PU239/40	-1.92E-03 +- 7.7E-02	U	pCi/g	66%			1.44E-01
1068427 LCS,								
MFFVN1AC	PU239/40	6.52E+00 +- 1.9E+00		pCi/g	60%	92%	-0.1	1.62E-01
GAMMA_GS								
1068431 BLANK QC,								
MFFVV1AA	AG-108M	5.65E-03 +- 2.0E-02	U	pCi/g				3.65E-02
	AMERICIUM 241	-4.74E-02 +- 1.3E-01	U	pCi/g				2.26E-01
	BA-133	2.69E-02 +- 3.0E-02	U	pCi/g				5.00E-02
	CO-60	-1.10E-02 +- 3.3E-02	U	pCi/g				5.93E-02
	CS-137	2.01E-02 +- 3.0E-02	U	pCi/g				5.54E-02
	EU-152	-5.25E-02 +- 7.0E-02	U	pCi/g				1.14E-01
	EU-154	1.42E-02 +- 1.0E-01	U	pCi/g				1.86E-01
	EU-155	1.92E-02 +- 5.1E-02	U	pCi/g				9.32E-02
1068431 LCS,								
MFFVV1AC	CS-137	8.20E-01 +- 2.4E-01		pCi/g		108%	0.1	1.73E-01
SRTOT_SEP_PRECIP_GPC								
1068430 BLANK QC,								
MFFVT1AA	STRONTIUM	2.58E-02 +- 5.8E-02	U	pCi/g	88%			1.30E-01
1068430 LCS,								
MFFVT2AC	STRONTIUM	1.13E+00 +- 3.1E-01		pCi/g	89%	99%	0.0	9.69E-02
7196_CR6								
1068405 MATRIX SPIKE, J1DX64								
MFEVG1AC	HEXCHROME	8.73E+00 +- 0.0E+00		mg/kg	N/A	88%	-0.1	1.50E-01
1068405 LCS,								
MFFLD1AC	HEXCHROME	1.83E+01 +- 0.0E+00		mg/kg	N/A	91%	-0.1	1.55E-01
1068405 BLANK QC,								
MFFLD1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A			1.55E-01
TC99_ETVDSK_LSC								
1068429 BLANK QC,								
MFFVR1AA	TC-99	3.97E-01 +- 4.1E-01	U	pCi/g	100%			6.52E-01
1068429 LCS,								
MFFVR1AC	TC-99	6.93E+01 +- 4.9E+00		pCi/g	100%	102%	0.0	6.48E-01
1068429 MATRIX SPIKE, J1DX93								
MFFE11AF	TC-99	1.96E+02 +- 1.3E+01		pCi/g	100%	89%	-0.1	6.40E-01

No. of Results: 20

TestAmerica

rptSTLRchQcSummary V5.2.12
A2002

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

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

FORM I

SAMPLE RESULTS

Date: 22-Mar-11

Lab Name:	**TestAmerica**	**SDG:**	JP0110	**Collection Date:**	3/8/2011 12:45:00 PM
Lot-Sample No.:	**J1C090552-1**	**Report No. :**	46021	**Received Date:**	3/9/2011 11:45:00 AM
Client Sample ID:	**J1DX64**	**COC No. :**	RC-107-060	**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: 1068405	7196_CR6			**Work Order:** MFET61AA			**Report DB ID:** 9MFET610					
HEXCHROME	***2.44E+00***			0.0E+00	1.53E-01	mg/kg	N/A	*(15.9)*	3/9/11		2.5	
							1.55E-01	*N/A*			g	

No. of Results: 1 **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: 22-Mar-11

Lab Name:	**TestAmerica**	**SDG:**	JP0110	**Collection Date:**	3/8/2011 1:35:00 PM
Lot-Sample No.:	**J1C090552-2**	**Report No. :**	46021	**Received Date:**	3/9/2011 11:45:00 AM
Client Sample ID:	**J1DX65**	**COC No. :**	RC-107-060	**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: 1068405	7196_CR6			**Work Order:** MFEVC1AA			**Report DB ID:** 9MFEVC10					
HEXCHROME	***2.07E+00***			0.0E+00	1.53E-01	mg/kg	N/A	*(13.5)*	3/9/11		2.5	
							1.55E-01	*N/A*			g	

No. of Results: 1 **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: 22-Mar-11

Lab Name:	**TestAmerica**	**SDG:**	JP0110	**Collection Date:**	3/8/2011 1:50:00 PM
Lot-Sample No.:	**J1C090552-3**	**Report No. :**	46021	**Received Date:**	3/9/2011 11:45:00 AM
Client Sample ID:	**J1DX66**	**COC No. :**	RC-107-060	**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: 1068405	7196_CR6			**Work Order:** MFEVF1AA			**Report DB ID:** 9MFEVF10					
HEXCHROME	***3.67E+00***			0.0E+00	1.44E-01	mg/kg	N/A	*(25.5)*	3/9/11		2.6	
							1.55E-01	*N/A*			g	

No. of Results: 1 **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: 22-Mar-11

Lab Name:	**TestAmerica**	**SDG:**	JP0110	**Collection Date:**	3/8/2011 1:15:00 PM
Lot-Sample No.:	**J1C090552-4**	**Report No. :**	46021	**Received Date:**	3/9/2011 11:45:00 AM
Client Sample ID:	**J1DX67**	**COC No. :**	RC-107-060	**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: 1068405	7196_CR6			**Work Order:** MFEVG1AA			**Report DB ID:** 9MFEVG10					
HEXCHROME	***2.79E+00***			0.0E+00	1.51E-01	mg/kg	N/A	*(18.5)*	3/9/11		2.5	
							1.55E-01	*N/A*			g	

No. of Results: 1 **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: 22-Mar-11

Lab Name:	TestAmerica	**SDG:**	JP0110	**Collection Date:**	3/8/2011 12:45:00 PM
Lot-Sample No.:	J1C090616-1	**Report No. :**	46021	**Received Date:**	3/9/2011 11:45:00 AM
Client Sample ID:	J1DX91	**COC No. :**	RC-107-061	**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: 1068427	PUISO_PLATE_AEA			**Work Order:** MFFDW1AE			**Report DB ID:** 9MFFDW10					
PU-238	***0.00E+00***	U	0.0E+00	7.3E-02	1.37E-01	pCi/g	75%	*0.*	3/17/11 06:52 p		1.05	ALP123
						1.90E-02	1.00E+00	*0.*			g	
PU239/40	***0.00E+00***	U	0.0E+00	7.3E-02	1.37E-01	pCi/g	75%	*0.*	3/17/11 06:52 p		1.05	ALP123
						1.90E-02	1.00E+00	*0.*			g	
Batch: 1068429	TC99_ETVDSK_LSC			**Work Order:** MFFDW1AC			**Report DB ID:** 9MFFDW10					
TC-99	***7.38E-01***		2.9E-01	4.3E-01	6.62E-01	pCi/g	100%	*(1.1)*	3/19/11 06:11 a		2.01	LSC6
						3.18E-01	1.50E+01	*(3.4)*			g	
Batch: 1068430	SRTOT_SEP_PRECIP_GPC			**Work Order:** MFFDW1AA			**Report DB ID:** 9MFFDW10					
STRONTIUM	***8.42E-02***	U	7.0E-02	7.4E-02	1.46E-01	pCi/g	84%	*0.58*	3/21/11 01:09 a		6.01	GPC26A
						6.82E-02		*(2.3)*			g	
Batch: 1068431	GAMMA_GS			**Work Order:** MFFDW1AD			**Report DB ID:** 9MFFDW10					
AG-108M	***6.13E-03***	U	2.9E-02	2.9E-02	5.22E-02	pCi/g		*0.12*	3/15/11 03:55 a		65.7	GER7$1
								0.42			g	
AMERICIUM 241	***-1.77E-02***	U	9.9E-02	9.9E-02	1.66E-01	pCi/g		*-0.11*	3/15/11 03:55 a		65.7	GER7$1
								-0.36			g	
BA-133	***1.41E-02***	U	4.9E-02	4.9E-02	7.57E-02	pCi/g		*0.19*	3/15/11 03:55 a		65.7	GER7$1
								0.58			g	
CO-60	***-2.02E-02***	U	4.6E-02	4.6E-02	7.87E-02	pCi/g		*-0.26*	3/15/11 03:55 a		65.7	GER7$1
							5.00E-02	*-0.88*			g	
CS-137	***3.87E-02***	U	4.1E-02	4.1E-02	7.83E-02	pCi/g		*0.49*	3/15/11 03:55 a		65.7	GER7$1
							1.00E-01	*(1.9)*			g	

TestAmerica
rptSTLRchSample
V5.2.12 A2002

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

FORM I

SAMPLE RESULTS

Date: 22-Mar-11

Lab Name:	**TestAmerica**	**SDG:**	JP0110	**Collection Date:**	3/8/2011 12:45:00 PM
Lot-Sample No.:	**J1C090616-1**	**Report No. :**	46021	**Received Date:**	3/9/2011 11:45:00 AM
Client Sample ID:	**J1DX91**	**COC No. :**	RC-107-061	**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
EU-152	***-5.97E-02***	U	1.0E-01	1.0E-01	1.64E-01	pCi/g		*-0.36*	3/15/11 03:55 a		65.7	GER7$1
							1.00E-01	*-(1.2)*			g	
EU-154	***1.98E-02***	U	1.3E-01	1.3E-01	2.36E-01	pCi/g		*0.08*	3/15/11 03:55 a		65.7	GER7$1
							1.00E-01	*0.31*			g	
EU-155	***5.25E-02***	U	7.9E-02	7.9E-02	1.40E-01	pCi/g		*0.38*	3/15/11 03:55 a		65.7	GER7$1
							1.00E-01	*(1.3)*			g	

No. of Results: 12 **Comments:**

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

FORM I

SAMPLE RESULTS

Date: 22-Mar-11

Lab Name:	TestAmerica	**SDG:**	JP0110	**Collection Date:**	3/8/2011 1:35:00 PM
Lot-Sample No.:	J1C090616-2	**Report No. :**	46021	**Received Date:**	3/9/2011 11:45:00 AM
Client Sample ID:	J1DX92	**COC No. :**	RC-107-061	**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: 1068427	PUISO_PLATE_AEA			**Work Order:**	MFFEX1AE		**Report DB ID:**	9MFFEX10				
PU-238	***-1.84E-03***	U	7.4E-02	7.4E-02	1.38E-01	pCi/g	75%	*-0.01*	3/17/11 05:21 p		1.03	ALP125
						1.91E-02	1.00E+00	*-0.05*			g	
PU239/40	***-1.84E-03***	U	7.4E-02	7.4E-02	1.38E-01	pCi/g	75%	*-0.01*	3/17/11 05:21 p		1.03	ALP125
						1.91E-02	1.00E+00	*-0.05*			g	
Batch: 1068429	TC99_ETVDSK_LSC			**Work Order:**	MFFEX1AC		**Report DB ID:**	9MFFEX10				
TC-99	***-1.75E-02***	U	2.6E-01	3.8E-01	6.43E-01	pCi/g	100%	*-0.03*	3/19/11 07:14 a		2.03	LSC6
						3.09E-01	1.50E+01	*-0.09*			g	
Batch: 1068430	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MFFEX1AA		**Report DB ID:**	9MFFEX10				
STRONTIUM	***1.56E-01***		7.6E-02	8.6E-02	1.42E-01	pCi/g	81%	*(1.1)*	3/21/11 01:09 a		6.05	GPC26B
						6.66E-02		*(3.6)*			g	
Batch: 1068431	GAMMA_GS			**Work Order:**	MFFEX1AD		**Report DB ID:**	9MFFEX10				
AG-108M	***1.66E-04***	U	2.2E-02	2.2E-02	3.91E-02	pCi/g		*0.*	3/15/11 03:56 a		55.4	GER11$1
								0.01			g	
AMERICIUM 241	***-1.29E-01***	U	1.5E-01	1.5E-01	2.39E-01	pCi/g		*-0.54*	3/15/11 03:56 a		55.4	GER11$1
								-(1.7)			g	
BA-133	***9.27E-03***	U	3.1E-02	3.1E-02	5.00E-02	pCi/g		*0.19*	3/15/11 03:56 a		55.4	GER11$1
								0.59			g	
CO-60	***2.66E-03***	U	3.7E-02	3.7E-02	6.85E-02	pCi/g		*0.04*	3/15/11 03:56 a		55.4	GER11$1
							5.00E-02	*0.14*			g	
CS-137	***6.45E-03***	U	3.1E-02	3.1E-02	5.56E-02	pCi/g		*0.12*	3/15/11 03:56 a		55.4	GER11$1
							1.00E-01	*0.41*			g	

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: 22-Mar-11

Lab Name:	**TestAmerica**	**SDG:**	JP0110	**Collection Date:**	3/8/2011 1:35:00 PM
Lot-Sample No.:	**J1C090616-2**	**Report No. :**	46021	**Received Date:**	3/9/2011 11:45:00 AM
Client Sample ID:	**J1DX92**	**COC No. :**	RC-107-061	**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
EU-152	***-1.26E-02***	U	6.7E-02	6.7E-02	1.14E-01	pCi/g		*-0.11*	3/15/11 03:56 a		55.4	GER11$1
							1.00E-01	*-0.38*			g	
EU-154	***3.41E-03***	U	1.0E-01	1.0E-01	1.86E-01	pCi/g		*0.02*	3/15/11 03:56 a		55.4	GER11$1
							1.00E-01	*0.07*			g	
EU-155	***2.05E-02***	U	6.0E-02	6.0E-02	1.08E-01	pCi/g		*0.19*	3/15/11 03:56 a		55.4	GER11$1
							1.00E-01	*0.68*			g	

No. of Results: 12 **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: 22-Mar-11

Lab Name:	TestAmerica	**SDG:**	JP0110	**Collection Date:**	3/8/2011 1:50:00 PM
Lot-Sample No.:	J1C090616-3	**Report No. :**	46021	**Received Date:**	3/9/2011 11:45:00 AM
Client Sample ID:	J1DX93	**COC No. :**	RC-107-061	**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: 1068427	PUISO_PLATE_AEA			**Work Order:** MFFE11AE			**Report DB ID:** 9MFFE110					
PU-238	***-9.18E-03***	U	9.2E-02	9.2E-02	2.19E-01	pCi/g	55%	*-0.04*	3/17/11 06:51 p		1.03	ALP38
						4.76E-02	1.00E+00	*-0.2*			g	
PU239/40	***-4.59E-03***	U	9.2E-02	9.2E-02	1.91E-01	pCi/g	55%	*-0.02*	3/17/11 06:51 p		1.03	ALP38
						3.37E-02	1.00E+00	*-0.1*			g	
Batch: 1068429	TC99_ETVDSK_LSC			**Work Order:** MFFE11AC			**Report DB ID:** 9MFFE110					
TC-99	***1.02E-01***	U	2.7E-01	3.9E-01	6.59E-01	pCi/g	100%	*0.16*	3/19/11 09:20 a		2.03	LSC6
						3.16E-01	1.50E+01	*0.52*			g	
Batch: 1068430	SRTOT_SEP_PRECIP_GPC			**Work Order:** MFFE11AA			**Report DB ID:** 9MFFE110					
STRONTIUM	***2.21E-01***		7.7E-02	9.6E-02	1.29E-01	pCi/g	81%	*(1.7)*	3/21/11 01:09 a		6.01	GPC26C
						5.99E-02		*(4.6)*			g	
Batch: 1068431	GAMMA_GS			**Work Order:** MFFE11AD			**Report DB ID:** 9MFFE110					
AG-108M	***-8.46E-04***	U	2.2E-02	2.2E-02	3.78E-02	pCi/g		*-0.02*	3/15/11 11:00 a		53.3	GER11$1
								-0.08			g	
AMERICIUM 241	***-3.08E-02***	U	1.5E-01	1.5E-01	2.59E-01	pCi/g		*-0.12*	3/15/11 11:00 a		53.3	GER11$1
								-0.4			g	
BA-133	***-4.43E-03***	U	3.2E-02	3.2E-02	5.13E-02	pCi/g		*-0.09*	3/15/11 11:00 a		53.3	GER11$1
								-0.28			g	
CO-60	***-2.76E-02***	U	3.4E-02	3.4E-02	5.66E-02	pCi/g		*-0.49*	3/15/11 11:00 a		53.3	GER11$1
							5.00E-02	*-(1.6)*			g	
CS-137	***4.19E-02***	U	3.2E-02	3.2E-02	6.16E-02	pCi/g		*0.68*	3/15/11 11:00 a		53.3	GER11$1
							1.00E-01	*(2.6)*			g	

TestAmerica
rptSTLRchSample
V5.2.12 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
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: 22-Mar-11

Lab Name:	TestAmerica	**SDG:**	JP0110	**Collection Date:**	3/8/2011 1:50:00 PM
Lot-Sample No.:	J1C090616-3	**Report No. :**	46021	**Received Date:**	3/9/2011 11:45:00 AM
Client Sample ID:	J1DX93	**COC No. :**	RC-107-061	**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
EU-152	***-9.96E-03***	U	7.0E-02	7.0E-02	1.19E-01	pCi/g		*-0.08*	3/15/11 11:00 a		53.3	GER11$1
							1.00E-01	*-0.29*			g	
EU-154	***-2.07E-02***	U	1.1E-01	1.1E-01	1.95E-01	pCi/g		*-0.11*	3/15/11 11:00 a		53.3	GER11$1
							1.00E-01	*-0.37*			g	
EU-155	***-3.94E-02***	U	5.8E-02	5.8E-02	9.68E-02	pCi/g		*-0.41*	3/15/11 11:00 a		53.3	GER11$1
							1.00E-01	*-(1.4)*			g	

No. of Results: 12 **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: 22-Mar-11

Lab Name:	TestAmerica	**SDG:**	JP0110	**Collection Date:**	3/8/2011 1:15:00 PM
Lot-Sample No.:	J1C090616-4	**Report No. :**	46021	**Received Date:**	3/9/2011 11:45:00 AM
Client Sample ID:	J1DX94	**COC No. :**	RC-107-061	**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: 1068427	PUISO_PLATE_AEA			**Work Order:** MFFE21AE			**Report DB ID:** 9MFFE210					
PU-238	***-2.50E-03***	U	1.0E-01	1.0E-01	1.87E-01	pCi/g	53%	*-0.01*	3/17/11 06:51 p		0.98	ALP39
						2.60E-02	1.00E+00	*-0.05*			g	
PU239/40	***-2.50E-03***	U	1.0E-01	1.0E-01	1.87E-01	pCi/g	53%	*-0.01*	3/17/11 06:51 p		0.98	ALP39
						2.60E-02	1.00E+00	*-0.05*			g	
Batch: 1068429	TC99_ETVDSK_LSC			**Work Order:** MFFE21AC			**Report DB ID:** 9MFFE210					
TC-99	***2.47E-01***	U	2.7E-01	3.9E-01	6.36E-01	pCi/g	100%	*0.39*	3/19/11 11:25 a		2.06	LSC6
						3.05E-01	1.50E+01	*(1.3)*			g	
Batch: 1068430	SRTOT_SEP_PRECIP_GPC			**Work Order:** MFFE21AA			**Report DB ID:** 9MFFE210					
STRONTIUM	***1.27E-01***	U	7.0E-02	7.8E-02	1.34E-01	pCi/g	80%	*0.95*	3/21/11 01:09 a		6.01	GPC26D
						6.21E-02		*(3.3)*			g	
Batch: 1068431	GAMMA_GS			**Work Order:** MFFE21AD			**Report DB ID:** 9MFFE210					
AG-108M	***-1.71E-02***	U	3.4E-02	3.4E-02	5.77E-02	pCi/g		*-0.3*	3/15/11 11:00 a		57.4	GER7$1
								-1.			g	
AMERICIUM 241	***-2.18E-02***	U	1.0E-01	1.0E-01	1.73E-01	pCi/g		*-0.13*	3/15/11 11:00 a		57.4	GER7$1
								-0.42			g	
BA-133	***-1.18E-02***	U	5.4E-02	5.4E-02	7.94E-02	pCi/g		*-0.15*	3/15/11 11:00 a		57.4	GER7$1
								-0.44			g	
CO-60	***6.76E-03***	U	4.8E-02	4.8E-02	8.98E-02	pCi/g		*0.08*	3/15/11 11:00 a		57.4	GER7$1
							5.00E-02	*0.28*			g	
CS-137	***-2.77E-03***	U	4.8E-02	4.8E-02	8.47E-02	pCi/g		*-0.03*	3/15/11 11:00 a		57.4	GER7$1
							1.00E-01	*-0.12*			g	

TestAmerica
rptSTLRchSample
V5.2.12 A2002

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

FORM I

SAMPLE RESULTS

Date: 22-Mar-11

Lab Name:	**TestAmerica**	**SDG:**	JP0110	**Collection Date:**	3/8/2011 1:15:00 PM
Lot-Sample No.:	**J1C090616-4**	**Report No. :**	46021	**Received Date:**	3/9/2011 11:45:00 AM
Client Sample ID:	**J1DX94**	**COC No. :**	RC-107-061	**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
EU-152	***5.71E-02***	U	1.1E-01	1.1E-01	1.90E-01	pCi/g		*0.3*	3/15/11 11:00 a		57.4	GER7$1
							1.00E-01	*(1.1)*			g	
EU-154	***-4.50E-02***	U	1.4E-01	1.4E-01	2.49E-01	pCi/g		*-0.18*	3/15/11 11:00 a		57.4	GER7$1
							1.00E-01	*-0.63*			g	
EU-155	***-7.60E-02***	U	8.6E-02	8.6E-02	1.42E-01	pCi/g		*-0.54*	3/15/11 11:00 a		57.4	GER7$1
							1.00E-01	*-(1.8)*			g	

No. of Results: 12 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.12 A2002

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

FORM II

Date: 22-Mar-11

DUPLICATE RESULTS

Lab Name:	TestAmerica	**SDG:**	JP0110	**Collection Date:**	3/8/2011 12:45:00 PM
Lot-Sample No.:	J1C090552-1	**Report No. :**	46021	**Received Date:**	3/9/2011 11:45:00 AM
Client Sample ID:	J1DX64	**COC No. :**	RC-107-060	**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: 1068405	7196_CR6			**Work Order:** MFEV61AA		**Report DB ID:** MFET61ER			**Orig Sa DB ID:**			
HEXCHROME	2.39E+00			0.0E+00	1.54E-01	mg/kg	N/A	(15.5)	3/9/11		2.5	
			RPD					N/A			g	

No. of Results: 1 Comments:

TestAmerica RPD - Relative Percent Difference.

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

FORM II

Date: 22-Mar-11

DUPLICATE RESULTS

Lab Name:	**TestAmerica**	**SDG:**	JP0110	**Collection Date:**	3/8/2011 12:45:00 PM
Lot-Sample No.:	**J1C090616-1**	**Report No. :**	46021	**Received Date:**	3/9/2011 11:45:00 AM
Client Sample ID:	**J1DX91 DUP**	**COC No. :**	RC-107-061	**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: 1068427	PUISO_PLATE_AEA			**Work Order:** MFFDW1AF		**Report DB ID:** MFFDW1FR			**Orig Sa DB ID:** 9MFFDW10			
PU-238	0.00E+00	U	0.0E+00	1.1E-01	2.01E-01	pCi/g	52%	0.	3/17/11 05:20 p		1.0	ALP124
	0.00E+00	U	**RPD**			1.00E+00		0.			g	
PU239/40	-2.68E-03	U	1.1E-01	1.1E-01	2.01E-01	pCi/g	52%	-0.01	3/17/11 05:20 p		1.0	ALP124
	0.00E+00	U	**RPD**	**-200.0**		1.00E+00		-0.05			g	
Batch: 1068431	GAMMA_GS			**Work Order:** MFFDW1AG		**Report DB ID:** MFFDW1GR			**Orig Sa DB ID:** 9MFFDW10			
AG-108M	1.03E-02	U	1.8E-02	1.8E-02	3.36E-02	pCi/g		0.31	3/15/11 07:33 a		65.7	GER11$1
	6.13E-03	U	**RPD**	**51.2**				(1.1)			g	
AMERICIUM 241	1.68E-02	U	1.3E-01	1.3E-01	2.26E-01	pCi/g		0.07	3/15/11 07:33 a		65.7	GER11$1
	-1.77E-02	U	**RPD**	**-8288.5**				0.26			g	
BA-133	8.97E-03	U	2.5E-02	2.5E-02	4.40E-02	pCi/g		0.2	3/15/11 07:33 a		65.7	GER11$1
	1.41E-02	U	**RPD**	**44.8**				0.7			g	
CO-60	-9.60E-04	U	2.7E-02	2.7E-02	4.99E-02	pCi/g		-0.02	3/15/11 07:33 a		65.7	GER11$1
	-2.02E-02	U	**RPD**	**-181.9**		5.00E-02		-0.07			g	
CS-137	9.64E-03	U	2.8E-02	2.8E-02	4.95E-02	pCi/g		0.19	3/15/11 07:33 a		65.7	GER11$1
	3.87E-02	U	**RPD**	**120.2**		1.00E-01		0.7			g	
EU-152	-3.70E-02	U	6.2E-02	6.2E-02	1.02E-01	pCi/g		-0.36	3/15/11 07:33 a		65.7	GER11$1
	-5.97E-02	U	**RPD**	**-46.9**		1.00E-01		-(1.2)			g	
EU-154	-7.62E-03	U	9.4E-02	9.4E-02	1.67E-01	pCi/g		-0.05	3/15/11 07:33 a		65.7	GER11$1
	1.98E-02	U	**RPD**	**449.3**		1.00E-01		-0.16			g	
EU-155	2.56E-02	U	5.1E-02	5.1E-02	9.21E-02	pCi/g		0.28	3/15/11 07:33 a		65.7	GER11$1
	5.25E-02	U	**RPD**	**68.8**		1.00E-01		(1.)			g	

TestAmerica **RPD** - Relative Percent Difference.

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

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

FORM II

Date: 22-Mar-11

DUPLICATE RESULTS

Lab Name:	TestAmerica	SDG:	JP0110	Collection Date:	3/8/2011 12:45:00 PM
Lot-Sample No.:	J1C090616-1	Report No. :	46021	Received Date:	3/9/2011 11:45:00 AM
Client Sample ID:	J1DX91 DUP	COC No. :	RC-107-061	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

No. of Results: 10 Comments:

TestAmerica RPD - Relative Percent Difference.

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

FORM II

Date: 22-Mar-11

DUPLICATE RESULTS

Lab Name:	TestAmerica	**SDG:**	JP0110	**Collection Date:**	3/8/2011 1:35:00 PM
Lot-Sample No.:	J1C090616-2	**Report No. :**	46021	**Received Date:**	3/9/2011 11:45:00 AM
Client Sample ID:	J1DX92 DUP	**COC No. :**	RC-107-061	**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: 1068429	TC99_ETVDSK_LSC			**Work Order:** MFFEX1AF		**Report DB ID:** MFFEX1FR			**Orig Sa DB ID:** 9MFFEX10			
TC-99	1.05E+00		3.1E-01	4.6E-01	7.05E-01	pCi/g	100%	(1.5)	3/19/11 08:17 a		2.03	LSC6
	-1.75E-02	U	**RPD**	**206.8**		1.50E+01		(4.6)			g	

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

TestAmerica
rptSTLRchDupV5.2
.12 A2002

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

FORM II

Date: 22-Mar-11

DUPLICATE RESULTS

Lab Name:	TestAmerica	**SDG:**	JP0110	**Collection Date:**	3/8/2011 1:15:00 PM
Lot-Sample No.:	J1C090616-4	**Report No. :**	46021	**Received Date:**	3/9/2011 11:45:00 AM
Client Sample ID:	J1DX94 DUP	**COC No. :**	RC-107-061	**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: 1068430	SRTOT_SEP_PRECIP_GPC			**Work Order:** MFFE21AF		**Report DB ID:** MFFE21FR			**Orig Sa DB ID:** 9MFFE210			
STRONTIUM	2.53E-01		7.9E-02	1.0E-01	1.27E-01	pCi/g	83%	(2.)	3/21/11 01:09 a		6.0	GPC27A
	1.27E-01	U	**RPD**	**66.7**				(4.9)			g	

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

TestAmerica
rptSTLRchDupV5.2
.12 A2002

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

FORM II

BLANK RESULTS

Date: 22-Mar-11

Lab Name: TestAmerica

Matrix: OTHER

SDG: JP0110

Report No. : 46021

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: 1068405	7196_CR6			**Work Order:**	MFFLD1AA		**Report DB ID:**	MFLLD1AB				
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	1.	3/9/11		2.5	
						1.55E-01		N/A			g	
Batch: 1068427	PUISO_PLATE_AEA			**Work Order:**	MFFVN1AA		**Report DB ID:**	MFFVN1AB				
PU-238	-1.92E-03	U	7.7E-02	7.7E-02	1.44E-01	pCi/g	66%	-0.01	3/17/11 06:51 p		1.05	ALP40
					2.00E-02	1.00E+00		-0.05			g	
PU239/40	-1.92E-03	U	7.7E-02	7.7E-02	1.44E-01	pCi/g	66%	-0.01	3/17/11 06:51 p		1.05	ALP40
					1.99E-02	1.00E+00		-0.05			g	
Batch: 1068429	TC99_ETVDSK_LSC			**Work Order:**	MFFVR1AA		**Report DB ID:**	MFFVR1AB				
TC-99	3.97E-01	U	2.8E-01	4.1E-01	6.52E-01	pCi/g	100%	0.61	3/19/11 12:28 p		2.01	LSC6
					3.13E-01	1.50E+01		(1.9)			g	
Batch: 1068431	GAMMA_GS			**Work Order:**	MFFVV1AA		**Report DB ID:**	MFFVV1AB				
AG-108M	5.65E-03	U	2.0E-02	2.0E-02	3.65E-02	pCi/g		0.15	3/15/11 02:28 p		52.0	GER11$1
								0.56			g	
AMERICIUM 241	-4.74E-02	U	1.3E-01	1.3E-01	2.26E-01	pCi/g		-0.21	3/15/11 02:28 p		52.0	GER11$1
								-0.7			g	
BA-133	2.69E-02	U	3.0E-02	3.0E-02	5.00E-02	pCi/g		0.54	3/15/11 02:28 p		52.0	GER11$1
								(1.8)			g	
CO-60	-1.10E-02	U	3.3E-02	3.3E-02	5.93E-02	pCi/g		-0.19	3/15/11 02:28 p		52.0	GER11$1
						5.00E-02		-0.66			g	
CS-137	2.01E-02	U	3.0E-02	3.0E-02	5.54E-02	pCi/g		0.36	3/15/11 02:28 p		52.0	GER11$1
						1.00E-01		(1.4)			g	
EU-152	-5.25E-02	U	7.0E-02	7.0E-02	1.14E-01	pCi/g		-0.46	3/15/11 02:28 p		52.0	GER11$1
						1.00E-01		-(1.5)			g	

TestAmerica
rptSTLRchBlank
V5.2.12 A2002

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

FORM II

BLANK RESULTS

Date: 22-Mar-11

Lab Name: TestAmerica

Matrix: OTHER

SDG: JP0110

Report No. : 46021

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
EU-154	1.42E-02	U	1.0E-01	1.0E-01	1.86E-01	pCi/g		0.08	3/15/11 02:28 p		52.0	GER11$1
						1.00E-01		0.28			g	
EU-155	1.92E-02	U	5.1E-02	5.1E-02	9.32E-02	pCi/g		0.21	3/15/11 02:28 p		52.0	GER11$1
						1.00E-01		0.75			g	
Batch: 1068430	SRTOT_SEP_PRECIP_GPC		**Work Order:**	MFFVT1AA		**Report DB ID:**	MFFVT1AB					
STRONTIUM	2.58E-02	U	5.8E-02	5.8E-02	1.30E-01	pCi/g	88%	0.2	3/21/11 01:09 a		6.0	GPC27B
					6.08E-02			0.89			g	

No. of Results: 13 **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: 22-Mar-11

Lab Name: TestAmerica

Matrix: OTHER

SDG: JP0110

Report No. : 46021

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: 1068405	7196_CR6			**Work Order:**	MFFLD1AC		**Report DB ID:**	MFLLD1AS					
HEXCHROME	1.83E+01			0.0E+00	1.55E-01	mg/kg	N/A	2.00E+01		91%	3/9/11	2.5	
							Rec Limits:	80	120	-0.1		g	
Batch: 1068427	PUISO_PLATE_AEA			**Work Order:**	MFFVN1AC		**Report DB ID:**	MFFVN1CS					
PU239/40	6.52E+00		1.1E+00	1.9E+00	1.62E-01	pCi/g	60%	7.09E+00	2.1E-01	92%	3/17/11 06:49 p	0.98	ALP121
							Rec Limits:	70	130	-0.1		g	
Batch: 1068429	TC99_ETVDSK_LSC			**Work Order:**	MFFVR1AC		**Report DB ID:**	MFFVR1CS					
TC-99	6.93E+01		1.2E+00	4.9E+00	6.48E-01	pCi/g	100%	6.80E+01	3.0E-01	102%	3/19/11 01:31 p	2.01	LSC6
							Rec Limits:	70	130	0.0		g	
Batch: 1068431	GAMMA_GS			**Work Order:**	MFFVV1AC		**Report DB ID:**	MFFVV1CS					
CS-137	8.20E-01		2.4E-01	2.4E-01	1.73E-01	pCi/g		7.60E-01	6.0E-02	108%	3/15/11 02:28 p	26.61	GER7$1
							Rec Limits:	70	130	0.1		g	
Batch: 1068430	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MFFVT2AC		**Report DB ID:**	MFFVT2CS					
STRONTIUM	1.13E+00		1.1E-01	3.1E-01	9.69E-02	pCi/g	89%	1.13E+00	3.1E-02	99%	3/22/11 10:44 a	5.97	GPC28C
							Rec Limits:	70	130	0.0		g	

No. of Results: 5 **Comments:**

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

rptSTLRchLcs
V5.2.12 A2002

FORM II

MATRIX SPIKE RESULTS

Date: 22-Mar-11

Lab Name: TestAmerica **SDG:** JP0110

Lot-Sample No.: J1C090552-1, J1DX64 **Report No. :** 46021 **Matrix:** OTHER OTHERSOLID

Parameter	SpikeResult, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA	Rpt Unit, CRDL	Yield	Rec-overy	Expected, Uncert	Analysis, Prep Date	Aliquot Size	Analy Method, Primary Detector
Batch: 1068405	Work Order:	MFEVG1AC		Report DB ID:	MFET61CW		Orig Sa DB ID:	9MFET610				
HEXCHROME	8.73E+00			0.0E+00	1.50E-01	mg/kg	N/A	88.49%	9.87E+00	3/9/11	2.5	7196_CR6
	2.44E+00										g	

Number of Results: 1

Comments:

TestAmerica
rptSTLRchMs
V5.2.12 A2002

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

FORM II

MATRIX SPIKE RESULTS

Date: 22-Mar-11

Lab Name: TestAmerica **SDG:** JP0110

Lot-Sample No.: J1C090616-3, J1DX93 **Report No. :** 46021 **Matrix:** OTHER OTHERSOLID

Parameter	SpikeResult, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA	Rpt Unit, CRDL	Yield	Rec-overy	Expected, Uncert	Analysis, Prep Date	Aliquot Size	Analy Method, Primary Detector
Batch: 1068429	Work Order:	MFFE11AF		Report DB ID:	MFFE11FW		Orig Sa DB ID:	9MFFE110				
TC-99	1.96E+02		1.9E+00	1.3E+01	6.40E-01	pCi/g	100%	88.89%	2.21E+02	3/19/11 10:23 a	2.06	TC99_ETVDSK_LSC
	1.02E-01								9.0E-01		g	LSC6

Number of Results: 1

Comments:

TestAmerica
rptSTLRchMs
V5.2.12 A2002

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

3/18/2011 3:45:06 PM

Lot No., Due Date: J1C090616; 03/16/2011
Client, Site: 127642; S00N063A00 HANFORD
QC Batch No., Method Test: 1068427; RPUISO Pulso by ALP
SDG, Matrix: JP0110; 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** 3/18/11

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 1068427

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

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

Second Level Review: Amanda W[illegible] Date: 3/18/11

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

3/22/2011 1:01:36 PM

Lot No., Due Date: J1C090616; 03/16/2011
Client, Site: 127642; S00N063A00 HANFORD
QC Batch No., Method Test: 1068430; RSRTOT SrTot by GPC
SDG, Matrix: JP0110; 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:
NCM 10-17791

First Level Lisa Anderson **Date** 3/22/11

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 10684130

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

Comments on any "No" response: CRDL = 1.0 pCi/g
See NCM #: 10-17791

Second Level Review: [signature] Date: 5/22/11

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

TESTAMERICA LABORATORY NONCONFORMANCE MEMO (NCM)

LOG #: RD-11-_____

Project ID: _____ NCM Initiated by: Lisa Antonson

Sample Numbers: MFFVT2AC (LCS)

Tests: TSr

Matrix: other

Analytical Area (check appropriate area):

- ❑ Sample control
- ❑ GC
- ❑ Wet chemistry
- ❑ Data review
- ❑ Organic preparation
- ❑ HPLC
- ❑ Metals
- ❑ Radiochemistry
- ❑ Inorganic preparation
- ❑ GC/MS
- ❑ Reporting
- ❑ Bioassay

Nonconformance (check appropriate area):

Holding Time Violations (exceeded by _____ days)

Category I: Laboratory Independent

- ❑ 1. Holding time expired in transit
- ❑ 2. Sample received > 48 hrs. or 1/2 holding time has expired
- ❑ 3. Test added by client after expiration

Category II: Laboratory Dependent

- ❑ 4. Instrument failure
- ❑ 5. Analyst error
- ❑ 6. Login error
- ❑ 7. Miscommunication
- ❑ 8. Other (complete description required)

Category III: Analysis Reruns (QA/QC)

- ❑ 9. Surrogates
- ❑ 10. Internal Standards
- ❑ 11. Spike Recoveries
- ❑ 12. Blank Contamination

Category IV: Analysis Reruns (Confirmation)

- ❑ 13. Second column
- ❑ 14. Contamination check
- ❑ 15. Confirmation of matrix effects
- ❑ 16. Other (complete description required)

Quality Assurance/Quality Control

- ❑ 17. QC data reported outside of controls
- ❑ 18. Incorrect procedure used
- ❑ 19. SOP intentionally modified with QA and Tech. approval
- ❑ 20. Invalid instrument calibration
- ❑ 21. Insufficient sample received for proper analysis

Incorrect or Incomplete Client Deliverable

- ❑ 22. Hardcopy deliverable error
- ❑ 23. Electronic deliverable error

Reported detection limits elevated due to:

- ❑ 24. Sample matrix
- ❑ 25. Insufficient sample volume
- ❑ 26. Other (complete description required)

X 27. *Other (specify):* _____

Comments/Explanation: The LCS was recovered high in the original count. The sample was re-flamed and recounted with good results.

NCM 10-17791

Notification (check appropriate area):

Client notified by (name and date): _____

- ❑ in writing
- ❑ by facsimile
- ❑ by telephone
- ❑ other (explain)

Client's name and response: _____

- ❑ process "as is"
- ❑ re-sample
- ❑ on hold until _____
- ❑ other (explain)

Project Manager (signature and date): [signature] 5/13/11

TESTAMERICA LABORATORY NONCONFORMANCE MEMO (NCM)

LOG#: RD-98-_____

Corrective Action

Root Cause Initial and date: _____

NA

Corrective Action Initial and Date: _____

NA

Responsibility for performing CA assigned to: _____

Actions to prevent recurrence Initial and Date: _____

NA

First Level Supervisor: Lisa Anderson Date: 3/28/11

Responsible Manager: _____ Date: _____

Quality Assurance Review

☐ Anomaly ☐ Deficiency ☐ Rerun

☐ Further action required: _____

Assigned to: _____

QA signature: _____ Date: _____

Corrective Action Verification

☐ Verified

☐ Cannot Verify (specify reason): _____

Nonconformance Memo Closure

QA signature/date: _____

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

3/17/2011 9:34:12 AM

Lot No., Due Date: J1C090616; 03/16/2011
Client, Site: 127642; S00N063A00 HANFORD
QC Batch No., Method Test: 1068431; RGAMMA Gamma by GER
SDG, Matrix: JP0110; OTHER

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

6.0 Comments on any No response:
NCM 10-17745 Manual NCM

First Level Lisa Autron Date 3/17/11

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 1068431

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

Comments on any "No" response: CRDL = 0.1 pCi/g
See NCM#: 10-17745

Second Level Review: Rhonda Wyen Date: 3/17/11

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

TESTAMERICA LABORATORY NONCONFORMANCE MEMO (NCM)

LOG #: RD-11-_____

Project ID: _____ NCM Initiated by: Lisa Antonson

Sample Numbers: All

Tests: Gamma

Matrix: Soil

Analytical Area (check appropriate area):

❑ Sample control	❑ GC	❑ Wet chemistry	X Data review
❑ Organic preparation	❑ HPLC	❑ Metals	❑ Radiochemistry
❑ Inorganic preparation	❑ GC/MS	❑ Reporting	❑ Bioassay

Nonconformance (check appropriate area):

Holding Time Violations (exceeded by _____ days)

Category I: Laboratory Independent

- ❑ 1. Holding time expired in transit
- ❑ 2. Sample received > 48 hrs. or 1/2 holding time has expired
- ❑ 3. Test added by client after expiration

Category II: Laboratory Dependent

- ❑ 4. Instrument failure
- ❑ 5. Analyst error
- ❑ 6. Login error
- ❑ 7. Miscommunication
- ❑ 8. Other (complete description required)

Category III: Analysis Reruns (QA/QC)

- ❑ 9. Surrogates
- ❑ 10. Internal Standards
- ❑ 11. Spike Recoveries
- ❑ 12. Blank Contamination

Category IV: Analysis Reruns (Confirmation)

- ❑ 13. Second column
- ❑ 14. Contamination check
- ❑ 15. Confirmation of matrix effects
- ❑ 16. Other (complete description required)

Quality Assurance/Quality Control

- ❑ 17. QC data reported outside of controls
- ❑ 18. Incorrect procedure used
- ❑ 19. SOP intentionally modified with QA and Tech. approval
- ❑ 20. Invalid instrument calibration
- ❑ 21. Insufficient sample received for proper analysis

Incorrect or Incomplete Client Deliverable

- ❑ 22. Hardcopy deliverable error
- ❑ 23. Electronic deliverable error

Reported detection limits elevated due to:

- ❑ 24. Sample matrix
- ❑ 25. Insufficient sample volume
- X 26. Other (complete description required)
- ❑ 27. *Other (specify):* _____

Comments/Explanation: CRDL not met for all analytes due to reduced count time based on priority processing.

NCM 10-17745

Notification (check appropriate area):

Client notified by (name and date): _____

- ❑ in writing
- ❑ by facsimile
- ❑ by telephone
- ❑ other (explain)

Client's name and response: _____

- ❑ process "as is"
- ❑ re-sample
- ❑ on hold until _____
- ❑ other (explain)

Project Manager (signature and date): Rhonda Lyon 8/17/11

TESTAMERICA LABORATORY NONCONFORMANCE MEMO (NCM)

LOG#: RD-98-_____

Corrective Action

Root Cause Initial and date: _____

NA

Corrective Action Initial and Date: _____

NA

Responsibility for performing CA assigned to: _____

Actions to prevent recurrence Initial and Date: _____

NA

First Level Supervisor: Lisa Autonsen Date: 3/17/11

Responsible Manager: _____ Date: _____

Quality Assurance Review

☐ Anomaly ☐ Deficiency ☐ Rerun

☐ Further action required: _____

Assigned to: _____

QA signature: _____ Date: _____

Corrective Action Verification

☐ Verified

☐ Cannot Verify (specify reason): _____

Nonconformance Memo Closure

QA signature/date: _____

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

3/21/2011 2:28:26 PM

Lot No., Due Date: J1C090616; 03/16/2011
Client, Site: 127642; S00N063A00 HANFORD
QC Batch No., Method Test: 1068429; RTC99 Tc-99 by LSC
SDG, Matrix: JP0110; 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 3/21/11

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist

RADIOCHEMISTRY

Second Level Review

Batch Number: 1068429

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

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

Second Level Review: [signature] Date: 3/21/11

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Richland Laboratory
Data Review Check List
Hexavalent Chromium

Batch Number(s): **1068405**

Lab Sample Numbers or SDG: **JP0110**

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

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

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

Comments on any "No" response:

Analyst: (H. R.) Date: 3-17-11

Second-Level Review: [illegible] Date: 3-17-11

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-107-060	Page 1 of 1
Collector M. Blankingship	Company Contact: Joan Kessner; Telephone No.: 509-375-4688	Project Coordinator: KESSNER, JH	Price Code: 8L 9B; Data Turnaround: 21 Days 7
Project Designation: 100-H Remaining Sites Burial Grounds - Soil Full Protocol	Sampling Location: 126-H-2 Verification Sampleing	SAF No.: RC-107	
Ice Chest No.: NA	Field Logbook No.: EL 1627-04; COA: 0126H22600	Method of Shipment: ~~Government Vehicle~~ Hand Deliver	
Shipped To: TestAmerica Incorporated, Richland	Offsite Property No.: N/A	Bill of Lading/Air Bill No.: N/A	

POSSIBLE SAMPLE HAZARDS/REMARKS

None

Special Handling and/or Storage

Cool 4 Deg C

Preservation	Cool 4C										
Type of Container	G/P										
No. of Container(s)	1										
Volume	60mL										
SAMPLE ANALYSIS	Chromium Hex - 7196										

J1C090552

Sample No.	Matrix *	Sample Date	Sample Time										
~~J1DX63~~	~~SOIL~~												
J1DX64	SOIL	3-8-11	1245	X		MFETC							
J1DX65	SOIL	3-8-11	1335	X		MFEVC							
J1DX66	SOIL	3-8-11	1350	X		MFEVF							
J1DX67	SOIL	3-8-11	1315	X		MFEVG							

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

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
MATT BLANKINGSHIP	3-8-11 1515	JV Fullmer	3-8-11 1515
JV Fullmer	3-8-11 1630	A. Freier	3-8-11 1630
A. Freier	3-9-11 1145	[illegible]	3.9.11 1145

SPECIAL INSTRUCTIONS

*24 Hr. Hold
JEB 3-9-11

REVIEWED BY JEB DATE 3-9-11

J1C090552
Due 3.16.11
SDG # JP0110

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

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

WCH-EE-011

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 3·9·11@1145 GM Screen Result (out) .3 (in) .6 Initials [✓]

Client: WCH SDG #: JP0110 NA [ ] SAF #: RC-107 NA [ ]

Work Order Number: J1C090552 Chain of Custody # RC-107-060

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

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

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

Item 6 through 10 for samples. Initial appropriate response.

6. Number of samples in shipping container (Each sample may contain multiple bottles): 4 (1 JW per)
7. Sample holding times exceeded? NA [ ] Yes [ ] No [✓]
8. Samples have:
   - ___ tape
   - ✓ custody seals
   - ___ hazard labels
   - ✓ appropriate sample labels
9. Samples:
   - ✓ are in good condition
   - ___ are broken
   - (other solid)
   - ___ are leaking
   - ___ have air bubbles (Only for samples requiring no head space)
10. Sample pH appropriate for analysis requested Yes [ ] No [ ] N/A [✓] (Note discrepancies in #13)
    (If acidification necessary, then document sample ID, initial pH, amount of HNO_3 added and pH after addition)

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

See other side for additional comments

Sample Custodian: 3·9·11@1145 MCR Date: 3·9·11

Client Informed on _____ by _____ Person contacted _____

[✓] No action necessary; process as is

Project Manager _____ Date 3/9/11

3-8-11 3-8-11

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-107-061	Page 1 of 2

Collector 3-8-11 M. Blankingshing	Company Contact Joan Kessner	Telephone No. 509-375-4688	Project Coordinator KESSNER, JH
Price Code 3-8-11 8L 9B	Data Turnaround 3-8-11 ~~21~~ 7 Days		
Project Designation 100-H Remaining Sites Burial Grounds - Soil Full Protocol	Sampling Location 126-H-2 Verification Sampleing		SAF No. RC-107
Ice Chest No. NA	Field Logbook No. EL 1627-04	COA 0126H22600	Method of Shipment Hand Deliver ~~Government Vehicle/FedEx~~ AF 3-8-11
Shipped To 3-8-11 Test America Richland ~~EDERLINE SERVICES / LIONVILLE~~	Offsite Property No. NA		Bill of Lading/Air Bill No. NA

POSSIBLE SAMPLE HAZARDS/REMARKS

None

Client#75619
Quote# 27038
SDG# JP0110
Lot# J1C090616
Due 3-16-11

Special Handling and/or Storage

~~Cool 4 Deg C~~ 3-8-11

Preservation	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	None	None
Type of Container	G/P	G/P	G	aGs*	G	aG	aG	aG	G/P	G/P
No. of Container(s)	1	0	1	1	0	1	0	0	1	0
Volume	60mL	60mL	120mL	40mL	120mL	40mL	120mL	120mL	~~500mL~~ 120 mL	120mL
SAMPLE ANALYSIS	See item (1) in Special Instructions.	See item (2) in Special Instructions.	TPH-Diesel Range - WTPH-D +	TPH-Gasoline Range - WTPH-G	Oil & Grease - 1664	VOA - 8260A (TCL)	PCBs - 8082	PAHs - 8310	See item (3) in Special Instructions.	Isotopic Plutonium

Sample No.	Matrix *	Sample Date	Sample Time										
~~J1DX90~~	~~SOIL~~		3-8-11										
J1DX91	3-8-11 ~~SOIL~~ Other	3-8-11	1245				MFFDW					X	X
J1DX92	3-8-11 ~~SOIL~~ Other	3-8-11	1335				MFFE	X				X	X
J1DX93	3-8-11 ~~SOIL~~ Other	3-8-11	1350				MFFE	1				X	X
J1DX94	3-8-11 ~~SOIL~~ Other	3-8-11	1315				MFFE	2				X	X

CHAIN OF POSSESSION	Date/Time	Sign/Print Names	Date/Time
Relinquished By/Removed From Matt Blankingship	1515 3-8-11	Received By/Stored In JV Fullmer	1515 3-8-11
Relinquished By/Removed From JV Fullmer	1630 3-8-11	Received By/Stored In A. Freier	1630 3-8-11
Relinquished By/Removed From A. Freier	1145 3-9-11	Received By/Stored In TRR	1145 3-9-11
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time

SPECIAL INSTRUCTIONS

(1) ICP Metals - 6010TR (Close-out List) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Molybdenum, Nickel, Potassium, Selenium, Silicon, Silver, Sodium, Vanadium, Zinc}; Mercury - 7471 - (CV)
(2) IC Anions - 300.0 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate}; NO2/NO3 - 353.2; pH (Soil) - 9045
(3) Gamma Spec - Client List {Americium-241, Barium-133, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155, Silver-108 metastable}

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

REVIEWED BY JEB DATE 3-9-11

JP0110

LABORATORY SECTION	Received By	J1C090616	Title	Date/Time
FINAL SAMPLE DISPOSITION	Disposal Method		Disposed By	Date/Time

WCH-EE-011

3-8-11 3-8-11

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-107-061	Page 1/2 of 1/2
Collector 3-8-11 M. Blankingship	Company Contact: Joan Kessner; Telephone No.: 509-375-4688	Project Coordinator: KESSNER, JH	Price Code 3-8-11 8L 9B; Data Turnaround 3-8-11 21 Days 7
Project Designation: 100-H Remaining Sites Burial Grounds - Soil Full Protocol	Sampling Location: 126-H-2 Verification Sampleing	SAF No.: RC-107	
Ice Chest No.: NA	Field Logbook No.: EL 1627-04; COA: 0126H22600	Method of Shipment: AF 3-8-11 ~~Government Vehicle/FedEx~~ Hand Deliver	
Shipped To: 3-8-11 Test America Richland ~~EBERLINE SERVICES / LIONVILLE~~	Offsite Property No.: NA	Bill of Lading/Air Bill No.: NA	

POSSIBLE SAMPLE HAZARDS/REMARKS

None

Lot# J1C090616

Special Handling and/or Storage

~~Cool 4 Deg C~~ 3-8-11

Preservation	None	None									
Type of Container	G/P	G/P									
No. of Container(s)	0	0									
Volume	120mL	120mL									
SAMPLE ANALYSIS	~~Nickel 63;~~ Strontium-89,90 -- Total Sr	Technetium-99									

Sample No.	Matrix *	Sample Date	Sample Time										
J1DX90	~~SOIL~~		3-8-11										
J1DX91	SOIL	3-8-11	1245	X	X								
J1DX92	SOIL	3-8-11	1335	X	X								
J1DX93	SOIL	3-8-11	1350	X	X								
J1DX94	SOIL	3-8-11	1315	X	X								

CHAIN OF POSSESSION

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
MBlankingship	1515 3-8-11	JV Fullmer	1515 3-8-11
JV Fullmer	1630 3-8-11	A. Freier	1630 3-8-11
WCH A. Freier	1145 3-9-11	TRIR Angel	1145 3-9-11

SPECIAL INSTRUCTIONS

REVIEWED BY JEB DATE 3-9-11

AF 3-8-11 ~~JP0110~~

JP0110

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

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

WCH-EE-011

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

J1C090616

Sample Check-in List

Date/Time Received: 3·9·11 1145 GM Screen Result (out) .3 (in) .5 Initials [CK]

Client: WCH SDG #: JP0110 NA [CK] SAF #: RC-107 NA [CK]

Work Order Number: J1C090616 Chain of Custody # RC-107-061 CK

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

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

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

Item 6 through 10 for samples. Initial appropriate response.

6. Number of samples in shipping container (Each sample may contain multiple bottles): 4 samples @ 120G (mL) each
7. Sample holding times exceeded? NA [ ] Yes [ ] No [CK]
8. Samples have:
   - CK custody seals
   - tape
   - (other - soil)
   - hazard labels
   - CK appropriate sample labels
9. Samples:
   - CK are in good condition
   - are broken
   - are leaking
   - have air bubbles (Only for samples requiring no head space)
10. Sample pH appropriate for analysis requested Yes [ ] No [ ] N/A [CK] (Note discrepancies in #13)
    (If acidification necessary, then document sample ID, initial pH, amount of HNO_3 added and pH after addition)

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

See other side for additional comments

Sample Custodian: Carmen [signature] Date: 3·9·11 1145

Client Informed on _____ by _____ Person contacted _____

[✓] No action necessary; process as is

Project Manager [signature] Date 3/9/11

3/9/2011 7:12:36 PM

Sample Preparation/Analysis

127642, Washington Closure Hanford LLC
Bechtel Hanford, Inc.

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

PRIORITY

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

AnalyDueDate: 03/16/2011 SP0110

Batch: 1068427 **OTHER** **pCi/g** **PM, Quote: RW , 27038**

SEQ Batch, Test: None All Tests: 1068427 6ASO, 1068429 ANS5, 1068430 CHTH, 1068431 AXTA,

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MFFDW-1-AE J1C090616-1-SAMP 03/08/2011 12:45	AmtRec: 1XJAR120MLG	#Containers: 1				Scr:	Alpha:	Beta:
2 MFFDW-1-AF-X J1C090616-1-DUP 03/08/2011 12:45	AmtRec: 1XJAR120MLG	#Containers: 1				Scr:	Alpha:	Beta:
3 MFFEX-1-AE J1C090616-2-SAMP 03/08/2011 13:35	AmtRec: 1XJAR120MLG	#Containers: 1				Scr:	Alpha:	Beta:
4 MFFE1-1-AE J1C090616-3-SAMP 03/08/2011 13:50	AmtRec: 1XJAR120MLG	#Containers: 1				Scr:	Alpha:	Beta:
5 MFFE2-1-AE J1C090616-4-SAMP 03/08/2011 13:15	AmtRec: 1XJAR120MLG	#Containers: 1				Scr:	Alpha:	Beta:
6 MFFVN-1-AA-B J1C090000-427-BLK 03/09/2011 19:12 pd	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:
7 MFFVN-1-AC-C J1C090000-427-LCS 03/09/2011 19:12 pd	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:

TestAmerica Richland Wa. Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 pd - Prep Dt, dc - Date Chg, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ISV - Insufficient Volume for Analysis

WO Cnt: 7

ICOC v4.8.49

TestAmerica Laboratories, Inc.

Sample Preparation/Analysis

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

AnalyDueDate: 03/16/2011

Batch: 1068427 pCi/g
SEQ Batch, Test: None

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

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

Comments:

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

MFFDW1AE-SAMP Constituent List:

MFFVN1AA-BLK:

MFFVN1AC-LCS:

MFFDW1AE-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MFFVN1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MFFVN1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

TestAmerica Laboratories, Inc.

3/18/2011 3:30:05 PM

ICOC Fraction Transfer/Status Report

ByDate: 3/18/2010, 3/23/2011, Batch: '1068427', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
1068427						
AC		**Rev1C**	**WoodT**	3/13/2011 10:56:09		
SC			wagarr	IsBatched	3/9/2011 7:14:30 PM	ICOC_RADCALC v4.8.49
SC			WoodT	InPrep	3/13/2011 10:56:09 AM	RL-PRP-003 REVISION 1
SC			BockT	Sep1C	3/15/2011 1:21:40 PM	RL-ALP-001 REVISION 2
SC			HoganH	Sep2C	3/17/2011 12:59:08 PM	RL-ALP-015 REVISION 1
SC			BlackCL	InCnt1	3/17/2011 1:44:06 PM	RL-CI-008 REVISION 1
SC			BlackCL	CalcC	3/18/2011 9:06:42 AM	RL-CI-008 REVISION 1
SC			WhelandS	Rev1C	3/18/2011 3:29:52 PM	RL-DR-001 Rev 2
AC			**BockT**	3/15/2011 1:21:40 PM		RL-ALP-001
AC			**HoganH**	3/17/2011 12:59:08		
AC			**BlackCL**	3/17/2011 1:44:06 PM		
AC			**BlackCL**	3/18/2011 9:06:42		
AC			**WhelandS**	3/18/2011 3:29:52 PM		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Page 1

Grp Rec Cnt: 6

ICOCFractions v4.8.44

3/14/2011 2:07:58 PM

Sample Preparation/Analysis

Balance Id:1120373922

127642, Washington Closure Hanford LLC
Bechtel Hanford, Inc.

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

PRIORITY

Pipet #:

AnalyDueDate: 03/16/2011

Sep1 DT/Tm Tech: ~~11:30 3/15/11 APA~~ 3/20/11 APA

Batch: 1068430 OTHER pCi/g PM, Quote: RW , 27038

Sep2 DT/Tm Tech: 14:45 3/20/11 APA

SEQ Batch, Test: None

Prep Tech: SannohS,WoodT

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MFFDW-1-AA J1C090616-1-SAMP 03/08/2011 12:45		6.01g,in AmtRec: 1XJAR120MLG	SRTA20586 01/27/11 #Containers: 1	1.5	1.5026g -1.4190g 83.6 mg	50	26A Scr:	0134 Alpha:	3/24/11 Beta:	
2 MFFEX-1-AA J1C090616-2-SAMP 03/08/2011 13:35		6.05g,in AmtRec: 1XJAR120MLG	SRTA20587 01/27/11 #Containers: 1		1.4727g -1.3916g 81.1 mg		26B Scr:	Alpha:	Beta:	
3 MFFE1-1-AA J1C090616-3-SAMP 03/08/2011 13:50		6.01g,in AmtRec: 1XJAR120MLG	SRTA20588 01/27/11 #Containers: 1		1.4934g -1.4120g 81.4 mg		26C Scr:	Alpha:	Beta:	
4 MFFE2-1-AA J1C090616-4-SAMP 03/08/2011 13:15		6.01g,in AmtRec: 1XJAR120MLG	SRTA20589 01/27/11 #Containers: 1		1.4652g -1.3855g 79.7 mg		26D Scr:	Alpha:	Beta:	
5 MFFE2-1-AF-X J1C090616-4-DUP 03/08/2011 13:15		6.00g,in AmtRec: 1XJAR120MLG	SRTA20590 01/27/11 #Containers: 1		1.4960g -1.4130g 83.0 mg		27A Scr:	Alpha:	Beta:	
6 MFFVT-1-AA-B J1C090000-430-BLK 03/09/2011 19:12 pd		6.00g,in AmtRec:	SRTA20591 01/27/11 #Containers: 1		1.4824g -1.3942g 88.2 mg		27B Scr:	Alpha:	Beta:	
7 MFFVT-1-AC-C J1C090000-430-LCS 03/09/2011 19:12 pd		5.97g,in AmtRec:	STSB1568 03/10/11 #Containers: 1		1.4781g -1.3891g 89.0 mg		27C Scr:	Alpha:	Beta:	

TestAmerica Laboratories, Inc.

55

TestAmerica Richland Wa. Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 pd - Prep Dt, dc - Date Chg, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ISV - Insufficient Volume for Analysis

WO Cnt: 7

Prep_SamplePrep v4.8.49

3/14/2011 2:07:58 PM

Sample Preparation/Analysis

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

PRIORITY

Balance Id:1120373922

Pipet #: _____

AnalyDueDate: 03/16/2011

Sep1 DT/Tm Tech:

Batch: 1068430 pCi/g

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,WoodT

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

Comments: MFFDW-SAMP "Comments IVS Recount DUP. on a different detector"

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

MFFDW1AA-SAMP Constituent List:

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

MFFVT1AA-BLK:

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

MFFVT1AC-LCS:

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

MFFDW1AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

MFFVT1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

MFFVT1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

TestAmerica Laboratories, Inc.

PRIORITY

*** RE-COUNT REQUEST ***

DUE DATE 3/16/11

CUSTOMER WCH

ANALYSIS TSr

MATRIX Soil

LOT NUMBER J1C090611C

SAMPLE DELIVERY GROUP

OLD BATCH NUMBER 10684130

NEW BATCH NUMBER

LAB SAMPLE ID	CLIENT ID	REASON FOR REQUEST & ANALYSIS COMMENTS
1) MFFVT	IAC	high LCS 50
2)		
3)		Please reflame and
4)		resubmit.
5)		
6)		
7)		
8)		
9)		
10)		
11)		
12)		
13)		
14)		
15)		
16)		
17)		
18)		
19)		
20)		

3/21/2011 2:34:54 PM

Sample Preparation/Analysis

Balance Id:1120373922

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

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

Pipet #: _____

AnalyDueDate: 03/16/2011

Sep1 DT/Tm Tech:

Batch: 1068430 OTHER pCi/g PM, Quote: RW , 27038

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 1068427 6ASO, 1068429 ANS5, 1068430 CHTH, 1068431 AXTA,

Prep Tech: SannohS,WoodT

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MFFDW-1-AA J1C090616-1-SAMP 03/08/2011 12:45		6.01g,in AmtRec: 1XJAR120MLG	SRTA20586 01/27/11 #Containers: 1					Scr:	Alpha:	Beta:
2 MFFEX-1-AA J1C090616-2-SAMP 03/08/2011 13:35		6.05g,in AmtRec: 1XJAR120MLG	SRTA20587 01/27/11 #Containers: 1					Scr:	Alpha:	Beta:
3 MFFE1-1-AA J1C090616-3-SAMP 03/08/2011 13:50		6.01g,in AmtRec: 1XJAR120MLG	SRTA20588 01/27/11 #Containers: 1					Scr:	Alpha:	Beta:
4 MFFE2-1-AA J1C090616-4-SAMP 03/08/2011 13:15		6.01g,in AmtRec: 1XJAR120MLG	SRTA20589 01/27/11 #Containers: 1					Scr:	Alpha:	Beta:
5 MFFE2-1-AF-X J1C090616-4-DUP 03/08/2011 13:15		6.00g,in AmtRec: 1XJAR120MLG	SRTA20590 01/27/11 #Containers: 1					Scr:	Alpha:	Beta:
6 MFFVT-1-AA-B J1C090000-430-BLK 03/09/2011 19:12 pd		6.00g,in AmtRec:	SRTA20591 01/27/11 #Containers: 1					Scr:	Alpha:	Beta:
7 MFFVT-1-AC-C J1C090000-430-LCS 03/09/2011 19:12 pd		5.97g,in AmtRec:	STSB1568 03/10/11 #Containers: 1					Scr:	Alpha:	Beta:

TestAmerica Laboratories, Inc.

3/21/2011 2:34:54 PM

Sample Preparation/Analysis

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

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

AnalyDueDate: 03/16/2011

Batch: 1068430 pCi/g

SEQ Batch, Test: None

PRIORITY

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 MFFVT-2-AC-C		5.97g	5TSB							
J1C090000-430-LCS			1 5628			SD	28C	1109	3/22/11	
03/21/2011 14:34 pd		AmtRec:	#Containers: 1				Scr:	Alpha:		Beta:

Comments: MFFDW-SAMP "Comments IVS Recount DUP. on a different detector"

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

MFFDW1AA-SAMP Constituent List:

Sr-90	RDL:1	pCi/g	LCL:70	UCL:130	RPD:35
MFFVT1AA-BLK:					
Sr-90	RDL:1	pCi/g	LCL:	UCL:	RPD:
MFFVT1AC-LCS:					
Sr-90	RDL:1	pCi/g	LCL:70	UCL:130	RPD:35
MFFVT2AC-LCS:					

MFFDW1AA-SAMP Calc Info:

Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
MFFVT1AA-BLK:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
MFFVT1AC-LCS:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
MFFVT2AC-LCS:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

TestAmerica Laboratories, Inc.

3/22/2011 12:41:44 PM

ICOC Fraction Transfer/Status Report

ByDate: 3/22/2010, 3/27/2011, Batch: '1068430', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
1068430						
AC		Rev1C	WoodT	3/13/2011 11:32:49		
SC			wagarr	IsBatched	3/9/2011 7:14:30 PM	ICOC_RADCALC v4.8.49
SC			WoodT	InPrep	3/13/2011 11:32:49 AM	RL-PRP-003 REVISION 1
SC			BouslaughP	InPrep	3/14/2011 2:07:52 PM	RL-PRP-003 REVISION 1
SC			BouslaughP	Prep1C	3/14/2011 2:09:03 PM	RL-PRP-003 REVISION 1
SC			AshworthA	Sep2C	3/18/2011 2:49:27 PM	RL-GPC-003 REVISION 1
SC			BlackCL	InCnt1	3/21/2011 12:14:42 AM	RL-CI-006 REVISION 1
SC			BlackCL	CalcC	3/21/2011 6:16:17 AM	RL-CI-006 REVISION 1
SC			BlackCL	InCnt1	3/22/2011 10:17:33 AM	RL-CI-006 REVISION 1
SC			antonsonl	Rev1C	3/22/2011 12:41:28 PM	RL-DR-001 Rev 2
AC			BouslaughP	3/14/2011 2:07:52 PM		
AC			BouslaughP	3/14/2011 2:09:03 PM		
AC			AshworthA	3/18/2011 2:49:27 PM		
AC			BlackCL	3/21/2011 12:14:42		
AC			BlackCL	3/21/2011 6:16:17		
AC			BlackCL	3/22/2011 10:17:33		
AC			antonsonl	3/22/2011 12:41:28		

AC: Accepting Entry; SC: Status Change

3/12/2011 10:01:52 AM

Sample Preparation/Analysis

127642, Washington Closure Hanford LLC
Bechtel Hanford, Inc.

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

PRIORITY

Balance Id:
Pipet #:

AnalyDueDate: 03/16/2011 JP0110

Sep1 DT/Tm Tech:

Batch: 1068431 OTHER pCi/g
SEQ Batch, Test: None

PM, Quote: RW , 27038

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:
1 MFFDW-1-AD J1C090616-1-SAMP 03/08/2011 12:45		AmtRec: 1XJAR120MLG	65.70g,in	65.70g		525	200	67	0715	3/15/11 S	
								Scr:	Alpha:		Beta:
2 MFFDW-1-AG-X J1C090616-1-DUP 03/08/2011 12:45		AmtRec: 1XJAR120MLG	ISV					61	1053		
								Scr:	Alpha:		Beta:
3 MFFEX-1-AD J1C090616-2-SAMP 03/08/2011 13:35		AmtRec: 1XJAR120MLG	55.40g,in	55.40g		525		61	0716	3/15/11	
								Scr:	Alpha:		Beta:
4 MFFE1-1-AD J1C090616-3-SAMP 03/08/2011 13:50		AmtRec: 1XJAR120MLG	53.3 3/16/11					~~67~~ 3/15 61	1420		
								Scr:	Alpha:		Beta:
5 MFFE2-1-AD J1C090616-4-SAMP 03/08/2011 13:15		AmtRec: 1XJAR120MLG	57.40g,in	57.40g				67	1420		
								Scr:	Alpha:		Beta:
6 MFFVV-1-AA-B J1C090000-431-BLK 03/09/2011 19:12 pd		AmtRec:	52.00g,in	52.00g	OSBK			61	1748	3/15/11 S	
								Scr:	Alpha:		Beta:
7 MFFVV-1-AC-C J1C090000-431-LCS 03/09/2011 19:12 pd		AmtRec:	26.61g,in	26.61g	CAL3122 01/01/03,pd 01/01/02,r	25		67	1748		
								Scr:	Alpha:		Beta:

TestAmerica Laboratories, Inc.

61

3/12/2011 10:01:53 AM

Sample Preparation/Analysis

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

PRIORITY

Balance Id:1120373922

Pipet #: _____

AnalyDueDate: 03/16/2011

Sep1 DT/Tm Tech:

Batch: 1068431 pCi/g
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,WoodT

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

Comments: MFFDW-SAMP "Comments IVS Recount DUP. on a different detector"

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

MFFDW1AD-SAMP Constituent List:

Co-60	RDL:5.00E-02	pCi/g	LCL:	UCL:	RPD:	Cs-137	RDL:1.00E-01	pCi/g	LCL:70	UCL:130	RPD:35
Cs-137DA	RDL:1.00E-01	pCi/g	LCL:70	UCL:130	RPD:35	Eu-152	RDL:1.00E-01	pCi/g	LCL:	UCL:	RPD:
Eu-154	RDL:1.00E-01	pCi/g	LCL:	UCL:	RPD:	Eu-155	RDL:1.00E-01	pCi/g	LCL:	UCL:	RPD:

MFFVV1AA-BLK:

Co-60	RDL:5.00E-02	pCi/g	LCL:	UCL:	RPD:	Cs-137	RDL:1.00E-01	pCi/g	LCL:	UCL:	RPD:
Cs-137DA	RDL:1.00E-01	pCi/g	LCL:	UCL:	RPD:	Eu-152	RDL:1.00E-01	pCi/g	LCL:	UCL:	RPD:
Eu-154	RDL:1.00E-01	pCi/g	LCL:	UCL:	RPD:	Eu-155	RDL:1.00E-01	pCi/g	LCL:	UCL:	RPD:

MFFVV1AC-LCS:

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

MFFDW1AD-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

MFFVV1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

MFFVV1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

TestAmerica Laboratories, Inc.

3/17/2011 9:32:57 AM

ICOC Fraction Transfer/Status Report

ByDate: 3/17/2010, 3/22/2011, Batch: '1068431', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
1068431						
AC		**Rev1C**	**WoodT**	3/12/2011 9:58:02		
SC			wagarr	IsBatched	3/9/2011 7:14:30 PM	ICOC_RADCALC v4.8.49
SC			WoodT	InPrep	3/12/2011 9:58:02 AM	RL-PRP-003 REVISION 1
SC			WoodT	Prep1C	3/12/2011 9:58:14 AM	RL-PRP-003 REVISION 1
SC			WoodT	InPrep2	3/12/2011 9:58:21 AM	RL-GAM-001 REVISION 1
SC			WoodT	Prep1C	3/12/2011 9:58:27 AM	RL-GAM-001 REVISION 1
SC			ClarkR	InCnt1	3/12/2011 10:04:39 AM	RL-CI-007 REVISION 1
SC			BlackCL	CalcC	3/16/2011 11:59:54 AM	RL-CI-007 REVISION 1
SC			antonsonl	Rev1C	3/17/2011 9:28:24 AM	RL-DR-001 Rev 2
AC			**WoodT**	3/12/2011 9:58:14		
AC			**WoodT**	3/12/2011 9:58:21		
AC			**WoodT**	3/12/2011 9:58:27		REVISION 1
AC			**ClarkR**	3/12/2011 10:04:39		
AC			**BlackCL**	3/16/2011 11:59:54		
AC			**antonsonl**	3/17/2011 9:28:24		

AC: Accepting Entry; SC: Status Change

3/15/2011 2:35:05 AM

Sample Preparation/Analysis

127642, Washington Closure Hanford LLC
Bechtel Hanford, Inc.

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

Balance Id:1120373922
Pipet #: _____

AnalyDueDate: 03/16/2011 JP0110

Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech: SannohS,WoodT

Batch: 1068429 OTHER pCi/g
SEQ Batch, Test: None

PM, Quote: RW , 27038

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MFFDW-1-AC J1C090616-1-SAMP 03/08/2011 12:45	2.01g,in AmtRec: 1XJAR120MLG	#Containers: 1		60		Scr:	Alpha:	Beta:
2 MFFEX-1-AC J1C090616-2-SAMP 03/08/2011 13:35	2.03g,in AmtRec: 1XJAR120MLG	#Containers: 1				Scr:	Alpha:	Beta:
3 MFFEX-1-AF-X J1C090616-2-DUP 03/08/2011 13:35	2.03g,in AmtRec: 1XJAR120MLG	#Containers: 1				Scr:	Alpha:	Beta:
4 MFFE1-1-AC J1C090616-3-SAMP 03/08/2011 13:50	2.03g,in AmtRec: 1XJAR120MLG	#Containers: 1				Scr:	Alpha:	Beta:
5 MFFE1-1-AF-S J1C090616-3-MS 03/08/2011 13:50	2.06g,in AmtRec: 1XJAR120MLG	#Containers: 1	TCSG3065 12/21/10,pd 01/01/87 r			Scr:	Alpha:	Beta:
6 MFFE2-1-AC J1C090616-4-SAMP 03/08/2011 13:15	2.06g,in AmtRec: 1XJAR120MLG	#Containers: 1				Scr:	Alpha:	Beta:
7 MFFVR-1-AA-B J1C090000-429-BLK 03/09/2011 19:12 pd	2.01g,in AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:

TestAmerica Richland Wa.

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1
pd - Prep Dt, dc - Date Chg, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ISV - Insufficient Volume for Analysis

WO Cnt: 7
Prep_SamplePrep v4.8.49

3/15/2011 2:35:05 AM

Sample Preparation/Analysis

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

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

AnalyDueDate: 03/16/2011

Batch: 1068429 pCi/g
SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 MFFVR-1-AC-C J1C090000-429-LCS 03/09/2011 19:12 pd		2.01g,in AmtRec:	TCSF2069 03/04/11,pd 01/01/87,r #Containers: 1	60		Scr:	Alpha:	Beta:
9 MFFVR-1-AD-BN J1C090000-429-IBLK 03/09/2011 19:12 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

Comments: MFFDW-SAMP "Comments IVS Recount DUP. on a different detector"

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

MFFDW1AC-SAMP Constituent List:
Tc-99 RDL:15 pCi/g LCL:70 UCL:130 RPD:35
MFFE11AF-MS:

MFFVR1AA-BLK:
Tc-99 RDL:15 pCi/g LCL: UCL: RPD:
MFFVR1AC-LCS:
Tc-99 RDL:15 pCi/g LCL:70 UCL:130 RPD:35
MFFVR1AD-IBLK:
Tc-99 RDL:15 pCi/g LCL: UCL: RPD:

MFFDW1AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MFFE11AF-MS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MFFVR1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MFFVR1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MFFVR1AD-IBLK:

TestAmerica Laboratories, Inc.

3/15/2011 2:35:06 AM

Sample Preparation/Analysis

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

Balance Id:

Pipet #:

AnalyDueDate: 03/16/2011

Sep1 DT/Tm Tech:

Batch: 1068429 pCi/g
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech:

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

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

3/21/2011 2:27:43 PM

ICOC Fraction Transfer/Status Report

ByDate: 3/21/2010, 3/26/2011, Batch: '1068429', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
1068429						
AC		Rev1C	WoodT	3/13/2011 11:13:10		
SC			wagarr	IsBatched	3/9/2011 7:14:30 PM	ICOC_RADCALC v4.8.49
SC			WoodT	InPrep	3/13/2011 11:13:10 AM	RL-PRP-003 REVISION 1
SC			WoodT	Prep1C	3/15/2011 2:35:11 AM	RL-PRP-003 REVISION 1
SC			DawkinsO	InCnt1	3/17/2011 3:50:52 PM	RL-CI-005 REVISION 1
SC			DawkinsO	CalcC	3/19/2011 9:27:22 PM	RL-CI-005 REVISION 1
SC			antonsonl	Rev1C	3/21/2011 2:27:34 PM	RL-DR-001 Rev 2
AC			WoodT	3/15/2011 2:35:11		
AC			DawkinsO	3/17/2011 3:50:52 PM		
AC			DawkinsO	3/19/2011 9:27:22 PM		
AC			antonsonl	3/21/2011 2:27:34 PM		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Page 1

Grp Rec Cnt: 5

ICOCFractions v4.8.44

3/9/2011 3:35:12 PM

Sample Preparation/Analysis

127642, Washington Closure Hanford LLC
Bechtel Hanford, Inc.

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

AnalyDueDate: 03/16/2011

Batch: 1068405 OTHER mg/kg
SEQ Batch, Test: None

PM, Quote: RW , 27038

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

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MFET6-1-AA J1C090552-1-SAMP 03/08/2011 12:45	AmtRec: 1XJAR60MLG	#Containers: 1						Scr:	Alpha:	Beta:
2 MFET6-1-AC-S J1C090552-1-MS 03/08/2011 12:45	AmtRec: 1XJAR60MLG	#Containers: 1						Scr:	Alpha:	Beta:
3 MFET6-1-AD-D J1C090552-1-MSD 03/08/2011 12:45	AmtRec: 1XJAR60MLG	#Containers: 1						Scr:	Alpha:	Beta:
4 MFET6-1-AE-X J1C090552-1-DUP 03/08/2011 12:45	AmtRec: 1XJAR60MLG	#Containers: 1						Scr:	Alpha:	Beta:
5 MFEVC-1-AA J1C090552-2-SAMP 03/08/2011 13:35	AmtRec: 1XJAR60MLG	#Containers: 1						Scr:	Alpha:	Beta:
6 MFEVF-1-AA J1C090552-3-SAMP 03/08/2011 13:50	AmtRec: 1XJAR60MLG	#Containers: 1						Scr:	Alpha:	Beta:
7 MFEVG-1-AA J1C090552-4-SAMP 03/08/2011 13:15	AmtRec: 1XJAR60MLG	#Containers: 1						Scr:	Alpha:	Beta:

TestAmerica Laboratories, Inc.

3/9/2011 3:35:13 PM

Sample Preparation/Analysis

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

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

AnalyDueDate: 03/16/2011

Batch: 1068405 mg/kg
SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 MFFLD-1-AA-B J1C090000-405-BLK 03/09/2011 15:33 pd	AmtRec:	#Containers: 1						Scr:	Alpha:	Beta:
9 MFFLD-1-AC-C J1C090000-405-LCS 03/09/2011 15:33 pd	AmtRec:	#Containers: 1						Scr:	Alpha:	Beta:

Comments:

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

MFET61AA-SAMP Constituent List:

MFET61AC-MS Constituent List:

MFET61AD-MSD:

MFFLD1AA-BLK:

MFFLD1AC-LCS:

MFET61AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MFET61AC-MS Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MFET61AD-MSD:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MFFLD1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MFFLD1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

TestAmerica Laboratories, Inc.

3/9/2011 3:35:13 PM

Sample Preparation/Analysis

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

Balance Id:

Pipet #:

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech:

AnalyDueDate: 03/16/2011

Batch: 1068405
SEQ Batch, Test: None

mg/kg

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 280-13353-1

SDG Number: JP0110

Job Description: SAF# RC-107

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

Attention: Joan H Kessner

RECEIVED
MAR 2011

Approved for release.
Kae E Yoder
Project Manager II
3/24/2011 12:51 PM

Kae E Yoder
Project Manager II
kae.yoder@testamericainc.com
03/24/2011

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

The Lab Certification ID# is E87667.

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

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

ACCREDITED IN ACCORDANCE WITH nelac

Table of Contents

Cover Title Page 1
Report Narrative 3
Data Qualifiers 6
Method Summary 8
Method / Analyst Summary 9
Sample Summary 10
Sample Results 11
Sample Datasheets 12
QC Results 44
Qc Association Summary 45
Qc Reports 52
Client Chain of Custody 82
Sample Receipt Checklist 83

CASE NARRATIVE

Client: Washington Closure Hanford

Project: WASHINGTON CLOSURE HANFORD

Report Number: 280-13353-1

SDG #: JP0110
SAF#: RC-107

Date SDG Closed: March 10, 2011
Data Deliverable: 7 Day / Summary

CLIENT ID	LAB ID	ANALYSES REQUESTED	ANALYSES PERFORMED
J1DX91	280-13353-1	6010/7471/300.0/353.2/9045/WTPH-D+/ WTPH-G/1664/8260A/8082/8310	6010B/7471A/9056M/353.2/9045C/NWTPH-Dx/ NWTPH-Gx/9071B/8260B/8082/8310
J1DX92	280-13353-2	6010/7471/300.0/353.2/9045/WTPH-D+/ WTPH-G/1664/8260A/8082/8310	6010B/7471A/9056M/353.2/9045C/NWTPH-Dx/ NWTPH-Gx/9071B/8260B/8082/8310
J1DX93	280-13353-3	6010/7471/300.0/353.2/9045/WTPH-D+/ WTPH-G/1664/8260A/8082/8310	6010B/7471A/9056M/353.2/9045C/NWTPH-Dx/ NWTPH-Gx/9071B/8260B/8082/8310
J1DX94	280-13353-4	6010/7471/300.0/353.2/9045/WTPH-D+/ WTPH-G/1664/8260A/8082/8310	6010B/7471A/9056M/353.2/9045C/NWTPH-Dx/ NWTPH-Gx/9071B/8260B/8082/8310

The method substitutions noted above, as agreed to by all parties, have no technical impact on the data.

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

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

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

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

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

RECEIPT
The samples were received on 3/10/2011; the samples arrived in good condition, properly preserved and on ice. The temperatures of the coolers at receipt were 5.4 C, 4.8 C, 5.2 C and 3.2 C.

GC/MS VOLATILES - SW846 8260B
Surrogate Dibromofluoromethane failed the recovery criteria low for samples J1DX91, J1DX92, J1DX93 and J1DX94, as well as, for the MS/MSD performed on sample J1DX94. The laboratory noted that the pH of the samples were >10. High sample pH causes degradation of surrogate Dibromofluoromethane, as such, corrective action was not initiated and data are reported as is.

Surrogate 4-Bromofluorobenzene was recovered outside the control limits, biased high, in sample J1DX93. This is an indicator that data may be biased high. As no detectable concentrations of analytes associated with surrogate 4-Bromofluorobeznene are present in the sample, corrective action is deemed unnecessary.

Low levels of Acetone, a common laboratory contaminant, are present in the method blank associated with batch 280-57770. Because the concentration in the method blank is not present at a level greater than the reporting limit, corrective action is deemed unnecessary. Associated sample results present above the MDL and/or RL have been flagged with a "B".

The MS/MSD performed on sample J1DX94 exhibited percent recoveries outside the control limits for Trichloroethene, and the associated sample result has been flagged "T". In addition, RPD limits were exceeded. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary.

No other anomalies were encountered.

GC VOLATILES - NWTPH-Gx - GRO
Low levels of Gasoline are present in the method blank associated with batch 280-57043. Because the concentration in the method blank is not present at a level greater than the reporting limit, corrective action is deemed unnecessary. Associated sample results present above the MDL and/or RL have been flagged with a "B".

No other anomalies were encountered.

GC SEMIVOLATILES - SW846 8082 - PCBs
The laboratory noted that a Sulfuric Acid clean-up was performed on the samples presented in this report to reduce matrix interferences.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to high constituent concentration, the samples presented in this report had to be analyzed at dilutions, and the associated results have been flagged with a "D". The reporting limits have been adjusted relative to the dilutions required.

Surrogate Decachlorobiphenyl was recovered outside the control limits, biased low, in sample J1DX91. The laboratory noted that this anomaly is due to obvious matrix interference; therefore, corrective action is deemed unnecessary.

The MS/MSD performed on sample J1DX94 exhibited percent recoveries outside the control limits for Aroclor 1260, and the associated sample result has been flagged "N". In addition, surrogate Decachlorobiphenyl was recovered outside the control limits. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary.

No other anomalies were encountered.

GC SEMIVOLATILES - NWTPH-Dx - DRO
Surrogate o-Terphenyl was recovered outside the control limits, biased low, in sample J1DX92. The laboratory noted that evidence of matrix interference is present; therefore, corrective action is deemed unnecessary.

No other anomalies were encountered.

HPLC - SW846 8310 - PAHs
In some cases, the RPD between the primary and confirmation columns exceeded 40%. The lower of the two values have been reported, as matrix interference is evident. Associated results have been flagged with an "X".

No other anomalies were encountered.

TOTAL METALS - SW846 6010B/7471A
Serial dilution of a digestate in batch 280-56929 indicates that physical and chemical interferences are present for several elements. Results have been flagged with an "X".

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to high constituent concentration, the Mercury analysis of sample J1DX94 had to be performed at a dilution. The reporting limit has been adjusted relative to the dilution required.

It can be noted that the sample amount was greater than four times the spike amount for Aluminum, Calcium, Iron and Manganese in the Matrix Spike performed on sample J1DX91; therefore, control limits are not applicable.

The duplicate analysis of sample J1DX91 exhibited RPD data outside the control limits for Chromium, Copper, Iron, Manganese, Molybdenum, Nickel and Mercury, and the associated sample results have been flagged "M". There is no indication that the analytical system was operating out of control, and method accuracy has been verified by the acceptable LCS analysis data; therefore, corrective action is deemed unnecessary.

No other anomalies were encountered.

GENERAL CHEMISTRY - MCAWW 353.2 - NITRATE+NITRITE as N
The Matrix Spike performed on sample J1DX94 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.

The duplicate analysis of sample J1DX94 exhibited RPD data outside the control limits, and the associated sample result has been flagged "M". There is no indication that the analytical system was operating out of control, and method accuracy has been verified by the acceptable LCS analysis data; therefore, corrective action is deemed unnecessary.

No other anomalies were encountered.

GENERAL CHEMISTRY - SW846 9056M - ANIONS
The Matrix Spike performed on sample J1DX94 exhibited percent recoveries outside the control limits for Orthophosphate as P, Sulfate and Fluoride, and the associated sample results have 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 9071B - OIL & GREASE (HEM)

Low levels of Oil & Grease (HEM) are present in the method blank associated with batch 280-57164. Because the concentration in the method blank is not present at a level greater than the reporting limit, corrective action is deemed unnecessary.

The Matrix Spike performed on sample J1DX94 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 9045C - PH

No anomalies were encountered.

DATA REPORTING QUALIFIERS

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Lab Section	Qualifier	Description
GC/MS 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
	T	MS, MSD: Recovery exceeds upper or lower control limits.
	*	MS/MSD RPD exceeded the control limit
	N	Presumptive evidence of material.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	*	Surrogate exceeds the control limit
GC VOA		
	B	Analyte was found in the associated method blank as well as in the sample.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
GC Semi VOA		
	U	Analyzed for but not detected.
	N	MS, MSD: Spike recovery exceeds upper or lower control limits.
	*	Surrogate exceeds the control limit
	D	The reported value is from a dilution.

DATA REPORTING QUALIFIERS

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Lab Section	Qualifier	Description
Metals		
	U	Analyzed for but not detected.
	B	Estimated result. Result is less than the RL, but greater than MDL
	4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
	M	Sample duplicate precision not met.
	X	Serial dilution in the analytical batch indicates that physical and chemical interferences are present.
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.
	M	Sample duplicate precision not met.
	C	The analyte was detected in both the sample and the assoicated QC blank, and the sample concentration was </= 5X the blank concentration.
HPLC/IC		
	U	Analyzed for but not detected.
	X	More than 40% difference between columns, lower result reported.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

METHOD SUMMARY

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Volatile Organic Compounds (GC/MS)	TAL DEN	SW846 8260B	
Purge and Trap	TAL DEN		SW846 5030B
Northwest - Volatile Petroleum Products (GC)	TAL DEN	NWTPH NWTPH-Gx	
Purge and Trap	TAL DEN		SW846 5030B
Polychlorinated Biphenyls (PCBs) by Gas Chromatography	TAL DEN	SW846 8082	
Ultrasonic Extraction	TAL DEN		SW846 3550C
Northwest - Semi-Volatile Petroleum Products (GC)	TAL DEN	NWTPH NWTPH-Dx	
Ultrasonic Extraction	TAL DEN		SW846 3550C
PAHs (HPLC)	TAL DEN	SW846 8310	
Ultrasonic Extraction	TAL DEN		SW846 3550C
Metals (ICP)	TAL DEN	SW846 6010B	
Preparation, Metals	TAL DEN		SW846 3050B
Mercury (CVAA)	TAL DEN	SW846 7471A	
Preparation, Mercury	TAL DEN		SW846 7471A
Nitrogen, Nitrate-Nitrite	TAL DEN	MCAWW 353.2	
Deionized Water Leaching Procedure	TAL DEN		ASTM DI Leach
pH	TAL DEN	SW846 9045C	
Deionized Water Leaching Procedure	TAL DEN		ASTM DI Leach
Anions, Ion Chromatography	TAL DEN	SW846 9056M	
Deionized Water Leaching Procedure	TAL DEN		ASTM DI Leach
HEM	TAL DEN	SW846 9071B	
Soxhlet Extraction	TAL DEN		SW846 3540C
ASTM D-2216	TAL DEN	ASTM D-2216	

Lab References:

TAL DEN = TestAmerica Denver

Method References:

ASTM = ASTM International

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

NWTPH = Northwest Total Petroleum Hydrocarbon

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: 280-13353-1
Sdg Number: JP0110

Method	Analyst	Analyst ID
SW846 8260B	Reinhardt, Jason	JR
NWTPH NWTPH-Gx	Gaskill, Daniel B	DBG
SW846 8082	Pavlakovich, Adam M	AMP
NWTPH NWTPH-Dx	Birdsell, Matthew R	MRB
SW846 6010B	Harre, John K	JKH
SW846 7471A	Stoltz, Katie	KS
MCAWW 353.2	Stosak, Lara E	LES
SW846 9045C	Taylor, Juli M	JMT
SW846 9056M	Kudla, Ewa	EK
SW846 9056M	Phan, Thu L	TLP
SW846 9071B	Gheorghe, Philip A	PAG
ASTM D-2216	Berry III, Paul B	PBB
SW846 8310	Hall, Koley J	KJH

SAMPLE SUMMARY

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-13353-1	J1DX91	Solid	03/08/2011 1245	03/10/2011 0930
280-13353-2	J1DX92	Solid	03/08/2011 1335	03/10/2011 0930
280-13353-3	J1DX93	Solid	03/08/2011 1350	03/10/2011 0930
280-13353-4	J1DX94	Solid	03/08/2011 1315	03/10/2011 0930

SAMPLE RESULTS

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Client Sample ID: **J1DX91**

Lab Sample ID: 280-13353-1
Client Matrix: Solid

% Moisture: 3.0

Date Sampled: 03/08/2011 1245
Date Received: 03/10/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 03/16/2011 1202
Date Prepared: 03/16/2011 0600

Analysis Batch: 280-57853
Prep Batch: 280-57770

Instrument ID: MSV_J
Lab File ID: J5497.D
Initial Weight/Volume: 5.526 g
Final Weight/Volume: 5 mL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		29	B	5.0	19
Benzene		0.44	U	0.44	4.7
Bromodichloromethane		0.21	U	0.21	4.7
Bromoform		0.21	U	0.21	4.7
Bromomethane		0.47	U	0.47	9.3
2-Butanone (MEK)		6.4	J	1.7	9.3
Carbon disulfide		0.39	U	0.39	4.7
Carbon tetrachloride		0.59	U	0.59	4.7
Chlorobenzene		0.50	U	0.50	4.7
Dibromochloromethane		0.53	U	0.53	4.7
Chloroethane		0.83	U	0.83	9.3
Chloroform		0.27	U	0.27	4.7
Chloromethane		0.72	U	0.72	9.3
1,1-Dichloroethane		0.20	U	0.20	4.7
1,2-Dichloroethane		0.65	U	0.65	4.7
1,1-Dichloroethene		0.55	U	0.55	4.7
1,2-Dichloroethene, Total		0.36	U	0.36	4.7
1,2-Dichloropropane		0.51	U	0.51	4.7
cis-1,3-Dichloropropene		1.2	U	1.2	4.7
trans-1,3-Dichloropropene		0.63	U	0.63	4.7
Ethylbenzene		0.63	U	0.63	4.7
2-Hexanone		4.6	U	4.6	19
Methylene Chloride		0.70	U	0.70	4.7
4-Methyl-2-pentanone (MIBK)		4.1	U	4.1	9.3
Styrene		2.6	J	0.59	4.7
1,1,2,2-Tetrachloroethane		0.57	U	0.57	4.7
Tetrachloroethene		0.55	U	0.55	4.7
Toluene		0.64	U	0.64	4.7
1,1,1-Trichloroethane		0.49	U	0.49	4.7
1,1,2-Trichloroethane		0.82	U	0.82	4.7
Trichloroethene		0.73	J	0.21	4.7
Vinyl chloride		1.3	U	1.3	4.7
Xylenes, Total		0.57	U	0.57	4.7

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	92		58 - 140
Toluene-d8 (Surr)	104		80 - 126
4-Bromofluorobenzene (Surr)	116		76 - 127
Dibromofluoromethane (Surr)	41	*	75 - 121

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Client Sample ID: **J1DX91**

Lab Sample ID: 280-13353-1
Client Matrix: Solid

% Moisture: 3.0

Date Sampled: 03/08/2011 1245
Date Received: 03/10/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 280-57853		Instrument ID:	MSV_J
Preparation:	5030B	Prep Batch: 280-57770		Lab File ID:	J5497.D
Dilution:	1.0			Initial Weight/Volume:	5.526 g
Date Analyzed:	03/16/2011 1202			Final Weight/Volume:	5 mL
Date Prepared:	03/16/2011 0600				

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
928-68-7	2-Heptanone, 6-methyl-	12.04	5.0	N J
104-76-7	1-Hexanol, 2-ethyl-	13.21	44	N J

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Client Sample ID: **J1DX92**

Lab Sample ID: 280-13353-2
Client Matrix: Solid

% Moisture: 3.0

Date Sampled: 03/08/2011 1335
Date Received: 03/10/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 280-57853		Instrument ID:	MSV_J
Preparation:	5030B	Prep Batch: 280-57770		Lab File ID:	J5498.D
Dilution:	1.0			Initial Weight/Volume:	5.418 g
Date Analyzed:	03/16/2011 1225			Final Weight/Volume:	5 mL
Date Prepared:	03/16/2011 0600				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		27	B	5.1	19
Benzene		0.45	U	0.45	4.8
Bromodichloromethane		0.21	U	0.21	4.8
Bromoform		0.22	U	0.22	4.8
Bromomethane		0.48	U	0.48	9.5
2-Butanone (MEK)		5.1	J	1.7	9.5
Carbon disulfide		0.40	U	0.40	4.8
Carbon tetrachloride		0.60	U	0.60	4.8
Chlorobenzene		0.51	U	0.51	4.8
Dibromochloromethane		0.54	U	0.54	4.8
Chloroethane		0.85	U	0.85	9.5
Chloroform		0.28	U	0.28	4.8
Chloromethane		0.73	U	0.73	9.5
1,1-Dichloroethane		0.20	U	0.20	4.8
1,2-Dichloroethane		0.67	U	0.67	4.8
1,1-Dichloroethene		0.56	U	0.56	4.8
1,2-Dichloroethene, Total		0.37	U	0.37	4.8
1,2-Dichloropropane		0.52	U	0.52	4.8
cis-1,3-Dichloropropene		1.2	U	1.2	4.8
trans-1,3-Dichloropropene		0.64	U	0.64	4.8
Ethylbenzene		0.64	U	0.64	4.8
2-Hexanone		4.7	U	4.7	19
Methylene Chloride		0.71	U	0.71	4.8
4-Methyl-2-pentanone (MIBK)		4.1	U	4.1	9.5
Styrene		2.8	J	0.60	4.8
1,1,2,2-Tetrachloroethane		0.58	U	0.58	4.8
Tetrachloroethene		0.56	U	0.56	4.8
Toluene		0.66	U	0.66	4.8
1,1,1-Trichloroethane		0.49	U	0.49	4.8
1,1,2-Trichloroethane		0.84	U	0.84	4.8
Trichloroethene		0.57	J	0.22	4.8
Vinyl chloride		1.3	U	1.3	4.8
Xylenes, Total		0.58	U	0.58	4.8

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	93		58 - 140
Toluene-d8 (Surr)	102		80 - 126
4-Bromofluorobenzene (Surr)	114		76 - 127
Dibromofluoromethane (Surr)	36	*	75 - 121

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Client Sample ID: **J1DX92**

Lab Sample ID: 280-13353-2
Client Matrix: Solid

% Moisture: 3.0

Date Sampled: 03/08/2011 1335
Date Received: 03/10/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 280-57853		Instrument ID:	MSV_J
Preparation:	5030B	Prep Batch: 280-57770		Lab File ID:	J5498.D
Dilution:	1.0			Initial Weight/Volume:	5.418 g
Date Analyzed:	03/16/2011 1225			Final Weight/Volume:	5 mL
Date Prepared:	03/16/2011 0600				

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
928-68-7	2-Heptanone, 6-methyl-	12.05	5.7	N J
104-76-7	1-Hexanol, 2-ethyl-	13.23	18	N J

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Client Sample ID: **J1DX93**

Lab Sample ID: 280-13353-3
Client Matrix: Solid

% Moisture: 4.9

Date Sampled: 03/08/2011 1350
Date Received: 03/10/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 280-57853		Instrument ID:	MSV_J
Preparation:	5030B	Prep Batch: 280-57770		Lab File ID:	J5499.D
Dilution:	1.0			Initial Weight/Volume:	5.272 g
Date Analyzed:	03/16/2011 1247			Final Weight/Volume:	5 mL
Date Prepared:	03/16/2011 0600				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		52	B	5.4	20
Benzene		0.47	U	0.47	5.0
Bromodichloromethane		0.22	U	0.22	5.0
Bromoform		0.23	U	0.23	5.0
Bromomethane		0.50	U	0.50	10
2-Butanone (MEK)		8.3	J	1.8	10
Carbon disulfide		0.42	U	0.42	5.0
Carbon tetrachloride		0.63	U	0.63	5.0
Chlorobenzene		0.54	U	0.54	5.0
Dibromochloromethane		0.57	U	0.57	5.0
Chloroethane		0.89	U	0.89	10
Chloroform		0.29	U	0.29	5.0
Chloromethane		0.77	U	0.77	10
1,1-Dichloroethane		0.21	U	0.21	5.0
1,2-Dichloroethane		0.70	U	0.70	5.0
1,1-Dichloroethene		0.59	U	0.59	5.0
1,2-Dichloroethene, Total		0.39	U	0.39	5.0
1,2-Dichloropropane		0.55	U	0.55	5.0
cis-1,3-Dichloropropene		1.3	U	1.3	5.0
trans-1,3-Dichloropropene		0.67	U	0.67	5.0
Ethylbenzene		0.67	U	0.67	5.0
2-Hexanone		4.9	U	4.9	20
Methylene Chloride		0.75	U	0.75	5.0
4-Methyl-2-pentanone (MIBK)		4.3	U	4.3	10
Styrene		1.2	J	0.63	5.0
1,1,2,2-Tetrachloroethane		0.61	U	0.61	5.0
Tetrachloroethene		0.59	U	0.59	5.0
Toluene		0.69	U	0.69	5.0
1,1,1-Trichloroethane		0.52	U	0.52	5.0
1,1,2-Trichloroethane		0.88	U	0.88	5.0
Trichloroethene		0.23	U	0.23	5.0
Vinyl chloride		1.3	U	1.3	5.0
Xylenes, Total		0.61	U	0.61	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	109		58 - 140
Toluene-d8 (Surr)	119		80 - 126
4-Bromofluorobenzene (Surr)	130	*	76 - 127
Dibromofluoromethane (Surr)	33	*	75 - 121

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Client Sample ID: **J1DX93**

Lab Sample ID: 280-13353-3
Client Matrix: Solid

% Moisture: 4.9

Date Sampled: 03/08/2011 1350
Date Received: 03/10/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 280-57853	Instrument ID:	MSV_J
Preparation:	5030B	Prep Batch: 280-57770	Lab File ID:	J5499.D
Dilution:	1.0		Initial Weight/Volume:	5.272 g
Date Analyzed:	03/16/2011 1247		Final Weight/Volume:	5 mL
Date Prepared:	03/16/2011 0600			

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
928-68-7	2-Heptanone, 6-methyl-	12.05	14	N J
104-76-7	1-Hexanol, 2-ethyl-	13.23	9.0	N J
693-54-9	2-Decanone	15.28	6.7	N J

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Client Sample ID: **J1DX94**

Lab Sample ID: 280-13353-4
Client Matrix: Solid

% Moisture: 3.5

Date Sampled: 03/08/2011 1315
Date Received: 03/10/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 280-57853		Instrument ID:	MSV_J
Preparation:	5030B	Prep Batch: 280-57770		Lab File ID:	J5500.D
Dilution:	1.0			Initial Weight/Volume:	5.505 g
Date Analyzed:	03/16/2011 1310			Final Weight/Volume:	5 mL
Date Prepared:	03/16/2011 0600				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		36	B	5.1	19
Benzene		0.44	U	0.44	4.7
Bromodichloromethane		0.21	U	0.21	4.7
Bromoform		0.22	U	0.22	4.7
Bromomethane		0.47	U	0.47	9.4
2-Butanone (MEK)		5.5	J	1.7	9.4
Carbon disulfide		0.56	J	0.40	4.7
Carbon tetrachloride		0.59	U	0.59	4.7
Chlorobenzene		0.51	U	0.51	4.7
Dibromochloromethane		0.54	U	0.54	4.7
Chloroethane		0.84	U	0.84	9.4
Chloroform		0.27	U	0.27	4.7
Chloromethane		0.73	U	0.73	9.4
1,1-Dichloroethane		0.20	U	0.20	4.7
1,2-Dichloroethane		0.66	U	0.66	4.7
1,1-Dichloroethene		0.56	U	0.56	4.7
1,2-Dichloroethene, Total		0.37	U	0.37	4.7
1,2-Dichloropropane		0.52	U	0.52	4.7
cis-1,3-Dichloropropene		1.2	U	1.2	4.7
trans-1,3-Dichloropropene		0.63	U	0.63	4.7
Ethylbenzene		0.63	U	0.63	4.7
2-Hexanone		4.6	U	4.6	19
Methylene Chloride		0.71	U	0.71	4.7
4-Methyl-2-pentanone (MIBK)		4.1	U	4.1	9.4
Styrene		4.5	J	0.59	4.7
1,1,2,2-Tetrachloroethane		0.57	U	0.57	4.7
Tetrachloroethene		0.56	U	0.56	4.7
Toluene		0.65	U	0.65	4.7
1,1,1-Trichloroethane		0.49	U	0.49	4.7
1,1,2-Trichloroethane		0.83	U	0.83	4.7
Trichloroethene		0.66	J T	0.22	4.7
Vinyl chloride		1.3	U	1.3	4.7
Xylenes, Total		0.57	U	0.57	4.7

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	95		58 - 140
Toluene-d8 (Surr)	106		80 - 126
4-Bromofluorobenzene (Surr)	115		76 - 127
Dibromofluoromethane (Surr)	26	*	75 - 121

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Client Sample ID: **J1DX94**

Lab Sample ID: 280-13353-4
Client Matrix: Solid

% Moisture: 3.5

Date Sampled: 03/08/2011 1315
Date Received: 03/10/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Method:	8260B	Analysis Batch: 280-57853		Instrument ID:	MSV_J
Preparation:	5030B	Prep Batch: 280-57770		Lab File ID:	J5500.D
Dilution:	1.0			Initial Weight/Volume:	5.505 g
Date Analyzed:	03/16/2011 1310			Final Weight/Volume:	5 mL
Date Prepared:	03/16/2011 0600				

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
928-68-7	2-Heptanone, 6-methyl-	12.07	6.6	N J
104-76-7	1-Hexanol, 2-ethyl-	13.23	9.5	N J
91-20-3	Naphthalene	15.60	13	N J

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Client Sample ID: **J1DX91**

Lab Sample ID: 280-13353-1
Client Matrix: Solid

% Moisture: 3.0

Date Sampled: 03/08/2011 1245
Date Received: 03/10/2011 0930

NWTPH-Gx Northwest - Volatile Petroleum Products (GC)

Method:	NWTPH-Gx	Analysis Batch: 280-57507		Instrument ID:	GCV_K
Preparation:	5030B	Prep Batch: 280-57043		Initial Weight/Volume:	10.42 g
Dilution:	1.0			Final Weight/Volume:	500 mL
Date Analyzed:	03/14/2011 1640			Injection Volume:	5 mL
Date Prepared:	03/11/2011 1157			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Gasoline		610	J B	320	1200

Surrogate	%Rec	Qualifier	Acceptance Limits
a,a,a-Trifluorotoluene	94		77 - 123

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Client Sample ID: **J1DX92**

Lab Sample ID: 280-13353-2
Client Matrix: Solid

% Moisture: 3.0

Date Sampled: 03/08/2011 1335
Date Received: 03/10/2011 0930

NWTPH-Gx Northwest - Volatile Petroleum Products (GC)

Method:	NWTPH-Gx	Analysis Batch: 280-57507		Instrument ID:	GCV_K
Preparation:	5030B	Prep Batch: 280-57043		Initial Weight/Volume:	10.26 g
Dilution:	1.0			Final Weight/Volume:	500 mL
Date Analyzed:	03/14/2011 1847			Injection Volume:	5 mL
Date Prepared:	03/11/2011 1157			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Gasoline		590	J B	330	1200

Surrogate	%Rec	Qualifier	Acceptance Limits
a,a,a-Trifluorotoluene	99		77 - 123

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Client Sample ID: **J1DX93**

Lab Sample ID: 280-13353-3
Client Matrix: Solid

% Moisture: 4.9

Date Sampled: 03/08/2011 1350
Date Received: 03/10/2011 0930

NWTPH-Gx Northwest - Volatile Petroleum Products (GC)

Method:	NWTPH-Gx	Analysis Batch: 280-57507		Instrument ID:	GCV_K
Preparation:	5030B	Prep Batch: 280-57043		Initial Weight/Volume:	10.33 g
Dilution:	1.0			Final Weight/Volume:	500 mL
Date Analyzed:	03/14/2011 2012			Injection Volume:	5 mL
Date Prepared:	03/11/2011 1157			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Gasoline		640	J B	330	1200

Surrogate	%Rec	Qualifier	Acceptance Limits
a,a,a-Trifluorotoluene	93		77 - 123

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Client Sample ID: **J1DX94**

Lab Sample ID: 280-13353-4
Client Matrix: Solid

% Moisture: 3.5

Date Sampled: 03/08/2011 1315
Date Received: 03/10/2011 0930

NWTPH-Gx Northwest - Volatile Petroleum Products (GC)

Method:	NWTPH-Gx	Analysis Batch: 280-57507		Instrument ID:	GCV_K
Preparation:	5030B	Prep Batch: 280-57043		Initial Weight/Volume:	10.46 g
Dilution:	1.0			Final Weight/Volume:	500 mL
Date Analyzed:	03/14/2011 1929			Injection Volume:	5 mL
Date Prepared:	03/11/2011 1157			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Gasoline		540	J B	320	1200

Surrogate	%Rec	Qualifier	Acceptance Limits
a,a,a-Trifluorotoluene	101		77 - 123

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Client Sample ID: **J1DX91**

Lab Sample ID: 280-13353-1
Client Matrix: Solid % Moisture: 3.0

Date Sampled: 03/08/2011 1245
Date Received: 03/10/2011 0930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 280-57957		Instrument ID:	GCS_W
Preparation:	3550C	Prep Batch: 280-57176		Initial Weight/Volume:	30.1 g
Dilution:	2.0			Final Weight/Volume:	5000 uL
Date Analyzed:	03/16/2011 1137			Injection Volume:	1 uL
Date Prepared:	03/12/2011 0942			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		5.7	U D	5.7	21
Aroclor 1221		16	U D	16	34
Aroclor 1232		4.1	U D	4.1	21
Aroclor 1242		9.6	U D	9.6	21
Aroclor 1248		9.6	U D	9.6	21
Aroclor 1254		5.3	U D	5.3	21
Aroclor 1260		190	D	5.3	21

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	47	*	59 - 130
Tetrachloro-m-xylene	72		53 - 128

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Client Sample ID: **J1DX92**

Lab Sample ID: 280-13353-2
Client Matrix: Solid

% Moisture: 3.0

Date Sampled: 03/08/2011 1335
Date Received: 03/10/2011 0930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 280-57957		Instrument ID:	GCS_W
Preparation:	3550C	Prep Batch: 280-57176		Initial Weight/Volume:	30.1 g
Dilution:	2.0			Final Weight/Volume:	5000 uL
Date Analyzed:	03/16/2011 1209			Injection Volume:	1 uL
Date Prepared:	03/12/2011 0942			Result Type:	PRIMARY

DryWt Corrected: Y

Analyte	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016	5.7	U D	5.7	21
Aroclor 1221	16	U D	16	34
Aroclor 1232	4.1	U D	4.1	21
Aroclor 1242	9.6	U D	9.6	21
Aroclor 1248	9.6	U D	9.6	21
Aroclor 1254	5.3	U D	5.3	21
Aroclor 1260	190	D	5.3	21

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	59		59 - 130
Tetrachloro-m-xylene	76		53 - 128

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Client Sample ID: **J1DX93**

Lab Sample ID: 280-13353-3
Client Matrix: Solid

% Moisture: 4.9

Date Sampled: 03/08/2011 1350
Date Received: 03/10/2011 0930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 280-57957		Instrument ID:	GCS_W
Preparation:	3550C	Prep Batch: 280-57176		Initial Weight/Volume:	31.1 g
Dilution:	2.0			Final Weight/Volume:	5000 uL
Date Analyzed:	03/16/2011 1241			Injection Volume:	1 uL
Date Prepared:	03/12/2011 0942			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		5.6	U D	5.6	20
Aroclor 1221		16	U D	16	33
Aroclor 1232		4.1	U D	4.1	20
Aroclor 1242		9.5	U D	9.5	20
Aroclor 1248		9.5	U D	9.5	20
Aroclor 1254		5.3	U D	5.3	20
Aroclor 1260		200	D	5.3	20

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	64		59 - 130
Tetrachloro-m-xylene	79		53 - 128

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Client Sample ID: **J1DX94**

Lab Sample ID: 280-13353-4
Client Matrix: Solid

% Moisture: 3.5

Date Sampled: 03/08/2011 1315
Date Received: 03/10/2011 0930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 280-57957		Instrument ID:	GCS_W
Preparation:	3550C	Prep Batch: 280-57176		Initial Weight/Volume:	30.6 g
Dilution:	2.0			Final Weight/Volume:	5000 uL
Date Analyzed:	03/16/2011 1313			Injection Volume:	1 uL
Date Prepared:	03/12/2011 0942			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		5.6	U D	5.6	20
Aroclor 1221		16	U D	16	34
Aroclor 1232		4.1	U D	4.1	20
Aroclor 1242		9.5	U D	9.5	20
Aroclor 1248		9.5	U D	9.5	20
Aroclor 1254		5.3	U D	5.3	20
Aroclor 1260		180	D N	5.3	20

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	61		59 - 130
Tetrachloro-m-xylene	78		53 - 128

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Client Sample ID: **J1DX91**

Lab Sample ID: 280-13353-1
Client Matrix: Solid

% Moisture: 3.0

Date Sampled: 03/08/2011 1245
Date Received: 03/10/2011 0930

NWTPH-Dx Northwest - Semi-Volatile Petroleum Products (GC)

Method:	NWTPH-Dx	Analysis Batch: 280-57857	Instrument ID:	GCS_U2
Preparation:	3550C	Prep Batch: 280-57175	Lab File ID:	007F0701.D
Dilution:	1.0		Initial Weight/Volume:	30.1 g
Date Analyzed:	03/15/2011 1340		Final Weight/Volume:	1000 uL
Date Prepared:	03/12/2011 1100		Injection Volume:	1 uL

DryWt Corrected: Y

Analyte	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36	460000		1000	4100
C10-C28	250000		700	4100

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	54		49 - 115

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Client Sample ID: **J1DX92**

Lab Sample ID: 280-13353-2
Client Matrix: Solid

% Moisture: 3.0

Date Sampled: 03/08/2011 1335
Date Received: 03/10/2011 0930

NWTPH-Dx Northwest - Semi-Volatile Petroleum Products (GC)

Method:	NWTPH-Dx	Analysis Batch: 280-57857		Instrument ID:	GCS_U2
Preparation:	3550C	Prep Batch: 280-57175		Lab File ID:	008F0801.D
Dilution:	1.0			Initial Weight/Volume:	30.0 g
Date Analyzed:	03/15/2011 1413			Final Weight/Volume:	1000 uL
Date Prepared:	03/12/2011 1100			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		69000		1000	4100
C10-C28		48000		700	4100

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	22	*	49 - 115

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Client Sample ID: **J1DX93**

Lab Sample ID: 280-13353-3
Client Matrix: Solid

% Moisture: 4.9

Date Sampled: 03/08/2011 1350
Date Received: 03/10/2011 0930

NWTPH-Dx Northwest - Semi-Volatile Petroleum Products (GC)

Method:	NWTPH-Dx	Analysis Batch: 280-57857		Instrument ID:	GCS_U2
Preparation:	3550C	Prep Batch: 280-57175		Lab File ID:	009F0901.D
Dilution:	1.0			Initial Weight/Volume:	31.2 g
Date Analyzed:	03/15/2011 1447			Final Weight/Volume:	1000 uL
Date Prepared:	03/12/2011 1100			Injection Volume:	1 uL

DryWt Corrected: Y

Analyte	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36	100000		1000	4000
C10-C28	61000		690	4000

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	51		49 - 115

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Client Sample ID: **J1DX94**

Lab Sample ID: 280-13353-4
Client Matrix: Solid

% Moisture: 3.5

Date Sampled: 03/08/2011 1315
Date Received: 03/10/2011 0930

NWTPH-Dx Northwest - Semi-Volatile Petroleum Products (GC)

Method:	NWTPH-Dx	Analysis Batch: 280-57857		Instrument ID:	GCS_U2
Preparation:	3550C	Prep Batch: 280-57175		Lab File ID:	010F1001.D
Dilution:	1.0			Initial Weight/Volume:	31.3 g
Date Analyzed:	03/15/2011 1521			Final Weight/Volume:	1000 uL
Date Prepared:	03/12/2011 1100			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		200000		990	4000
C10-C28		130000		670	4000

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	57		49 - 115

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Client Sample ID: **J1DX91**

Lab Sample ID: 280-13353-1
Client Matrix: Solid

% Moisture: 3.0

Date Sampled: 03/08/2011 1245
Date Received: 03/10/2011 0930

8310 PAHs (HPLC)

Method: 8310
Preparation: 3550C
Dilution: 1.0
Date Analyzed: 03/14/2011 1450
Date Prepared: 03/12/2011 0904

Analysis Batch: 280-57253
Prep Batch: 280-57169

Instrument ID: CHHPLC_G
Initial Weight/Volume: 30.0 g
Final Weight/Volume: 4000 uL
Injection Volume: 20 uL
Result Type: PRIMARY

DryWt Corrected: Y

Analyte	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene	10	U	10	100
Acenaphthylene	9.3	U	9.3	100
Anthracene	3.1	U	3.1	21
Benzo[a]anthracene	3.3	U	3.3	15
Benzo[a]pyrene	6.6	U	6.6	15
Benzo[b]fluoranthene	4.3	U	4.3	15
Benzo[g,h,i]perylene	7.4	U	7.4	31
Benzo[k]fluoranthene	4.1	U	4.1	15
Chrysene	20	J X	5.0	41
Dibenzo(a,h)anthracene	11	U	11	31
Fluoranthene	13	U	13	41
Fluorene	5.4	U	5.4	31
Indeno[1,2,3-cd]pyrene	12	U	12	31
Naphthalene	12	U	12	100
Phenanthrene	18	J X	12	41
Pyrene	12	U	12	41

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	104		72 - 115

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Client Sample ID: **J1DX92**

Lab Sample ID: 280-13353-2
Client Matrix: Solid

% Moisture: 3.0

Date Sampled: 03/08/2011 1335
Date Received: 03/10/2011 0930

8310 PAHs (HPLC)

Method:	8310	Analysis Batch: 280-57253		Instrument ID:	CHHPLC_G
Preparation:	3550C	Prep Batch: 280-57169		Initial Weight/Volume:	31.6 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Date Analyzed:	03/14/2011 1521			Injection Volume:	20 uL
Date Prepared:	03/12/2011 0904			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		9.8	U	9.8	98
Acenaphthylene		8.8	U	8.8	98
Anthracene		3.0	U	3.0	20
Benzo[a]anthracene		3.1	U	3.1	15
Benzo[a]pyrene		6.3	U	6.3	15
Benzo[b]fluoranthene		4.1	U	4.1	15
Benzo[g,h,i]perylene		7.0	U	7.0	29
Benzo[k]fluoranthene		3.9	U	3.9	15
Chrysene		36	J X	4.7	39
Dibenzo(a,h)anthracene		11	U	11	29
Fluoranthene		69		13	39
Fluorene		12	J	5.2	29
Indeno[1,2,3-cd]pyrene		12	U	12	29
Naphthalene		12	U	12	98
Phenanthrene		23	J X	12	39
Pyrene		12	U	12	39

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	104		72 - 115

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Client Sample ID: **J1DX93**

Lab Sample ID: 280-13353-3
Client Matrix: Solid

% Moisture: 4.9

Date Sampled: 03/08/2011 1350
Date Received: 03/10/2011 0930

8310 PAHs (HPLC)

Method:	8310	Analysis Batch: 280-57253		Instrument ID:	CHHPLC_G
Preparation:	3550C	Prep Batch: 280-57169		Initial Weight/Volume:	30.2 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Date Analyzed:	03/14/2011 1551			Injection Volume:	20 uL
Date Prepared:	03/12/2011 0904			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	100
Acenaphthylene		9.4	U	9.4	100
Anthracene		3.2	U	3.2	21
Benzo[a]anthracene		3.3	U	3.3	16
Benzo[a]pyrene		6.7	U	6.7	16
Benzo[b]fluoranthene		6.9	J X	4.4	16
Benzo[g,h,i]perylene		7.5	U	7.5	31
Benzo[k]fluoranthene		4.1	U	4.1	16
Chrysene		18	J X	5.1	42
Dibenzo(a,h)anthracene		11	U	11	31
Fluoranthene		14	U	14	42
Fluorene		5.5	U	5.5	31
Indeno[1,2,3-cd]pyrene		13	U	13	31
Naphthalene		13	U	13	100
Phenanthrene		17	J X	13	42
Pyrene		13	U	13	42

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

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Client Sample ID: **J1DX94**

Lab Sample ID: 280-13353-4
Client Matrix: Solid

% Moisture: 3.5

Date Sampled: 03/08/2011 1315
Date Received: 03/10/2011 0930

8310 PAHs (HPLC)

Method:	8310	Analysis Batch: 280-57253		Instrument ID:	CHHPLC_G
Preparation:	3550C	Prep Batch: 280-57169		Initial Weight/Volume:	30.9 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Date Analyzed:	03/14/2011 1622			Injection Volume:	20 uL
Date Prepared:	03/12/2011 0904			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	100
Acenaphthylene		9.1	U	9.1	100
Anthracene		3.1	U	3.1	20
Benzo[a]anthracene		3.2	U	3.2	15
Benzo[a]pyrene		6.5	U	6.5	15
Benzo[b]fluoranthene		4.2	U	4.2	15
Benzo[g,h,i]perylene		7.2	U	7.2	30
Benzo[k]fluoranthene		4.0	U	4.0	15
Chrysene		29	J	4.9	40
Dibenzo(a,h)anthracene		11	U	11	30
Fluoranthene		38	J	13	40
Fluorene		5.8	J	5.3	30
Indeno[1,2,3-cd]pyrene		12	U	12	30
Naphthalene		12	U	12	100
Phenanthrene		49	X	12	40
Pyrene		12	U	12	40

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

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Client Sample ID: **J1DX91**

Lab Sample ID: 280-13353-1
Client Matrix: Solid

% Moisture: 3.0

Date Sampled: 03/08/2011 1245
Date Received: 03/10/2011 0930

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 03/14/2011 1855
Date Prepared: 03/11/2011 1500

Analysis Batch: 280-57453
Prep Batch: 280-56929

Instrument ID: MT_025
Lab File ID: 25A2031411.asc
Initial Weight/Volume: 1.11 g
Final Weight/Volume: 100 mL

DryWt Corrected: Y

Analyte	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum	9780	X	1.4	4.6
Antimony	2.4		0.35	0.56
Arsenic	39.0		0.61	0.93
Barium	91.5	X	0.071	0.46
Beryllium	0.068	B	0.031	0.19
Boron	5.3		0.91	1.9
Cadmium	0.24		0.038	0.19
Calcium	87200	X	13.1	46.5
Chromium	14.4	X M	0.054	0.19
Cobalt	7.6	X	0.093	0.93
Copper	40.1	M	0.20	0.93
Iron	16900	M	3.5	4.6
Lead	12.1		0.25	0.46
Magnesium	4960	X	3.4	18.6
Manganese	270	X M	0.093	0.93
Molybdenum	1.1	B M	0.24	1.9
Nickel	11.8	X M	0.11	3.7
Potassium	1220		38.1	279
Selenium	0.80	U	0.80	0.93
Silicon	66.6		5.3	9.3
Silver	0.15	U	0.15	0.19
Sodium	857		54.8	111
Vanadium	50.9	X	0.087	1.9
Zinc	163	X	0.37	0.93

7471A Mercury (CVAA)

Method: 7471A
Preparation: 7471A
Dilution: 1.0
Date Analyzed: 03/11/2011 2008
Date Prepared: 03/11/2011 1145

Analysis Batch: 280-57335
Prep Batch: 280-56941

Instrument ID: MT_033
Lab File ID: 110311AA.txt
Initial Weight/Volume: 0.65 g
Final Weight/Volume: 50 mL

DryWt Corrected: Y

Analyte	Result (mg/Kg)	Qualifier	MDL	RL
Mercury	0.045	M	0.0053	0.016

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Client Sample ID: **J1DX92**

Lab Sample ID: 280-13353-2
Client Matrix: Solid
% Moisture: 3.0

Date Sampled: 03/08/2011 1335
Date Received: 03/10/2011 0930

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 280-57453		Instrument ID:	MT_025
Preparation:	3050B	Prep Batch: 280-56929		Lab File ID:	25A2031411.asc
Dilution:	1.0			Initial Weight/Volume:	1.05 g
Date Analyzed:	03/14/2011 1905			Final Weight/Volume:	100 mL
Date Prepared:	03/11/2011 1500				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		9510	X	1.5	4.9
Antimony		0.66		0.37	0.59
Arsenic		15.9		0.65	0.98
Barium		95.9	X	0.075	0.49
Beryllium		0.074	B	0.032	0.20
Boron		5.1		0.96	2.0
Cadmium		0.21		0.040	0.20
Calcium		88000	X	13.8	49.1
Chromium		18.8	X	0.057	0.20
Cobalt		6.2	X	0.098	0.98
Copper		26.4		0.21	0.98
Iron		17200		3.7	4.9
Lead		10.7		0.27	0.49
Magnesium		4790	X	3.6	19.6
Manganese		265	X	0.098	0.98
Molybdenum		1.2	B	0.26	2.0
Nickel		11.3	X	0.12	3.9
Potassium		1380		40.2	295
Selenium		0.84	U	0.84	0.98
Silicon		76.3		5.6	9.8
Silver		0.16	U	0.16	0.20
Sodium		905		57.9	118
Vanadium		50.2	X	0.092	2.0
Zinc		105	X	0.39	0.98

7471A Mercury (CVAA)

Method:	7471A	Analysis Batch: 280-57335		Instrument ID:	MT_033
Preparation:	7471A	Prep Batch: 280-56941		Lab File ID:	110311AA.txt
Dilution:	1.0			Initial Weight/Volume:	0.60 g
Date Analyzed:	03/11/2011 2014			Final Weight/Volume:	50 mL
Date Prepared:	03/11/2011 1145				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.070		0.0057	0.018

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Client Sample ID: **J1DX93**

Lab Sample ID: 280-13353-3
Client Matrix: Solid
% Moisture: 4.9

Date Sampled: 03/08/2011 1350
Date Received: 03/10/2011 0930

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 03/14/2011 1907
Date Prepared: 03/11/2011 1500

Analysis Batch: 280-57453
Prep Batch: 280-56929

Instrument ID: MT_025
Lab File ID: 25A2031411.asc
Initial Weight/Volume: 1.14 g
Final Weight/Volume: 100 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		10100	X	1.4	4.6
Antimony		2.5		0.35	0.55
Arsenic		44.6		0.61	0.92
Barium		86.3	X	0.070	0.46
Beryllium		0.076	B	0.030	0.18
Boron		6.3		0.90	1.8
Cadmium		0.31		0.038	0.18
Calcium		101000	X	13.0	46.1
Chromium		20.6	X	0.054	0.18
Cobalt		7.3	X	0.092	0.92
Copper		57.6		0.20	0.92
Iron		19000		3.5	4.6
Lead		20.7		0.25	0.46
Magnesium		5010	X	3.4	18.5
Manganese		306	X	0.092	0.92
Molybdenum		1.7	B	0.24	1.8
Nickel		16.3	X	0.11	3.7
Potassium		1510		37.8	277
Selenium		0.79	U	0.79	0.92
Silicon		74.0		5.2	9.2
Silver		0.15	B	0.15	0.18
Sodium		1270		54.4	111
Vanadium		48.7	X	0.087	1.8
Zinc		176	X	0.37	0.92

7471A Mercury (CVAA)

Method: 7471A
Preparation: 7471A
Dilution: 1.0
Date Analyzed: 03/11/2011 2017
Date Prepared: 03/11/2011 1145

Analysis Batch: 280-57335
Prep Batch: 280-56941

Instrument ID: MT_033
Lab File ID: 110311AA.txt
Initial Weight/Volume: 0.61 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.23		0.0057	0.018

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Client Sample ID: **J1DX94**

Lab Sample ID: 280-13353-4
Client Matrix: Solid
% Moisture: 3.5

Date Sampled: 03/08/2011 1315
Date Received: 03/10/2011 0930

6010B Metals (ICP)

Method: 6010B
Preparation: 3050B
Dilution: 1.0
Date Analyzed: 03/14/2011 1910
Date Prepared: 03/11/2011 1500

Analysis Batch: 280-57453
Prep Batch: 280-56929

Instrument ID: MT_025
Lab File ID: 25A2031411.asc
Initial Weight/Volume: 1.10 g
Final Weight/Volume: 100 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		10000	X	1.5	4.7
Antimony		0.82		0.36	0.57
Arsenic		20.3		0.62	0.94
Barium		102	X	0.072	0.47
Beryllium		0.074	B	0.031	0.19
Boron		5.2		0.92	1.9
Cadmium		0.26		0.039	0.19
Calcium		86700	X	13.3	47.1
Chromium		14.1	X	0.055	0.19
Cobalt		6.4	X	0.094	0.94
Copper		29.8		0.20	0.94
Iron		17000		3.6	4.7
Lead		16.8		0.25	0.47
Magnesium		4900	X	3.5	18.9
Manganese		269	X	0.094	0.94
Molybdenum		0.92	B	0.25	1.9
Nickel		11.3	X	0.12	3.8
Potassium		1330		38.6	283
Selenium		0.81	U	0.81	0.94
Silicon		69.6		5.3	9.4
Silver		0.15	U	0.15	0.19
Sodium		841		55.6	113
Vanadium		51.4	X	0.089	1.9
Zinc		119	X	0.38	0.94

7471A Mercury (CVAA)

Method: 7471A
Preparation: 7471A
Dilution: 2.0
Date Analyzed: 03/11/2011 2235
Date Prepared: 03/11/2011 1145

Analysis Batch: 280-57335
Prep Batch: 280-56941

Instrument ID: MT_033
Lab File ID: 110311AA.txt
Initial Weight/Volume: 0.69 g
Final Weight/Volume: 50 mL

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.84		0.010	0.031

General Chemistry

Client Sample ID: **J1DX91**

Lab Sample ID: 280-13353-1
Client Matrix: Solid

% Moisture: 3.0

Date Sampled: 03/08/2011 1245
Date Received: 03/10/2011 0930

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate Nitrite as N-Soluble	6.3		mg/Kg	0.37	0.77	1.0	353.2
Analysis Batch: 280-57151	Date Analyzed: 03/11/2011 1910						DryWt Corrected: Y
Chloride-Soluble	17.8		mg/Kg	2.0	5.2	1.0	9056M
Analysis Batch: 280-57630	Date Analyzed: 03/12/2011 0332						DryWt Corrected: Y
Nitrate as N-Soluble	4.8		mg/Kg	0.32	2.6	1.0	9056M
Analysis Batch: 280-57817	Date Analyzed: 03/12/2011 0332						DryWt Corrected: Y
Bromide-Soluble	0.40	U	mg/Kg	0.40	2.1	1.0	9056M
Analysis Batch: 280-57630	Date Analyzed: 03/12/2011 0332						DryWt Corrected: Y
Nitrite as N-Soluble	0.45	B	mg/Kg	0.35	2.6	1.0	9056M
Analysis Batch: 280-57817	Date Analyzed: 03/12/2011 0332						DryWt Corrected: Y
Orthophosphate as P-Soluble	1.3	U	mg/Kg	1.3	5.2	1.0	9056M
Analysis Batch: 280-57817	Date Analyzed: 03/12/2011 1122						DryWt Corrected: Y
Sulfate-Soluble	209		mg/Kg	1.8	5.2	1.0	9056M
Analysis Batch: 280-57630	Date Analyzed: 03/12/2011 0332						DryWt Corrected: Y
Fluoride-Soluble	5.9		mg/Kg	0.85	5.2	1.0	9056M
Analysis Batch: 280-57630	Date Analyzed: 03/12/2011 0332						DryWt Corrected: Y
Oil & Grease (HEM)	1020		mg/Kg	87.0	513	1.0	9071B
Analysis Batch: 280-57172	Date Analyzed: 03/12/2011 0905						DryWt Corrected: Y
Prep Batch: 280-57164	Date Prepared: 03/12/2011 0821						

Analyte	Result	Qual	Units	RL	RL	Dil	Method
pH adj. to 25 deg C-Soluble	12.0		SU	0.0100	0.0100	1.0	9045C
Analysis Batch: 280-57330	Date Analyzed: 03/11/2011 1539						DryWt Corrected: N
Percent Moisture	3.0		%	0.10	0.10	1.0	D-2216
Analysis Batch: 280-57036	Date Analyzed: 03/11/2011 1148						DryWt Corrected: N

General Chemistry

Client Sample ID: **J1DX92**

Lab Sample ID: 280-13353-2
Client Matrix: Solid
% Moisture: 3.0

Date Sampled: 03/08/2011 1335
Date Received: 03/10/2011 0930

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate Nitrite as N-Soluble	22.5		mg/Kg	0.37	0.77	1.0	353.2
Analysis Batch: 280-57151	Date Analyzed: 03/11/2011 1911						DryWt Corrected: Y
Chloride-Soluble	24.0		mg/Kg	2.0	5.1	1.0	9056M
Analysis Batch: 280-57630	Date Analyzed: 03/12/2011 0350						DryWt Corrected: Y
Nitrate as N-Soluble	16.2		mg/Kg	0.32	2.6	1.0	9056M
Analysis Batch: 280-57817	Date Analyzed: 03/12/2011 0350						DryWt Corrected: Y
Bromide-Soluble	0.40	U	mg/Kg	0.40	2.0	1.0	9056M
Analysis Batch: 280-57630	Date Analyzed: 03/12/2011 0350						DryWt Corrected: Y
Nitrite as N-Soluble	0.50	B	mg/Kg	0.34	2.6	1.0	9056M
Analysis Batch: 280-57817	Date Analyzed: 03/12/2011 0350						DryWt Corrected: Y
Orthophosphate as P-Soluble	1.3	U	mg/Kg	1.3	5.1	1.0	9056M
Analysis Batch: 280-57817	Date Analyzed: 03/12/2011 1214						DryWt Corrected: Y
Sulfate-Soluble	174		mg/Kg	1.8	5.1	1.0	9056M
Analysis Batch: 280-57630	Date Analyzed: 03/12/2011 0350						DryWt Corrected: Y
Fluoride-Soluble	7.9		mg/Kg	0.84	5.1	1.0	9056M
Analysis Batch: 280-57630	Date Analyzed: 03/12/2011 0350						DryWt Corrected: Y
Oil & Grease (HEM)	546	C	mg/Kg	87.3	515	1.0	9071B
Analysis Batch: 280-57172	Date Analyzed: 03/12/2011 0905						DryWt Corrected: Y
Prep Batch: 280-57164	Date Prepared: 03/12/2011 0821						

Analyte	Result	Qual	Units	RL	RL	Dil	Method
pH adj. to 25 deg C-Soluble	12.2		SU	0.0100	0.0100	1.0	9045C
Analysis Batch: 280-57330	Date Analyzed: 03/11/2011 1542						DryWt Corrected: N
Percent Moisture	3.0		%	0.10	0.10	1.0	D-2216
Analysis Batch: 280-57036	Date Analyzed: 03/11/2011 1148						DryWt Corrected: N

General Chemistry

Client Sample ID: **J1DX93**

Lab Sample ID: 280-13353-3
Client Matrix: Solid

% Moisture: 4.9

Date Sampled: 03/08/2011 1350
Date Received: 03/10/2011 0930

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate Nitrite as N-Soluble	4.9		mg/Kg	0.37	0.78	1.0	353.2
Analysis Batch: 280-57151	Date Analyzed: 03/11/2011 1913						DryWt Corrected: Y
Chloride-Soluble	14.1		mg/Kg	2.1	5.2	1.0	9056M
Analysis Batch: 280-57630	Date Analyzed: 03/12/2011 0407						DryWt Corrected: Y
Nitrate as N-Soluble	3.6		mg/Kg	0.33	2.6	1.0	9056M
Analysis Batch: 280-57817	Date Analyzed: 03/12/2011 0407						DryWt Corrected: Y
Bromide-Soluble	0.40	U	mg/Kg	0.40	2.1	1.0	9056M
Analysis Batch: 280-57630	Date Analyzed: 03/12/2011 0407						DryWt Corrected: Y
Nitrite as N-Soluble	0.70	B	mg/Kg	0.35	2.6	1.0	9056M
Analysis Batch: 280-57817	Date Analyzed: 03/12/2011 0407						DryWt Corrected: Y
Orthophosphate as P-Soluble	1.3	U	mg/Kg	1.3	5.2	1.0	9056M
Analysis Batch: 280-57817	Date Analyzed: 03/12/2011 1231						DryWt Corrected: Y
Sulfate-Soluble	96.4		mg/Kg	1.8	5.2	1.0	9056M
Analysis Batch: 280-57630	Date Analyzed: 03/12/2011 0407						DryWt Corrected: Y
Fluoride-Soluble	9.7		mg/Kg	0.86	5.2	1.0	9056M
Analysis Batch: 280-57630	Date Analyzed: 03/12/2011 0407						DryWt Corrected: Y
Oil & Grease (HEM)	399	B C	mg/Kg	89.1	525	1.0	9071B
Analysis Batch: 280-57172	Date Analyzed: 03/12/2011 0905						DryWt Corrected: Y
Prep Batch: 280-57164	Date Prepared: 03/12/2011 0821						

Analyte	Result	Qual	Units	RL	RL	Dil	Method
pH adj. to 25 deg C-Soluble	12.3		SU	0.0100	0.0100	1.0	9045C
Analysis Batch: 280-57330	Date Analyzed: 03/11/2011 1544						DryWt Corrected: N
Percent Moisture	4.9		%	0.10	0.10	1.0	D-2216
Analysis Batch: 280-57036	Date Analyzed: 03/11/2011 1148						DryWt Corrected: N

General Chemistry

Client Sample ID: **J1DX94**

Lab Sample ID: 280-13353-4
Client Matrix: Solid

% Moisture: 3.5

Date Sampled: 03/08/2011 1315
Date Received: 03/10/2011 0930

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate Nitrite as N-Soluble	11.7	M N	mg/Kg	0.36	0.75	1.0	353.2
Analysis Batch: 280-57151	Date Analyzed: 03/11/2011 1915						DryWt Corrected: Y
Chloride-Soluble	19.0		mg/Kg	2.0	5.0	1.0	9056M
Analysis Batch: 280-57630	Date Analyzed: 03/12/2011 0459						DryWt Corrected: Y
Nitrate as N-Soluble	9.0		mg/Kg	0.31	2.5	1.0	9056M
Analysis Batch: 280-57817	Date Analyzed: 03/12/2011 0459						DryWt Corrected: Y
Bromide-Soluble	3.7		mg/Kg	0.39	2.0	1.0	9056M
Analysis Batch: 280-57630	Date Analyzed: 03/12/2011 0459						DryWt Corrected: Y
Nitrite as N-Soluble	0.44	B	mg/Kg	0.33	2.5	1.0	9056M
Analysis Batch: 280-57817	Date Analyzed: 03/12/2011 0459						DryWt Corrected: Y
Orthophosphate as P-Soluble	1.2	U N	mg/Kg	1.2	5.0	1.0	9056M
Analysis Batch: 280-57817	Date Analyzed: 03/12/2011 1249						DryWt Corrected: Y
Sulfate-Soluble	83.5	N	mg/Kg	1.7	5.0	1.0	9056M
Analysis Batch: 280-57630	Date Analyzed: 03/12/2011 0459						DryWt Corrected: Y
Fluoride-Soluble	7.5	N	mg/Kg	0.82	5.0	1.0	9056M
Analysis Batch: 280-57630	Date Analyzed: 03/12/2011 0459						DryWt Corrected: Y
Oil & Grease (HEM)	638	N C	mg/Kg	87.3	515	1.0	9071B
Analysis Batch: 280-57172	Date Analyzed: 03/12/2011 0905						DryWt Corrected: Y
Prep Batch: 280-57164	Date Prepared: 03/12/2011 0821						

Analyte	Result	Qual	Units	RL	RL	Dil	Method
pH adj. to 25 deg C-Soluble	12.4		SU	0.0100	0.0100	1.0	9045C
Analysis Batch: 280-57330	Date Analyzed: 03/11/2011 1546						DryWt Corrected: N
Percent Moisture	3.5		%	0.10	0.10	1.0	D-2216
Analysis Batch: 280-57036	Date Analyzed: 03/11/2011 1148						DryWt Corrected: N

QUALITY CONTROL RESULTS

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Prep Batch: 280-57770					
LCS 280-57770/2-A	Lab Control Sample	T	Solid	5030B	
MB 280-57770/1-A	Method Blank	T	Solid	5030B	
280-13353-1	J1DX91	T	Solid	5030B	
280-13353-2	J1DX92	T	Solid	5030B	
280-13353-3	J1DX93	T	Solid	5030B	
280-13353-4	J1DX94	T	Solid	5030B	
280-13353-4MS	Matrix Spike	T	Solid	5030B	
280-13353-4MSD	Matrix Spike Duplicate	T	Solid	5030B	
Analysis Batch:280-57853					
LCS 280-57770/2-A	Lab Control Sample	T	Solid	8260B	280-57770
MB 280-57770/1-A	Method Blank	T	Solid	8260B	280-57770
280-13353-1	J1DX91	T	Solid	8260B	280-57770
280-13353-2	J1DX92	T	Solid	8260B	280-57770
280-13353-3	J1DX93	T	Solid	8260B	280-57770
280-13353-4	J1DX94	T	Solid	8260B	280-57770
280-13353-4MS	Matrix Spike	T	Solid	8260B	280-57770
280-13353-4MSD	Matrix Spike Duplicate	T	Solid	8260B	280-57770

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC VOA					
Prep Batch: 280-57043					
LCS 280-57043/1-A	Lab Control Sample	T	Solid	5030B	
LCSD 280-57043/2-A	Lab Control Sample Duplicate	T	Solid	5030B	
MB 280-57043/3-A	Method Blank	T	Solid	5030B	
280-13353-1	J1DX91	T	Solid	5030B	
280-13353-1MS	Matrix Spike	T	Solid	5030B	
280-13353-1MSD	Matrix Spike Duplicate	T	Solid	5030B	
280-13353-2	J1DX92	T	Solid	5030B	
280-13353-3	J1DX93	T	Solid	5030B	
280-13353-4	J1DX94	T	Solid	5030B	
Analysis Batch:280-57507					
LCS 280-57043/1-A	Lab Control Sample	T	Solid	NWTPH-Gx	280-57043
LCSD 280-57043/2-A	Lab Control Sample Duplicate	T	Solid	NWTPH-Gx	280-57043
MB 280-57043/3-A	Method Blank	T	Solid	NWTPH-Gx	280-57043
280-13353-1	J1DX91	T	Solid	NWTPH-Gx	280-57043
280-13353-1MS	Matrix Spike	T	Solid	NWTPH-Gx	280-57043
280-13353-1MSD	Matrix Spike Duplicate	T	Solid	NWTPH-Gx	280-57043
280-13353-2	J1DX92	T	Solid	NWTPH-Gx	280-57043
280-13353-3	J1DX93	T	Solid	NWTPH-Gx	280-57043
280-13353-4	J1DX94	T	Solid	NWTPH-Gx	280-57043

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 280-57175					
LCS 280-57175/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-57175/1-A	Method Blank	T	Solid	3550C	
280-13353-1	J1DX91	T	Solid	3550C	
280-13353-2	J1DX92	T	Solid	3550C	
280-13353-3	J1DX93	T	Solid	3550C	
280-13353-4	J1DX94	T	Solid	3550C	
280-13353-4MS	Matrix Spike	T	Solid	3550C	
280-13353-4MSD	Matrix Spike Duplicate	T	Solid	3550C	
Prep Batch: 280-57176					
LCS 280-57176/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-57176/1-A	Method Blank	T	Solid	3550C	
280-13353-1	J1DX91	T	Solid	3550C	
280-13353-2	J1DX92	T	Solid	3550C	
280-13353-3	J1DX93	T	Solid	3550C	
280-13353-4	J1DX94	T	Solid	3550C	
280-13353-4MS	Matrix Spike	T	Solid	3550C	
280-13353-4MSD	Matrix Spike Duplicate	T	Solid	3550C	
Analysis Batch:280-57857					
LCS 280-57175/2-A	Lab Control Sample	T	Solid	NWTPH-Dx	280-57175
MB 280-57175/1-A	Method Blank	T	Solid	NWTPH-Dx	280-57175
280-13353-1	J1DX91	T	Solid	NWTPH-Dx	280-57175
280-13353-2	J1DX92	T	Solid	NWTPH-Dx	280-57175
280-13353-3	J1DX93	T	Solid	NWTPH-Dx	280-57175
280-13353-4	J1DX94	T	Solid	NWTPH-Dx	280-57175
280-13353-4MS	Matrix Spike	T	Solid	NWTPH-Dx	280-57175
280-13353-4MSD	Matrix Spike Duplicate	T	Solid	NWTPH-Dx	280-57175
Analysis Batch:280-57955					
LCS 280-57176/2-A	Lab Control Sample	T	Solid	8082	280-57176
MB 280-57176/1-A	Method Blank	T	Solid	8082	280-57176
280-13353-4MS	Matrix Spike	T	Solid	8082	280-57176
280-13353-4MSD	Matrix Spike Duplicate	T	Solid	8082	280-57176
Analysis Batch:280-57957					
280-13353-1	J1DX91	T	Solid	8082	280-57176
280-13353-2	J1DX92	T	Solid	8082	280-57176
280-13353-3	J1DX93	T	Solid	8082	280-57176
280-13353-4	J1DX94	T	Solid	8082	280-57176

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-56929					
LCS 280-56929/2-A	Lab Control Sample	T	Solid	3050B	
MB 280-56929/1-A	Method Blank	T	Solid	3050B	
280-13353-1	J1DX91	T	Solid	3050B	
280-13353-1DU	Duplicate	T	Solid	3050B	
280-13353-1MS	Matrix Spike	T	Solid	3050B	
280-13353-2	J1DX92	T	Solid	3050B	
280-13353-3	J1DX93	T	Solid	3050B	
280-13353-4	J1DX94	T	Solid	3050B	
Prep Batch: 280-56941					
LCS 280-56941/2-A	Lab Control Sample	T	Solid	7471A	
MB 280-56941/1-A	Method Blank	T	Solid	7471A	
280-13353-1	J1DX91	T	Solid	7471A	
280-13353-1DU	Duplicate	T	Solid	7471A	
280-13353-1MS	Matrix Spike	T	Solid	7471A	
280-13353-2	J1DX92	T	Solid	7471A	
280-13353-3	J1DX93	T	Solid	7471A	
280-13353-4	J1DX94	T	Solid	7471A	
Analysis Batch:280-57335					
LCS 280-56941/2-A	Lab Control Sample	T	Solid	7471A	280-56941
MB 280-56941/1-A	Method Blank	T	Solid	7471A	280-56941
280-13353-1	J1DX91	T	Solid	7471A	280-56941
280-13353-1DU	Duplicate	T	Solid	7471A	280-56941
280-13353-1MS	Matrix Spike	T	Solid	7471A	280-56941
280-13353-2	J1DX92	T	Solid	7471A	280-56941
280-13353-3	J1DX93	T	Solid	7471A	280-56941
280-13353-4	J1DX94	T	Solid	7471A	280-56941
Analysis Batch:280-57453					
LCS 280-56929/2-A	Lab Control Sample	T	Solid	6010B	280-56929
MB 280-56929/1-A	Method Blank	T	Solid	6010B	280-56929
280-13353-1	J1DX91	T	Solid	6010B	280-56929
280-13353-1DU	Duplicate	T	Solid	6010B	280-56929
280-13353-1MS	Matrix Spike	T	Solid	6010B	280-56929
280-13353-2	J1DX92	T	Solid	6010B	280-56929
280-13353-3	J1DX93	T	Solid	6010B	280-56929
280-13353-4	J1DX94	T	Solid	6010B	280-56929

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Prep Batch: 280-56844					
280-13353-1	J1DX91	S	Solid	DI Leach	
280-13353-1DU	Duplicate	S	Solid	DI Leach	
280-13353-2	J1DX92	S	Solid	DI Leach	
280-13353-3	J1DX93	S	Solid	DI Leach	
280-13353-4	J1DX94	S	Solid	DI Leach	
Prep Batch: 280-56977					
LCS 280-56977/1-A	Lab Control Sample	S	Solid	DI Leach	
MB 280-56977/2-A	Method Blank	S	Solid	DI Leach	
280-13353-1	J1DX91	S	Solid	DI Leach	
280-13353-2	J1DX92	S	Solid	DI Leach	
280-13353-3	J1DX93	S	Solid	DI Leach	
280-13353-4	J1DX94	S	Solid	DI Leach	
280-13353-4DU	Duplicate	S	Solid	DI Leach	
280-13353-4MS	Matrix Spike	S	Solid	DI Leach	
Analysis Batch:280-57036					
280-13353-1	J1DX91	T	Solid	D-2216	
280-13353-2	J1DX92	T	Solid	D-2216	
280-13353-3	J1DX93	T	Solid	D-2216	
280-13353-4	J1DX94	T	Solid	D-2216	
280-13353-4DU	Duplicate	T	Solid	D-2216	
Prep Batch: 280-57113					
LCS 280-57113/1-A	Lab Control Sample	S	Solid	DI Leach	
MB 280-57113/2-A	Method Blank	S	Solid	DI Leach	
280-13353-1	J1DX91	S	Solid	DI Leach	
280-13353-2	J1DX92	S	Solid	DI Leach	
280-13353-3	J1DX93	S	Solid	DI Leach	
280-13353-4	J1DX94	S	Solid	DI Leach	
280-13353-4DU	Duplicate	S	Solid	DI Leach	
280-13353-4MS	Matrix Spike	S	Solid	DI Leach	
Analysis Batch:280-57151					
LCS 280-57113/1-A	Lab Control Sample	S	Solid	353.2	
MB 280-57113/2-A	Method Blank	S	Solid	353.2	
280-13353-1	J1DX91	S	Solid	353.2	
280-13353-2	J1DX92	S	Solid	353.2	
280-13353-3	J1DX93	S	Solid	353.2	
280-13353-4	J1DX94	S	Solid	353.2	
280-13353-4DU	Duplicate	S	Solid	353.2	
280-13353-4MS	Matrix Spike	S	Solid	353.2	

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Prep Batch: 280-57164					
LCS 280-57164/2-A	Lab Control Sample	T	Solid	3540C	
MB 280-57164/1-A	Method Blank	T	Solid	3540C	
280-13353-1	J1DX91	T	Solid	3540C	
280-13353-2	J1DX92	T	Solid	3540C	
280-13353-3	J1DX93	T	Solid	3540C	
280-13353-4	J1DX94	T	Solid	3540C	
280-13353-4DU	Duplicate	T	Solid	3540C	
280-13353-4MS	Matrix Spike	T	Solid	3540C	
Analysis Batch:280-57172					
LCS 280-57164/2-A	Lab Control Sample	T	Solid	9071B	280-57164
MB 280-57164/1-A	Method Blank	T	Solid	9071B	280-57164
280-13353-1	J1DX91	T	Solid	9071B	280-57164
280-13353-2	J1DX92	T	Solid	9071B	280-57164
280-13353-3	J1DX93	T	Solid	9071B	280-57164
280-13353-4	J1DX94	T	Solid	9071B	280-57164
280-13353-4DU	Duplicate	T	Solid	9071B	280-57164
280-13353-4MS	Matrix Spike	T	Solid	9071B	280-57164
Analysis Batch:280-57330					
LCS 280-57330/4	Lab Control Sample	T	Water	9045C	
LCSD 280-57330/5	Lab Control Sample Duplicate	T	Water	9045C	
280-13353-1	J1DX91	S	Solid	9045C	
280-13353-1DU	Duplicate	S	Solid	9045C	
280-13353-2	J1DX92	S	Solid	9045C	
280-13353-3	J1DX93	S	Solid	9045C	
280-13353-4	J1DX94	S	Solid	9045C	
Analysis Batch:280-57630					
LCS 280-56977/1-A	Lab Control Sample	S	Solid	9056M	
MB 280-56977/2-A	Method Blank	S	Solid	9056M	
280-13353-1	J1DX91	S	Solid	9056M	
280-13353-2	J1DX92	S	Solid	9056M	
280-13353-3	J1DX93	S	Solid	9056M	
280-13353-4	J1DX94	S	Solid	9056M	
280-13353-4DU	Duplicate	S	Solid	9056M	
280-13353-4MS	Matrix Spike	S	Solid	9056M	

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-57817					
LCS 280-56977/1-A	Lab Control Sample	S	Solid	9056M	
MB 280-56977/2-A	Method Blank	S	Solid	9056M	
280-13353-1	J1DX91	S	Solid	9056M	
280-13353-2	J1DX92	S	Solid	9056M	
280-13353-3	J1DX93	S	Solid	9056M	
280-13353-4	J1DX94	S	Solid	9056M	
280-13353-4DU	Duplicate	S	Solid	9056M	
280-13353-4MS	Matrix Spike	S	Solid	9056M	

Report Basis
S = Soluble
T = Total

HPLC/IC					
Prep Batch: 280-57169					
LCS 280-57169/8-A	Lab Control Sample	T	Solid	3550C	
MB 280-57169/7-A	Method Blank	T	Solid	3550C	
280-13353-1	J1DX91	T	Solid	3550C	
280-13353-2	J1DX92	T	Solid	3550C	
280-13353-3	J1DX93	T	Solid	3550C	
280-13353-4	J1DX94	T	Solid	3550C	
280-13353-4MS	Matrix Spike	T	Solid	3550C	
280-13353-4MSD	Matrix Spike Duplicate	T	Solid	3550C	
Analysis Batch:280-57253					
LCS 280-57169/8-A	Lab Control Sample	T	Solid	8310	280-57169
MB 280-57169/7-A	Method Blank	T	Solid	8310	280-57169
280-13353-1	J1DX91	T	Solid	8310	280-57169
280-13353-2	J1DX92	T	Solid	8310	280-57169
280-13353-3	J1DX93	T	Solid	8310	280-57169
280-13353-4	J1DX94	T	Solid	8310	280-57169
280-13353-4MS	Matrix Spike	T	Solid	8310	280-57169
280-13353-4MSD	Matrix Spike Duplicate	T	Solid	8310	280-57169

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Method Blank - Batch: 280-57770

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 280-57770/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/16/2011 0908
Date Prepared: 03/16/2011 0600

Analysis Batch: 280-57853
Prep Batch: 280-57770
Units: ug/Kg

Instrument ID: MSV_J
Lab File ID: J5490.D
Initial Weight/Volume: 5.02 g
Final Weight/Volume: 5 mL

Analyte	Result	Qual	MDL	RL
Acetone	10.9	J	5.4	20
Benzene	0.47	U	0.47	5.0
Bromodichloromethane	0.22	U	0.22	5.0
Bromoform	0.23	U	0.23	5.0
Bromomethane	0.50	U	0.50	10
2-Butanone (MEK)	1.8	U	1.8	10
Carbon disulfide	0.42	U	0.42	5.0
Carbon tetrachloride	0.63	U	0.63	5.0
Chlorobenzene	0.54	U	0.54	5.0
Dibromochloromethane	0.57	U	0.57	5.0
Chloroethane	0.89	U	0.89	10
Chloroform	0.29	U	0.29	5.0
Chloromethane	0.77	U	0.77	10
1,3-Dichlorobenzene	0.48	U	0.48	5.0
1,1-Dichloroethane	0.21	U	0.21	5.0
1,2-Dichloroethane	0.70	U	0.70	5.0
trans-1,2-Dichloroethene	0.39	U	0.39	2.5
1,1-Dichloroethene	0.59	U	0.59	5.0
1,2-Dichloroethene, Total	0.39	U	0.39	5.0
1,2-Dichloropropane	0.55	U	0.55	5.0
cis-1,3-Dichloropropene	1.3	U	1.3	5.0
trans-1,3-Dichloropropene	0.67	U	0.67	5.0
Ethylbenzene	0.67	U	0.67	5.0
2-Hexanone	4.9	U	4.9	20
Methylene Chloride	0.75	U	0.75	5.0
4-Methyl-2-pentanone (MIBK)	4.3	U	4.3	10
Styrene	0.63	U	0.63	5.0
1,1,2,2-Tetrachloroethane	0.61	U	0.61	5.0
Tetrachloroethene	0.59	U	0.59	5.0
Toluene	0.69	U	0.69	5.0
1,1,1-Trichloroethane	0.52	U	0.52	5.0
1,1,2-Trichloroethane	0.88	U	0.88	5.0
Trichloroethene	0.23	U	0.23	5.0
Vinyl chloride	1.3	U	1.3	5.0
Xylenes, Total	0.61	U	0.61	5.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	95	58 - 140
Toluene-d8 (Surr)	100	80 - 126
4-Bromofluorobenzene (Surr)	107	76 - 127
Dibromofluoromethane (Surr)	99	75 - 121

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Method Blank TICs- Batch: 280-57770

Cas Number	Analyte	RT	Est. Result	Qual
87-61-6	1,2,3-Trichlorobenzene	15.87	0.760	J N J
87-68-3	Hexachlorobutadiene	15.47	0.617	J N J
91-20-3	Naphthalene	15.59	0.652	J N J
	Unknown	16.05	6.44	J N
	Unknown	9.19	6.87	J N

Lab Control Sample - Batch: 280-57770

Method: 8260B
Preparation: 5030B

Lab Sample ID: LCS 280-57770/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/16/2011 0759
Date Prepared: 03/16/2011 0600

Analysis Batch: 280-57853
Prep Batch: 280-57770
Units: ug/Kg

Instrument ID: MSV_J
Lab File ID: J5487.D
Initial Weight/Volume: 5 g
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Benzene	50.0	54.2	108	76 - 120	
Bromodichloromethane	50.0	50.6	101	74 - 125	
Carbon tetrachloride	50.0	57.1	114	69 - 147	
Chlorobenzene	50.0	53.1	106	74 - 120	
Chloroform	50.0	52.0	104	77 - 125	
1,3-Dichlorobenzene	50.0	54.2	108	74 - 120	
1,1-Dichloroethane	50.0	50.8	102	74 - 120	
trans-1,2-Dichloroethene	50.0	54.3	109	80 - 127	
1,1-Dichloroethene	50.0	58.3	117	77 - 143	
1,2-Dichloropropane	50.0	50.7	101	74 - 120	
Ethylbenzene	50.0	54.9	110	78 - 120	
Methylene Chloride	50.0	53.0	106	76 - 137	
Tetrachloroethene	50.0	57.1	114	71 - 120	
Toluene	50.0	55.3	111	72 - 120	
1,1,1-Trichloroethane	50.0	56.5	113	67 - 143	
Trichloroethene	50.0	56.1	112	78 - 120	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	88	58 - 140
Toluene-d8 (Surr)	104	80 - 126
4-Bromofluorobenzene (Surr)	101	76 - 127
Dibromofluoromethane (Surr)	94	75 - 121

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-57770

Method: 8260B
Preparation: 5030B

MS Lab Sample ID:	280-13353-4	Analysis Batch: 280-57853	Instrument ID: MSV_J
Client Matrix:	Solid	Prep Batch: 280-57770	Lab File ID: J5501.D
Dilution:	1.0		Initial Weight/Volume: 5.680 g
Date Analyzed:	03/16/2011 1333		Final Weight/Volume: 5 mL
Date Prepared:	03/16/2011 0600		

MSD Lab Sample ID:	280-13353-4	Analysis Batch: 280-57853	Instrument ID: MSV_J
Client Matrix:	Solid	Prep Batch: 280-57770	Lab File ID: J5502.D
Dilution:	1.0		Initial Weight/Volume: 5.316 g
Date Analyzed:	03/16/2011 1356		Final Weight/Volume: 5 mL
Date Prepared:	03/16/2011 0600		

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Benzene	90	95	76 - 120	12	20		
Bromodichloromethane	89	88	74 - 125	5	20		
Carbon tetrachloride	88	95	69 - 147	14	20		
Chlorobenzene	87	92	74 - 120	11	20		
Chloroform	89	94	77 - 125	12	20		
1,3-Dichlorobenzene	81	88	74 - 120	15	20		
1,1-Dichloroethane	85	90	74 - 120	12	20		
trans-1,2-Dichloroethene	89	93	80 - 127	11	20		
1,1-Dichloroethene	108	126	77 - 143	22	20		*
1,2-Dichloropropane	91	94	74 - 120	10	20		
Ethylbenzene	84	91	78 - 120	14	20		
Methylene Chloride	94	98	76 - 137	10	21		
Tetrachloroethene	85	93	71 - 120	16	20		
Toluene	90	106	72 - 120	23	20		*
1,1,1-Trichloroethane	86	93	67 - 143	15	20		
Trichloroethene	169	181	78 - 120	13	20	T	T

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	100	95	58 - 140
Toluene-d8 (Surr)	105	104	80 - 126
4-Bromofluorobenzene (Surr)	105	110	76 - 127
Dibromofluoromethane (Surr)	39 *	26 *	75 - 121

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Method Blank - Batch: 280-57043

Method: NWTPH-Gx
Preparation: 5030B

Lab Sample ID: MB 280-57043/3-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/14/2011 1558
Date Prepared: 03/11/2011 1157

Analysis Batch: 280-57507
Prep Batch: 280-57043
Units: ug/Kg

Instrument ID: GCV_K
Lab File ID: 202F0501.D
Initial Weight/Volume: 10.10 g
Final Weight/Volume: 500 mL
Injection Volume: 5 mL
Column ID: PRIMARY

Analyte	Result	Qual	MDL	RL
Gasoline	491	J	320	1200

Surrogate	% Rec	Acceptance Limits
a,a,a-Trifluorotoluene	94	77 - 123

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-57043

Method: NWTPH-Gx
Preparation: 5030B

LCS Lab Sample ID: LCS 280-57043/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/14/2011 1433
Date Prepared: 03/11/2011 1157

Analysis Batch: 280-57507
Prep Batch: 280-57043
Units: ug/Kg

Instrument ID: GCV_K
Lab File ID: 116F0301.D
Initial Weight/Volume: 10.42 g
Final Weight/Volume: 500 mL
Injection Volume: 5 mL
Column ID: PRIMARY

LCSD Lab Sample ID: LCSD 280-57043/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/14/2011 1516
Date Prepared: 03/11/2011 1157

Analysis Batch: 280-57507
Prep Batch: 280-57043
Units: ug/Kg

Instrument ID: GCV_K
Lab File ID: 201F0401.D
Initial Weight/Volume: 10.42 g
Final Weight/Volume: 500 mL
Injection Volume: 5 mL
Column ID: PRIMARY

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Gasoline	125	119	85 - 153	4	30		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
a,a,a-Trifluorotoluene	116	107	77 - 123

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-57043

Method: NWTPH-Gx
Preparation: 5030B

MS Lab Sample ID:	280-13353-1	Analysis Batch: 280-57507	Instrument ID: GCV_K
Client Matrix:	Solid	Prep Batch: 280-57043	Lab File ID: 204F0701.D
Dilution:	1.0		Initial Weight/Volume: 10.34 g
Date Analyzed:	03/14/2011 1722		Final Weight/Volume: 500 mL
Date Prepared:	03/11/2011 1157		Injection Volume: 5 mL
			Column ID: PRIMARY

MSD Lab Sample ID:	280-13353-1	Analysis Batch: 280-57507	Instrument ID: GCV_K
Client Matrix:	Solid	Prep Batch: 280-57043	Lab File ID: 205F0801.D
Dilution:	1.0		Initial Weight/Volume: 10.34 g
Date Analyzed:	03/14/2011 1805		Final Weight/Volume: 500 mL
Date Prepared:	03/11/2011 1157		Injection Volume: 5 mL
			Column ID: PRIMARY

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Gasoline	114	108	85 - 153	5	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
a,a,a-Trifluorotoluene	111	113	77 - 123

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Method Blank - Batch: 280-57176

Method: 8082
Preparation: 3550C

Lab Sample ID: MB 280-57176/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/14/2011 2000
Date Prepared: 03/12/2011 0942

Analysis Batch: 280-57955
Prep Batch: 280-57176
Units: ug/Kg

Instrument ID: GCS_W
Lab File ID: 045F4501.D
Initial Weight/Volume: 32.4 g
Final Weight/Volume: 5000 uL
Injection Volume: 1 uL
Column ID: PRIMARY

Analyte	Result	Qual	MDL	RL
Aroclor 1016	2.6	U	2.6	9.3
Aroclor 1221	7.4	U	7.4	15
Aroclor 1232	1.9	U	1.9	9.3
Aroclor 1242	4.3	U	4.3	9.3
Aroclor 1248	4.3	U	4.3	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	77	59 - 130
Tetrachloro-m-xylene	78	53 - 128

Lab Control Sample - Batch: 280-57176

Method: 8082
Preparation: 3550C

Lab Sample ID: LCS 280-57176/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/14/2011 2032
Date Prepared: 03/12/2011 0942

Analysis Batch: 280-57955
Prep Batch: 280-57176
Units: ug/Kg

Instrument ID: GCS_W
Lab File ID: 046F4601.D
Initial Weight/Volume: 30.5 g
Final Weight/Volume: 5000 uL
Injection Volume: 1 uL
Column ID: PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aroclor 1016	32.8	28.6	87	54 - 132	
Aroclor 1260	32.8	29.9	91	62 - 129	

Surrogate	% Rec	Acceptance Limits
Decachlorobiphenyl	75	59 - 130
Tetrachloro-m-xylene	76	53 - 128

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-57176

Method: 8082
Preparation: 3550C

MS Lab Sample ID:	280-13353-4	Analysis Batch: 280-57955	Instrument ID: GCS_W
Client Matrix:	Solid	Prep Batch: 280-57176	Lab File ID: 092F9201.D
Dilution:	2.0		Initial Weight/Volume: 32.1 g
Date Analyzed:	03/15/2011 2056		Final Weight/Volume: 5000 uL
Date Prepared:	03/12/2011 0942		Injection Volume: 1 uL
			Column ID: PRIMARY

MSD Lab Sample ID:	280-13353-4	Analysis Batch: 280-57955	Instrument ID: GCS_W
Client Matrix:	Solid	Prep Batch: 280-57176	Lab File ID: 093F9301.D
Dilution:	2.0		Initial Weight/Volume: 32.2 g
Date Analyzed:	03/15/2011 2128		Final Weight/Volume: 5000 uL
Date Prepared:	03/12/2011 0942		Injection Volume: 1 uL
			Column ID: PRIMARY

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Aroclor 1016	74	81	54 - 132	8	26	D	D
Aroclor 1260	32	-1	62 - 129	6	26	D N	D N

Surrogate	MS % Rec		MSD % Rec		Acceptance Limits
Decachlorobiphenyl	56	*	48	*	59 - 130
Tetrachloro-m-xylene	78		70		53 - 128

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Method Blank - Batch: 280-57175

Method: NWTPH-Dx
Preparation: 3550C

Lab Sample ID: MB 280-57175/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/15/2011 1232
Date Prepared: 03/12/2011 1100

Analysis Batch: 280-57857
Prep Batch: 280-57175
Units: ug/Kg

Instrument ID: GCS_U2
Lab File ID: 005F0501.D
Initial Weight/Volume: 31.1 g
Final Weight/Volume: 1000 uL
Injection Volume: 1 uL

Analyte	Result	Qual	MDL	RL
C10-C36	960	U	960	3900
C10-C28	650	U	650	3900

Surrogate	% Rec	Acceptance Limits
o-Terphenyl	79	49 - 115

Lab Control Sample - Batch: 280-57175

Method: NWTPH-Dx
Preparation: 3550C

Lab Sample ID: LCS 280-57175/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/15/2011 1306
Date Prepared: 03/12/2011 1100

Analysis Batch: 280-57857
Prep Batch: 280-57175
Units: ug/Kg

Instrument ID: GCS_U2
Lab File ID: 006F0601.D
Initial Weight/Volume: 32.7 g
Final Weight/Volume: 1000 uL
Injection Volume: 1 uL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
C10-C36	61200	50900	83	57 - 115	
C10-C28	61200	50900	83	53 - 115	

Surrogate	% Rec	Acceptance Limits
o-Terphenyl	68	49 - 115

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-57175

Method: NWTPH-Dx
Preparation: 3550C

MS Lab Sample ID:	280-13353-4	Analysis Batch: 280-57857	Instrument ID: GCS_U2
Client Matrix:	Solid	Prep Batch: 280-57175	Lab File ID: 011F1101.D
Dilution:	1.0		Initial Weight/Volume: 30.2 g
Date Analyzed:	03/15/2011 1555		Final Weight/Volume: 1000 uL
Date Prepared:	03/12/2011 1100		Injection Volume: 1 uL

MSD Lab Sample ID:	280-13353-4	Analysis Batch: 280-57857	Instrument ID: GCS_U2
Client Matrix:	Solid	Prep Batch: 280-57175	Lab File ID: 012F1201.D
Dilution:	1.0		Initial Weight/Volume: 30.4 g
Date Analyzed:	03/15/2011 1628		Final Weight/Volume: 1000 uL
Date Prepared:	03/12/2011 1100		Injection Volume: 1 uL

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
C10-C36	101	85	57 - 115	4	23		
C10-C28	96	83	56 - 115	5	23		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
o-Terphenyl	53	62	49 - 115

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Method Blank - Batch: 280-57169

Method: 8310
Preparation: 3550C

Lab Sample ID: MB 280-57169/7-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/14/2011 1753
Date Prepared: 03/12/2011 0904

Analysis Batch: 280-57253
Prep Batch: 280-57169
Units: ug/Kg

Instrument ID: CHHPLC_G
Lab File ID: G0314020.D
Initial Weight/Volume: 32.9 g
Final Weight/Volume: 4000 uL
Injection Volume: 20 uL
Column ID: PRIMARY

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

Surrogate	% Rec	Acceptance Limits
Terphenyl-d14 (SUR)	98	72 - 115

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Lab Control Sample - Batch: 280-57169

Method: 8310
Preparation: 3550C

Lab Sample ID: LCS 280-57169/8-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/14/2011 1824
Date Prepared: 03/12/2011 0904

Analysis Batch: 280-57253
Prep Batch: 280-57169
Units: ug/Kg

Instrument ID: CHHPLC_G
Lab File ID: G0314021.D
Initial Weight/Volume: 32.4 g
Final Weight/Volume: 4000 uL
Injection Volume: 20 uL
Column ID: PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acenaphthene	1850	1690	91	72 - 115	
Acenaphthylene	1850	1630	88	60 - 115	
Anthracene	1850	1550	84	61 - 115	
Benzo[a]anthracene	1850	1860	100	76 - 115	
Benzo[a]pyrene	1850	1500	81	69 - 115	
Benzo[b]fluoranthene	1850	1760	95	81 - 115	
Benzo[g,h,i]perylene	1850	1730	93	71 - 115	
Benzo[k]fluoranthene	1850	1780	96	85 - 115	
Chrysene	1850	1730	94	70 - 115	
Dibenzo(a,h)anthracene	1850	1790	96	79 - 115	
Fluoranthene	1850	1740	94	67 - 115	
Fluorene	1850	1670	90	72 - 115	
Indeno[1,2,3-cd]pyrene	1850	1880	102	76 - 115	
Naphthalene	1850	1730	93	77 - 115	
Phenanthrene	1850	1720	93	79 - 115	
Pyrene	1850	1760	95	77 - 115	

Surrogate	% Rec	Acceptance Limits
Terphenyl-d14 (SUR)	97	72 - 115

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-57169

Method: 8310
Preparation: 3550C

MS Lab Sample ID:	280-13353-4	Analysis Batch: 280-57253	Instrument ID: CHHPLC_G
Client Matrix:	Solid	Prep Batch: 280-57169	Lab File ID: G0314018.D
Dilution:	1.0		Initial Weight/Volume: 30.0 g
Date Analyzed:	03/14/2011 1652		Final Weight/Volume: 4000 uL
Date Prepared:	03/12/2011 0904		Injection Volume: 20 uL
			Column ID: PRIMARY

MSD Lab Sample ID:	280-13353-4	Analysis Batch: 280-57253	Instrument ID: CHHPLC_G
Client Matrix:	Solid	Prep Batch: 280-57169	Lab File ID: G0314019.D
Dilution:	1.0		Initial Weight/Volume: 31.6 g
Date Analyzed:	03/14/2011 1723		Final Weight/Volume: 4000 uL
Date Prepared:	03/12/2011 0904		Injection Volume: 20 uL
			Column ID: PRIMARY

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acenaphthene	92	93	72 - 115	5	20		
Acenaphthylene	86	86	60 - 115	5	21		
Anthracene	83	85	61 - 115	2	20		
Benzo[a]anthracene	102	98	76 - 115	8	20		
Benzo[a]pyrene	82	79	69 - 115	8	20		
Benzo[b]fluoranthene	93	92	81 - 115	7	20		
Benzo[g,h,i]perylene	88	89	71 - 115	4	20		
Benzo[k]fluoranthene	97	94	85 - 115	9	20		
Chrysene	95	92	70 - 115	9	20		
Dibenzo(a,h)anthracene	91	90	79 - 115	7	20		
Fluoranthene	93	93	67 - 115	5	20		
Fluorene	90	90	72 - 115	6	20		
Indeno[1,2,3-cd]pyrene	96	96	76 - 115	6	20		
Naphthalene	92	91	77 - 115	6	20		
Phenanthrene	93	95	79 - 115	3	20		
Pyrene	100	109	77 - 115	4	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Terphenyl-d14 (SUR)	98	99	72 - 115

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Method Blank - Batch: 280-56929

Method: 6010B
Preparation: 3050B

Lab Sample ID: MB 280-56929/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/14/2011 1851
Date Prepared: 03/11/2011 1500

Analysis Batch: 280-57453
Prep Batch: 280-56929
Units: mg/Kg

Instrument ID: MT_025
Lab File ID: 25A2031411.asc
Initial Weight/Volume: 1 g
Final Weight/Volume: 100 mL

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	0.0830	B	0.076	0.50
Beryllium	0.033	U	0.033	0.20
Boron	0.98	U	0.98	2.0
Cadmium	0.041	U	0.041	0.20
Calcium	14.1	U	14.1	50.0
Chromium	0.058	U	0.058	0.20
Cobalt	0.10	U	0.10	1.0
Copper	0.22	U	0.22	1.0
Iron	3.8	U	3.8	5.0
Lead	0.27	U	0.27	0.50
Magnesium	3.7	U	3.7	20.0
Manganese	0.10	U	0.10	1.0
Molybdenum	0.26	U	0.26	2.0
Nickel	0.12	U	0.12	4.0
Potassium	41.0	U	41.0	300
Selenium	0.86	U	0.86	1.0
Silicon	5.7	U	5.7	10.0
Silver	0.16	U	0.16	0.20
Sodium	59.0	U	59.0	120
Vanadium	0.094	U	0.094	2.0
Zinc	0.40	U	0.40	1.0

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Lab Control Sample - Batch: 280-56929

Method: 6010B
Preparation: 3050B

Lab Sample ID: LCS 280-56929/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/14/2011 1853
Date Prepared: 03/11/2011 1500

Analysis Batch: 280-57453
Prep Batch: 280-56929
Units: mg/Kg

Instrument ID: MT_025
Lab File ID: 25A2031411.asc
Initial Weight/Volume: 1 g
Final Weight/Volume: 100 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	200	187.0	94	82 - 116	
Antimony	50.0	50.80	102	82 - 110	
Arsenic	100	93.64	94	85 - 110	
Barium	200	195.6	98	87 - 112	
Beryllium	5.00	4.94	99	84 - 114	
Boron	100	95.50	96	81 - 110	
Cadmium	10.0	10.48	105	87 - 110	
Calcium	5000	5009	100	82 - 114	
Chromium	20.0	20.86	104	84 - 114	
Cobalt	50.0	50.23	100	87 - 110	
Copper	25.0	24.38	98	88 - 110	
Iron	100	95.43	95	87 - 120	
Lead	50.0	46.48	93	86 - 110	
Magnesium	5000	5078	102	90 - 110	
Manganese	50.0	53.64	107	88 - 110	
Molybdenum	100	108.7	109	86 - 110	
Nickel	50.0	50.39	101	87 - 110	
Potassium	5000	5366	107	89 - 110	
Selenium	200	207.2	104	83 - 110	
Silicon	1000	128.4	13	10 - 70	
Silver	5.00	5.71	114	87 - 114	
Sodium	5000	5396	108	90 - 112	
Vanadium	50.0	54.20	108	88 - 110	
Zinc	50.0	49.88	100	76 - 114	

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Matrix Spike - Batch: 280-56929

Method: 6010B
Preparation: 3050B

Lab Sample ID: 280-13353-1
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/14/2011 1902
Date Prepared: 03/11/2011 1500

Analysis Batch: 280-57453
Prep Batch: 280-56929
Units: mg/Kg

Instrument ID: MT_025
Lab File ID: 25A2031411.asc
Initial Weight/Volume: 1.09 g
Final Weight/Volume: 100 mL

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	9780		189	11800	1063	50 - 200	4
Antimony	2.4		47.3	19.73	37	20 - 200	
Arsenic	39.0		94.6	123.1	89	76 - 111	
Barium	91.5		189	272.0	95	52 - 159	
Beryllium	0.068	B	4.73	4.20	87	72 - 105	
Boron	5.3		94.6	86.82	86	75 - 107	
Cadmium	0.24		9.46	9.56	99	40 - 130	
Calcium	87200		4730	93000	122	43 - 165	4
Chromium	14.4		18.9	32.44	96	70 - 200	
Cobalt	7.6		47.3	48.78	87	72 - 106	
Copper	40.1		23.7	62.93	96	37 - 187	
Iron	16900		94.6	17990	1119	70 - 200	4
Lead	12.1		47.3	49.26	79	70 - 200	
Magnesium	4960		4730	9926	105	64 - 145	
Manganese	270		47.3	354.7	178	40 - 200	4
Molybdenum	1.1	B	94.6	89.90	94	75 - 103	
Nickel	11.8		47.3	52.44	86	61 - 126	
Potassium	1220		4730	6088	103	56 - 172	
Selenium	0.80	U	189	182.5	96	76 - 104	
Silicon	66.6		946	264.2	21	20 - 200	
Silver	0.15	U	4.73	5.28	112	75 - 141	
Sodium	857		4730	5864	106	78 - 111	
Vanadium	50.9		47.3	104.5	113	50 - 169	
Zinc	163		47.3	202.9	85	70 - 200	

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Duplicate - Batch: 280-56929

Method: 6010B
Preparation: 3050B

Lab Sample ID: 280-13353-1
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/14/2011 1900
Date Prepared: 03/11/2011 1500

Analysis Batch: 280-57453
Prep Batch: 280-56929
Units: mg/Kg

Instrument ID: MT_025
Lab File ID: 25A2031411.asc
Initial Weight/Volume: 1.01 g
Final Weight/Volume: 100 mL

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Aluminum	9780		9909	1	40	
Antimony	2.4		2.84	15	40	
Arsenic	39.0		40.62	4	30	
Barium	91.5		91.53	0.01	30	
Beryllium	0.068	B	0.0572	17	30	B
Boron	5.3		5.02	6	30	
Cadmium	0.24		0.216	8	30	
Calcium	87200		88720	2	30	
Chromium	14.4		40.60	95	40	M
Cobalt	7.6		9.19	19	30	
Copper	40.1		105.9	90	30	M
Iron	16900		35460	71	40	M
Lead	12.1		11.84	2	40	
Magnesium	4960		4858	2	30	
Manganese	270		413.4	42	40	M
Molybdenum	1.1	B	5.28	133	30	M
Nickel	11.8		28.48	83	30	M
Potassium	1220		1227	0.3	40	
Selenium	0.80	U	0.88	NC	30	U
Silicon	66.6		79.10	17	40	
Silver	0.15	U	0.223	NC	30	
Sodium	857		858.7	0.2	30	
Vanadium	50.9		51.28	0.7	30	
Zinc	163		158.5	3	40	

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Method Blank - Batch: 280-56941

Method: 7471A
Preparation: 7471A

Lab Sample ID: MB 280-56941/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/11/2011 2003
Date Prepared: 03/11/2011 1145

Analysis Batch: 280-57335
Prep Batch: 280-56941
Units: mg/Kg

Instrument ID: MT_033
Lab File ID: 110311AA.txt
Initial Weight/Volume: 0.60 g
Final Weight/Volume: 50 mL

Analyte	Result	Qual	MDL	RL
Mercury	0.0055	U	0.0055	0.017

Lab Control Sample - Batch: 280-56941

Method: 7471A
Preparation: 7471A

Lab Sample ID: LCS 280-56941/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/11/2011 2005
Date Prepared: 03/11/2011 1145

Analysis Batch: 280-57335
Prep Batch: 280-56941
Units: mg/Kg

Instrument ID: MT_033
Lab File ID: 110311AA.txt
Initial Weight/Volume: 0.60 g
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.417	0.456	109	87 - 111	

Matrix Spike - Batch: 280-56941

Method: 7471A
Preparation: 7471A

Lab Sample ID: 280-13353-1
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/11/2011 2012
Date Prepared: 03/11/2011 1145

Analysis Batch: 280-57335
Prep Batch: 280-56941
Units: mg/Kg

Instrument ID: MT_033
Lab File ID: 110311AA.txt
Initial Weight/Volume: 0.64 g
Final Weight/Volume: 50 mL

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.045	0.403	0.418	93	87 - 111	

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Duplicate - Batch: 280-56941

Method: 7471A
Preparation: 7471A

Lab Sample ID: 280-13353-1
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/11/2011 2010
Date Prepared: 03/11/2011 1145

Analysis Batch: 280-57335
Prep Batch: 280-56941
Units: mg/Kg

Instrument ID: MT_033
Lab File ID: 110311AA.txt
Initial Weight/Volume: 0.60 g
Final Weight/Volume: 50 mL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Mercury	0.045	0.210	130	20	M

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Method Blank - Batch: 280-57151

Method: 353.2
Preparation: N/A

Lab Sample ID: MB 280-57113/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/11/2011 1858
Date Prepared: N/A
Date Leached: 03/11/2011 1545

Analysis Batch: 280-57151
Prep Batch: N/A
Units: mg/Kg

Leachate Batch: 280-57113

Instrument ID: WC_Alp 2
Lab File ID: C:\FLOW_4\0311NXN.RST
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

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

Method Reporting Limit Check - Batch: 280-57151

Method: 353.2
Preparation: N/A

Lab Sample ID: MRL 280-57151/17
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/11/2011 1115
Date Prepared: N/A

Analysis Batch: 280-57151
Prep Batch: N/A
Units: mg/L

Instrument ID: WC_Alp 2
Lab File ID: C:\FLOW_4\0311NXN.RST
Initial Weight/Volume: 100 mL
Final Weight/Volume: 100 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate Nitrite as N-Soluble	0.100	0.0844	84	50 - 150	B

Lab Control Sample - Batch: 280-57151

Method: 353.2
Preparation: N/A

Lab Sample ID: LCS 280-57113/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/11/2011 1908
Date Prepared: N/A
Date Leached: 03/11/2011 1545

Analysis Batch: 280-57151
Prep Batch: N/A
Units: mg/Kg

Leachate Batch: 280-57113

Instrument ID: WC_Alp 2
Lab File ID: C:\FLOW_4\0311NXN.RST
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate Nitrite as N-Soluble	49.0	49.64	101	90 - 110	

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Matrix Spike - Batch: 280-57151

Method: 353.2
Preparation: N/A

Lab Sample ID: 280-13353-4
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/11/2011 1918
Date Prepared: N/A
Date Leached: 03/11/2011 1545

Analysis Batch: 280-57151
Prep Batch: N/A
Units: mg/Kg

Leachate Batch: 280-57113

Instrument ID: WC_Alp 2
Lab File ID: C:\FLOW_4\0311NXN.RST
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate Nitrite as N-Soluble	11.7	41.1	57.33	111	90 - 110	N

Duplicate - Batch: 280-57151

Method: 353.2
Preparation: N/A

Lab Sample ID: 280-13353-4
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/11/2011 1916
Date Prepared: N/A
Date Leached: 03/11/2011 1545

Analysis Batch: 280-57151
Prep Batch: N/A
Units: mg/Kg

Leachate Batch: 280-57113

Instrument ID: WC_Alp 2
Lab File ID: C:\FLOW_4\0311NXN.RST
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Nitrate Nitrite as N-Soluble	11.7	16.76	36	10	M

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-57330

Method: 9045C
Preparation: N/A

LCS Lab Sample ID: LCS 280-57330/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/11/2011 1536
Date Prepared: N/A

Analysis Batch: 280-57330
Prep Batch: N/A
Units: SU

Instrument ID: WC_pH Probe
Lab File ID: N/A
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

LCSD Lab Sample ID: LCSD 280-57330/5
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/11/2011 1537
Date Prepared: N/A

Analysis Batch: 280-57330
Prep Batch: N/A
Units: SU

Instrument ID: WC_pH Probe
Lab File ID: N/A
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

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

Duplicate - Batch: 280-57330

Method: 9045C
Preparation: N/A

Lab Sample ID: 280-13353-1
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/11/2011 1540
Date Prepared: N/A
Date Leached: 03/10/2011 1607

Analysis Batch: 280-57330
Prep Batch: N/A
Units: SU

Leachate Batch: 280-56844

Instrument ID: WC_pH Probe
Lab File ID: N/A
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
pH adj. to 25 deg C-Soluble	12.0	12.04	0.08	5	

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Method Blank - Batch: 280-57630

Method: 9056M
Preparation: N/A

Lab Sample ID: MB 280-56977/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/12/2011 0315
Date Prepared: N/A
Date Leached: 03/11/2011 0936

Analysis Batch: 280-57630
Prep Batch: N/A
Units: mg/Kg

Leachate Batch: 280-56977

Instrument ID: WC_IC6
Lab File ID: 158.TXT
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

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

Method Reporting Limit Check - Batch: 280-57630

Method: 9056M
Preparation: N/A

Lab Sample ID: MRL 280-57630/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/11/2011 1359
Date Prepared: N/A

Analysis Batch: 280-57630
Prep Batch: N/A
Units: mg/L

Instrument ID: WC_IC6
Lab File ID: 112.TXT
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chloride-Soluble	1.00	0.985	98	50 - 150	B
Bromide-Soluble	0.200	0.212	106	50 - 150	B
Sulfate-Soluble	1.00	0.951	95	50 - 150	B
Fluoride-Soluble	0.200	0.230	115	50 - 150	B

Lab Control Sample - Batch: 280-57630

Method: 9056M
Preparation: N/A

Lab Sample ID: LCS 280-56977/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/12/2011 0258
Date Prepared: N/A
Date Leached: 03/11/2011 0936

Analysis Batch: 280-57630
Prep Batch: N/A
Units: mg/Kg

Leachate Batch: 280-56977

Instrument ID: WC_IC6
Lab File ID: 157.TXT
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chloride-Soluble	250	247.7	99	90 - 110	
Bromide-Soluble	50.0	50.47	101	90 - 110	
Sulfate-Soluble	250	252.1	101	90 - 110	
Fluoride-Soluble	50.0	51.54	103	90 - 110	

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Matrix Spike - Batch: 280-57630

Method: 9056M
Preparation: N/A

Lab Sample ID: 280-13353-4
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/12/2011 0533
Date Prepared: N/A
Date Leached: 03/11/2011 0936

Analysis Batch: 280-57630
Prep Batch: N/A
Units: mg/Kg

Leachate Batch: 280-56977

Instrument ID: WC_IC6
Lab File ID: 166.TXT
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Chloride-Soluble	19.0	252	261.1	96	80 - 120	
Bromide-Soluble	3.7	50.3	50.63	93	80 - 120	
Sulfate-Soluble	83.5	252	198.2	46	80 - 120	N
Fluoride-Soluble	7.5	50.3	14.39	14	80 - 120	N

Duplicate - Batch: 280-57630

Method: 9056M
Preparation: N/A

Lab Sample ID: 280-13353-4
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/12/2011 0516
Date Prepared: N/A
Date Leached: 03/11/2011 0936

Analysis Batch: 280-57630
Prep Batch: N/A
Units: mg/Kg

Leachate Batch: 280-56977

Instrument ID: WC_IC6
Lab File ID: 165.TXT
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Chloride-Soluble	19.0	19.85	4	15	
Bromide-Soluble	3.7	3.90	4	15	
Sulfate-Soluble	83.5	87.11	4	15	
Fluoride-Soluble	7.5	7.84	4	15	

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Method Blank - Batch: 280-57817

Method: 9056M
Preparation: N/A

Lab Sample ID: MB 280-56977/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/12/2011 0315
Date Prepared: N/A
Date Leached: 03/11/2011 0936

Analysis Batch: 280-57817
Prep Batch: N/A
Units: mg/Kg

Leachate Batch: 280-56977

Instrument ID: WC_IC6
Lab File ID: 158.TXT
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Result	Qual	MDL	RL
Nitrate as N-Soluble	0.31	U	0.31	2.5
Nitrite as N-Soluble	0.34	U	0.34	2.5

Method Blank - Batch: 280-57817

Method: 9056M
Preparation: N/A

Lab Sample ID: MB 280-56977/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/12/2011 1105
Date Prepared: N/A
Date Leached: 03/11/2011 0936

Analysis Batch: 280-57817
Prep Batch: N/A
Units: mg/Kg

Leachate Batch: 280-56977

Instrument ID: WC_IC6
Lab File ID: 184.TXT
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Result	Qual	MDL	RL
Orthophosphate as P-Soluble	1.2	U	1.2	5.0

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Method Reporting Limit Check - Batch: 280-57817

Method: 9056M
Preparation: N/A

Lab Sample ID: MRL 280-57817/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 03/11/2011 1359
Date Prepared: N/A

Analysis Batch: 280-57817
Prep Batch: N/A
Units: mg/L

Instrument ID: WC_IC6
Lab File ID: 112.TXT
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 5 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate as N-Soluble	0.200	0.209	104	50 - 150	B
Nitrite as N-Soluble	0.200	0.193	96	50 - 150	B
Orthophosphate as P-Soluble	0.200	0.222	111	50 - 150	B

Lab Control Sample - Batch: 280-57817

Method: 9056M
Preparation: N/A

Lab Sample ID: LCS 280-56977/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/12/2011 0258
Date Prepared: N/A
Date Leached: 03/11/2011 0936

Analysis Batch: 280-57817
Prep Batch: N/A
Units: mg/Kg

Leachate Batch: 280-56977

Instrument ID: WC_IC6
Lab File ID: 157.TXT
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate as N-Soluble	50.0	50.17	100	90 - 110	
Nitrite as N-Soluble	50.0	48.00	96	90 - 110	

Lab Control Sample - Batch: 280-57817

Method: 9056M
Preparation: N/A

Lab Sample ID: LCS 280-56977/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/12/2011 1048
Date Prepared: N/A
Date Leached: 03/11/2011 0936

Analysis Batch: 280-57817
Prep Batch: N/A
Units: mg/Kg

Leachate Batch: 280-56977

Instrument ID: WC_IC6
Lab File ID: 183.TXT
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Orthophosphate as P-Soluble	50.0	49.44	99	90 - 110	

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Matrix Spike - Batch: 280-57817

Method: 9056M
Preparation: N/A

Lab Sample ID: 280-13353-4
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/12/2011 0533
Date Prepared: N/A
Date Leached: 03/11/2011 0936

Analysis Batch: 280-57817
Prep Batch: N/A
Units: mg/Kg

Leachate Batch: 280-56977

Instrument ID: WC_IC6
Lab File ID: 166.TXT
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Nitrate as N-Soluble	9.0		50.3	60.49	102	80 - 120	
Nitrite as N-Soluble	0.44	B	50.3	46.88	92	80 - 120	

Matrix Spike - Batch: 280-57817

Method: 9056M
Preparation: N/A

Lab Sample ID: 280-13353-4
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/12/2011 1323
Date Prepared: N/A
Date Leached: 03/11/2011 0936

Analysis Batch: 280-57817
Prep Batch: N/A
Units: mg/Kg

Leachate Batch: 280-56977

Instrument ID: WC_IC6
Lab File ID: 192.TXT
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Orthophosphate as P-Soluble	1.2	U	50.3	1.2	0	80 - 120	U N

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Duplicate - Batch: 280-57817

Method: 9056M
Preparation: N/A

Lab Sample ID: 280-13353-4
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/12/2011 0516
Date Prepared: N/A
Date Leached: 03/11/2011 0936

Analysis Batch: 280-57817
Prep Batch: N/A
Units: mg/Kg

Leachate Batch: 280-56977

Instrument ID: WC_IC6
Lab File ID: 165.TXT
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Nitrate as N-Soluble	9.0		9.41	4	15	
Nitrite as N-Soluble	0.44	B	0.482	10	15	B

Duplicate - Batch: 280-57817

Method: 9056M
Preparation: N/A

Lab Sample ID: 280-13353-4
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/12/2011 1306
Date Prepared: N/A
Date Leached: 03/11/2011 0936

Analysis Batch: 280-57817
Prep Batch: N/A
Units: mg/Kg

Leachate Batch: 280-56977

Instrument ID: WC_IC6
Lab File ID: 191.TXT
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Orthophosphate as P-Soluble	1.2	U	1.3	NC	15	U

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Method Blank - Batch: 280-57164

Method: 9071B
Preparation: 3540C

Lab Sample ID: MB 280-57164/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/12/2011 0905
Date Prepared: 03/12/2011 0821

Analysis Batch: 280-57172
Prep Batch: 280-57164
Units: mg/Kg

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 10.06 g
Final Weight/Volume: 10 g

Analyte	Result	Qual	MDL	RL
Oil & Grease (HEM)	129.2	B	84.3	497

Lab Control Sample - Batch: 280-57164

Method: 9071B
Preparation: 3540C

Lab Sample ID: LCS 280-57164/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/12/2011 0905
Date Prepared: 03/12/2011 0821

Analysis Batch: 280-57172
Prep Batch: 280-57164
Units: mg/Kg

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 10.00 g
Final Weight/Volume: 10 g

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Oil & Grease (HEM)	2000	2250	113	56 - 142	

Matrix Spike - Batch: 280-57164

Method: 9071B
Preparation: 3540C

Lab Sample ID: 280-13353-4
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/12/2011 0905
Date Prepared: 03/12/2011 0821

Analysis Batch: 280-57172
Prep Batch: 280-57164
Units: mg/Kg

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 10.04 g
Final Weight/Volume: 10 g

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Oil & Grease (HEM)	638	2070	4378	181	56 - 142	N

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Duplicate - Batch: 280-57164

Method: 9071B
Preparation: 3540C

Lab Sample ID: 280-13353-4
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/12/2011 0905
Date Prepared: 03/12/2011 0821

Analysis Batch: 280-57172
Prep Batch: 280-57164
Units: mg/Kg

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 10.12 g
Final Weight/Volume: 10 g

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Oil & Grease (HEM)	638	635.2	0.5	32	C

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-13353-1
Sdg Number: JP0110

Duplicate - Batch: 280-57036

Method: D-2216
Preparation: N/A

Lab Sample ID: 280-13353-4
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 03/11/2011 1148
Date Prepared: N/A

Analysis Batch: 280-57036
Prep Batch: N/A
Units: %

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume:

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Moisture	3.5	3.4	4	20	

3.9cu 3/10/11 MM, 5.4, ~~3.6~~ 3.3, 4.8, 5.2, 3.2

3-8-11 QW 3-8-11

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-107-061	Page 1 of 12

Collector QW 3-8-11 M. Blankingship Ship	Company Contact Joan Kessner	Telephone No. 509-375-4688	Project Coordinator KESSNER, JH
Price Code ~~8L~~ QW 3-8-11 9B	Data Turnaround QW 3-8-11 ~~21~~ 7 Days		
Project Designation 100-H Remaining Sites Burial Grounds - Soil Full Protocol	Sampling Location 126-H-2 Verification Sampleing		SAF No. RC-107
Ice Chest No. ~~NA~~ AF 3-9-11 ERC-96-030	Field Logbook No. EL 1627-04	COA 0126H22600	Method of Shipment AF 3-8-11 Fed Ex ~~Government Vehicle/FedEx~~ ~~Hand Deliver~~ AF 3-9-11
Shipped To QW 3-8-11 Test America Denver ~~EDERLINE SERVICES / LIONVILLE~~	Offsite Property No. NA		Bill of Lading/Air Bill No. ~~NA~~ AF 3-9-11 7945 1421 9809

POSSIBLE SAMPLE HAZARDS/REMARKS

None

Special Handling and/or Storage

Cool 4 Deg C

Preservation	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	None	None
Type of Container	G/P	G/P	G	aGs*	G	aG	aG	aG	G/P	G/P
No. of Container(s)	1	0	1	1	0	1	0	0	1	0
Volume	60mL	60mL	120mL	~~40mL~~ QW 3-8-11 60mL	120mL	40mL	120mL	120mL	500mL	120mL
SAMPLE ANALYSIS	See item (1) in Special Instructions. *	See item (2) in Special Instructions.	TPH-Diesel Range - WTPH-D + **	TPH-Gasoline Range - WTPH-G	Oil & Grease - 1664	VOA - 8260A (TCL)	PCBs - 8082	PAHs - 8310	See item (3) in Special Instructions.	Isotopic Plutonium

Sample No.	Matrix *	Sample Date	Sample Time										
~~J1DX90~~	~~SOIL~~			QW 3-8-11									
J1DX91	QW 3-8-11 ~~SOIL~~ Other	3-8-11	1245	X	X	X	X	X	X	X	X		
J1DX92	QW 3-8-11 ~~SOIL~~ Other	3-8-11	1335	X	X	X	X	X	X	X	X		
J1DX93	QW 3-8-11 ~~SOIL~~ Other	3-8-11	1350	X	X	X	X	X	X	X	X		
J1DX94	QW 3-8-11 ~~SOIL~~ Other	3-8-11	1315	X	X	X	X	X	X	X	X		

CHAIN OF POSSESSION — Sign/Print Names

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
M. Blankingship	3-8-11 1515	JV Fullmer	1515 3-8-11
JV Fullmer	1630 3-8-11	A. Freier	1630 3-8-11
A. Freier	WCH 1420 3-9-11	Fed Ex	
		~~Received By/Stored In~~	~~Date/Time~~ 3/10/11 0930

SPECIAL INSTRUCTIONS

(1) ICP Metals - 6010TR (Close-out List) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Molybdenum, Nickel, Potassium, Selenium, Silicon, Silver, Sodium, Vanadium, Zinc}; Mercury - 7471 - (CV)
(2) IC Anions - 300.0 {Bromide, Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate}; NO2/NO3 - 353.2; pH (Soil) - 9045
(3) Gamma Spec - Client List {Americium-241, Barium-133, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155, Silver-108 metastable}

* J1DX94 - 120 mL container QW 3-8-11

** J1DX94 - 500 mL container QW 3-8-11

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 JEB DATE 3-9-11

JP0110

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 ~6010TR ~5.1.2

1-3) 4, 30,
4) B, L, 20

Analytical Due:

Report Due: 3/17/11 (Rush 5 day TAT)

Sample Check-in List

Date/Time Received: 3/10/11 930 GM Screen Result 12 microR/hr

Client: Washington Closure Hanford SDG #: JP0110 NA[ ] SAF #: RC-107 NA [ ]

Job Number: 13353 Chain of Custody # RC-107-061

Shipping Container ID: GWS-239 ERC-03-103 ERC-96-030 ERC-95-032 Air Bill # 7968 4930 0783 7968 4930 0934 7968 1421 9809 7968 1421 9792

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? NA [ ] Yes [✓] No [ ]
4. Cooler Temperature °C: 5.4, 4.8, 5.2, 3.2 NA [ ] 5. Vermiculite/packing materials is NA [ ] Wet [ ] Dry [✓]
6. Number of samples in shipping container: 4
7. Sample holding times exceeded? NA [ ] Yes [ ] No [✓]
8. Samples have:
   - ✓ Tape
   - ✓ Custody Seals
   - ✓ Hazard Lables
   - ✓ Appropriate Sample Lables
9. Samples are:
   - ✓ In Good Condition
   - ___ Broken
   - ___ Leaking
   - ___ Have Air Bubbles
   - (Only for samples requiring no head space.)
10. Sample pH taken? NA [✓] pH<2 [ ] pH>2 [ ] pH>9 [ ] Amount HNO_3 Added ___
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): ___

Sample Custodian: [signature] Date: 3/10/11

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on ___ by ___ Person Contacted ___

[ ] No action necessary; process as is.

Project Manager [signature] Date 3/11/11

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

RICHLAND, WA 99354

FedEx. Express

J11101012220225

Ship Date: 09MAR11
ActWgt: 85.0 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

THU - 10 MAR A1
PRIORITY OVERNIGHT

TRK# 7968 4930 0783
0201

MASTER

XH WHHA

80002
CO-US
DEN

50DG2/BDD9/7EFB

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

RICHLAND, WA 99354

FedEx. Express

J11101012220225

Ship Date: 09MAR11
ActWgt: 72.0 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 - 10 MAR A1
PRIORITY OVERNIGHT

MPS# 7968 4930 0934
0263

Mstr# 7968 4930 0783 0201

XH WHHA

80002
CO-US
DEN

50DG2/BDD9/7EFB

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WASHINGTON CLOSURE HANFORD
2620 FERMI AVE

RICHLAND, WA 99354

FedEx. Express

J1110101222022 5

Ship Date: 09MAR11
ActWgt: 82.0 LB
CAD: 8897843/INET3130

Delivery Address Bar Code

SHIP TO: (303) 736-0100 BILL SENDER

Sample Recieving
Test America Denver
4955 YARROW ST

ARVADA, CO 80002

Ref #
Invoice #
PO #
Dept #

1 of 2

THU - 10 MAR A1
PRIORITY OVERNIGHT

TRK# 7945 1421 9809
0201

MASTER

XH WHHA

80002
CO-US
DEN

50DG2/BDD9/7EFB

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WASHINGTON CLOSURE HANFORD
2620 FERMI AVE

RICHLAND, WA 99354

FedEx. Express

J11101012220225

Ship Date: 09MAR11
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

2 of 2

THU - 10 MAR A1
PRIORITY OVERNIGHT

MPS# 7945 1421 9772
0263

Mstr# 7945 1421 9809 0201

XH WHHA

80002
CO-US
DEN

50D32/8DD9/7EFB

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