0096434

SAF-RC-190
100N Field Remediation – Soil In-Process
FINAL DATA PACKAGE

COMPLETE COPY OF DATA PACKAGE TO:

Kathy Wendt H4-21 KW 5/17/11
INITIAL/DATE

COMMENTS:

SDG J01053 SAF-RC-190

Rad only Chem only ☑ Rad & Chem

☑ Complete Partial

Sample Location: 124-N-2

RECEIVED
MAY 20 2011
EDMC

Analytical Data Package Prepared For

Washington Closure Hanford

RECEIVED
2011

Radiochemical Analysis By

TestAmerica

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

Assigned Laboratory Code: TARL

Data Package Contains 79 *Pages*

Report No.: 46199

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.
J01053		J1H0C3	J1C300601-3	MGD001AG	9MGD0010	1090124
		J1H0C3	J1C300601-3	MGD001AF	9MGD0010	1090127
		J1H0C3	J1C300601-3	MGD001AH	9MGD0010	1090129
		J1H0C3	J1C300601-3	MGD001AD	9MGD0010	1090135
		J1H0C3	J1C300601-3	MGD001AE	9MGD0010	1090138
		J1H0C3	J1C300601-3	MGD001AC	9MGD0010	1090139
		J1H0C3	J1C300601-3	MGD001AA	9MGD0010	1090267
		J1H0C5	J1C300601-4	MGD1K1AG	9MGD1K10	1090124
		J1H0C5	J1C300601-4	MGD1K1AF	9MGD1K10	1090127
		J1H0C5	J1C300601-4	MGD1K1AH	9MGD1K10	1090129
		J1H0C5	J1C300601-4	MGD1K1AD	9MGD1K10	1090135
		J1H0C5	J1C300601-4	MGD1K1AE	9MGD1K10	1090138
		J1H0C5	J1C300601-4	MGD1K1AC	9MGD1K10	1090139
		J1H0C5	J1C300601-4	MGD1K1AA	9MGD1K10	1090267
	RC-190	J1H0K2	J1C300601-1	MGD5X1AG	9MGD5X10	1090124
		J1H0K2	J1C300601-1	MGD5X1AF	9MGD5X10	1090127
		J1H0K2	J1C300601-1	MGD5X1AH	9MGD5X10	1090129
		J1H0K2	J1C300601-1	MGD5X1AD	9MGD5X10	1090135
		J1H0K2	J1C300601-1	MGD5X1AE	9MGD5X10	1090138
		J1H0K2	J1C300601-1	MGD5X1AC	9MGD5X10	1090139
		J1H0K2	J1C300601-1	MGD5X1AA	9MGD5X10	1090267
		J1H0K3	J1C300601-2	MGD511AG	9MGD5110	1090124
		J1H0K3	J1C300601-2	MGD511AF	9MGD5110	1090127
		J1H0K3	J1C300601-2	MGD511AH	9MGD5110	1090129
		J1H0K3	J1C300601-2	MGD511AD	9MGD5110	1090135
		J1H0K3	J1C300601-2	MGD511AE	9MGD5110	1090138

Report No.: 46199

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.
J01053	RC-190	J1H0K3	J1C300601-2	MGD511AC	9MGD5110	1090139
		J1H0K3	J1C300601-2	MGD511AA	9MGD5110	1090267

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

Washington Hanford Closure
2620 Fermi Avenue
Richland, WA 99354

TestAmerica Laboratories, Inc.

April 14, 2011

Attention: Joan Kessner

SAF Number	:	RC-190
Date SDG Closed	:	March 30, 2011
Number of Samples	:	four (4)
Sample Type	:	Soil
SDG Number	:	J01053
Data Deliverable	:	21– Day / Summary

CASE NARRATIVE

I. Introduction

On March 30, 2011, four soil samples were received at TestAmerica for radiochemical analysis. Upon receipt, the samples were assigned the following laboratory ID number to correspond with the Washington Closure Hanford (WCH) specific ID:

WCH ID#	TARL ID#	MATRIX	DATE OF RECEIPT
J1H0C3	MGD00	SOIL	3/30/11
J1H0C5	MGD1K	SOIL	3/30/11
J1H0K2	MGD5X	SOIL	3/30/11
J1H0K3	MGD51	SOIL	3/30/11

II. Sample Receipt

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

III. Analytical Results/Methodology

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

The requested analyses were:

Gas Proportional Counting
Strontium-90 by method RL-GPC-003

Gamma Spectroscopy
Gamma Spec by method RL-GAM-001
Liquid Scintillation Counting
Technetium-99 by method RL-LSC-013
Tritium by method RL-LSC-005
Carbon-14 by method RL-LSC-008
Nickel-63 by method RL-LCS-017
Chemical Analysis
Hexavalent Chromium by EPA method 7196A

IV. Quality Control

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

QC and sample results are reported in the same units.

V. Comments

Gas Proportional Counting
Strontium-90 by method RL-GPC-003 :
The LCS, batch blank, samples and sample duplicate (J1H0K3) results are within contractual requirements.

Gamma Spectroscopy
Gamma Spec by method RL-GAM-001 :
There was insufficient volume for a duplicate. Sample J1H0C5 was recounted on a different detector for the duplicate (J1H0C5 DUP). The CRDL was not met on some analytes due to reduced count time. The count time was reduced to meet the priority turn around time. Except as noted, the LCS, batch blank, samples and sample duplicate (J1H0C5) results are within contractual requirements.

Liquid Scintillation Counting
Technetium-99 by method RL-LSC-013 :
The LCS, batch blank, samples, sample duplicate (J1H0K2) and sample matrix spike (J1H0K3) results are within contractual requirements.

Tritium by method RL-LSC-005 :
The LCS, batch blank, samples and sample duplicate (J1H0C5) results are within contractual requirements.

Carbon-14 by method RL-LSC-008 :
The LCS, batch blank, samples and sample duplicate (J1H0C5) results are within contractual requirements.

Nickel-63 by method RL-LCS-017 :
The LCS, batch blank, samples and sample duplicate (J1H0K2) results are within contractual requirements.

Washington Closure Hanford
April 14, 2011

Chemical Analysis

Hexavalent Chromium by EPA method 7196A

The matrix spike recovered low at 47.7%. The post digestive matrix spike recovered at 96.7% and the insoluble matrix spike recovered at 99.5%. This implies strong reducing capacity in the sample, but not enough to exhaust the insoluble matrix spike. Except as noted, the LCS, batch blank, samples, sample duplicate (J1H0K2) and sample matrix spike (J1H0K2) results are within contractual requirements.

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

Reviewed and approved:

Rhonda Wagar
Project Manager

Drinking Water Method Cross References

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

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

Uncertainty Estimation

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

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

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

Report Definitions

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

Sample Results Summary

TestAmerica TARL

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

Date: 14-Apr-11

Report No. : 46199

SDG No: J01053

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDC or MDA	CRDL	RPD
1090124 GAMMA_GS									
J1H0C3									
	MGD001AG	AMERICIUM 241	1.03E-01 +- 1.6E-01	U	pCi/g		2.82E-01		
		CO-60	5.46E-03 +- 1.8E-02	U	pCi/g		3.28E-02	5.00E-02	
		CS-137	2.74E-01 +- 5.0E-02		pCi/g		3.03E-02	1.00E-01	
		EU-152	-8.53E-03 +- 4.4E-02	U	pCi/g		7.48E-02	1.00E-01	
		EU-154	5.78E-02 +- 5.8E-02	U	pCi/g		1.07E-01	1.00E-01	
		EU-155	4.66E-02 +- 5.6E-02	U	pCi/g		9.48E-02	1.00E-01	
		RA-226	4.74E-01 +- 9.7E-02		pCi/g		5.20E-02		
J1H0C5									
	MGD1K1AG	AMERICIUM 241	-4.74E-02 +- 1.6E-01	U	pCi/g		2.73E-01		
		CO-60	9.06E-03 +- 1.8E-02	U	pCi/g		3.31E-02	5.00E-02	
		CS-137	9.34E-02 +- 3.1E-02		pCi/g		2.88E-02	1.00E-01	
		EU-152	-1.30E-02 +- 4.3E-02	U	pCi/g		7.32E-02	1.00E-01	
		EU-154	2.30E-02 +- 5.4E-02	U	pCi/g		9.73E-02	1.00E-01	
		EU-155	7.00E-02 +- 5.5E-02	U	pCi/g		9.35E-02	1.00E-01	
		RA-226	5.86E-01 +- 1.0E-01		pCi/g		5.34E-02		
J1H0C5 DUP									
	MGD1K1AJ	AMERICIUM 241	8.10E-02 +- 9.1E-02	U	pCi/g		1.56E-01		
		CO-60	2.49E-03 +- 1.3E-02	U	pCi/g		2.37E-02	5.00E-02	
		CS-137	1.01E-01 +- 2.9E-02		pCi/g		2.05E-02	1.00E-01	
		EU-152	-1.55E-02 +- 3.2E-02	U	pCi/g		5.32E-02	1.00E-01	
		EU-154	6.97E-03 +- 4.3E-02	U	pCi/g		7.66E-02	1.00E-01	
		EU-155	6.12E-02 +- 3.8E-02	U	pCi/g		6.65E-02	1.00E-01	
		RA-226	4.98E-01 +- 8.9E-02		pCi/g		4.08E-02		
J1H0K2									
	MGD5X1AG	AMERICIUM 241	8.49E-02 +- 1.3E-01	U	pCi/g		2.31E-01		
		CO-60	1.22E-02 +- 5.9E-02	U	pCi/g		1.11E-01	5.00E-02	
		CS-137	2.67E-02 +- 6.0E-02	U	pCi/g		1.08E-01	1.00E-01	
		EU-152	-8.97E-03 +- 1.3E-01	U	pCi/g		2.29E-01	1.00E-01	
		EU-154	1.18E-01 +- 2.0E-01	U	pCi/g		3.86E-01	1.00E-01	
		EU-155	-3.43E-03 +- 1.1E-01	U	pCi/g		1.91E-01	1.00E-01	
		RA-226	8.62E-01 +- 2.0E-01	U	pCi/g		3.49E-01		
J1H0K3									
	MGD511AG	AMERICIUM 241	8.74E-02 +- 1.8E-01	U	pCi/g		3.11E-01		
		CO-60	-1.21E-03 +- 4.0E-02	U	pCi/g		7.23E-02	5.00E-02	
		CS-137	4.54E-02 +- 3.8E-02	U	pCi/g		7.20E-02	1.00E-01	
		EU-152	-4.86E-02 +- 7.9E-02	U	pCi/g		1.29E-01	1.00E-01	
		EU-154	5.68E-03 +- 1.4E-01	U	pCi/g		2.46E-01	1.00E-01	

TestAmerica

rptSTLRchSaSummary2 V5.2.12
A2002

RPD - Relative Percent Difference.

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

Sample Results Summary

TestAmerica TARL

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

Date: 14-Apr-11

Report No. : 46199

SDG No: J01053

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDC or MDA	CRDL	RPD
1090124 GAMMA_GS									
J1H0K3									
	MGD511AG	EU-155	7.81E-02 +- 7.3E-02	U	pCi/g		1.34E-01	1.00E-01	
		RA-226	6.20E-01 +- 1.5E-01	U	pCi/g		2.15E-01		
1090139 SRTOT_SEP_PRECIP_GPC									
J1H0C3									
	MGD001AC	STRONTIUM	5.39E-02 +- 7.3E-02	U	pCi/g	69%	1.55E-01		
J1H0C5									
	MGD1K1AC	STRONTIUM	6.36E-02 +- 6.7E-02	U	pCi/g	74%	1.37E-01		
J1H0K2									
	MGD5X1AC	STRONTIUM	2.68E-02 +- 5.5E-02	U	pCi/g	75%	1.22E-01		
J1H0K3									
	MGD511AC	STRONTIUM	1.60E-01 +- 8.4E-02		pCi/g	72%	1.31E-01		
J1H0K3 DUP									
	MGD511AK	STRONTIUM	3.47E-02 +- 6.1E-02	U	pCi/g	71%	1.34E-01		128.6
1090127 906.0_H3_LSC									
J1H0C3									
	MGD001AF	H-3	3.02E-02 +- 1.1E-02		pCi/g	100%	2.09E-02	4.00E+02	
J1H0C5									
	MGD1K1AF	H-3	5.79E-02 +- 1.7E-02		pCi/g	100%	3.15E-02	4.00E+02	
J1H0C5 DUP									
	MGD1K1AK	H-3	4.45E-02 +- 1.2E-02		pCi/g	100%	2.30E-02	4.00E+02	
J1H0K2									
	MGD5X1AF	H-3	3.83E-02 +- 1.8E-02		pCi/g	100%	3.51E-02	4.00E+02	
J1H0K3									
	MGD511AF	H-3	3.57E-01 +- 2.2E-01	U	pCi/g	100%	4.48E-01	4.00E+02	
1090129 C14_CHEM_LSC									
J1H0C3									
	MGD001AH	C-14	1.66E-01 +- 2.2E-01	U	pCi/g	100%	4.43E-01	5.00E+01	
J1H0C5									
	MGD1K1AH	C-14	8.93E-02 +- 2.1E-01	U	pCi/g	100%	4.46E-01	5.00E+01	
J1H0C5 DUP									
	MGD1K1AL	C-14	1.04E-01 +- 2.1E-01	U	pCi/g	100%	4.46E-01	5.00E+01	
J1H0K2									
	MGD5X1AH	C-14	1.46E-01 +- 2.1E-01	U	pCi/g	100%	4.43E-01	5.00E+01	
J1H0K3									
	MGD511AH	C-14	9.62E-02 +- 2.1E-01	U	pCi/g	100%	4.45E-01	5.00E+01	
1090135 NI63_LSC									
J1H0C3									
	MGD001AD	NI-63	-1.98E-01 +- 9.7E+00	U	pCi/g	65%	1.99E+01	3.00E+01	

TestAmerica

rptSTLRchSaSummary2 V5.2.12 A2002

RPD - Relative Percent Difference.

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

Sample Results Summary

TestAmerica TARL

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

Date: 14-Apr-11

Report No. : 46199

SDG No: J01053

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDC or MDA	CRDL	RPD
1090135 NI63_LSC									
J1H0C5									
	MGD1K1AD	NI-63	1.35E+00 +- 8.7E+00	U	pCi/g	83%	2.33E+01	3.00E+01	
J1H0K2									
	MGD5X1AD	NI-63	2.54E-01 +- 7.2E+00	U	pCi/g	85%	1.45E+01	3.00E+01	
J1H0K2 DUP									
	MGD5X1AJ	NI-63	6.76E+00 +- 9.4E+00	U	pCi/g	82%	2.31E+01	3.00E+01	185.5
J1H0K3									
	MGD511AD	NI-63	-8.72E-01 +- 7.1E+00	U	pCi/g	98%	1.91E+01	3.00E+01	
1090138 TC99_ETVDSK_LSC									
J1H0C3									
	MGD001AE	TC-99	-2.71E-02 +- 3.5E-01	U	pCi/g	100%	6.30E-01	1.50E+01	
J1H0C5									
	MGD1K1AE	TC-99	6.51E-02 +- 3.6E-01	U	pCi/g	100%	6.31E-01	1.50E+01	
J1H0K2									
	MGD5X1AE	TC-99	-2.13E-01 +- 3.5E-01	U	pCi/g	100%	6.31E-01	1.50E+01	
J1H0K2 DUP									
	MGD5X1AK	TC-99	-5.41E-02 +- 3.5E-01	U	pCi/g	100%	6.31E-01	1.50E+01	-118.9
J1H0K3									
	MGD511AE	TC-99	4.30E-02 +- 3.6E-01	U	pCi/g	100%	6.32E-01	1.50E+01	
1090267 7196_CR6									
J1H0C3									
	MGD001AA	HEXCHROME	1.46E-01 +- 0.0E+00	U	mg/kg	N/A	1.46E-01	1.55E-01	
J1H0C5									
	MGD1K1AA	HEXCHROME	1.47E-01 +- 0.0E+00	U	mg/kg	N/A	1.47E-01	1.55E-01	
J1H0K2									
	MGD5X1AA	HEXCHROME	2.38E-01 +- 0.0E+00		mg/kg	N/A	1.48E-01	1.55E-01	
	MGD5X1AN	HEXCHROME	2.54E-01 +- 0.0E+00		mg/kg	N/A	1.44E-01	3.50E-01	6.5
J1H0K3									
	MGD511AA	HEXCHROME	1.48E-01 +- 0.0E+00	U	mg/kg	N/A	1.48E-01	1.55E-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: 14-Apr-11

Report No. : 46199

SDG No.: J01053

Batch Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDC|MDA
GAMMA_GS								
1090124 BLANK QC,								
MGEE81AA	AMERICIUM 241	-4.56E-03 +- 4.5E-02	U	pCi/g				7.50E-02
	CO-60	7.81E-03 +- 9.6E-03	U	pCi/g				1.98E-02
	CS-137	3.66E-03 +- 1.1E-02	U	pCi/g				2.01E-02
	EU-152	-1.85E-02 +- 3.4E-02	U	pCi/g				5.49E-02
	EU-154	2.70E-02 +- 2.9E-02	U	pCi/g				5.86E-02
	EU-155	-3.47E-02 +- 3.1E-02	U	pCi/g				5.02E-02
	RA-226	8.06E-02 +- 4.8E-02		pCi/g				4.11E-02
1090124 LCS,								
MGEE81AC	CS-137	1.08E+00 +- 1.6E-01		pCi/g		100%	0.0	4.55E-02
	RA-226	1.01E+00 +- 1.7E-01		pCi/g		89%	-0.1	7.87E-02
SRTOT_SEP_PRECIP_GPC								
1090139 BLANK QC,								
MGEF71AA	STRONTIUM	7.47E-02 +- 5.9E-02	U	pCi/g	94%			1.13E-01
1090139 LCS,								
MGEF71AC	STRONTIUM	9.38E-01 +- 2.7E-01		pCi/g	95%	83%	-0.2	1.15E-01
906.0_H3_LSC								
1090127 BLANK QC,								
MGEFG1AA	H-3	4.93E-02 +- 2.3E-02		pCi/g	100%			4.61E-02
1090127 LCS,								
MGEFG1AC	H-3	3.71E-01 +- 3.2E-02		pCi/g	100%	111%	0.1	4.17E-02
C14_CHEM_LSC								
1090129 BLANK QC,								
MGEFL1AA	C-14	5.96E-03 +- 5.5E-03	U	pCi/g	100%			1.12E-02
1090129 LCS,								
MGEFL1AC	C-14	8.07E+00 +- 5.5E-01		pCi/g	100%	107%	0.1	4.47E-01
NI63_LSC								
1090135 BLANK QC,								
MGEFX1AA	NI-63	1.27E+01 +- 9.7E+00	U	pCi/g	92%			2.61E+01
1090135 LCS,								
MGEFX1AC	NI-63	4.68E+02 +- 4.8E+01		pCi/g	96%	77%	-0.2	1.92E+01
TC99_ETVDSK_LSC								
1090138 BLANK QC,								
MGEF51AA	TC-99	1.68E-01 +- 3.6E-01	U	pCi/g	100%			6.22E-01
1090138 LCS,								
MGEF51AC	TC-99	6.27E+01 +- 3.8E+00		pCi/g	100%	92%	-0.1	6.27E-01
1090138 MATRIX SPIKE, J1H0K3								
MGD511AJ	TC-99	2.00E+02 +- 1.1E+01		pCi/g	100%	90%	-0.1	6.19E-01
7196_CR6								
1090267 MATRIX SPIKE, J1H0K2								
MGD5X1AL	HEXCHROME	5.11E+00 +- 0.0E+00		mg/kg	N/A	48%	-0.5	1.44E-01
1090267 LCS,								

TestAmerica
rptSTLRchQcSummary V5.2.12
A2002

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

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

QC Results Summary

TestAmerica TARL

Ordered by Method, Batch No, QC Type,.

Date: 14-Apr-11

Report No. : 46199

SDG No.: J01053

Batch Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDC|MDA
MGE431AC	HEXCHROME	1.86E+01 +- 0.0E+00		mg/kg	N/A	93%	-0.1	1.55E-01
1090267 BLANK QC,								
MGE431AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A			1.55E-01

No. of Results: 23

TestAmerica
rptSTLRchQcSummary V5.2.12
A2002

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

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

FORM I

SAMPLE RESULTS

Date: 14-Apr-11

Lab Name:	TestAmerica	**SDG:**	J01053	**Collection Date:**	3/29/2011 12:45:00 PM
Lot-Sample No.:	J1C300601-3	**Report No. :**	46199	**Received Date:**	3/30/2011 3:15:00 PM
Client Sample ID:	J1H0C3	**COC No. :**	RC-190-041	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1090124	GAMMA_GS			**Work Order:** MGD001AG			**Report DB ID:** 9MGD0010					
AMERICIUM 241	***1.03E-01***	U	1.6E-01	1.6E-01	2.82E-01	pCi/g		*0.36*	4/2/11 02:15 a		396.7	GER13$1
								(1.3)			g	
CO-60	***5.46E-03***	U	1.8E-02	1.8E-02	3.28E-02	pCi/g		*0.17*	4/2/11 02:15 a		396.7	GER13$1
							5.00E-02	*0.6*			g	
CS-137	***2.74E-01***		5.0E-02	5.0E-02	3.03E-02	pCi/g		*(9.)*	4/2/11 02:15 a		396.7	GER13$1
							1.00E-01	*(10.9)*			g	
EU-152	***-8.53E-03***	U	4.4E-02	4.4E-02	7.48E-02	pCi/g		*-0.11*	4/2/11 02:15 a		396.7	GER13$1
							1.00E-01	*-0.39*			g	
EU-154	***5.78E-02***	U	5.8E-02	5.8E-02	1.07E-01	pCi/g		*0.54*	4/2/11 02:15 a		396.7	GER13$1
							1.00E-01	*(2.)*			g	
EU-155	***4.66E-02***	U	5.6E-02	5.6E-02	9.48E-02	pCi/g		*0.49*	4/2/11 02:15 a		396.7	GER13$1
							1.00E-01	*(1.7)*			g	
RA-226	***4.74E-01***		9.7E-02	9.7E-02	5.20E-02	pCi/g		*(9.1)*	4/2/11 02:15 a		396.7	GER13$1
								(9.7)			g	
Batch: 1090127	906.0_H3_LSC			**Work Order:** MGD001AF			**Report DB ID:** 9MGD0010					
H-3	***3.02E-02***		9.8E-03	1.1E-02	2.09E-02	pCi/g	100%	*(1.4)*	4/7/11 03:30 a		90.4	LSC8
						9.94E-03	4.00E+02	*(5.6)*			g	
Batch: 1090129	C14_CHEM_LSC			**Work Order:** MGD001AH			**Report DB ID:** 9MGD0010					
C-14	***1.66E-01***	U	1.9E-01	2.2E-01	4.43E-01	pCi/g	100%	*0.37*	4/6/11 08:56 a		5.039	LSC3
						2.08E-01	5.00E+01	*(1.5)*			g	
Batch: 1090135	NI63_LSC			**Work Order:** MGD001AD			**Report DB ID:** 9MGD0010					

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

SAMPLE RESULTS

Date: 14-Apr-11

Lab Name:	TestAmerica	**SDG:**	J01053	**Collection Date:**	3/29/2011 12:45:00 PM
Lot-Sample No.:	J1C300601-3	**Report No. :**	46199	**Received Date:**	3/30/2011 3:15:00 PM
Client Sample ID:	J1H0C3	**COC No. :**	RC-190-041	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
NI-63	***-1.98E-01***	U	8.0E+00	9.7E+00	1.99E+01	pCi/g	65%	*-0.01*	4/7/11 07:58 a		0.25	LSC3
						9.30E+00	3.00E+01	*-0.04*			g	
Batch: 1090138	TC99_ETVDSK_LSC			**Work Order:**	MGD001AE		**Report DB ID:**	9MGD0010				
TC-99	***-2.71E-02***	U	2.6E-01	3.5E-01	6.30E-01	pCi/g	100%	*-0.04*	4/7/11 08:54 p		1.99	LSC3
						3.02E-01	1.50E+01	*-0.15*			g	
Batch: 1090139	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MGD001AC		**Report DB ID:**	9MGD0010				
STRONTIUM	***5.39E-02***	U	7.1E-02	7.3E-02	1.55E-01	pCi/g	69%	*0.35*	4/12/11 06:21 a		6.02	GPC26A
						7.27E-02		*(1.5)*			g	
Batch: 1090267	7196_CR6			**Work Order:**	MGD001AA		**Report DB ID:**	9MGD0010				
HEXCHROME	***1.46E-01***	U		0.0E+00	1.46E-01	mg/kg	N/A	*(1.)*	4/1/11		2.5	
							1.55E-01	*N/A*			g	

No. of Results: 13 **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.
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FORM I

SAMPLE RESULTS

Date: 14-Apr-11

Lab Name:	TestAmerica	SDG:	J01053	Collection Date:	3/29/2011 1:20:00 PM
Lot-Sample No.:	J1C300601-4	Report No. :	46199	Received Date:	3/30/2011 3:15:00 PM
Client Sample ID:	J1H0C5	COC No. :	RC-190-041	Matrix:	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1090124	GAMMA_GS			Work Order: MGD1K1AG			Report DB ID: 9MGD1K10					
AMERICIUM 241	***-4.74E-02***	U	1.6E-01	1.6E-01	2.73E-01	pCi/g		*-0.17*	4/7/11 07:06 a		394.7	GER13$1
								-0.59			g	
CO-60	***9.06E-03***	U	1.8E-02	1.8E-02	3.31E-02	pCi/g		*0.27*	4/7/11 07:06 a		394.7	GER13$1
							5.00E-02	*0.99*			g	
CS-137	***9.34E-02***		3.1E-02	3.1E-02	2.88E-02	pCi/g		*(3.2)*	4/7/11 07:06 a		394.7	GER13$1
							1.00E-01	*(6.)*			g	
EU-152	***-1.30E-02***	U	4.3E-02	4.3E-02	7.32E-02	pCi/g		*-0.18*	4/7/11 07:06 a		394.7	GER13$1
							1.00E-01	*-0.6*			g	
EU-154	***2.30E-02***	U	5.4E-02	5.4E-02	9.73E-02	pCi/g		*0.24*	4/7/11 07:06 a		394.7	GER13$1
							1.00E-01	*0.85*			g	
EU-155	***7.00E-02***	U	5.5E-02	5.5E-02	9.35E-02	pCi/g		*0.75*	4/7/11 07:06 a		394.7	GER13$1
							1.00E-01	*(2.5)*			g	
RA-226	***5.86E-01***		1.0E-01	1.0E-01	5.34E-02	pCi/g		*(11.)*	4/7/11 07:06 a		394.7	GER13$1
								(11.6)			g	
Batch: 1090127	906.0_H3_LSC			Work Order: MGD1K1AF			Report DB ID: 9MGD1K10					
H-3	***5.79E-02***		1.5E-02	1.7E-02	3.15E-02	pCi/g	100%	*(1.8)*	4/7/11 04:52 a		53.4	LSC8
						1.50E-02	4.00E+02	*(6.9)*			g	
Batch: 1090129	C14_CHEM_LSC			Work Order: MGD1K1AH			Report DB ID: 9MGD1K10					
C-14	***8.93E-02***	U	1.9E-01	2.1E-01	4.46E-01	pCi/g	100%	*0.2*	4/6/11 09:19 a		5.004	LSC3
						2.10E-01	5.00E+01	*0.84*			g	
Batch: 1090135	NI63_LSC			Work Order: MGD1K1AD			Report DB ID: 9MGD1K10					

TestAmerica
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V5.2.12 A2002

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

FORM I

SAMPLE RESULTS

Date: 14-Apr-11

Lab Name:	TestAmerica	SDG:	J01053	Collection Date:	3/29/2011 1:20:00 PM
Lot-Sample No.:	J1C300601-4	Report No. :	46199	Received Date:	3/30/2011 3:15:00 PM
Client Sample ID:	J1H0C5	COC No. :	RC-190-041	Matrix:	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
NI-63	***1.35E+00***	U	7.6E+00	8.7E+00	2.33E+01	pCi/g	83%	*0.06*	4/7/11 08:22 a		0.26	LSC3
						1.09E+01	3.00E+01	*0.31*			g	
Batch: 1090138	TC99_ETVDSK_LSC			**Work Order:**	MGD1K1AE		**Report DB ID:**	9MGD1K10				
TC-99	***6.51E-02***	U	2.6E-01	3.6E-01	6.31E-01	pCi/g	100%	*0.1*	4/7/11 09:57 p		1.99	LSC3
						3.03E-01	1.50E+01	*0.36*			g	
Batch: 1090139	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MGD1K1AC		**Report DB ID:**	9MGD1K10				
STRONTIUM	***6.36E-02***	U	6.5E-02	6.7E-02	1.37E-01	pCi/g	74%	*0.46*	4/12/11 06:21 a		6.01	GPC26B
						6.39E-02		*(1.9)*			g	
Batch: 1090267	7196_CR6			**Work Order:**	MGD1K1AA		**Report DB ID:**	9MGD1K10				
HEXCHROME	***1.47E-01***	U		0.0E+00	1.47E-01	mg/kg	N/A	*(1.)*	4/1/11		2.5	
							1.55E-01	*N/A*			g	

No. of Results: 13 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.12 A2002

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

FORM I

SAMPLE RESULTS

Date: 14-Apr-11

Lab Name:	TestAmerica	SDG:	J01053	Collection Date:	3/30/2011 8:40:00 AM
Lot-Sample No.:	J1C300601-1	Report No. :	46199	Received Date:	3/30/2011 3:30:00 PM
Client Sample ID:	J1H0K2	COC No. :	RC-190-042	Matrix:	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC | MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1090124	GAMMA_GS			Work Order:	MGD5X1AG		Report DB ID: 9MGD5X10					
AMERICIUM 241	***8.49E-02***	U	1.3E-01	1.3E-01	2.31E-01	pCi/g		*0.37*	4/2/11 02:16 a		47.9	GER7$1
								(1.3)			g	
CO-60	***1.22E-02***	U	5.9E-02	5.9E-02	1.11E-01	pCi/g		*0.11*	4/2/11 02:16 a		47.9	GER7$1
							5.00E-02	*0.41*			g	
CS-137	***2.67E-02***	U	6.0E-02	6.0E-02	1.08E-01	pCi/g		*0.25*	4/2/11 02:16 a		47.9	GER7$1
							1.00E-01	*0.89*			g	
EU-152	***-8.97E-03***	U	1.3E-01	1.3E-01	2.29E-01	pCi/g		*-0.04*	4/2/11 02:16 a		47.9	GER7$1
							1.00E-01	*-0.14*			g	
EU-154	***1.18E-01***	U	2.0E-01	2.0E-01	3.86E-01	pCi/g		*0.31*	4/2/11 02:16 a		47.9	GER7$1
							1.00E-01	*(1.2)*			g	
EU-155	***-3.43E-03***	U	1.1E-01	1.1E-01	1.91E-01	pCi/g		*-0.02*	4/2/11 02:16 a		47.9	GER7$1
							1.00E-01	*-0.06*			g	
RA-226	***8.62E-01***	U	2.0E-01	2.0E-01	3.49E-01	pCi/g		*(2.5)*	4/2/11 02:16 a		47.9	GER7$1
								(8.5)			g	
Batch: 1090127	906.0_H3_LSC			Work Order:	MGD5X1AF		Report DB ID: 9MGD5X10					
H-3	***3.83E-02***		1.6E-02	1.8E-02	3.51E-02	pCi/g	100%	*(1.1)*	4/7/11 08:58 a		106.6	LSC8
						1.67E-02	4.00E+02	*(4.4)*			g	
Batch: 1090129	C14_CHEM_LSC			Work Order:	MGD5X1AH		Report DB ID: 9MGD5X10					
C-14	***1.46E-01***	U	1.9E-01	2.1E-01	4.43E-01	pCi/g	100%	*0.33*	4/6/11 10:05 a		5.039	LSC3
						2.08E-01	5.00E+01	*(1.4)*			g	
Batch: 1090135	NI63_LSC			Work Order:	MGD5X1AD		Report DB ID: 9MGD5X10					

TestAmerica
rptSTLRchSample
V5.2.12 A2002

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

TestAmerica Laboratories, Inc.

FORM I

SAMPLE RESULTS

Date: 14-Apr-11

Lab Name:	TestAmerica	SDG:	J01053	Collection Date:	3/30/2011 8:40:00 AM
Lot-Sample No.:	J1C300601-1	Report No. :	46199	Received Date:	3/30/2011 3:30:00 PM
Client Sample ID:	J1H0K2	COC No. :	RC-190-042	Matrix:	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
NI-63	***2.54E-01***	U	5.9E+00	7.2E+00	1.45E+01	pCi/g	85%	*0.02*	4/7/11 08:44 a		0.26	LSC3
						6.80E+00	3.00E+01	*0.07*			g	
Batch: 1090138	TC99_ETVDSK_LSC			**Work Order:**	MGD5X1AE		**Report DB ID:** 9MGD5X10					
TC-99	***-2.13E-01***	U	2.5E-01	3.5E-01	6.31E-01	pCi/g	100%	*-0.34*	4/7/11 11:00 p		1.99	LSC3
						3.03E-01	1.50E+01	*-(1.2)*			g	
Batch: 1090139	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MGD5X1AC		**Report DB ID:** 9MGD5X10					
STRONTIUM	***2.68E-02***	U	5.4E-02	5.5E-02	1.22E-01	pCi/g	75%	*0.22*	4/12/11 06:21 a		6.0	GPC26C
						5.63E-02		*0.98*			g	
Batch: 1090267	7196_CR6			**Work Order:**	MGD5X1AA		**Report DB ID:** 9MGD5X10					
HEXCHROME	***2.38E-01***			0.0E+00	1.48E-01	mg/kg	N/A	*(1.6)*	4/1/11		2.5	
							1.55E-01	*N/A*			g	

No. of Results: 13 **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.
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FORM I

SAMPLE RESULTS

Date: 14-Apr-11

Lab Name:	TestAmerica	**SDG:**	J01053	**Collection Date:**	3/30/2011 8:10:00 AM
Lot-Sample No.:	J1C300601-2	**Report No. :**	46199	**Received Date:**	3/30/2011 3:30:00 PM
Client Sample ID:	J1H0K3	**COC No. :**	RC-190-042	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1090124	GAMMA_GS			**Work Order:**	MGD511AG		**Report DB ID:**	9MGD5110				
AMERICIUM 241	***8.74E-02***	U	1.8E-01	1.8E-01	3.11E-01	pCi/g		*0.28*	4/2/11 02:17 a		50.3	GER11$1
								0.99			g	
CO-60	***-1.21E-03***	U	4.0E-02	4.0E-02	7.23E-02	pCi/g		*-0.02*	4/2/11 02:17 a		50.3	GER11$1
							5.00E-02	*-0.06*			g	
CS-137	***4.54E-02***	U	3.8E-02	3.8E-02	7.20E-02	pCi/g		*0.63*	4/2/11 02:17 a		50.3	GER11$1
							1.00E-01	*(2.4)*			g	
EU-152	***-4.86E-02***	U	7.9E-02	7.9E-02	1.29E-01	pCi/g		*-0.38*	4/2/11 02:17 a		50.3	GER11$1
							1.00E-01	*-(1.2)*			g	
EU-154	***5.68E-03***	U	1.4E-01	1.4E-01	2.46E-01	pCi/g		*0.02*	4/2/11 02:17 a		50.3	GER11$1
							1.00E-01	*0.08*			g	
EU-155	***7.81E-02***	U	7.3E-02	7.3E-02	1.34E-01	pCi/g		*0.58*	4/2/11 02:17 a		50.3	GER11$1
							1.00E-01	*(2.1)*			g	
RA-226	***6.20E-01***	U	1.5E-01	1.5E-01	2.15E-01	pCi/g		*(2.9)*	4/2/11 02:17 a		50.3	GER11$1
								(8.2)			g	
Batch: 1090127	906.0_H3_LSC			**Work Order:**	MGD511AF		**Report DB ID:**	9MGD5110				
H-3	***3.57E-01***	U	2.0E-01	2.2E-01	4.48E-01	pCi/g	100%	*0.8*	4/7/11 07:36 a		10.9	LSC8
						2.13E-01	4.00E+02	*(3.3)*			g	
Batch: 1090129	C14_CHEM_LSC			**Work Order:**	MGD511AH		**Report DB ID:**	9MGD5110				
C-14	***9.62E-02***	U	1.9E-01	2.1E-01	4.45E-01	pCi/g	100%	*0.22*	4/6/11 10:27 a		5.023	LSC3
						2.09E-01	5.00E+01	*0.9*			g	
Batch: 1090135	NI63_LSC			**Work Order:**	MGD511AD		**Report DB ID:**	9MGD5110				

TestAmerica
rptSTLRchSample
V5.2.12 A2002

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

TestAmerica Laboratories, Inc.

FORM I

SAMPLE RESULTS

Date: 14-Apr-11

Lab Name:	TestAmerica	SDG:	J01053	Collection Date:	3/30/2011 8:10:00 AM
Lot-Sample No.:	J1C300601-2	Report No. :	46199	Received Date:	3/30/2011 3:30:00 PM
Client Sample ID:	J1H0K3	COC No. :	RC-190-042	Matrix:	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
NI-63	***-8.72E-01***	U	6.2E+00	7.1E+00	1.91E+01	pCi/g	98%	*-0.05*	4/7/11 09:31 a		0.26	LSC3
						8.92E+00	3.00E+01	*-0.24*			g	
Batch: 1090138	TC99_ETVDSK_LSC			**Work Order:**	MGD511AE		**Report DB ID:** 9MGD5110					
TC-99	***4.30E-02***	U	2.6E-01	3.6E-01	6.32E-01	pCi/g	100%	*0.07*	4/8/11 01:06 a		2.01	LSC3
						3.03E-01	1.50E+01	*0.24*			g	
Batch: 1090139	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MGD511AC		**Report DB ID:** 9MGD5110					
STRONTIUM	***1.60E-01***		7.3E-02	8.4E-02	1.31E-01	pCi/g	72%	*(1.2)*	4/12/11 06:21 a		5.99	GPC26D
						6.07E-02		*(3.8)*			g	
Batch: 1090267	7196_CR6			**Work Order:**	MGD511AA		**Report DB ID:** 9MGD5110					
HEXCHROME	***1.48E-01***	U		0.0E+00	1.48E-01	mg/kg	N/A	*1.*	4/1/11		2.5	
							1.55E-01	*N/A*			g	

No. of Results: 13 **Comments:**

TestAmerica
rptSTLRchSample
V5.2.12 A2002

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

FORM I

SAMPLE RESULTS

Date: 14-Apr-11

Lab Name:	TestAmerica	SDG:	J01053	Collection Date:	3/30/2011 8:10:00 AM
Lot-Sample No.:	J1C300601-2	Report No. :	46199	Received Date:	3/30/2011 3:30:00 PM
Client Sample ID:	J1H0K3	COC No. :	RC-190-042	Matrix:	SOIL

Ordered by Client Sample ID, Batch No.

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

TestAmerica
rptSTLRchSample
V5.2.12 A2002

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

FORM II

Date: 14-Apr-11

DUPLICATE RESULTS

Lab Name:	TestAmerica	SDG:	J01053	Collection Date:	3/29/2011 1:20:00 PM
Lot-Sample No.:	J1C300592-2	Report No. :	46199	Received Date:	3/30/2011 1:15:00 PM
Client Sample ID:	J1H0C5 DUP	COC No. :	RC-190-041	Matrix:	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1090124	GAMMA_GS			Work Order:	MGD1K1AJ	Report DB ID:	MGD1K1JR		Orig Sa DB ID:			
AMERICIUM 241	8.10E-02	U	9.1E-02	9.1E-02	1.56E-01	pCi/g		0.52	4/8/11 04:10 a		394.7	GER11$1
			RPD					(1.8)			g	
CO-60	2.49E-03	U	1.3E-02	1.3E-02	2.37E-02	pCi/g		0.11	4/8/11 04:10 a		394.7	GER11$1
			RPD			5.00E-02		0.38			g	
CS-137	1.01E-01		2.9E-02	2.9E-02	2.05E-02	pCi/g		(4.9)	4/8/11 04:10 a		394.7	GER11$1
			RPD			1.00E-01		(7.)			g	
EU-152	-1.55E-02	U	3.2E-02	3.2E-02	5.32E-02	pCi/g		-0.29	4/8/11 04:10 a		394.7	GER11$1
			RPD			1.00E-01		-0.96			g	
EU-154	6.97E-03	U	4.3E-02	4.3E-02	7.66E-02	pCi/g		0.09	4/8/11 04:10 a		394.7	GER11$1
			RPD			1.00E-01		0.33			g	
EU-155	6.12E-02	U	3.8E-02	3.8E-02	6.65E-02	pCi/g		0.92	4/8/11 04:10 a		394.7	GER11$1
			RPD			1.00E-01		(3.3)			g	
RA-226	4.98E-01		8.9E-02	8.9E-02	4.08E-02	pCi/g		(12.2)	4/8/11 04:10 a		394.7	GER11$1
			RPD					(11.1)			g	
Batch: 1090127	906.0_H3_LSC			Work Order:	MGD1K1AK	Report DB ID:	MGD1K1KR		Orig Sa DB ID:			
H-3	4.45E-02		1.1E-02	1.2E-02	2.30E-02	pCi/g	100%	(1.9)	4/7/11 06:14 a		90.5	LSC8
			RPD			4.00E+02		(7.3)			g	
Batch: 1090129	C14_CHEM_LSC			Work Order:	MGD1K1AL	Report DB ID:	MGD1K1LR		Orig Sa DB ID:			
C-14	1.04E-01	U	1.9E-01	2.1E-01	4.46E-01	pCi/g	100%	0.23	4/6/11 09:42 a		5.009	LSC3
			RPD			5.00E+01		0.98			g	

TestAmerica
rptSTLRchDupV5.2
.12 A2002

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

FORM II

Date: 14-Apr-11

DUPLICATE RESULTS

Lab Name:	TestAmerica	SDG:	J01053	Collection Date:	3/29/2011 1:20:00 PM
Lot-Sample No.:	J1C300592-2	Report No. :	46199	Received Date:	3/30/2011 1:15:00 PM
Client Sample ID:	J1H0C5 DUP	COC No. :	RC-190-041	Matrix:	SOIL

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

No. of Results: 9 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: 14-Apr-11

DUPLICATE RESULTS

Lab Name:	TestAmerica	**SDG:**	J01053	**Collection Date:**	3/30/2011 8:40:00 AM
Lot-Sample No.:	J1C300601-1	**Report No. :**	46199	**Received Date:**	3/30/2011 3:30:00 PM
Client Sample ID:	J1H0K2	**COC No. :**	RC-190-042	**Matrix:**	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1090267	7196_CR6			**Work Order:** MGD5X1AN		**Report DB ID:** MGD5X1ER			**Orig Sa DB ID:** 9MGD5X10			
HEXCHROME	2.54E-01			0.0E+00	1.44E-01	mg/kg	N/A	(1.8)	4/1/11		2.5	
	2.38E-01		**RPD**	**6.5**		3.50E-01		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.

TestAmerica Laboratories, Inc.

FORM II

Date: 14-Apr-11

DUPLICATE RESULTS

Lab Name:	TestAmerica	**SDG:**	J01053	**Collection Date:**	3/30/2011 8:40:00 AM
Lot-Sample No.:	J1C300601-1	**Report No. :**	46199	**Received Date:**	3/30/2011 3:30:00 PM
Client Sample ID:	J1H0K2 DUP	**COC No. :**	RC-190-042	**Matrix:**	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1090135	NI63_LSC			**Work Order:**	MGD5X1AJ	**Report DB ID:**	MGD5X1JR		**Orig Sa DB ID:** 9MGD5X10			
NI-63	6.76E+00	U	8.1E+00	9.4E+00	2.31E+01	pCi/g	82%	0.29	4/7/11 09:08 a		0.25	LSC3
	2.54E-01	U	**RPD**	**185.5**		3.00E+01		(1.4)			g	
Batch: 1090138	TC99_ETVDSK_LSC			**Work Order:**	MGD5X1AK	**Report DB ID:**	MGD5X1KR		**Orig Sa DB ID:** 9MGD5X10			
TC-99	-5.41E-02	U	2.6E-01	3.5E-01	6.31E-01	pCi/g	100%	-0.09	4/8/11 12:03 a		2.01	LSC3
	-2.13E-01	U	**RPD**	**-118.9**		1.50E+01		-0.31			g	

No. of Results: 2 **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.
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FORM II

Date: 14-Apr-11

DUPLICATE RESULTS

Lab Name:	TestAmerica	SDG:	J01053	Collection Date:	3/30/2011 8:10:00 AM
Lot-Sample No.:	J1C300601-2	Report No. :	46199	Received Date:	3/30/2011 3:30:00 PM
Client Sample ID:	J1H0K3 DUP	COC No. :	RC-190-042	Matrix:	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDC, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 1090139	SRTOT_SEP_PRECIP_GPC			Work Order: MGD511AK		Report DB ID: MGD511KR			Orig Sa DB ID: 9MGD5110			
STRONTIUM	3.47E-02	U	6.0E-02	6.1E-02	1.34E-01	pCi/g	71%	0.26	4/12/11 06:21 a		5.99	GPC27A
	1.60E-01		RPD	128.6				(1.1)			g	

No. of Results: 1 Comments:

TestAmerica Laboratories, Inc.

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.
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TestAmerica Laboratories, Inc.

FORM II

BLANK RESULTS

Date: 14-Apr-11

Lab Name: TestAmerica

Matrix: SOIL

SDG: J01053

Report No. : 46199

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: 1090267	7196_CR6			**Work Order:**	MGE431AA		**Report DB ID:**	MGE431AB				
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	1.	4/1/11		2.5	
						1.55E-01		N/A			g	
Batch: 1090129	C14_CHEM_LSC			**Work Order:**	MGEFL1AA		**Report DB ID:**	MGEFL1AB				
C-14	5.96E-03	U	4.8E-03	5.5E-03	1.12E-02	pCi/g	100%	0.53	4/6/11 10:50 a		200.0	LSC3
					5.25E-03	5.00E+01		(2.2)			g	
Batch: 1090135	NI63_LSC			**Work Order:**	MGEFX1AA		**Report DB ID:**	MGEFX1AB				
NI-63	1.27E+01	U	8.6E+00	9.7E+00	2.61E+01	pCi/g	92%	0.49	4/7/11 09:55 a		0.25	LSC3
					1.22E+01	3.00E+01		(2.6)			g	
Batch: 1090138	TC99_ETVDSK_LSC			**Work Order:**	MGEF51AA		**Report DB ID:**	MGEF51AB				
TC-99	1.68E-01	U	2.6E-01	3.6E-01	6.22E-01	pCi/g	100%	0.27	4/8/11 03:12 a		2.01	LSC3
					2.99E-01	1.50E+01		0.93			g	
Batch: 1090127	906.0_H3_LSC			**Work Order:**	MGEFG1AA		**Report DB ID:**	MGEFG1AB				
H-3	4.93E-02		2.1E-02	2.3E-02	4.61E-02	pCi/g	100%	(1.1)	4/7/11 10:19 a		74.6	LSC8
					2.19E-02	4.00E+02		(4.3)			g	
Batch: 1090124	GAMMA_GS			**Work Order:**	MGEE81AA		**Report DB ID:**	MGEE81AB				
AMERICIUM 241	-4.56E-03	U	4.5E-02	4.5E-02	7.50E-02	pCi/g		-0.06	4/2/11 02:18 a		348.0	GER10$1
								-0.2			g	
CO-60	7.81E-03	U	9.6E-03	9.6E-03	1.98E-02	pCi/g		0.4	4/2/11 02:18 a		348.0	GER10$1
						5.00E-02		(1.6)			g	
CS-137	3.66E-03	U	1.1E-02	1.1E-02	2.01E-02	pCi/g		0.18	4/2/11 02:18 a		348.0	GER10$1
						1.00E-01		0.67			g	

TestAmerica
rptSTLRchBlank
V5.2.12 A2002

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

FORM II
BLANK RESULTS

Date: 14-Apr-11

Lab Name: TestAmerica
Matrix: SOIL

SDG: J01053
Report No. : 46199

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-152	-1.85E-02	U	3.4E-02	3.4E-02	5.49E-02	pCi/g		-0.34	4/2/11 02:18 a		348.0	GER10$1
						1.00E-01		-(1.1)			g	
EU-154	2.70E-02	U	2.9E-02	2.9E-02	5.86E-02	pCi/g		0.46	4/2/11 02:18 a		348.0	GER10$1
						1.00E-01		(1.9)			g	
EU-155	-3.47E-02	U	3.1E-02	3.1E-02	5.02E-02	pCi/g		-0.69	4/2/11 02:18 a		348.0	GER10$1
						1.00E-01		-(2.2)			g	
RA-226	8.06E-02		4.8E-02	4.8E-02	4.11E-02	pCi/g		(2.)	4/2/11 02:18 a		348.0	GER10$1
								(3.4)			g	
Batch: 1090139	SRTOT_SEP_PRECIP_GPC			**Work Order:**	MGEF71AA		**Report DB ID:**	MGEF71AB				
STRONTIUM	7.47E-02	U	5.6E-02	5.9E-02	1.13E-01	pCi/g	94%	0.66	4/12/11 06:21 a		6.0	GPC27B
					5.26E-02			(2.5)			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.

TestAmerica Laboratories, Inc.

FORM II

LCS RESULTS

Date: 14-Apr-11

Lab Name: TestAmerica

Matrix: SOIL

SDG: J01053

Report No. : 46199

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: 1090267	7196_CR6			Work Order:	MGE431AC		Report DB ID:	MGE431AS					
HEXCHROME	1.86E+01			0.0E+00	1.55E-01	mg/kg	N/A	2.00E+01		93%	4/1/11	2.5	
							Rec Limits:	80	120	-0.1		g	
Batch: 1090129	C14_CHEM_LSC			Work Order:	MGEFL1AC		Report DB ID:	MGEFL1CS					
C-14	8.07E+00		4.4E-01	5.5E-01	4.47E-01	pCi/g	100%	7.55E+00	1.3E-01	107%	4/6/11 11:13 a	5.0	LSC3
							Rec Limits:	70	130	0.1		g	
Batch: 1090135	NI63_LSC			Work Order:	MGEFX1AC		Report DB ID:	MGEFX1CS					
NI-63	4.68E+02		2.2E+01	4.8E+01	1.92E+01	pCi/g	96%	6.09E+02	1.0E+01	77%	4/7/11 10:18 a	0.25	LSC3
							Rec Limits:	70	130	-0.2		g	
Batch: 1090138	TC99_ETVDSK_LSC			Work Order:	MGEF51AC		Report DB ID:	MGEF51CS					
TC-99	6.27E+01		1.1E+00	3.8E+00	6.27E-01	pCi/g	100%	6.78E+01	3.0E-01	92%	4/8/11 04:15 a	2.0	LSC3
							Rec Limits:	70	130	-0.1		g	
Batch: 1090127	906.0_H3_LSC			Work Order:	MGEFG1AC		Report DB ID:	MGEFG1CS					
H-3	3.71E-01		2.9E-02	3.2E-02	4.17E-02	pCi/g	100%	3.35E-01	1.0E-02	111%	4/7/11 11:41 a	80.9	LSC8
							Rec Limits:	70	130	0.1		g	
Batch: 1090124	GAMMA_GS			Work Order:	MGEE81AC		Report DB ID:	MGEE81CS					
CS-137	1.08E+00		1.6E-01	1.6E-01	4.55E-02	pCi/g		1.08E+00	1.1E-02	100%	4/8/11 04:10 a	350.1	GER14$1
							Rec Limits:	70	130	0.0		g	
RA-226	1.01E+00		1.7E-01	1.7E-01	7.87E-02	pCi/g		1.14E+00	1.2E-02	89%	4/8/11 04:10 a	350.1	GER14$1
							Rec Limits:	70	130	-0.1		g	
Batch: 1090139	SRTOT_SEP_PRECIP_GPC			Work Order:	MGEF71AC		Report DB ID:	MGEF71CS					
STRONTIUM	9.38E-01		1.1E-01	2.7E-01	1.15E-01	pCi/g	95%	1.13E+00	3.1E-02	83%	4/12/11 06:21 a	6.0	GPC27C
							Rec Limits:	70	130	-0.2		g	

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

rptSTLRchLcs
V5.2.12 A2002

FORM II

LCS RESULTS

Date: 14-Apr-11

Lab Name: TestAmerica

Matrix: SOIL

SDG: J01053

Report No. : 46199

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

No. of Results: 8 Comments:

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

rptSTLRchLcs
V5.2.12 A2002

FORM II

MATRIX SPIKE RESULTS

Date: 14-Apr-11

Lab Name: TestAmerica **SDG:** J01053

Lot-Sample No.: J1C300601-1, J1H0K2 **Report No. :** 46199 **Matrix:** SOIL

Parameter	SpikeResult, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC|MDA	Rpt Unit, CRDL	Yield	Rec-overy	Expected, Uncert	Analysis, Prep Date	Aliquot Size	Analy Method, Primary Detector
Batch: 1090267	Work Order: MGD5X1AL			Report DB ID: MGD5X1CW			Orig Sa DB ID: 9MGD5X10					
HEXCHROME	5.11E+00			0.0E+00	1.44E-01	mg/kg	N/A	47.70%	1.07E+01	4/1/11	2.5	7196_CR6
	2.38E-01										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: 14-Apr-11

Lab Name: TestAmerica SDG: J01053

Lot-Sample No.: J1C300601-2, J1H0K3 Report No. : 46199 Matrix: SOIL

Parameter	SpikeResult, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDC | MDA	Rpt Unit, CRDL	Yield	Rec-overy	Expected, Uncert	Analysis, Prep Date	Aliquot Size	Analy Method, Primary Detector
Batch: 1090138	Work Order: MGD511AJ			Report DB ID: MGD511JW			Orig Sa DB ID: 9MGD5110					
TC-99	2.00E+02		1.9E+00	1.1E+01	6.19E-01	pCi/g	100%	89.53%	2.23E+02	4/8/11 02:09 a	2.02	TC99_ETVDSK_LSC
	4.30E-02								9.0E-01		g	LSC3

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

4/13/2011 3:19:57 PM

Lot No., Due Date: J1C300592,J1C300601; 04/20/2011
Client, Site: 127642; S00N063A00 HANFORD
QC Batch No., Method Test: 1090139; RSRTOT SrTot by GPC
SDG, Matrix: J01053; SOIL

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

6.0 Comments on any No response:

First Level [signature] Date 4-13-11

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 109a39

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

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

Second Level Review: [signature] Date: 4/13/11

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

4/8/2011 1:57:15 PM

Lot No., Due Date: J1C300592,J1C300601; 04/20/2011
Client, Site: 127642; S00N063A00 HANFORD
QC Batch No., Method Test: 1090124; RGAMMA Gamma by GER
SDG, Matrix: J01053; SOIL

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

First Level [signature] Date 4/8/11

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 1090124

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: CRQL = 0.1 pci/g
See NCM #: 10-

Second Level Review: _____ Date: _____

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

Clouseau
Nonconformance Memo

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

NCM #: **10-18005**
NCM Initiated By: Steven Wheland
Date Opened: 04/08/2011
Date Closed:

Classification: **Anomaly**
Status: **PMREVIEW**
Production Area: Environmental - Sep
Tests: Gamma by GER
Lot #'s (Sample #'s): J1C300592 (1,2), J1C300601 (1,2), J1C310000 (124),
QC Batches: 1090124,

Nonconformance: MDA not met
Subcategory: Data accepted

Problem Description / Root Cause

Name	Date	Description
Steven Wheland	04/08/2011	Short priority counting times elevated the MDA's

Corrective Action

Name	Date	Corrective Action
Steven Wheland	04/08/2011	report data

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note	Response	Response Note

Quality Assurance Verification

Verified By	Due Date	Status	Notes
		This section not yet completed by QA.	

Approval History

Date Approved	Approved By	Position

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

4/8/2011 4:20:20 PM

Lot No., Due Date: J1C300592,J1C300601; 04/20/2011
Client, Site: 127642; S00N063A00 HANFORD
QC Batch No., Method Test: 1090138; RTC99 Tc-99 by LSC
SDG, Matrix: J01053; SOIL

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

First Level [signature] **Date** 4/8/11

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 1090138

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

Comments on any "No" response: CRDL: 15.0 pci/g

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

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

4/8/2011 3:15:22 PM

Lot No., Due Date: J1C300592,J1C300601; 04/20/2011
Client, Site: 127642; S00N063A00 HANFORD
QC Batch No., Method Test: 1090127; RTRITIUM H-3 by LSC
SDG, Matrix: J01053; SOIL

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

First Level [signature] Date 4/8/11

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 1090127

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

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

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

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

4/7/2011 10:09:41 AM

Lot No., Due Date: J1C300592,J1C300601; 04/20/2011
Client, Site: 127642; S00N063A00 HANFORD
QC Batch No., Method Test: 1090129; RC14 C-14 by LSC
SDG, Matrix: J01053; SOIL

1.0 COC

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

2.0 QC Batch

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

3.0 QC & Samples

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

4.0 Raw Data

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

5.0 Other

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

6.0 Comments on any No response:

First Level Tra Anderson Date 4/7/11

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 1090129

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

Comments on any "No" response: _____

Second Level Review: Jodie G Date: 4/7/11

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

4/11/2011 2:20:02 PM

Lot No., Due Date: J1C300592,J1C300601; 04/20/2011
Client, Site: 127642; S00N063A00 HANFORD
QC Batch No., Method Test: 1090135; RNI63 Ni-63 by LSC
SDG, Matrix: J01053; SOIL

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

6.0 Comments on any No response:

First Level [signature] **Date** 4-11-11

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

Batch Number: 1090135

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 = 30.0 pci/g

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

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Richland Laboratory
Data Review Check List
Hexavalent Chromium

Batch Number(s): 1090267
Lab Sample Numbers or SDG:J01053
Method/Test/Parameter: **Cr+6 in SOLID / RL-WC-004**

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

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

TN 4/4/11

Comments on any "~~No sample~~. The MS recovered low at 47.7%. The insoluble MSD recovered within limits at 99.5%. PDMS recovered at 96.7%.

Suspect reducing capacity in the sample, but not enough to exhaust the more copious insoluble MSD.

Analyst: _____ Date: 4-1-11

Second-Level Review: _____ Date: 4/4/11

Clouseau
Nonconformance Memo

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

NCM #: **10-17932**
NCM Initiated By: Hooshang Rahavi
Date Opened: 04/01/2011
Date Closed:

Classification: **Anomaly**
Status: **PMREVIEW**
Production Area: Classical Chemistry
Tests: 7196A
Lot #'s (Sample #'s): J1C300592 (1,2), J1C300601 (1,2), J1C310000 (267),
QC Batches: 1090267,

Nonconformance: QC data exceeded criteria
Subcategory: MS/MSD accuracy and/or precision out of control

Problem Description / Root Cause

Name	Date	Description
Hooshang Rahavi	04/01/2011	The MS recovered low at47.7%. The insoluble MS~~D~~ recovered within limits at 99.5%. PDMS recovered at 96.7%. TW 4/4/11 Suspect reducing capacity in the sample, but not enough to exhaust the more copious insoluble MS~~D~~. TW 4/4/11

Corrective Action

Name	Date	Corrective Action
Hooshang Rahavi	04/01/2011	Report data

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note	Response	Response Note

Quality Assurance Verification

Verified By	Due Date	Status	Notes
		This section not yet completed by QA.	

Approval History

Date Approved	Approved By	Position

Date Printed: 4/1/2011

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-190-041	Page 1 of 2

Collector: BC Koelling	Company Contact: Joan Kessner	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Price Code: 8L	Data Turnaround: 21 Days		
Project Designation: 100N Field Remediation - Soil In-Process	Sampling Location: 124-N-2		SAF No.: RC-190
Ice Chest No.: NA	Field Logbook No.: EL-1652-2	COA: R11NX3Y000	Method of Shipment: ~~Fed Ex~~ Hand Delivery MAB 3-28-11
Shipped To: TestAmerica Incorporated, Richland	Offsite Property No.: NA		Bill of Lading/Air Bill No.: ~~See OSPC~~ NA MAB 3-28-11

POSSIBLE SAMPLE HAZARDS/REMARKS

~~Potential Radio Activity~~ NONE MAB 3/29/11

Special Handling and/or Storage

Cool 4°C MAB 3-28-11

Lot# J1C300592
SDG#J01053
Due ~~4-19-11~~ 4-2011
CIC 3-30-11

Preservation	Cool 4C	None	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C
Type of Container	G/P	G/P	G/P	G/P	G	G	aG	aG	aG	aG
No. of Container(s)	1	1	1	0	1	1	1	0	0	0
Volume	120mL	120mL	60mL	120mL	60mL	120mL	250mL	250mL	250mL	250mL
SAMPLE ANALYSIS	See item (1) in Special Instructions.	See item (2) in Special Instructions.	Chromium Hex - 7196 (Hexavalent Chromium)	See item (3) in Special Instructions.	TPH-Diesel Range - WTPH-D +	VOA - 8260 (TCL)	Semi-VOA - 8270A (TCL)	PCBs - 8082	PAHs - 8310	Pesticides - 8081

MAB 3-29-11 MAB 3-28-11

Sample No.	Matrix *	Sample Date	Sample Time										RCF
J1H0C3	SOIL	3/29/11	1245			✓		MGD00					27432
J1H0C5	SOIL	3/29/11	1320			✓		MGD1K					27433

CHAIN OF POSSESSION	Date/Time	Sign/Print Names	Date/Time
Relinquished By/Removed From: Charles Ontiveros/Kelling	1400 3/29/11	Received By/Stored In: MA Bamberger MA Bamberger	1400 3/29/11
Relinquished By/Removed From: MA Bamberger MA Bamberger	3-29-11 1620	Received By/Stored In: J. E. Bahl	1620 3-29-11
Relinquished By/Removed From: J. E. Bahl	1315 3-30-11	Received By/Stored In: TAVP Lucas Velazquez Lopez	1315 3/30/11
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

Leach and Hold TCLP metals per Joan Kessner

(1) ICP Metals - 6010TR (Client List) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Molybdenum, Nickel, Potassium, Selenium, Silicon, Silver, Sodium, Vanadium, Zinc}; Mercury - 7471 - (CV) {Mercury}
(2) Metals by ICP (TCLP) - 1311/6010 {Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver}; Mercury (TCLP) - 1311/7470 {Mercury}
(3) IC Anions - 9056 Modified {Bromide, Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Phosphorous in phosphate, Sulfate}; NO2/NO3 - 3[illegible] Nitrogen in Nitrite and Nitrate}; pH (Soil) - 9045 {pH Measurement}

Lot#J1C300592
SDG#J01053

REVIEWED BY AJ DATE 3-30-11

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

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

WCH-EE-011

TestAmerica Laboratories, Inc.

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Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-190-041	Page 2 of 2

Collector BC Koelling	**Company Contact** Joan Kessner	**Telephone No.** 375-4688	**Project Coordinator** KESSNER, JH	**Price Code** 8L	**Data Turnaround** 21 Days
Project Designation 100N Field Remediation - Soil In-Process	**Sampling Location** 124-N-2		**SAF No.** RC-190		
Ice Chest No. NA	**Field Logbook No.** EL-1652-2	**COA** R11NX3Y000	**Method of Shipment** ~~Fed Ex~~ Hand Delivery MAB 3-25-11		
Shipped To TestAmerica Incorporated, Richland	**Offsite Property No.** NA		**Bill of Lading/Air Bill No.** ~~See OSPG~~ NA MAB 3-25-11		

POSSIBLE SAMPLE HAZARDS/REMARKS

~~Potential Radio Activity~~ MAB 3/29/11 NONE

Lot#J1C300592 SDG#J01053 Due ~~4-19-11~~ 4-20-11

Special Handling and/or Storage

NONE 3/29/11 JEB 3-30-11

CK 3-30-11

Preservation	Cool 4C	None	None	None	None	None	None			
Type of Container	aG	G/P	G/P	G/P	G/P	G/P	G/P			
No. of Container(s)	1	1	0	0	0	0	1			
Volume	60mL	500mL	500mL	500mL	500mL	500mL	60mL			
SAMPLE ANALYSIS	Chloro-Herbicides - EPA8151	See item (1) in Special Instructions.	Carbon-14 Low Level; Tritium - H3 Low Level Soil	Nickel-63	Strontium-89,90 -- Total Sr	Technetium-99	RCF GEA Shipping Screen			

Sample No.	Matrix *	Sample Date	Sample Time										RCF
J1H0C3	SOIL	3/29/11	1245		✓	✓	✓	✓	✓				27432
J1H0C5	SOIL	3/29/11	1320		✓	✓	✓	✓	✓				27433

CHAIN OF POSSESSION	Date/Time	Sign/Print Names	Date/Time
Relinquished By/Removed From: Cindy Brittain Koelling	3/29/11 1400	Received By/Stored In: MA Bamberger MA Bamberger	3/29/11 1400
Relinquished By/Removed From: MA Bamberger MA Bamberger	3-29-11 1620	Received By/Stored In: J. E. Beal	3-29-11 1620
Relinquished By/Removed From: J. E. Beal	3-30-11 1315	Received By/Stored In: TALR	3/30/11 1315
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

Leach and Hold TCLP metals per Joan Kessner

(1) Gamma Spec (Client List) {Americium-241, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155, Radium-226}

REVIEWED BY AJ DATE 3-30-11

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

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

WCH-EE-011

Apex™ Non-Reg

Analysis Report for RCF27432

J1H0C3 SAF:RC-190 100NFR/124-N-2

GAMMA SPECTRUM ANALYSIS

Sample Identification	: RCF27432
Sample Description	: J1H0C3 SAF:RC-190 100NFR/124-N-2
Sample Type	: Non Standard Geometry
Sample Size	: 7.800E+01 grams
Facility	: Default
Sample Taken On	: 3/29/2011 12:45:00PM
Acquisition Started	: 3/30/2011 8:13:14AM
Procedure	: Non Standard Geometry
Operator	: RCT
Detector Name	: GEA2703
Geometry	: Non Standard Geometry
Live Time	: 3600.0 seconds
Real Time	: 3601.1 seconds
Dead Time	: 0.03 %
Peak Locate Threshold	: 3.00
Peak Locate Range (in channels)	: 40 - 4096
Peak Area Range (in channels)	: 40 - 4096
Identification Energy Tolerance	: 1.000 keV
Energy Calibration Used Done On	: 2/2/2011
Efficiency Calibration Used Done On	: 2/2/2011
Efficiency Calibration Description	: GEA2703 NSTD EC 020211 SN82751A-238
Sample Number	: 13036

"Qualitative Only"

INTERFERENCE CORRECTED REPORT

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/grams)	Wt mean Activity Uncertainty	Comments
K-40	1.000	1.22E+01	2.36E+00	
PB-212	0.704	4.05E-01	1.06E-01	
U-235	0.547	1.36E-01	1.08E-01	

MDA <1.74E-01

Apex™

Non-Reg

Analysis Report for RCF27433

J1H0C5 SAF:RC-190 100NFR/124-N-2

GAMMA SPECTRUM ANALYSIS

Sample Identification	: RCF27433
Sample Description	: J1H0C5 SAF:RC-190 100NFR/124-N-2
Sample Type	: Non Standard Geometry
Sample Size	: 8.000E+01 grams
Facility	: Default
Sample Taken On	: 3/29/2011 1:20:00PM
Acquisition Started	: 3/30/2011 8:13:22AM
Procedure	: Non Standard Geometry
Operator	: RCT
Detector Name	: PGTLYNX
Geometry	: Non Standard Geometry
Live Time	: 3600.0 seconds
Real Time	: 3601.6 seconds
Dead Time	: 0.04 %
Peak Locate Threshold	: 3.00
Peak Locate Range (in channels)	: 40 - 4096
Peak Area Range (in channels)	: 40 - 4096
Identification Energy Tolerance	: 1.000 keV
Energy Calibration Used Done On	: 3/3/2011
Efficiency Calibration Used Done On	: 3/11/2011
Efficiency Calibration Description	: PGTL NSTD 030711EC SN28751A-238
Sample Number	: 13037

"Qualitative Only"

INTERFERENCE CORRECTED REPORT

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/grams)	Wt mean Activity Uncertainty	Comments
K-40	0.994	1.42E+01	2.31E+00	
PB-212	0.711	3.99E-01	9.30E-02	
TH-232d	0.601	5.08E-01	1.07E-01	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

J1C300592

Sample Check-in List

Date/Time Received: 3·30·11 1315 GM Screen Result (out) .3 (in) .8 Initials [CK]

Client: WCH SDG #: J01053 NA [ ] SAF #: RC-190 NA [ ]

Work Order Number: J1C300592 Chain of Custody # RC-190 - 041

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

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

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

Item 6 through 10 for samples. Initial appropriate response.

6. Number of samples in shipping container (Each sample may contain multiple bottles): 2 samples @ 1x 500ml P & 1x ~~JAR~~ 60 ML G per
7. Sample holding times exceeded? NA [ ] Yes [ ] No [CK]
8. Samples have:
   - ____ tape
   - CK custody seals (Soil)
   - ____ hazard labels
   - CK appropriate sample labels
9. Samples:
   - CK are in good condition
   - ____ are broken
   - ____ are leaking
   - ____ have air bubbles (Only for samples requiring no head space)
10. Sample pH appropriate for analysis requested Yes [ ] No [ ] N/A [CK] (Note discrepancies in #13)
    (If acidification necessary, then document sample ID, initial pH, amount of HNO_3 added and pH after addition)

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

See other side for additional comments

Sample Custodian: Carmen J Krupa Date: 3·30·11 1315

Client Informed on _____ by _____ Person contacted _____

[✓] No action necessary; process as is

Project Manager [signature] Date 3/30/11

LS-023, Rev. 12, 10/10

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-190-042	Page 1 of 2

Collector: BC Koelling	Company Contact: Joan Kessner	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Price Code: 8L	Data Turnaround: 21 Days		
Project Designation: 100N Field Remediation - Soil In-Process	Sampling Location: 124-N-2		SAF No.: RC-190
Ice Chest No.: NA	Field Logbook No.: EL-1652-2	COA: R11NX3Y000	Method of Shipment: ~~Fed Ex~~ Hand Delivery MAB 3-29-11
Shipped To: TestAmerica Incorporated, Richland	Offsite Property No.: NA		Bill of Lading/Air Bill No.: ~~See OSPC~~ NA MAB 3-29-11

POSSIBLE SAMPLE HAZARDS/REMARKS
NONE MAB 3-29-11

Special Handling and/or Storage
COOL 4°C MAB 3-29-11

SD G# J01053
Lot# J1C300601
Due 4-20-11

Preservation				Cool 4C	None	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C
Type of Container				G/P	G/P	G/P	G/P	G	G	aG	aG	aG	aG
No. of Container(s)				1	1	1	0	1	1	1	0	0	0
Volume				120mL	120mL	60mL	120mL	60mL	120mL	250mL	250mL	250mL	250mL
SAMPLE ANALYSIS				See item (1) in Special Instructions.	See item (2) in Special Instructions.	Chromium Hex - 7196 {Hexavalent Chromium}	See item (3) in Special Instructions.	TPH-Diesel Range - WTPH-D +	VOA - 8260A (TCL)	Semi-VOA - 8270A (TCL)	PCBs - 8082	PAHs - 8310	Pesticides - 8081
Sample No.	Matrix *	Sample Date	Sample Time										RCF
J1H0K2	SOIL	3/30/11	0840			✓	MGD5X						27433
J1H0K3	SOIL	3/30/11	~~0840~~ 0810 MAB 3-30-11			✓	MGD51						

MAB 3-29-11 MAB 3-29-11

CHAIN OF POSSESSION	Sign/Print Names		
Relinquished By/Removed From	Date/Time 1020 3/30/11	Received By/Stored In	Date/Time 1020 3/30/11
Relinquished By/Removed From 3-30-11	Date/Time 1500	Received By/Stored In	Date/Time 1500 3-30-11
Relinquished By/Removed From WCH	Date/Time 1530 3-30-11	Received By/Stored In TAMP	Date/Time 1530 3/30/11
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
Leach and Hold TCLP metals per Joan Kessner

(1) ICP Metals - 6010TR (Client List) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Molybdenum, Nickel, Potassium, Selenium, Silicon, Silver, Sodium, Vanadium, Zinc}; Mercury - 7471 - (CV) {Mercury}
(2) Metals by ICP (TCLP) - 1311/6010 {Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver}; Mercury (TCLP) - 1311/7470 {Mercury}
(3) IC Anions - 9056 Modified {Bromide, Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Phosphorous in phosphate, Sulfate}; NO2/NO3 - 353.2 {Nitrogen in Nitrite and Nitrate}; pH (Soil) - 9045 {pH Measurement}

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
DATE 3-30-11

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

J1C300601

WCH-EE-011

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-190-042	Page 2 of 2

Collector BC Koelling	**Company Contact** Joan Kessner	**Telephone No.** 375-4688	**Project Coordinator** KESSNER, JH
Price Code 8L	**Data Turnaround** 21 Days		
Project Designation 100N Field Remediation - Soil In-Process	**Sampling Location** 124-N-2		**SAF No.** RC-190
Ice Chest No. NA	**Field Logbook No.** EL-1652-2	**COA** R11NX3Y000	**Method of Shipment** ~~Fed Ex~~ Hand Delivery MAB 3-29-11
Shipped To TestAmerica Incorporated, Richland	**Offsite Property No.** NA		**Bill of Lading/Air Bill No.** ~~See OSPC~~ NA MAB 3-29-11

POSSIBLE SAMPLE HAZARDS/REMARKS
NONE MAB 3-29-11

Special Handling and/or Storage
NONE MAB 3-29-11

Preservation	Cool 4C	None	None	None	None	None					
Type of Container	aG	G/P	G/P	G/P	G/P	G/P					
No. of Container(s)	1	1	0	0	0	0					
Volume	60mL	500mL	500mL	500mL	500mL	500mL					
SAMPLE ANALYSIS SDG #J01053 LOT #J1C300601 Due 4-20-11	Chloro-Herbicides - EPA8151	See item (1) in Special Instructions.	Carbon-14 Low Level; Tritium - H3 Low Level Soil	Nickel-63	Strontium-89,90 -- Total Sr	Technetium-99					

Sample No.	Matrix *	Sample Date	Sample Time										RCF
J1H0K2	SOIL	3/30/11	0810		✓	✓	✓	✓	✓				27433
J1H0K3	SOIL	3/30/11	~~0810~~ 0810 MAB 3-30-11		✓	✓	✓	✓	✓				

CHAIN OF POSSESSION	Date/Time	Sign/Print Names	Date/Time
Relinquished By/Removed From BC Koelling	1010 3/30/11	Received By/Stored In MA Bamberger	1020 3/30/11
Relinquished By/Removed From MA Bamberger	3-30-11 1500	Received By/Stored In J.E. Beebe	1500 3-30-11
Relinquished By/Removed From J.E. Beebe	1530 3-30-11	Received By/Stored In TALR	1530 3/30/11
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
Leach and Hold TCLP metals per Joan Kessner

(1) Gamma Spec (Client List) {Americium-241, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155, Radium-226}

REVIEWED BY AJ
DATE 3-30-11

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

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

WCH-EE-011

Apex™

Non-Reg

Analysis Report for RCF27433

J1H0C5 SAF:RC-190 100NFR/124-N-2

GAMMA SPECTRUM ANALYSIS

Sample Identification	: RCF27433
Sample Description	: J1H0C5 SAF:RC-190 100NFR/124-N-2
Sample Type	: Non Standard Geometry
Sample Size	: 8.000E+01 grams
Facility	: Default
Sample Taken On	: 3/29/2011 1:20:00PM
Acquisition Started	: 3/30/2011 8:13:22AM
Procedure	: Non Standard Geometry
Operator	: RCT
Detector Name	: PGTLYNX
Geometry	: Non Standard Geometry
Live Time	: 3600.0 seconds
Real Time	: 3601.6 seconds
Dead Time	: 0.04 %
Peak Locate Threshold	: 3.00
Peak Locate Range (in channels)	: 40 - 4096
Peak Area Range (in channels)	: 40 - 4096
Identification Energy Tolerance	: 1.000 keV
Energy Calibration Used Done On	: 3/3/2011
Efficiency Calibration Used Done On	: 3/11/2011
Efficiency Calibration Description	: PGTL NSTD 030711EC SN28751A-238
Sample Number	: 13037

"Qualitative Only"

INTERFERENCE CORRECTED REPORT

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/grams)	Wt mean Activity Uncertainty	Comments
K-40	0.994	1.42E+01	2.31E+00	
PB-212	0.711	3.99E-01	9.30E-02	
TH-232d	0.601	5.08E-01	1.07E-01	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

J1C300601

Sample Check-in List

Date/Time Received: 3.30.11 1530 GM Screen Result (out) .3 (in) .8 Initials CK

Client: WCH SDG #: J01053 NA [ ] SAF #: RC-190 NA [ ]

Work Order Number: J1C300601 Chain of Custody # RC-190-042

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 [CK]

Item 6 through 10 for samples. Initial appropriate response.

6. Number of samples in shipping container (Each sample may contain multiple bottles): 2 samples @ 1X JARGO MLG & 1X 500MLP per
7. Sample holding times exceeded? NA [ ] Yes [ ] No [CK]
8. Samples have:
   CK tape
   CK custody seals (soil)
   CK hazard labels
   CK appropriate sample labels
9. Samples:
   CK are in good condition
   ____ are broken
   ____ are leaking
   ____ have air bubbles (Only for samples requiring no head space)
10. Sample pH appropriate for analysis requested Yes [ ] No [ ] N/A [CK] (Note discrepancies in #13)
    (If acidification necessary, then document sample ID, initial pH, amount of HNO_3 added and pH after addition)

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

See other side for additional comments

Sample Custodian: [signature] Date: 3.30.11 1530

Client Informed on _____ by _____ Person contacted _____

[✓] No action necessary; process as is

Project Manager [signature] Date 3/30/11

LS-023, Rev. 12, 10/10

4/1/2011 1:07:41 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: 04/20/2011

Sep1 DT/Tm Tech: 14:20 4/12/11 APA

Sep2 DT/Tm Tech:

Batch: 1090139 SOIL pCi/g PM, Quote: RW2, 27038

SEQ Batch, Test: None All Tests: 1090124 AXTA, 1090127 ATS6, 1090129 5SS3, 1090135 AFS4, 1090138 ANS5, 1090139 CHTH, 1090267 DWEA,

Prep Tech: ,BouslaughP

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MGD00-1-AC J1C300592-1-SAMP 03/29/2011 12:45		6.02g,in AmtRec: 1XJAR60MLG,1X500MLP #Containers: 2	SRTA20748 02/25/11	1.5	1.4852g -1.4163g 68.9mg	50min	26A Scr:	0645 Alpha:	4/12/11 Beta:	
2 MGD1K-1-AC J1C300592-2-SAMP 03/29/2011 13:20		6.01g,in AmtRec: 1XJAR60MLG,1X500MLP #Containers: 2	SRTA20749 02/25/11		1.4805g -1.4070g 73.5mg		26B Scr:	Alpha:	Beta:	
3 MGD5X-1-AC J1C300601-1-SAMP 03/30/2011 08:40		6.00g,in AmtRec: 1XJAR60MLG,1X500MLP #Containers: 2	SRTA20750 02/25/11		1.4901g -1.4153g 74.8mg		26C Scr:	Alpha:	Beta:	
4 MGD51-1-AC J1C300601-2-SAMP 03/30/2011 08:10		5.99g,in AmtRec: 1XJAR60MLG,1X500MLP #Containers: 2	SRTA20845 03/16/11		1.4926g -1.4208g 71.8mg		26D Scr:	Alpha:	Beta:	
5 MGD51-1-AK-X J1C300601-2-DUP 03/30/2011 08:10		5.99g,in AmtRec: 1XJAR60MLG,1X500MLP #Containers: 2	SRTA20846 03/16/11		1.4876g -1.4166g 71.0mg		27A Scr:	Alpha:	Beta:	
6 MGEF7-1-AA-B J1C310000-139-BLK 03/31/2011 09:07 pd		6.00g,in AmtRec: #Containers: 1	SRTA20847 03/16/11		1.5014g -1.4078g 93.6mg		27B Scr:	Alpha:	Beta:	
7 MGEF7-1-AC-C J1C310000-139-LCS 03/31/2011 09:07 pd		6.00g,in AmtRec: #Containers: 1	STSB1558 03/10/11		1.5137g -1.4183g 95.4mg		27C Scr:	Alpha:	Beta:	

4/1/2011 1:07:42 PM

Sample Preparation/Analysis

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

Balance Id:1120373922

Pipet #: _____

AnalyDueDate: 04/20/2011

Sep1 DT/Tm Tech:

Batch: 1090139 pCi/g
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BouslaughP

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

Comments: ~~MGD1K SAMP "ISV. Recount DUP on a different detector."~~ ~~4/12/11 APA~~
4/11/11 APA

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

MGD001AC-SAMP Constituent List:
Sr-90 RDL:1 pCi/g LCL:70 UCL:130 RPD:35
MGEF71AA-BLK:
Sr-90 RDL:1 pCi/g LCL: UCL: RPD:
MGEF71AC-LCS:
Sr-90 RDL:1 pCi/g LCL:70 UCL:130 RPD:35

MGD001AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGEF71AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGEF71AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

4/13/2011 3:21:54 PM

ICOC Fraction Transfer/Status Report

ByDate: 4/13/2010, 4/18/2011, Batch: '1090139', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
1090139						
AC		Rev1C	**BouslaughP**	4/1/2011 12:50:22 PM		
SC			Maucieris	IsBatched	3/31/2011 9:16:51 AM	ICOC_RADCALC v4.8.49
SC			BouslaughP	InPrep	4/1/2011 12:50:22 PM	RL-PRP-003 REVISION 1
SC			BouslaughP	Prep1C	4/5/2011 7:34:32 AM	RL-PRP-003 REVISION 1
SC			ManisD	Prep2C	4/7/2011 7:14:52 PM	RL-GPC-003 REVISION 1
SC			AshworthA	Sep2C	4/11/2011 9:24:11 PM	RL-GPC-003 REVISION 1
SC			DawkinsO	InCnt1	4/11/2011 11:25:18 PM	RL-CI-006 REVISION 1
SC			ClarkR	CalcC	4/12/2011 8:46:12 AM	RL-CI-006 REVISION 1
SC			nortonj	Rev1C	4/13/2011 3:19:06 PM	RL-DR-001 Rev 2
AC			**BouslaughP**	4/5/2011 7:34:32 AM		
AC			**ManisD**	4/7/2011 7:14:52 PM		
AC			**AshworthA**	4/11/2011 9:24:11 PM		
AC			**DawkinsO**	4/11/2011 11:25:18		
AC			**ClarkR**	4/12/2011 8:46:12		
AC			**nortonj**	4/13/2011 3:19:06 PM		

AC: Accepting Entry; SC: Status Change

TestAmerica Richland

Richland Wa.

Grp Rec Cnt: 7

ICOCFractions v4.8.44

WCH Soil

4/1/2011 3:10:42 PM

Sample Preparation/Analysis

127642, Washington Closure Hanford LLC
Bechtel Hanford, Inc.

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

Balance Id:1120421763
Pipet #:

AnalyDueDate: 04/20/2011

Sep1 DT/Tm Tech:

Batch: 1090124 SOIL pCi/g PM, Quote: RW2, 27038
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BouslaughP

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MGD00-1-AG J1C300592-1-SAMP 03/29/2011 12:45			396.70g,in AmtRec: 1XJAR60MLG,1X500MLP #Containers: 2	396.70g		5200 gco	200 min	G13	0535	4/2/11 GRO	
2 MGD1K-1-AG J1C300592-2-SAMP 03/29/2011 13:20			394.70g,in AmtRec: 1XJAR60MLG,1X500MLP #Containers: 2	394.70g				~~G13~~ G13	1025	~~4/2/11~~ 4/2/11	
3 MGD1K-1-AJ-X J1C300592-2-DUP 03/29/2011 13:20		ISV	AmtRec: 1XJAR60MLG,1X500MLP #Containers: 2					G11	0730	4/8/11 S	
4 MGD5X-1-AG J1C300601-1-SAMP 03/30/2011 08:40			47.90g,in AmtRec: 1XJAR60MLG,1X500MLP #Containers: 2	47.90g		525 gco		G7	0536	4/2/11 ORE	
5 MGD51-1-AG J1C300601-2-SAMP 03/30/2011 08:10			50.30g,in AmtRec: 1XJAR60MLG,1X500MLP #Containers: 2	50.30g				G11	0536		
6 MGEE8-1-AA-B J1C310000-124-BLK 03/31/2011 09:07 pd			348.00g,in AmtRec: #Containers: 1	348.00g		5200 gco		G10	0538		
7 MGEE8-1-AC-C J1C310000-124-LCS 03/31/2011 09:07 pd			350.10g,in AmtRec: #Containers: 1	350.10g	QC20009 08/04/09,pd 09/01/09,r			~~G13~~ G14	0730	~~4/2/11~~ 4/8/11	

TestAmerica Laboratories, Inc.

4/1/2011 3:10:43 PM

Sample Preparation/Analysis

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

Balance Id:1120373922

Pipet #: _____

AnalyDueDate: 04/20/2011

Sep1 DT/Tm Tech:

Batch: 1090124 pCi/g

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BouslaughP

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

Comments: MGD1K-SAMP "ISV. Recount DUP on a different detector."

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

MGD001AG-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:

MGEE81AA-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:

MGEE81AC-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						

MGD001AG-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

MGEE81AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

MGEE81AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

TestAmerica Laboratories, Inc.

4/12/2011 1:48:52 PM

ICOC Fraction Transfer/Status Report

ByDate: 4/12/2010, 4/17/2011, Batch: '1090124', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
1090124						
AC		**Rev1C**	**BouslaughP**	3/31/2011 11:23:22		
SC			Maucieris	IsBatched	3/31/2011 9:15:04 AM	ICOC_RADCALC v4.8.49
SC			BouslaughP	InPrep	3/31/2011 11:23:22 AM	RL-GAM-001 REVISION 1
SC			BouslaughP	Prep1C	4/1/2011 3:12:50 PM	RL-GAM-001 REVISION 1
SC			DawkinsO	InCnt1	4/1/2011 3:29:24 PM	RL-CI-007 REVISION 1
SC			ClarkR	CalcC	4/8/2011 9:52:57 AM	RL-CI-007 REVISION 1
SC			WhelandS	Rev1C	4/8/2011 1:37:20 PM	RL-DR-001 Rev 2
AC			**BouslaughP**	4/1/2011 3:12:50 PM		
AC			**DawkinsO**	4/1/2011 3:29:24 PM		
AC			**ClarkR**	4/8/2011 9:52:57 AM		
AC			**WhelandS**	4/8/2011 1:37:20 PM		

AC: Accepting Entry; SC: Status Change

4/1/2011 1:52:27 PM

Sample Preparation/Analysis

Balance Id:1120373922

127642, Washington Closure Hanford LLC
Bechtel Hanford, Inc.

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

Pipet #: _____

AnalyDueDate: 04/20/2011

Sep1 DT/Tm Tech:

Batch: 1090138 SOIL pCi/g PM, Quote: RW2, 27038

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BouslaughP

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MGD00-1-AE J1C300592-1-SAMP 03/29/2011 12:45		1.99g,in AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
2 MGD1K-1-AE J1C300592-2-SAMP 03/29/2011 13:20		1.99g,in AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
3 MGD5X-1-AE J1C300601-1-SAMP 03/30/2011 08:40		1.99g,in AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
4 MGD5X-1-AK-X J1C300601-1-DUP 03/30/2011 08:40		2.01g,in AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
5 MGD51-1-AE J1C300601-2-SAMP 03/30/2011 08:10		2.01g,in AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
6 MGD51-1-AJ-S J1C300601-2-MS 03/30/2011 08:10		2.02g,in AmtRec: 1XJAR60MLG,1X500MLP	TCSG3101 12/21/10,pd 01/01/87,r #Containers: 2			Scr:	Alpha:	Beta:
7 MGEF5-1-AA-B J1C310000-138-BLK 03/31/2011 09:07 pd		2.01g,in AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

TestAmerica Laboratories, Inc.

4/1/2011 1:52:28 PM

Sample Preparation/Analysis

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

Balance Id:1120373922
Pipet #: _____

AnalyDueDate: 04/20/2011

Sep1 DT/Tm Tech:

Batch: 1090138 pCi/g

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BouslaughP

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 MGEF5-1-AC-C J1C310000-138-LCS 03/31/2011 09:07 pd		2.00g,in AmtRec:	TCSF2299 03/08/11,pd 01/01/87,r #Containers: 1			Scr:	Alpha:	Beta:
9 MGEF5-1-AD-BN J1C310000-138-IBLK 03/31/2011 09:07 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

Comments: MGD1K-SAMP "ISV. Recount DUP on a different detector."

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

MGD001AE-SAMP Constituent List:
Tc-99 RDL:15 pCi/g LCL:70 UCL:130 RPD:35
MGD511AJ-MS:

MGEF51AA-BLK:
Tc-99 RDL:15 pCi/g LCL: UCL: RPD:
MGEF51AC-LCS:
Tc-99 RDL:15 pCi/g LCL:70 UCL:130 RPD:35
MGEF51AD-IBLK:
Tc-99 RDL:15 pCi/g LCL: UCL: RPD:

MGD001AE-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGD511AJ-MS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGEF51AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGEF51AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGEF51AD-IBLK:

Sample Preparation/Analysis

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

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

AnalyDueDate: 04/20/2011

Batch: 1090138 pCi/g
SEQ Batch, Test: None

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

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

TestAmerica Laboratories, Inc.

4/8/2011 4:19:32 PM

ICOC Fraction Transfer/Status Report

ByDate: 4/8/2010, 4/13/2011, Batch: '1090138', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
1090138						
AC		Rev1C	**BouslaughP**	4/1/2011 1:39:21 PM		
SC			Mauclerls	IsBatched	3/31/2011 9:16:41 AM	ICOC_RADCALC v4.8.49
SC			BouslaughP	InPrep	4/1/2011 1:39:21 PM	RL-PRP-003 REVISION 1
SC			BouslaughP	Prep1C	4/4/2011 2:34:26 PM	RL-PRP-003 REVISION 1
SC			LuksicS	Sep2C	4/7/2011 11:33:08 AM	RL-LSC-013 REVISION 1
SC			ClarkR	InCnt1	4/7/2011 2:03:45 PM	RL-CI-005 REVISION 1
SC			WhelandS	Rev1C	4/8/2011 4:19:06 PM	RL-DR-001 Rev 2
AC			**BouslaughP**	4/4/2011 2:34:26 PM		
AC			**LuksicS**	4/7/2011 11:33:08		
AC			**ClarkR**	4/7/2011 2:03:45 PM		
AC			**WhelandS**	4/8/2011 4:19:06 PM		

AC: Accepting Entry; SC: Status Change

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03/31/2011 9:07:59 AM

Sample Preparation/Analysis

127642, Washington Closure Hanford LLC
Bechtel Hanford, Inc.

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

AnalyDueDate: 04/20/2011

Batch: 1090127 SOIL pCi/g PM, Quote: RW2, 27038
SEQ Batch, Test: None

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

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MGD00-1-AF J1C300592-1-SAMP 03/29/2011 12:45		AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
2 MGD1K-1-AF J1C300592-2-SAMP 03/29/2011 13:20		AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
3 MGD1K-1-AK-X J1C300592-2-DUP 03/29/2011 13:20		AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
4 MGD5X-1-AF J1C300601-1-SAMP 03/30/2011 08:40		AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
5 MGD51-1-AF J1C300601-2-SAMP 03/30/2011 08:10		AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
6 MGEFG-1-AA-B J1C310000-127-BLK 03/31/2011 09:07 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
7 MGEFG-1-AC-C J1C310000-127-LCS 03/31/2011 09:07 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

03/31/2011 9:07:59 AM

Sample Preparation/Analysis

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

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

AnalyDueDate: 04/20/2011

Batch: 1090127 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 MGEFG-1-AD-BN								
J1C310000-127-IBLK								
03/31/2011 09:07 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

Comments:

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

MGD001AF-SAMP Constituent List:
H-3 RDL:400 pCi/g LCL:70 UCL:130 RPD:35
MGEFG1AA-BLK:

MGEFG1AC-LCS:

MGEFG1AD-IBLK:

MGD001AF-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGEFG1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGEFG1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGEFG1AD-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

TestAmerica Laboratories, Inc.

4/8/2011 3:14:49 PM

ICOC Fraction Transfer/Status Report

ByDate: 4/8/2010, 4/13/2011, Batch: '1090127', User: *ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting			Comments
1090127							
AC		RL-LSC-0	Sep1C	WagnerF	4/6/2011 7:32:54 AM		
SC				WagnerF	Sep1C	4/6/2011 7:32:54 AM	REVISION 1
1090127							
AC			Rev1C	ClarkR	4/6/2011 10:58:10		
SC				Maucleris	IsBatched	3/31/2011 9:16:16 AM	ICOC_RADCALC v4.8.49
SC				ClarkR	InCnt1	4/6/2011 10:58:10 AM	RL-CI-005 REVISION 1
SC				DawkinsO	CalcC	4/8/2011 12:30:36 AM	RL-CI-005 REVISION 1
SC				WhelandS	Rev1C	4/8/2011 3:14:39 PM	RL-DR-001 Rev 2
AC				DawkinsO	4/8/2011 12:30:36		
AC				WhelandS	4/8/2011 3:14:39 PM		

AC: Accepting Entry; SC: Status Change

51 [redacted]

03/31/2011 9:08:00 AM

Sample Preparation/Analysis

127642, Washington Closure Hanford LLC
Bechtel Hanford, Inc.

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

AnalyDueDate: 04/20/2011

Batch: 1090129 SOIL pCi/g PM, Quote: RW2, 27038
SEQ Batch, Test: None

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

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MGD00-1-AH J1C300592-1-SAMP 03/29/2011 12:45		5.039g AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
2 MGD1K-1-AH J1C300592-2-SAMP 03/29/2011 13:20		5.004g AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
3 MGD1K-1-AL-X J1C300592-2-DUP 03/29/2011 13:20		5.009g AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
4 MGD5X-1-AH J1C300601-1-SAMP 03/30/2011 08:40		5.039g AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
5 MGD51-1-AH J1C300601-2-SAMP 03/30/2011 08:10		5.023g AmtRec: 1XJAR60MLG,1X500MLP	#Containers: 2			Scr:	Alpha:	Beta:
6 MGEFL-1-AA-B J1C310000-129-BLK 03/31/2011 09:07 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
7 MGEFL-1-AC-C J1C310000-129-LCS 03/31/2011 09:07 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

TestAmerica Laboratories, Inc.

3/31/2011 9:08:00 AM

Sample Preparation/Analysis

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

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

AnalyDueDate: 04/20/2011

Batch: 1090129 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 MGEFL-1-AD-BN								
J1C310000-129-IBLK								
03/31/2011 09:07 pd		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

Comments:

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

MGD001AH-SAMP Constituent List:
C-14 RDL:50 pCi/g LCL:70 UCL:130 RPD:35
MGEFL1AA-BLK:

MGEFL1AC-LCS:

MGEFL1AD-IBLK:

MGD001AH-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGEFL1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGEFL1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGEFL1AD-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

4/7/2011 10:08:40 AM

ICOC Fraction Transfer/Status Report

ByDate: 4/7/2010, 4/12/2011, Batch: '1090129', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus		Accepting		Comments
1090129						
AC		Rev1C	WagnerF	4/5/2011 2:00:18 PM		
SC			MauclerIs	IsBatched	3/31/2011 9:16:27 AM	ICOC_RADCALC v4.8.49
SC			WagnerF	Sep1C	4/5/2011 2:00:18 PM	RL-LSC-008 REVISION 1
SC			ClarkR	InCnt1	4/5/2011 4:10:43 PM	RL-CI-005 REVISION 1
SC			DawkinsO	CalcC	4/6/2011 10:33:28 PM	RL-CI-005 REVISION 1
SC			antonsonl	Rev1C	4/7/2011 10:08:04 AM	RL-DR-001 Rev 2
AC			ClarkR	4/5/2011 4:10:43 PM		
AC			DawkinsO	4/6/2011 10:33:28 PM		
AC			antonsonl	4/7/2011 10:08:04		

AC: Accepting Entry; SC: Status Change

4/1/2011 1:37:25 PM

Sample Preparation/Analysis

Balance Id:1120373922

127642, Washington Closure Hanford LLC
Bechtel Hanford, Inc.

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

Pipet #: _____

AnalyDueDate: 04/20/2011

Sep1 DT/Tm Tech:

Batch: 1090135 SOIL pCi/g PM, Quote: RW2, 27038

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BouslaughP

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MGD00-1-AD J1C300592-1-SAMP 03/29/2011 12:45		AmtRec: 1XJAR60MLG,1X500MLP	0.25g,in #Containers: 2	0.25g	NITA3851 01/11/11	20min		Scr:	Alpha:	Beta:
2 MGD1K-1-AD J1C300592-2-SAMP 03/29/2011 13:20		AmtRec: 1XJAR60MLG,1X500MLP	0.26g,in #Containers: 2	0.26g	NITA3852 01/11/11			Scr:	Alpha:	Beta:
3 MGD5X-1-AD J1C300601-1-SAMP 03/30/2011 08:40		AmtRec: 1XJAR60MLG,1X500MLP	0.26g,in #Containers: 2	0.26g	NITA3853 01/11/11			Scr:	Alpha:	Beta:
4 MGD5X-1-AJ-X J1C300601-1-DUP 03/30/2011 08:40		AmtRec: 1XJAR60MLG,1X500MLP	0.25g,in #Containers: 2	0.25g	NITA3854 01/11/11			Scr:	Alpha:	Beta:
5 MGD51-1-AD J1C300601-2-SAMP 03/30/2011 08:10		AmtRec: 1XJAR60MLG,1X500MLP	0.26g,in #Containers: 2	0.26g	NITA3855 01/11/11			Scr:	Alpha:	Beta:
6 MGEFX-1-AA-B J1C310000-135-BLK 03/31/2011 09:07 pd		AmtRec:	0.25g,in #Containers: 1	0.25g	NITA3856 01/11/11			Scr:	Alpha:	Beta:
7 MGEFX-1-AC-C J1C310000-135-LCS 03/31/2011 09:07 pd		AmtRec:	0.25g,in #Containers: 1	0.25g	NISA1326 10/27/10			Scr:	Alpha:	Beta:

TestAmerica Laboratories, Inc.

4/1/2011 1:37:26 PM

Sample Preparation/Analysis

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

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

AnalyDueDate: 04/20/2011

Batch: 1090135 pCi/g
SEQ Batch, Test: None

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 MGEFX-1-AD-BN										
J1C310000-135-IBLK										
03/31/2011 09:07 pd		AmtRec:	#Containers: 1				Scr:	Alpha:		Beta:

Comments: MGD1K-SAMP "ISV. Recount DUP on a different detector."

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

MGD001AD-SAMP Constituent List:
Ni-63 RDL:30 pCi/g LCL:70 UCL:130 RPD:35
MGEFX1AA-BLK:
Ni-63 RDL:30 pCi/g LCL: UCL: RPD:
MGEFX1AC-LCS:
Ni-63 RDL:30 pCi/g LCL:70 UCL:130 RPD:35
MGEFX1AD-IBLK:
Ni-63 RDL:30 pCi/g LCL: UCL: RPD:

MGD001AD-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGEFX1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGEFX1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGEFX1AD-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

4/11/2011 2:18:44 PM

ICOC Fraction Transfer/Status Report

ByDate: 4/11/2010, 4/16/2011, Batch: '1090135', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord.	CurStatus	Accepting			Comments
1090135						
AC		Rev1C	**BouslaughP**	4/1/2011 1:11:26 PM		
SC			Maucieris	IsBatched	3/31/2011 9:16:33 AM	ICOC_RADCALC v4.8.49
SC			BouslaughP	InPrep	4/1/2011 1:11:26 PM	RL-PRP-003 REVISION 1
SC			BouslaughP	Prep1C	4/5/2011 7:26:51 AM	RL-PRP-003 REVISION 1
SC			LuksicS	Sep1C	4/6/2011 5:11:03 PM	RL-LSC-017 REVISION 1
SC			DawkinsO	InCnt1	4/6/2011 5:43:53 PM	RL-CI-005 REVISION 1
SC			ClarkR	InCalc	4/11/2011 12:18:36 PM	RL-CI-005 REVISION 1
SC			nortonj	Rev1C	4/11/2011 2:18:36 PM	RL-DR-001 Rev 2
AC			**BouslaughP**	4/5/2011 7:26:51 AM		
AC			**LuksicS**	4/6/2011 5:11:03 PM		
AC			**DawkinsO**	4/6/2011 5:43:53 PM		
AC			**ClarkR**	4/11/2011 12:18:36		
AC			**nortonj**	4/11/2011 2:18:36 PM		

AC: Accepting Entry; SC: Status Change

3/31/2011 11:59:34 AM

Sample Preparation/Analysis

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

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

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

AnalyDueDate: 04/20/2011

Batch: 1090267 SOIL mg/kg PM, Quote: RW2, 27038

SEQ Batch, Test: None All Tests: 1090124 AXTA, 1090127 ATS6, 1090129 5SS3, 1090135 AFS4, 1090138 ANS5, 1090139 CHTH, 1090267
DWEA,

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MGD00-1-AA										
J1C300592-1-SAMP										
03/29/2011 12:45		AmtRec: 1XJAR60MLG,1X500MLP		#Containers: 2				Scr:	Alpha:	Beta:
2 MGD1K-1-AA										
J1C300592-2-SAMP										
03/29/2011 13:20		AmtRec: 1XJAR60MLG,1X500MLP		#Containers: 2				Scr:	Alpha:	Beta:
3 MGD5X-1-AA										
J1C300601-1-SAMP										
03/30/2011 08:40		AmtRec: 1XJAR60MLG,1X500MLP		#Containers: 2				Scr:	Alpha:	Beta:
4 MGD5X-1-AL-S										
J1C300601-1-MS										
03/30/2011 08:40		AmtRec: 1XJAR60MLG,1X500MLP		#Containers: 2				Scr:	Alpha:	Beta:
5 MGD5X-1-AM-D										
J1C300601-1-MSD										
03/30/2011 08:40		AmtRec: 1XJAR60MLG,1X500MLP		#Containers: 2				Scr:	Alpha:	Beta:
6 MGD5X-1-AN-X										
J1C300601-1-DUP										
03/30/2011 08:40		AmtRec: 1XJAR60MLG,1X500MLP		#Containers: 2				Scr:	Alpha:	Beta:
7 MGD51-1-AA										
J1C300601-2-SAMP										
03/30/2011 08:10		AmtRec: 1XJAR60MLG,1X500MLP		#Containers: 2				Scr:	Alpha:	Beta:

03/31/2011 11:59:34 AM

Sample Preparation/Analysis

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

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

AnalyDueDate: 04/20/2011

Batch: 1090267 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 MGE43-1-AA-B J1C310000-267-BLK 03/31/2011 11:59 pd		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:
9 MGE43-1-AC-C J1C310000-267-LCS 03/31/2011 11:59 pd		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:

Comments: MGD1K-SAMP "ISV. Recount DUP on a different detector."

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

MGD001AA-SAMP Constituent List:
HEXCHROME RDL:0.1548 mg/kg LCL:80 UCL:120 RPD:20
MGD5X1AL-MS:

MGD5X1AM-MSD:

MGE431AA-BLK:

MGE431AC-LCS:

MGD001AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGD5X1AL-MS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGD5X1AM-MSD:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGE431AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
MGE431AC-LCS:

TestAmerica Laboratories, Inc.

Sample Preparation/Analysis

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

AnalyDueDate: 04/20/2011

Batch: 1090267 mg/kg
SEQ Batch, Test: None

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

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

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 280-14083-1

SDG Number: J01053

Job Description: SAF# RC-190

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

Attention: Joan H Kessner

RECEIVED

Approved for release.
Michael T Dedio
Project Mgmt. Assistant
4/26/2011 11:06 AM

Designee for
Kae E Yoder
Project Manager II
kae.yoder@testamericainc.com
04/26/2011

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

The Lab Certification ID# is E87667.

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

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

ACCREDITED IN ACCORDANCE WITH nelac

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CASE NARRATIVE

Client: Washington Closure Hanford

Project: WASHINGTON CLOSURE HANFORD

Report Number: 280-14083-1

SDG #: J01053
SAF#: RC-190

Date SDG Closed: April 1, 2011
Data Deliverable: 21 Day / Summary

CLIENT ID	LAB ID	ANALYSES REQUESTED	ANALYSES PERFORMED
J1H0C3	280-14083-1	6010/7471/1311-6010-7470/9056M/353.2/ 9045/WTPH-D+/8260A/8270A/8082/8310/ 8081/8151	6010B/7471A/9056M/353.2/9045C/NWTPH-Dx/ 8260B/8270C/8082/8310/8081A/8151A
J1H0C5	280-14083-2	6010/7471/9056M/353.2/9045/WTPH-D+/ 9045/WTPH-D+/8260A/8270A/8082/8310/ 8081/8151	6010B/7471A/9056M/353.2/9045C/NWTPH-Dx/ 8260B/8270C/8082/8310/8081A/8151A
J1H0K2	280-14129-1	6010/7471/9056M/353.2/9045/WTPH-D+/ 9045/WTPH-D+/8260A/8270A/8082/8310/ 8081/8151	6010B/7471A/9056M/353.2/9045C/NWTPH-Dx/ 8260B/8270C/8082/8310/8081A/8151A
J1H0K3	280-14129-2	6010/7471/9056M/353.2/9045/WTPH-D+/ 9045/WTPH-D+/8260A/8270A/8082/8310/ 8081/8151	6010B/7471A/9056M/353.2/9045C/NWTPH-Dx/ 8260B/8270C/8082/8310/8081A/8151A

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
Samples J1H0C3 and J1H0C5 were received on 3/31/2011; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 3.7 C.

Samples J1H0K2 and J1H0K3 were received on 4/1/2011; the samples arrived in good condition, properly preserved and on ice. The temperatures of the coolers at receipt were 3.4 C, 4.2 C and 2.7 C.

GC/MS VOLATILES - SW846 8260C
The MS/MSD performed on sample J1H0K3 exhibited percent recoveries outside the control limits for Chlorobenzne, 1,3-Dichlorobenzene, Ethylbenzene and Tetrachloroethene, and the associated sample results have 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/MS SEMIVOLATILES - SW846 8270C
Low levels of Bis(2-ethylhexyl) phthalate are present in the method blank associated with batch 280-60672. Because the concentrations in the method blank are not present at levels greater than the reporting limits, corrective action is deemed unnecessary. Associated sample results present above the MDL and/or RL have been flagged with a "B".

Compounds Benzo(b)fluoranthene and Benzo(k)fluoranthene were unresolved in sample J1H0C5 due to matrix interferences. It can be noted that these compounds were adequately resolved in associated standards, indicating the instrument is achieving separation. The combined peak was reported as Benzo(b)fluoranthene, while Benzo(k)fluoranthene was reported as undetected even though it may be present. Associated results have been flagged with a "K".

No other anomalies were encountered.

GC SEMIVOLATILES - SW846 8081A - PESTICIDEs

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".

The MS aliquot of the MS/MSD performed on sample J1H0C5 exhibited a spike compound recovery for 4,4'-DDE outside the control limits, and the associated sample results have been flagged "N". The RDP was also outside of control limits. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary.

The MS/MSD performed on sample J1H0K3 exhibited spike compound recoveries for Endrin outside the control limits, and the associated sample results have been flagged "N". The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary.

A Continuing Calibration Verification (CCV) standard, for batch 280-61768, exhibited %Difference (%D) values >15%, biased high, as detailed below. The overall mean %D is ≤15%; therefore, method criteria have been met and corrective action is deemed unnecessary.

Sequence: CCV1, CCV2, LCS, J1H0K2, J1H0K2, MB CCV3

CCV1 primary column	CCV1 confirmation column
All OK	All OK

CCV2 primary column	CCV2 confirmation column
Methoxychlor +16.5%	4,4'-DDE +18.7%
	4,4'-DDT +24.3%
	Delta-BHC +17.8%
	Endrin +23.8%
	Gamma-BHC 16.1%
	Methoxychlor +18.7%

CCV3 primary column	CCV3 confirmation column
All Ok	4,4'-DDE +21.2%
	4,4'-DDT +26.5%
	delta-BHC +17.6%
	Endrin +25.1
	Endrin ketone +15.6%
	gamma-BHC +16.2%
	Methoxychlor +23.2%

A Continuing Calibration Verification (CCV) standard, for batch 280-60667, exhibited %Difference (%D) values >15%, biased high, as detailed below. The overall mean %D is ≤15%; therefore, method criteria have been met and corrective action is deemed unnecessary.

Sequence: CCV1, LCS, J1H0C3 MB, CCV2, J1H0C5, MS, MSD, CCV3

CCV1 primary column	CCV1 confirmation column
4,4'-DDT +16.2%	4,4'-DDT +21.3%
Methoxychlor +15.9%	Methoxychlor +24.6%

CCV2 primary column	CCV2 confirmation column
All Ok	4,4'-DDT +32.0%
	Heptachlor +15.7%
	Methoxychlor +37.1%

CCV3 primary column	CCV3 confirmation column
All Ok	Endrin +16.7%

No other anomalies were encountered.

GC SEMIVOLATILES - SW846 8082 - PCBs

The sample J1H0K3 presented in this report appears to contain polychlorinated biphenyls (PCBs); however, due to weathering or other environmental processes, the PCBs in the sample do not closely match any of the laboratory's Aroclor standards used for instrument calibration. The sample has been quantified and reported as Aroclor 1260; however, due to the poor match with the Aroclor standard(s), there is increased qualitative and quantitative uncertainty associated with these results.

The LCS associated with batch 280-61774 failed the recovery criteria high for Arochlor 1260 and surrogate Decachlorobiphenyl. As no detectable concentrations of Arochlor 1260 are present in the sample J1H0K2, data is reported and flagged "N" for Arochlor 1260. Sample J1H0K3 which has a hit for Arochlor 1260 was re-extracted and re-analyzed in batch 280-62528.

The MS/MSD performed on sample J1H0K3, in batch 280-61774, exhibited spike compound recoveries and RPD data outside the control limits, and the associated sample results have been flagged "N". Surrogate Tetrachloro-m-xylene also failed recovery criteria high. The laboratory noted matrix interference which interfered with the recoveries; therefore, corrective action is deemed unnecessary. Please note the parent sample was not reported in this batch due to the LCS failure mentioned above.

The method required MS/MSD could not be performed for batch 280-62528, due to insufficient sample volume submitted by the client. A duplicate LCS (LCSD) was analyzed to provide some evidence of batch precision.

The RPD between the primary and confirmation columns exceeded 25% for Aroclor 1254 in sample J1H0C5. The results have been flagged with a "P".

No other anomalies were encountered.

GC SEMIVOLATILES - SW846 8151A - Herbicides

The MSD aliquot of the MS/MSD performed on sample J1H0C5 exhibited a spike compound recovery for Dinoseb outside the control limits, and the associated sample results have been flagged "N". The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary.

A Continuing Calibration Verification (CCV) standard exhibited %Difference (%D) values >15%, as detailed below. The overall mean %D is ≤15%; therefore, method criteria have been met and corrective action is deemed unnecessary.

Sequence: CCV1, LCS, J1H0C3, J1H0C05, MS, MSD, J1H0K2, J1H0K3 MB, CCV2,

CCV1 primary column	CCV1 confirmation column
All okay	2,4,5-T +21%
	Dinoseb +24%
	2,4-DB -26%

CCV2 primary column	CCV2 confirmation column
DCAA +17%	2,4,5-T +23%
MCPP +16%	Dinoseb +29%
	MCPA +22%
	MCPP +16&
	Silvex +16

No other anomalies were encountered.

GC SEMIVOLATILES - NWTPH-Dx - DRO

Surrogate o-Terphenyl was recovered outside the control limits, biased high, in method blank for batch 61224. As no detectable concentrations are present in the method blank, the data are not adversely affected; therefore, corrective action is deemed unnecessary.

The MS/MSD performed on sample J1H0K3 exhibited spike compound recoveries outside the control limits, and the associated sample results have been flagged "N". The RDP data was also outside of 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.

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".

The MS/MSD performed on sample J1H0K3 exhibited spike compound recoveries outside the control limits for Acenaphthene, and the associated sample results have been flagged "N". The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary.

The continuing calibration verification (CCV) associated with batch 61770 was outside %D criteria for the individual peaks used for the quantitation of Benzo(g,h,i)perylene at +21.1%D on the confirmation channel. The average %D is in control for this analyte; therefore, corrective action was not performed.

No other anomalies were encountered.

TOTAL METALS - SW846 6010B/7471A

Serial dilution of a digestate in batch 280-60350 indicates that physical and chemical interferences are present for several elements. Serial dilution of a digestate in batch 280-60623 indicates that physical and chemical interferences are present for Iron. Results have been flagged with an "X".

Low levels of Barium and Chromium are present in the method blank associated with batch 280-60350. Because the concentrations in the method blank are not present at levels greater than the reporting limits, corrective action is deemed unnecessary.

It can be noted that the sample amount was greater than four times the spike amount for Aluminum, Iron and Manganese in the Matrix Spike performed on sample J1H0C3; therefore, control limits are not applicable.

The Cadmium and Mercury duplicate analysis of sample J1H0C5 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.

Low levels of Silicon are present in the method blank associated with batch 280-60623. Because the concentrations in the method blank are not present at levels greater than the reporting limits, corrective action is deemed unnecessary.

Silicon failed the recovery criteria low in the LCS associated with batch 280-60623, and the associated sample result has been flagged "N". Silicon is not controlled on for batch QC because there are not EPA prescribed limits for the LCS and MS recoveries. Limits are given to the client as guidance only; therefore, data are reported as is.

It can be noted that the sample amount was greater than four times the spike amount for Aluminum and Iron in the Matrix Spike performed on sample J1H0K2; therefore, control limits are not applicable.

Silicon was recovered outside the control limits in the SW846 6010B Matrix Spike analysis performed on sample J1H0K2, 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 Arsenic duplicate analysis of sample J1H0K2 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.

Mercury was recovered outside the control limits in the SW846 7471A Matrix Spike analysis performed on sample J1H0K3, 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 - MCAWW 353.2 - NITRATE+NITRITE

The Matrix Spike performed on samples J1H0C3 and J1H0K2 exhibited the percent recoveries outside the control limits, 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 9056M - ANIONS

The Fluoride Matrix Spike performed on sample J1H0K2 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 Orthophosphate as P Matrix Spikes performed on samples J1H0C3 and J1H0K2 exhibited the percent recoveries outside the control limits, 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 9045C - PH

No anomalies were encountered.

DATA REPORTING QUALIFIERS

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

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.
GC/MS Semi VOA		
	B	Analyte was found in the associated method blank as well as in the sample.
	U	Analyzed for but not detected.
	K	Benzo (b&k) fluoranthene are unresolved due to matrix, result is reported as Benzo(b)fluoranthene.
	J	Indicates an Estimated Value for TICs
	N	Presumptive evidence of material.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

DATA REPORTING QUALIFIERS

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Lab Section	Qualifier	Description
GC Semi VOA		
	U	Analyzed for but not detected.
	N	LCS, LCSD: Recovery exceeds upper or lower control limits.
	X	More than 40% difference between columns, lower result reported.
	N	MS, MSD: Spike recovery exceeds upper or lower control limits.
	*	MS/MSD RPD exceeded the control limit
	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
	P	This flag is used for an aroclor target analyte where there is greater than 25% difference for detected concentrations between the two GC columns
Metals		
	U	Analyzed for but not detected.
	B	Estimated result. Result is less than the RL, but greater than MDL
	4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
	N	Recovery exceeds upper or lower control limits
	M	Sample duplicate precision not met.
	X	Serial dilution in the analytical batch indicates that physical and chemical interferences are present.
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.

DATA REPORTING QUALIFIERS

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Lab Section	Qualifier	Description
HPLC/IC		
	U	Analyzed for but not detected.
	X	More than 40% difference between columns, lower result reported.
	N	MS, MSD: Spike recovery exceeds upper or lower control limits.
	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: 280-14083-1
Sdg Number: J01053

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Volatile Organic Compounds (GC/MS)	TAL DEN	SW846 8260B	
Purge and Trap	TAL DEN		SW846 5030B
Semivolatile Organic Compounds (GC/MS)	TAL DEN	SW846 8270C	
Ultrasonic Extraction	TAL DEN		SW846 3550C
Organochlorine Pesticides (GC)	TAL DEN	SW846 8081A	
Ultrasonic Extraction	TAL DEN		SW846 3550C
Polychlorinated Biphenyls (PCBs) by Gas Chromatography	TAL DEN	SW846 8082	
Ultrasonic Extraction	TAL DEN		SW846 3550C
Herbicides (GC)	TAL DEN	SW846 8151A	
Extraction (Herbicides)	TAL DEN		SW846 8151A
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
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: 280-14083-1
Sdg Number: J01053

Method	Analyst	Analyst ID
SW846 8260B	Reinhardt, Jason	JR
SW846 8270C	Kiekel, Daniel C	DCK
SW846 8270C	Tinkham, Sarah A	SAT
SW846 8081A	Ream, Brian E	BER
SW846 8082	Pavlakovich, Adam M	AMP
SW846 8151A	Wells, David	DW
NWTPH NWTPH-Dx	Birdsell, Matthew R	MRB
SW846 6010B	Bowen, Heidi E	HEB
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	Phan, Thu L	TLP
ASTM D-2216	Berry III, Paul B	PBB
SW846 8310	Hall, Koley J	KJH

SAMPLE SUMMARY

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-14083-1	J1H0C3	Solid	03/29/2011 1245	03/31/2011 0900
280-14083-2	J1H0C5	Solid	03/29/2011 1320	03/31/2011 0900
280-14129-1	J1H0K2	Solid	03/30/2011 0840	04/01/2011 0830
280-14129-2	J1H0K3	Solid	03/30/2011 0810	04/01/2011 0830

SAMPLE RESULTS

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0C3**

Lab Sample ID: 280-14083-1
Client Matrix: Solid
% Moisture: 7.0

Date Sampled: 03/29/2011 1245
Date Received: 03/31/2011 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-60985	Instrument ID:	MSV_J
Prep Method:	5030B	Prep Batch:	280-60736	Lab File ID:	J5875.D
Dilution:	1.0			Initial Weight/Volume:	5.374 g
Analysis Date:	04/05/2011 1404			Final Weight/Volume:	5 mL
Prep Date:	04/05/2011 0600				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		5.4	U	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
1,1-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		2.2	J	0.75	5.0
4-Methyl-2-pentanone (MIBK)		4.4	U	4.4	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	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	99		58 - 140
Toluene-d8 (Surr)	115		80 - 126
4-Bromofluorobenzene (Surr)	114		76 - 127
Dibromofluoromethane (Surr)	108		75 - 121

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0C3**

Lab Sample ID: 280-14083-1
Client Matrix: Solid
% Moisture: 7.0

Date Sampled: 03/29/2011 1245
Date Received: 03/31/2011 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-60985	Instrument ID:	MSV_J
Prep Method:	5030B	Prep Batch:	280-60736	Lab File ID:	J5875.D
Dilution:	1.0			Initial Weight/Volume:	5.374 g
Analysis Date:	04/05/2011 1404			Final Weight/Volume:	5 mL
Prep Date:	04/05/2011 0600				

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	9.19	7.6	N J
120-82-1	1,2,4-Trichlorobenzene	15.31	0.96	J N B J
87-68-3	Hexachlorobutadiene	15.50	2.3	J N B J
91-20-3	Naphthalene	15.61	1.2	J N B J
87-61-6	1,2,3-Trichlorobenzene	15.88	1.3	J N B J
	Unknown	16.06	9.7	N J

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0C5**

Lab Sample ID: 280-14083-2
Client Matrix: Solid

% Moisture: 7.9

Date Sampled: 03/29/2011 1320
Date Received: 03/31/2011 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-60985	Instrument ID:	MSV_J
Prep Method:	5030B	Prep Batch:	280-60736	Lab File ID:	J5876.D
Dilution:	1.0			Initial Weight/Volume:	5.860 g
Analysis Date:	04/05/2011 1427			Final Weight/Volume:	5 mL
Prep Date:	04/05/2011 0600				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		5.0	U	5.0	19
Benzene		0.44	U	0.44	4.6
Bromodichloromethane		0.20	U	0.20	4.6
Bromoform		0.21	U	0.21	4.6
Bromomethane		0.46	U	0.46	9.3
2-Butanone (MEK)		1.7	U	1.7	9.3
Carbon disulfide		0.39	U	0.39	4.6
Carbon tetrachloride		0.58	U	0.58	4.6
Chlorobenzene		0.50	U	0.50	4.6
Dibromochloromethane		0.53	U	0.53	4.6
Chloroethane		0.82	U	0.82	9.3
Chloroform		0.27	U	0.27	4.6
Chloromethane		0.71	U	0.71	9.3
1,1-Dichloroethane		0.19	U	0.19	4.6
1,2-Dichloroethane		0.65	U	0.65	4.6
1,1-Dichloroethene		0.55	U	0.55	4.6
1,2-Dichloroethene, Total		0.36	U	0.36	4.6
1,2-Dichloropropane		0.51	U	0.51	4.6
cis-1,3-Dichloropropene		1.2	U	1.2	4.6
trans-1,3-Dichloropropene		0.62	U	0.62	4.6
Ethylbenzene		0.62	U	0.62	4.6
2-Hexanone		4.5	U	4.5	19
Methylene Chloride		1.9	J	0.69	4.6
4-Methyl-2-pentanone (MIBK)		4.0	U	4.0	9.3
Styrene		0.58	U	0.58	4.6
1,1,2,2-Tetrachloroethane		0.57	U	0.57	4.6
Tetrachloroethene		0.59	J	0.55	4.6
Toluene		0.64	U	0.64	4.6
1,1,1-Trichloroethane		0.48	U	0.48	4.6
1,1,2-Trichloroethane		0.82	U	0.82	4.6
Trichloroethene		0.21	U	0.21	4.6
Vinyl chloride		1.2	U	1.2	4.6
Xylenes, Total		0.57	U	0.57	4.6

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	96		58 - 140
Toluene-d8 (Surr)	113		80 - 126
4-Bromofluorobenzene (Surr)	119		76 - 127
Dibromofluoromethane (Surr)	105		75 - 121

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0C5**

Lab Sample ID: 280-14083-2
Client Matrix: Solid
% Moisture: 7.9

Date Sampled: 03/29/2011 1320
Date Received: 03/31/2011 0900

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-60985	Instrument ID:	MSV_J
Prep Method:	5030B	Prep Batch:	280-60736	Lab File ID:	J5876.D
Dilution:	1.0			Initial Weight/Volume:	5.860 g
Analysis Date:	04/05/2011 1427			Final Weight/Volume:	5 mL
Prep Date:	04/05/2011 0600				

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Tentatively Identified Compound		None	
87-68-3	Hexachlorobutadiene	15.48	1.7	J N B J
91-20-3	Naphthalene	15.61	0.66	J B N J

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0K2**

Lab Sample ID: 280-14129-1
Client Matrix: Solid
% Moisture: 13.2

Date Sampled: 03/30/2011 0840
Date Received: 04/01/2011 0830

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-61383	Instrument ID:	MSV_J
Prep Method:	5030B	Prep Batch:	280-60901	Lab File ID:	J5909.D
Dilution:	1.0			Initial Weight/Volume:	5.300 g
Analysis Date:	04/06/2011 1604			Final Weight/Volume:	5 mL
Prep Date:	04/06/2011 0917				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		5.8	U	5.8	22
Benzene		0.51	U	0.51	5.4
Bromodichloromethane		0.24	U	0.24	5.4
Bromoform		0.25	U	0.25	5.4
Bromomethane		0.54	U	0.54	11
2-Butanone (MEK)		2.0	U	2.0	11
Carbon disulfide		0.46	U	0.46	5.4
Carbon tetrachloride		0.68	U	0.68	5.4
Chlorobenzene		0.59	U	0.59	5.4
Dibromochloromethane		0.62	U	0.62	5.4
Chloroethane		0.97	U	0.97	11
Chloroform		0.32	U	0.32	5.4
Chloromethane		0.84	U	0.84	11
1,1-Dichloroethane		0.23	U	0.23	5.4
1,2-Dichloroethane		0.76	U	0.76	5.4
1,1-Dichloroethene		0.64	U	0.64	5.4
1,2-Dichloroethene, Total		0.42	U	0.42	5.4
1,2-Dichloropropane		0.60	U	0.60	5.4
cis-1,3-Dichloropropene		1.4	U	1.4	5.4
trans-1,3-Dichloropropene		0.73	U	0.73	5.4
Ethylbenzene		0.73	U	0.73	5.4
2-Hexanone		5.3	U	5.3	22
Methylene Chloride		0.81	U	0.81	5.4
4-Methyl-2-pentanone (MIBK)		4.7	U	4.7	11
Styrene		0.68	U	0.68	5.4
1,1,2,2-Tetrachloroethane		0.66	U	0.66	5.4
Tetrachloroethene		0.64	U	0.64	5.4
Toluene		0.75	U	0.75	5.4
1,1,1-Trichloroethane		0.56	U	0.56	5.4
1,1,2-Trichloroethane		0.96	U	0.96	5.4
Trichloroethene		0.25	U	0.25	5.4
Vinyl chloride		1.5	U	1.5	5.4
Xylenes, Total		0.66	U	0.66	5.4

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	94		58 - 140
Toluene-d8 (Surr)	117		80 - 126
4-Bromofluorobenzene (Surr)	117		76 - 127
Dibromofluoromethane (Surr)	106		75 - 121

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0K2**

Lab Sample ID: 280-14129-1
Client Matrix: Solid

% Moisture: 13.2

Date Sampled: 03/30/2011 0840
Date Received: 04/01/2011 0830

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-61383	Instrument ID:	MSV_J
Prep Method:	5030B	Prep Batch:	280-60901	Lab File ID:	J5909.D
Dilution:	1.0			Initial Weight/Volume:	5.300 g
Analysis Date:	04/06/2011 1604			Final Weight/Volume:	5 mL
Prep Date:	04/06/2011 0917				

Tentatively Identified Compounds **Number TIC's Found:** **1**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	16.05	7.4	N J

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0K3**

Lab Sample ID: 280-14129-2
Client Matrix: Solid
% Moisture: 9.9

Date Sampled: 03/30/2011 0810
Date Received: 04/01/2011 0830

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-60985	Instrument ID:	MSV_J
Prep Method:	5030B	Prep Batch:	280-60736	Lab File ID:	J5870.D
Dilution:	1.0			Initial Weight/Volume:	5.222 g
Analysis Date:	04/05/2011 1210			Final Weight/Volume:	5 mL
Prep Date:	04/05/2011 0600				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		5.7	U	5.7	21
Benzene		0.50	U	0.50	5.3
Bromodichloromethane		0.23	U	0.23	5.3
Bromoform		0.24	U	0.24	5.3
Bromomethane		0.53	U	0.53	11
2-Butanone (MEK)		1.9	U	1.9	11
Carbon disulfide		0.45	U	0.45	5.3
Carbon tetrachloride		0.67	U	0.67	5.3
Chlorobenzene		0.57	U T	0.57	5.3
Dibromochloromethane		0.61	U	0.61	5.3
Chloroethane		0.95	U	0.95	11
Chloroform		0.31	U	0.31	5.3
Chloromethane		0.82	U	0.82	11
1,1-Dichloroethane		0.22	U	0.22	5.3
1,2-Dichloroethane		0.74	U	0.74	5.3
1,1-Dichloroethene		0.63	U	0.63	5.3
1,2-Dichloroethene, Total		0.41	U	0.41	5.3
1,2-Dichloropropane		0.58	U	0.58	5.3
cis-1,3-Dichloropropene		1.4	U	1.4	5.3
trans-1,3-Dichloropropene		0.71	U	0.71	5.3
Ethylbenzene		0.71	U T	0.71	5.3
2-Hexanone		5.2	U	5.2	21
Methylene Chloride		0.80	U	0.80	5.3
4-Methyl-2-pentanone (MIBK)		4.6	U	4.6	11
Styrene		0.67	U T	0.67	5.3
1,1,2,2-Tetrachloroethane		0.65	U	0.65	5.3
Tetrachloroethene		0.63	U T	0.63	5.3
Toluene		0.73	U	0.73	5.3
1,1,1-Trichloroethane		0.55	U	0.55	5.3
1,1,2-Trichloroethane		0.93	U	0.93	5.3
Trichloroethene		0.24	U	0.24	5.3
Vinyl chloride		1.4	U	1.4	5.3
Xylenes, Total		0.65	U T	0.65	5.3

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	103		58 - 140
Toluene-d8 (Surr)	116		80 - 126
4-Bromofluorobenzene (Surr)	121		76 - 127
Dibromofluoromethane (Surr)	108		75 - 121

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0K3**

Lab Sample ID: 280-14129-2
Client Matrix: Solid
% Moisture: 9.9

Date Sampled: 03/30/2011 0810
Date Received: 04/01/2011 0830

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-60985	Instrument ID:	MSV_J
Prep Method:	5030B	Prep Batch:	280-60736	Lab File ID:	J5870.D
Dilution:	1.0			Initial Weight/Volume:	5.222 g
Analysis Date:	04/05/2011 1210			Final Weight/Volume:	5 mL
Prep Date:	04/05/2011 0600				

Tentatively Identified Compounds **Number TIC's Found:** 1

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Tentatively Identified Compound		None	
141-78-6	Ethyl acetate	5.63	13	

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0C3**

Lab Sample ID: 280-14083-1
Client Matrix: Solid
% Moisture: 7.0

Date Sampled: 03/29/2011 1245
Date Received: 03/31/2011 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-61044	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-60672	Lab File ID:	Y9326.D
Dilution:	1.0			Initial Weight/Volume:	31.2 g
Analysis Date:	04/05/2011 2257			Final Weight/Volume:	1000 uL
Prep Date:	04/04/2011 2115			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		11	U	11	340
Acenaphthylene		18	U	18	340
Anthracene		18	U	18	340
Benzo[a]anthracene		21	U	21	340
Benzo[a]pyrene		21	U	21	340
Benzo[b]fluoranthene		27	U	27	340
Benzo[ghi]perylene		17	U	17	340
Benzo[k]fluoranthene		41	U	41	340
Bis(2-chloroethoxy)methane		24	U	24	340
Bis(2-chloroethyl)ether		17	U	17	340
bis (2-chloroisopropyl) ether		24	U	24	340
Bis(2-ethylhexyl) phthalate		580	B	48	340
4-Bromophenyl phenyl ether		20	U	20	340
Butyl benzyl phthalate		44	U	44	340
Carbazole		37	U	37	340
4-Chloroaniline		85	U	85	340
4-Chloro-3-methylphenol		68	U	68	340
2-Chloronaphthalene		10	U	10	340
2-Chlorophenol		22	U	22	340
4-Chlorophenyl phenyl ether		22	U	22	340
Chrysene		28	U	28	340
Dibenz(a,h)anthracene		20	U	20	340
Dibenzofuran		21	U	21	340
1,2-Dichlorobenzene		23	U	23	340
1,3-Dichlorobenzene		12	U	12	340
1,4-Dichlorobenzene		14	U	14	340
3,3'-Dichlorobenzidine		93	U	93	680
2,4-Dichlorophenol		10	U	10	340
Diethyl phthalate		27	U	27	340
2,4-Dimethylphenol		68	U	68	340
Dimethyl phthalate		24	U	24	340
Di-n-butyl phthalate		30	U	30	340
4,6-Dinitro-2-methylphenol		340	U	340	680
2,4-Dinitrophenol		340	U	340	850
2,4-Dinitrotoluene		68	U	68	340
2,6-Dinitrotoluene		29	U	29	340
Di-n-octyl phthalate		15	U	15	340
Fluoranthene		37	U	37	340
Fluorene		19	U	19	340
Hexachlorobenzene		30	U	30	340
Hexachlorobutadiene		10	U	10	340
Hexachlorocyclopentadiene		52	U	52	340
Hexachloroethane		22	U	22	340
Indeno[1,2,3-cd]pyrene		23	U	23	340
Isophorone		18	U	18	340
2-Methylnaphthalene		20	U	20	340

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0C3**

Lab Sample ID: 280-14083-1
Client Matrix: Solid
% Moisture: 7.0

Date Sampled: 03/29/2011 1245
Date Received: 03/31/2011 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-61044	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-60672	Lab File ID:	Y9326.D
Dilution:	1.0			Initial Weight/Volume:	31.2 g
Analysis Date:	04/05/2011 2257			Final Weight/Volume:	1000 uL
Prep Date:	04/04/2011 2115			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2-Methylphenol		13	U	13	340
3 & 4 Methylphenol		34	U	34	340
Naphthalene		32	U	32	340
2-Nitroaniline		52	U	52	340
3-Nitroaniline		75	U	75	340
4-Nitroaniline		75	U	75	340
Nitrobenzene		23	U	23	340
2-Nitrophenol		10	U	10	340
4-Nitrophenol		100	U	100	680
N-Nitrosodi-n-propylamine		32	U	32	340
N-Nitrosodiphenylamine		22	U	22	340
Pentachlorophenol		340	U	340	680
Phenanthrene		18	U	18	340
Phenol		19	U	19	340
Pyrene		13	U	13	340
1,2,4-Trichlorobenzene		29	U	29	340
2,4,5-Trichlorophenol		10	U	10	340
2,4,6-Trichlorophenol		10	U	10	340

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	65		50 - 120
2-Fluorophenol	64		53 - 120
Nitrobenzene-d5	61		50 - 120
Phenol-d5	65		52 - 120
Terphenyl-d14	92		55 - 120
2,4,6-Tribromophenol	82		51 - 120

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0C3**

Lab Sample ID: 280-14083-1
Client Matrix: Solid

% Moisture: 7.0

Date Sampled: 03/29/2011 1245
Date Received: 03/31/2011 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-61044	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-60672	Lab File ID:	Y9326.D
Dilution:	1.0			Initial Weight/Volume:	31.2 g
Analysis Date:	04/05/2011 2257			Final Weight/Volume:	1000 uL
Prep Date:	04/04/2011 2115			Injection Volume:	0.5 uL

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	2.72	210	N J
	Unknown	2.97	160	N J
2216-30-0	Heptane, 2,5-dimethyl-	3.10	160	N J
	Unknown	3.17	2500	N J

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0C5**

Lab Sample ID: 280-14083-2
Client Matrix: Solid
% Moisture: 7.9

Date Sampled: 03/29/2011 1320
Date Received: 03/31/2011 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-61044	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-60672	Lab File ID:	Y9329.D
Dilution:	1.0			Initial Weight/Volume:	30.9 g
Analysis Date:	04/05/2011 2357			Final Weight/Volume:	1000 uL
Prep Date:	04/04/2011 2115			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		11	U	11	350
Acenaphthylene		18	U	18	350
Anthracene		18	U	18	350
Benzo[a]anthracene		62	J	21	350
Benzo[a]pyrene		62	J	21	350
Benzo[b]fluoranthene		110	J K	28	350
Benzo[ghi]perylene		39	J	17	350
Benzo[k]fluoranthene		42	U K	42	350
Bis(2-chloroethoxy)methane		24	U	24	350
Bis(2-chloroethyl)ether		17	U	17	350
bis (2-chloroisopropyl) ether		24	U	24	350
Bis(2-ethylhexyl) phthalate		250	J B	48	350
4-Bromophenyl phenyl ether		20	U	20	350
Butyl benzyl phthalate		45	U	45	350
Carbazole		38	U	38	350
4-Chloroaniline		330	J	86	350
4-Chloro-3-methylphenol		70	U	70	350
2-Chloronaphthalene		11	U	11	350
2-Chlorophenol		22	U	22	350
4-Chlorophenyl phenyl ether		22	U	22	350
Chrysene		91	J	28	350
Dibenz(a,h)anthracene		20	U	20	350
Dibenzofuran		21	U	21	350
1,2-Dichlorobenzene		23	U	23	350
1,3-Dichlorobenzene		13	U	13	350
1,4-Dichlorobenzene		14	U	14	350
3,3'-Dichlorobenzidine		95	U	95	700
2,4-Dichlorophenol		11	U	11	350
Diethyl phthalate		27	U	27	350
2,4-Dimethylphenol		70	U	70	350
Dimethyl phthalate		24	U	24	350
Di-n-butyl phthalate		31	U	31	350
4,6-Dinitro-2-methylphenol		350	U	350	700
2,4-Dinitrophenol		350	U	350	870
2,4-Dinitrotoluene		70	U	70	350
2,6-Dinitrotoluene		30	U	30	350
Di-n-octyl phthalate		15	U	15	350
Fluoranthene		140	J	38	350
Fluorene		19	U	19	350
Hexachlorobenzene		31	U	31	350
Hexachlorobutadiene		11	U	11	350
Hexachlorocyclopentadiene		53	U	53	350
Hexachloroethane		22	U	22	350
Indeno[1,2,3-cd]pyrene		35	J	23	350
Isophorone		18	U	18	350
2-Methylnaphthalene		20	U	20	350

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0C5**

Lab Sample ID: 280-14083-2
Client Matrix: Solid
% Moisture: 7.9

Date Sampled: 03/29/2011 1320
Date Received: 03/31/2011 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-61044	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-60672	Lab File ID:	Y9329.D
Dilution:	1.0			Initial Weight/Volume:	30.9 g
Analysis Date:	04/05/2011 2357			Final Weight/Volume:	1000 uL
Prep Date:	04/04/2011 2115			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2-Methylphenol		14	U	14	350
3 & 4 Methylphenol		35	U	35	350
Naphthalene		33	U	33	350
2-Nitroaniline		53	U	53	350
3-Nitroaniline		77	U	77	350
4-Nitroaniline		76	U	76	350
Nitrobenzene		23	U	23	350
2-Nitrophenol		11	U	11	350
4-Nitrophenol		100	U	100	700
N-Nitrosodi-n-propylamine		33	U	33	350
N-Nitrosodiphenylamine		22	U	22	350
Pentachlorophenol		350	U	350	700
Phenanthrene		88	J	18	350
Phenol		23	J	19	350
Pyrene		140	J	13	350
1,2,4-Trichlorobenzene		30	U	30	350
2,4,5-Trichlorophenol		11	U	11	350
2,4,6-Trichlorophenol		11	U	11	350

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	80		50 - 120
2-Fluorophenol	75		53 - 120
Nitrobenzene-d5	73		50 - 120
Phenol-d5	82		52 - 120
Terphenyl-d14	96		55 - 120
2,4,6-Tribromophenol	88		51 - 120

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0C5**

Lab Sample ID: 280-14083-2
Client Matrix: Solid
% Moisture: 7.9

Date Sampled: 03/29/2011 1320
Date Received: 03/31/2011 0900

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-61044	Instrument ID:	MSS_Y
Prep Method:	3550C	Prep Batch:	280-60672	Lab File ID:	Y9329.D
Dilution:	1.0			Initial Weight/Volume:	30.9 g
Analysis Date:	04/05/2011 2357			Final Weight/Volume:	1000 uL
Prep Date:	04/04/2011 2115			Injection Volume:	0.5 uL

Tentatively Identified Compounds **Number TIC's Found:** **12**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	2.97	160	N J
926-82-9	Heptane, 3,5-dimethyl-	3.10	160	N J
	Unknown	3.17	2800	N J
51134-03-3	Benzene, chloroisocyanato-	5.52	160	N J
102-36-3	Benzene, 1,2-dichloro-4-isocyanato-	6.59	190	N J
544-76-3	Hexadecane	7.91	18	J J N
	Unknown	10.36	220	N J
	Unknown	12.62	470	N J
	Unknown	12.67	280	N J
	Unknown	12.80	470	N J
	Unknown	13.03	310	N J
	Unknown	13.22	170	N J

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0K2**

Lab Sample ID: 280-14129-1
Client Matrix: Solid
% Moisture: 13.2

Date Sampled: 03/30/2011 0840
Date Received: 04/01/2011 0830

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-62353	Instrument ID:	MSS_B
Prep Method:	3550C	Prep Batch:	280-61769	Lab File ID:	B4266.D
Dilution:	1.0			Initial Weight/Volume:	30.2 g
Analysis Date:	04/14/2011 1057			Final Weight/Volume:	1000 uL
Prep Date:	04/12/2011 1105			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		12	U	12	380
Acenaphthylene		19	U	19	380
Anthracene		19	U	19	380
Benzo[a]anthracene		23	U	23	380
Benzo[a]pyrene		23	U	23	380
Benzo[b]fluoranthene		30	U	30	380
Benzo[ghi]perylene		18	U	18	380
Benzo[k]fluoranthene		46	U	46	380
Bis(2-chloroethoxy)methane		26	U	26	380
Bis(2-chloroethyl)ether		19	U	19	380
bis (2-chloroisopropyl) ether		26	U	26	380
Bis(2-ethylhexyl) phthalate		53	U	53	380
4-Bromophenyl phenyl ether		22	U	22	380
Butyl benzyl phthalate		49	U	49	380
Carbazole		41	U	41	380
4-Chloroaniline		94	U	94	380
4-Chloro-3-methylphenol		76	U	76	380
2-Chloronaphthalene		11	U	11	380
2-Chlorophenol		24	U	24	380
4-Chlorophenyl phenyl ether		24	U	24	380
Chrysene		31	U	31	380
Dibenz(a,h)anthracene		22	U	22	380
Dibenzofuran		23	U	23	380
1,2-Dichlorobenzene		25	U	25	380
1,3-Dichlorobenzene		14	U	14	380
1,4-Dichlorobenzene		16	U	16	380
3,3'-Dichlorobenzidine		100	U	100	760
2,4-Dichlorophenol		11	U	11	380
Diethyl phthalate		30	U	30	380
2,4-Dimethylphenol		76	U	76	380
Dimethyl phthalate		26	U	26	380
Di-n-butyl phthalate		33	U	33	380
4,6-Dinitro-2-methylphenol		380	U	380	760
2,4-Dinitrophenol		380	U	380	940
2,4-Dinitrotoluene		76	U	76	380
2,6-Dinitrotoluene		32	U	32	380
Di-n-octyl phthalate		16	U	16	380
Fluoranthene		41	U	41	380
Fluorene		21	U	21	380
Hexachlorobenzene		33	U	33	380
Hexachlorobutadiene		11	U	11	380
Hexachlorocyclopentadiene		57	U	57	380
Hexachloroethane		24	U	24	380
Indeno[1,2,3-cd]pyrene		25	U	25	380
Isophorone		19	U	19	380
2-Methylnaphthalene		22	U	22	380

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0K2**

Lab Sample ID: 280-14129-1
Client Matrix: Solid
% Moisture: 13.2

Date Sampled: 03/30/2011 0840
Date Received: 04/01/2011 0830

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-62353	Instrument ID:	MSS_B
Prep Method:	3550C	Prep Batch:	280-61769	Lab File ID:	B4266.D
Dilution:	1.0			Initial Weight/Volume:	30.2 g
Analysis Date:	04/14/2011 1057			Final Weight/Volume:	1000 uL
Prep Date:	04/12/2011 1105			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2-Methylphenol		15	U	15	380
3 & 4 Methylphenol		38	U	38	380
Naphthalene		35	U	35	380
2-Nitroaniline		57	U	57	380
3-Nitroaniline		84	U	84	380
4-Nitroaniline		83	U	83	380
Nitrobenzene		25	U	25	380
2-Nitrophenol		11	U	11	380
4-Nitrophenol		110	U	110	760
N-Nitrosodi-n-propylamine		35	U	35	380
N-Nitrosodiphenylamine		24	U	24	380
Pentachlorophenol		380	U	380	760
Phenanthrene		19	U	19	380
Phenol		21	U	21	380
Pyrene		14	U	14	380
1,2,4-Trichlorobenzene		32	U	32	380
2,4,5-Trichlorophenol		11	U	11	380
2,4,6-Trichlorophenol		11	U	11	380

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	77		50 - 120
2-Fluorophenol	80		53 - 120
Nitrobenzene-d5	80		50 - 120
Phenol-d5	82		52 - 120
Terphenyl-d14	85		55 - 120
2,4,6-Tribromophenol	93		51 - 120

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0K2**

Lab Sample ID: 280-14129-1
Client Matrix: Solid
% Moisture: 13.2

Date Sampled: 03/30/2011 0840
Date Received: 04/01/2011 0830

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-62353	Instrument ID:	MSS_B
Prep Method:	3550C	Prep Batch:	280-61769	Lab File ID:	B4266.D
Dilution:	1.0			Initial Weight/Volume:	30.2 g
Analysis Date:	04/14/2011 1057			Final Weight/Volume:	1000 uL
Prep Date:	04/12/2011 1105			Injection Volume:	0.5 uL

Tentatively Identified Compounds **Number TIC's Found:** **5**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	2.76	2100	N J
	Unknown	2.85	160	N J
	Unknown	3.05	200	N J
926-82-9	Heptane, 3,5-dimethyl-	3.18	220	N J
	Unknown	3.27	4300	N J

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0K3**

Lab Sample ID: 280-14129-2
Client Matrix: Solid
% Moisture: 9.9

Date Sampled: 03/30/2011 0810
Date Received: 04/01/2011 0830

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-62353	Instrument ID:	MSS_B
Prep Method:	3550C	Prep Batch:	280-61769	Lab File ID:	B4269.D
Dilution:	1.0			Initial Weight/Volume:	30.2 g
Analysis Date:	04/14/2011 1156			Final Weight/Volume:	1000 uL
Prep Date:	04/12/2011 1105			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		11	U	11	360
Acenaphthylene		19	U	19	360
Anthracene		19	U	19	360
Benzo[a]anthracene		22	U	22	360
Benzo[a]pyrene		22	U	22	360
Benzo[b]fluoranthene		29	U	29	360
Benzo[ghi]perylene		18	U	18	360
Benzo[k]fluoranthene		44	U	44	360
Bis(2-chloroethoxy)methane		25	U	25	360
Bis(2-chloroethyl)ether		18	U	18	360
bis (2-chloroisopropyl) ether		25	U	25	360
Bis(2-ethylhexyl) phthalate		330	J	51	360
4-Bromophenyl phenyl ether		21	U	21	360
Butyl benzyl phthalate		47	U	47	360
Carbazole		40	U	40	360
4-Chloroaniline		890		90	360
4-Chloro-3-methylphenol		73	U	73	360
2-Chloronaphthalene		11	U	11	360
2-Chlorophenol		23	U	23	360
4-Chlorophenyl phenyl ether		23	U	23	360
Chrysene		30	U	30	360
Dibenz(a,h)anthracene		21	U	21	360
Dibenzofuran		22	U	22	360
1,2-Dichlorobenzene		24	U	24	360
1,3-Dichlorobenzene		13	U	13	360
1,4-Dichlorobenzene		15	U	15	360
3,3'-Dichlorobenzidine		99	U	99	730
2,4-Dichlorophenol		11	U	11	360
Diethyl phthalate		29	U	29	360
2,4-Dimethylphenol		73	U	73	360
Dimethyl phthalate		25	U	25	360
Di-n-butyl phthalate		32	U	32	360
4,6-Dinitro-2-methylphenol		360	U	360	730
2,4-Dinitrophenol		370	U	370	910
2,4-Dinitrotoluene		73	U	73	360
2,6-Dinitrotoluene		31	U	31	360
Di-n-octyl phthalate		16	U	16	360
Fluoranthene		40	U	40	360
Fluorene		20	U	20	360
Hexachlorobenzene		32	U	32	360
Hexachlorobutadiene		11	U	11	360
Hexachlorocyclopentadiene		55	U	55	360
Hexachloroethane		23	U	23	360
Indeno[1,2,3-cd]pyrene		24	U	24	360
Isophorone		19	U	19	360
2-Methylnaphthalene		21	U	21	360

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0K3**

Lab Sample ID: 280-14129-2
Client Matrix: Solid
% Moisture: 9.9

Date Sampled: 03/30/2011 0810
Date Received: 04/01/2011 0830

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-62353	Instrument ID:	MSS_B
Prep Method:	3550C	Prep Batch:	280-61769	Lab File ID:	B4269.D
Dilution:	1.0			Initial Weight/Volume:	30.2 g
Analysis Date:	04/14/2011 1156			Final Weight/Volume:	1000 uL
Prep Date:	04/12/2011 1105			Injection Volume:	0.5 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2-Methylphenol		14	U	14	360
3 & 4 Methylphenol		36	U	36	360
Naphthalene		34	U	34	360
2-Nitroaniline		55	U	55	360
3-Nitroaniline		80	U	80	360
4-Nitroaniline		80	U	80	360
Nitrobenzene		24	U	24	360
2-Nitrophenol		11	U	11	360
4-Nitrophenol		110	U	110	730
N-Nitrosodi-n-propylamine		34	U	34	360
N-Nitrosodiphenylamine		23	U	23	360
Pentachlorophenol		360	U	360	730
Phenanthrene		19	U	19	360
Phenol		20	U	20	360
Pyrene		13	U	13	360
1,2,4-Trichlorobenzene		31	U	31	360
2,4,5-Trichlorophenol		11	U	11	360
2,4,6-Trichlorophenol		11	U	11	360

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorobiphenyl	75		50 - 120
2-Fluorophenol	67		53 - 120
Nitrobenzene-d5	66		50 - 120
Phenol-d5	76		52 - 120
Terphenyl-d14	78		55 - 120
2,4,6-Tribromophenol	86		51 - 120

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0K3**

Lab Sample ID: 280-14129-2
Client Matrix: Solid
% Moisture: 9.9

Date Sampled: 03/30/2011 0810
Date Received: 04/01/2011 0830

8270C Semivolatile Organic Compounds (GC/MS)

Analysis Method:	8270C	Analysis Batch:	280-62353	Instrument ID:	MSS_B
Prep Method:	3550C	Prep Batch:	280-61769	Lab File ID:	B4269.D
Dilution:	1.0			Initial Weight/Volume:	30.2 g
Analysis Date:	04/14/2011 1156			Final Weight/Volume:	1000 uL
Prep Date:	04/12/2011 1105			Injection Volume:	0.5 uL

Tentatively Identified Compounds **Number TIC's Found:** **13**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	2.76	1400	N J
	Unknown	2.86	220	N J
	Unknown	3.05	180	N J
2216-30-0	Heptane, 2,5-dimethyl-	3.18	170	N J
	Unknown	3.27	3100	N J
3320-83-0	Benzene, 1-chloro-2-isocyanato-	5.70	340	N J
102-36-3	Benzene, 1,2-dichloro-4-isocyanato-	6.77	300	N J
544-76-3	Hexadecane	8.13	22	N J
	Unknown	8.77	180	N J
	Unknown	12.88	540	N J
	Unknown	13.06	440	N J
	Unknown	13.27	270	N J
	Unknown	13.46	300	N J

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0C3**

Lab Sample ID: 280-14083-1
Client Matrix: Solid
% Moisture: 7.0

Date Sampled: 03/29/2011 1245
Date Received: 03/31/2011 0900

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-61327	Instrument ID:	GCS_P1
Prep Method:	3550C	Prep Batch:	280-60667	Initial Weight/Volume:	31.7 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	04/08/2011 0158			Injection Volume:	
Prep Date:	04/04/2011 1900			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.56	U	0.56	1.7
4,4'-DDE		0.24	U	0.24	1.7
4,4'-DDT		0.60	U	0.60	1.7
Aldrin		0.26	U	0.26	1.7
alpha-BHC		0.22	U	0.22	1.7
beta-BHC		0.68	U	0.68	1.7
delta-BHC		0.41	U	0.41	1.7
gamma-BHC (Lindane)		0.47	U	0.47	1.7
Heptachlor		0.22	U	0.22	1.7
Heptachlor epoxide		0.43	U	0.43	1.7
Endosulfan I		0.18	U	0.18	1.7
Endosulfan II		0.29	U	0.29	1.7
Endosulfan sulfate		0.28	U	0.28	1.7
Endrin		0.31	U	0.31	1.7
Endrin aldehyde		0.17	U	0.17	1.7
Endrin ketone		0.50	U	0.50	1.7
gamma-Chlordane		0.27	U	0.27	1.7
Methoxychlor		0.46	U	0.46	3.4
alpha-Chlordane		0.33	U	0.33	1.7
Dieldrin		0.21	U	0.21	1.7
Toxaphene		16	U	16	170

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	65		59 - 115
Decachlorobiphenyl	92		63 - 124

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0C5**

Lab Sample ID: 280-14083-2
Client Matrix: Solid

% Moisture: 7.9

Date Sampled: 03/29/2011 1320
Date Received: 03/31/2011 0900

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-61327	Instrument ID:	GCS_P1
Prep Method:	3550C	Prep Batch:	280-60667	Initial Weight/Volume:	30.2 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	04/08/2011 0321			Injection Volume:	
Prep Date:	04/04/2011 1900			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.59	U	0.59	1.8
4,4'-DDE		0.79	J X N	0.26	1.8
4,4'-DDT		0.64	U	0.64	1.8
Aldrin		0.27	U	0.27	1.8
alpha-BHC		0.23	U	0.23	1.8
beta-BHC		0.72	U	0.72	1.8
delta-BHC		0.43	U	0.43	1.8
gamma-BHC (Lindane)		0.50	U	0.50	1.8
Heptachlor		0.23	U	0.23	1.8
Heptachlor epoxide		0.46	U	0.46	1.8
Endosulfan I		0.19	U	0.19	1.8
Endosulfan II		0.31	U	0.31	1.8
Endosulfan sulfate		0.30	U	0.30	1.8
Endrin		0.33	U	0.33	1.8
Endrin aldehyde		0.18	U	0.18	1.8
Endrin ketone		0.53	U	0.53	1.8
gamma-Chlordane		1.5	J X	0.29	1.8
Methoxychlor		0.49	U	0.49	3.6
alpha-Chlordane		0.41	J X	0.35	1.8
Dieldrin		0.23	U	0.23	1.8
Toxaphene		17	U	17	180

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	69		59 - 115
Decachlorobiphenyl	98		63 - 124

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0K2**

Lab Sample ID: 280-14129-1
Client Matrix: Solid
% Moisture: 13.2

Date Sampled: 03/30/2011 0840
Date Received: 04/01/2011 0830

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-62400	Instrument ID:	GCS_P1
Prep Method:	3550C	Prep Batch:	280-61768	Initial Weight/Volume:	30.2 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	04/14/2011 1542			Injection Volume:	1 uL
Prep Date:	04/12/2011 1105			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.62	U	0.62	1.9
4,4'-DDE		0.58	J	0.27	1.9
4,4'-DDT		0.67	U	0.67	1.9
Aldrin		0.29	U	0.29	1.9
alpha-BHC		0.24	U	0.24	1.9
beta-BHC		0.76	U	0.76	1.9
delta-BHC		0.46	U	0.46	1.9
gamma-BHC (Lindane)		0.53	U	0.53	1.9
Heptachlor		0.24	U	0.24	1.9
Heptachlor epoxide		0.49	U	0.49	1.9
Endosulfan I		0.20	U	0.20	1.9
Endosulfan II		0.33	U	0.33	1.9
Endosulfan sulfate		0.32	U	0.32	1.9
Endrin		0.35	U	0.35	1.9
Endrin aldehyde		0.20	U	0.20	1.9
Endrin ketone		0.56	U	0.56	1.9
gamma-Chlordane		0.30	U	0.30	1.9
Methoxychlor		0.51	U	0.51	3.8
alpha-Chlordane		0.37	U	0.37	1.9
Dieldrin		0.24	U	0.24	1.9
Toxaphene		18	U	18	190

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	90		59 - 115
Decachlorobiphenyl	91		63 - 124

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0K3**

Lab Sample ID: 280-14129-2
Client Matrix: Solid
% Moisture: 9.9

Date Sampled: 03/30/2011 0810
Date Received: 04/01/2011 0830

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-62400	Instrument ID:	GCS_P1
Prep Method:	3550C	Prep Batch:	280-61768	Initial Weight/Volume:	30.1 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	04/14/2011 1559			Injection Volume:	1 uL
Prep Date:	04/12/2011 1105			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.60	U	0.60	1.9
4,4'-DDE		4.4		0.26	1.9
4,4'-DDT		1.0	J X	0.65	1.9
Aldrin		0.28	U	0.28	1.8
alpha-BHC		0.24	U	0.24	1.8
beta-BHC		0.73	U	0.73	1.8
delta-BHC		0.44	U	0.44	1.8
gamma-BHC (Lindane)		0.51	U	0.51	1.8
Heptachlor		0.24	U	0.24	1.8
Heptachlor epoxide		0.47	U	0.47	1.8
Endosulfan I		0.19	U	0.19	1.8
Endosulfan II		0.32	U	0.32	1.9
Endosulfan sulfate		0.31	U	0.31	1.9
Endrin		0.34	U N	0.34	1.9
Endrin aldehyde		0.19	U	0.19	1.9
Endrin ketone		0.54	U	0.54	1.9
gamma-Chlordane		0.90	J X	0.29	1.9
Methoxychlor		0.50	U	0.50	3.6
alpha-Chlordane		0.36	U	0.36	1.9
Dieldrin		0.23	U	0.23	1.9
Toxaphene		17	U	17	180

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	104		59 - 115
Decachlorobiphenyl	117		63 - 124

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0C3**

Lab Sample ID: 280-14083-1
Client Matrix: Solid
% Moisture: 7.0

Date Sampled: 03/29/2011 1245
Date Received: 03/31/2011 0900

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-61261	Instrument ID:	GCS_P3
Prep Method:	3550C	Prep Batch:	280-60678	Initial Weight/Volume:	30.9 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	04/07/2011 0037			Injection Volume:	1 uL
Prep Date:	04/04/2011 2205			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		2.9	U	2.9	10
Aroclor 1221		8.4	U	8.4	17
Aroclor 1232		2.1	U	2.1	10
Aroclor 1242		4.9	U	4.9	10
Aroclor 1248		4.9	U	4.9	10
Aroclor 1254		2.7	U	2.7	10
Aroclor 1260		4.5	J	2.7	10

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	100		59 - 130
Tetrachloro-m-xylene	105		53 - 128

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0C5**

Lab Sample ID: 280-14083-2
Client Matrix: Solid

% Moisture: 7.9

Date Sampled: 03/29/2011 1320
Date Received: 03/31/2011 0900

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-61261	Instrument ID:	GCS_P3
Prep Method:	3550C	Prep Batch:	280-60678	Initial Weight/Volume:	30.5 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	04/07/2011 0058			Injection Volume:	1 uL
Prep Date:	04/04/2011 2205			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		3.0	U	3.0	11
Aroclor 1221		8.6	U	8.6	18
Aroclor 1232		2.1	U	2.1	11
Aroclor 1242		5.0	U	5.0	11
Aroclor 1248		5.0	U	5.0	11
Aroclor 1254		24	P	2.8	11
Aroclor 1260		21		2.8	11

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	97		59 - 130
Tetrachloro-m-xylene	95		53 - 128

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0K2**

Lab Sample ID: 280-14129-1
Client Matrix: Solid
% Moisture: 13.2

Date Sampled: 03/30/2011 0840
Date Received: 04/01/2011 0830

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-62436	Instrument ID:	GCS_P3
Prep Method:	3550C	Prep Batch:	280-61774	Initial Weight/Volume:	32.6 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	04/14/2011 2308			Injection Volume:	1 uL
Prep Date:	04/12/2011 1105			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		2.9	U	2.9	11
Aroclor 1221		8.5	U	8.5	17
Aroclor 1232		2.1	U	2.1	11
Aroclor 1242		4.9	U	4.9	11
Aroclor 1248		4.9	U	4.9	11
Aroclor 1254		2.8	U	2.8	11
Aroclor 1260		2.8	U N	2.8	11

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	114		59 - 130
Tetrachloro-m-xylene	111		53 - 128

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0K3**

Lab Sample ID: 280-14129-2
Client Matrix: Solid
% Moisture: 9.9

Date Sampled: 03/30/2011 0810
Date Received: 04/01/2011 0830

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-62904	Instrument ID:	GCS_P3
Prep Method:	3550C	Prep Batch:	280-62528	Initial Weight/Volume:	30.1 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	04/18/2011 1343			Injection Volume:	1 uL
Prep Date:	04/15/2011 1915			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		3.1	U	3.1	11
Aroclor 1221		8.9	U	8.9	18
Aroclor 1232		2.2	U	2.2	11
Aroclor 1242		5.2	U	5.2	11
Aroclor 1248		5.2	U	5.2	11
Aroclor 1254		2.9	U	2.9	11
Aroclor 1260		28		2.9	11

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	64		59 - 130
Tetrachloro-m-xylene	80		53 - 128

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0C3**

Lab Sample ID: 280-14083-1
Client Matrix: Solid

% Moisture: 7.0

Date Sampled: 03/29/2011 1245
Date Received: 03/31/2011 0900

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	280-61394	Instrument ID:	GCS_M
Prep Method:	8151A	Prep Batch:	280-60900	Initial Weight/Volume:	52.3 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	04/07/2011 1934			Injection Volume:	1 uL
Prep Date:	04/06/2011 1045			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2,4,5-T		2.4	U	2.4	21
2,4-Dichlorophenoxyacetic acid		14	U	14	82
2,4-DB		2.9	U	2.9	82
Dalapon		1.4	U	1.4	41
Dicamba		1.4	U	1.4	41
Dichlorprop		3.3	U	3.3	82
Dinoseb		1.4	U	1.4	12
MCPA		2100	U	2100	8200
2,4,5-TP (Silvex)		1.4	U	1.4	21
MCPP		2100	U	2100	8200

Surrogate	%Rec	Qualifier	Acceptance Limits
DCAA	79		31 - 105

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0C5**

Lab Sample ID: 280-14083-2
Client Matrix: Solid

% Moisture: 7.9

Date Sampled: 03/29/2011 1320
Date Received: 03/31/2011 0900

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	280-61394	Instrument ID:	GCS_M
Prep Method:	8151A	Prep Batch:	280-60900	Initial Weight/Volume:	52.7 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	04/07/2011 1955			Injection Volume:	1 uL
Prep Date:	04/06/2011 1045			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2,4,5-T		2.4	U	2.4	21
2,4-Dichlorophenoxyacetic acid		14	U	14	82
2,4-DB		2.9	U	2.9	82
Dalapon		1.4	U	1.4	41
Dicamba		1.4	U	1.4	41
Dichlorprop		3.3	U	3.3	82
Dinoseb		1.4	U N	1.4	12
MCPA		2100	U	2100	8200
2,4,5-TP (Silvex)		1.4	U	1.4	21
MCPP		2100	U	2100	8200

Surrogate	%Rec	Qualifier	Acceptance Limits
DCAA	80		31 - 105

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0K2**

Lab Sample ID: 280-14129-1
Client Matrix: Solid

% Moisture: 13.2

Date Sampled: 03/30/2011 0840
Date Received: 04/01/2011 0830

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	280-61394	Instrument ID:	GCS_M
Prep Method:	8151A	Prep Batch:	280-60900	Initial Weight/Volume:	52.4 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	04/07/2011 2100			Injection Volume:	1 uL
Prep Date:	04/06/2011 1045			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2,4,5-T		2.5	U	2.5	22
2,4-Dichlorophenoxyacetic acid		15	U	15	88
2,4-DB		3.1	U	3.1	88
Dalapon		1.5	U	1.5	44
Dicamba		1.5	U	1.5	44
Dichlorprop		3.5	U	3.5	88
Dinoseb		1.5	U	1.5	13
MCPA		2200	U	2200	8800
2,4,5-TP (Silvex)		1.5	U	1.5	22
MCPP		2200	U	2200	8800

Surrogate	%Rec	Qualifier	Acceptance Limits
DCAA	84		31 - 105

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0K3**

Lab Sample ID: 280-14129-2
Client Matrix: Solid
% Moisture: 9.9

Date Sampled: 03/30/2011 0810
Date Received: 04/01/2011 0830

8151A Herbicides (GC)

Analysis Method:	8151A	Analysis Batch:	280-61394	Instrument ID:	GCS_M
Prep Method:	8151A	Prep Batch:	280-60900	Initial Weight/Volume:	52.1 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	04/07/2011 2121			Injection Volume:	1 uL
Prep Date:	04/06/2011 1045			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
2,4,5-T		2.4	U	2.4	21
2,4-Dichlorophenoxyacetic acid		15	U	15	85
2,4-DB		3.0	U	3.0	85
Dalapon		1.5	U	1.5	43
Dicamba		1.5	U	1.5	43
Dichlorprop		3.4	U	3.4	85
Dinoseb		1.5	U	1.5	13
MCPA		2100	U	2100	8500
2,4,5-TP (Silvex)		1.5	U	1.5	21
MCPP		2100	U	2100	8500

Surrogate	%Rec	Qualifier	Acceptance Limits
DCAA	83		31 - 105

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0C3**

Lab Sample ID: 280-14083-1
Client Matrix: Solid

% Moisture: 7.0

Date Sampled: 03/29/2011 1245
Date Received: 03/31/2011 0900

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-61645	Instrument ID:	GCS_U
Prep Method:	3550C	Prep Batch:	280-61224	Lab File ID:	041B4101.D
Dilution:	1.0			Initial Weight/Volume:	30.5 g
Analysis Date:	04/09/2011 0324			Final Weight/Volume:	1000 uL
Prep Date:	04/07/2011 1555			Injection Volume:	1 uL

DryWt Corrected: Y

Analyte	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36	37000		1100	4200
C10-C28	14000		720	4200

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	87		49 - 115

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0C5**

Lab Sample ID: 280-14083-2
Client Matrix: Solid

% Moisture: 7.9

Date Sampled: 03/29/2011 1320
Date Received: 03/31/2011 0900

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-61645	Instrument ID:	GCS_U
Prep Method:	3550C	Prep Batch:	280-61224	Lab File ID:	042B4201.D
Dilution:	1.0			Initial Weight/Volume:	30.3 g
Analysis Date:	04/09/2011 0352			Final Weight/Volume:	1000 uL
Prep Date:	04/07/2011 1555			Injection Volume:	1 uL

DryWt Corrected: Y

Analyte	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36	92000		1100	4300
C10-C28	37000		730	4300

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	82		49 - 115

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0K2**

Lab Sample ID: 280-14129-1
Client Matrix: Solid

% Moisture: 13.2

Date Sampled: 03/30/2011 0840
Date Received: 04/01/2011 0830

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-62713	Instrument ID:	GCS_U
Prep Method:	3550C	Prep Batch:	280-61773	Lab File ID:	011B1101.D
Dilution:	1.0			Initial Weight/Volume:	30.1 g
Analysis Date:	04/15/2011 1607			Final Weight/Volume:	1000 uL
Prep Date:	04/12/2011 1640			Injection Volume:	1 uL

DryWt Corrected: Y

Analyte	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36	5500		1100	4600
C10-C28	2700	J	780	4600

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	77		49 - 115

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0K3**

Lab Sample ID: 280-14129-2
Client Matrix: Solid
% Moisture: 9.9

Date Sampled: 03/30/2011 0810
Date Received: 04/01/2011 0830

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-62713	Instrument ID:	GCS_U
Prep Method:	3550C	Prep Batch:	280-61773	Lab File ID:	012B1201.D
Dilution:	2.0			Initial Weight/Volume:	31.1 g
Analysis Date:	04/15/2011 1635			Final Weight/Volume:	1000 uL
Prep Date:	04/12/2011 1640			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		270000	N	2100	8600
C10-C28		130000	N	1500	8600

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	106		49 - 115

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0C3**

Lab Sample ID: 280-14083-1
Client Matrix: Solid
% Moisture: 7.0

Date Sampled: 03/29/2011 1245
Date Received: 03/31/2011 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-61359	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-60733	Initial Weight/Volume:	30.1 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	04/09/2011 0928			Injection Volume:	20 uL
Prep Date:	04/05/2011 1150			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		220		11	110
Acenaphthylene		9.6	U	9.6	110
Anthracene		3.3	U	3.3	21
Benzo[a]anthracene		3.4	U	3.4	16
Benzo[a]pyrene		19	X	6.9	16
Benzo[b]fluoranthene		10	J	4.5	16
Benzo[g,h,i]perylene		7.7	U	7.7	32
Benzo[k]fluoranthene		4.2	U	4.2	16
Chrysene		8.7	J	5.2	43
Dibenzo(a,h)anthracene		12	U	12	32
Fluoranthene		14	U	14	43
Fluorene		5.7	U	5.7	32
Indeno[1,2,3-cd]pyrene		13	U	13	32
Naphthalene		13	U	13	110
Phenanthrene		13	U	13	43
Pyrene		13	U	13	43

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	96		72 - 115

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0C5**

Lab Sample ID: 280-14083-2
Client Matrix: Solid

% Moisture: 7.9

Date Sampled: 03/29/2011 1320
Date Received: 03/31/2011 0900

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-61359	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-60733	Initial Weight/Volume:	30.7 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	04/09/2011 1100			Injection Volume:	20 uL
Prep Date:	04/05/2011 1150			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		11	U	11	110
Acenaphthylene		9.5	U	9.5	110
Anthracene		3.2	U	3.2	21
Benzo[a]anthracene		3.4	U	3.4	16
Benzo[a]pyrene		6.8	U	6.8	16
Benzo[b]fluoranthene		48		4.5	16
Benzo[g,h,i]perylene		8.6	J X	7.6	32
Benzo[k]fluoranthene		4.2	U	4.2	16
Chrysene		50		5.1	42
Dibenzo(a,h)anthracene		12	U	12	32
Fluoranthene		46		14	42
Fluorene		7.6	J	5.6	32
Indeno[1,2,3-cd]pyrene		42		13	32
Naphthalene		13	U	13	110
Phenanthrene		25	J X	13	42
Pyrene		64		13	42

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

Analytical Data

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0K2**

Lab Sample ID: 280-14129-1
Client Matrix: Solid

% Moisture: 13.2

Date Sampled: 03/30/2011 0840
Date Received: 04/01/2011 0830

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-62017	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-61770	Initial Weight/Volume:	31.8 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	04/13/2011 2008			Injection Volume:	20 uL
Prep Date:	04/12/2011 1105			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		23	J X	11	110
Acenaphthylene		9.8	U	9.8	110
Anthracene		3.3	U	3.3	22
Benzo[a]anthracene		3.5	U	3.5	16
Benzo[a]pyrene		7.0	U	7.0	16
Benzo[b]fluoranthene		4.6	U	4.6	16
Benzo[g,h,i]perylene		7.8	U	7.8	33
Benzo[k]fluoranthene		4.3	U	4.3	16
Chrysene		5.3	U	5.3	43
Dibenzo(a,h)anthracene		12	U	12	33
Fluoranthene		14	U	14	43
Fluorene		5.7	U	5.7	33
Indeno[1,2,3-cd]pyrene		13	U	13	33
Naphthalene		13	U	13	110
Phenanthrene		13	U	13	43
Pyrene		13	U	13	43

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

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0K3**

Lab Sample ID: 280-14129-2
Client Matrix: Solid
% Moisture: 9.9

Date Sampled: 03/30/2011 0810
Date Received: 04/01/2011 0830

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-62017	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-61770	Initial Weight/Volume:	31.7 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	04/13/2011 2038			Injection Volume:	20 uL
Prep Date:	04/12/2011 1105			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		4100	X N	11	110
Acenaphthylene		9.5	U	9.5	110
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		71		4.4	16
Benzo[g,h,i]perylene		7.6	U	7.6	32
Benzo[k]fluoranthene		4.1	U	4.1	16
Chrysene		7.2	J X	5.1	42
Dibenzo(a,h)anthracene		12	U	12	32
Fluoranthene		14	U	14	42
Fluorene		31	J	5.5	32
Indeno[1,2,3-cd]pyrene		13	U	13	32
Naphthalene		14	J X	13	110
Phenanthrene		13	U	13	42
Pyrene		13	U	13	42

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	93		72 - 115

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0C3**

Lab Sample ID: 280-14083-1
Client Matrix: Solid
% Moisture: 7.0

Date Sampled: 03/29/2011 1245
Date Received: 03/31/2011 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-61070	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-60350	Lab File ID:	25A3040611.asc
Dilution:	1.0			Initial Weight/Volume:	1.18 g
Analysis Date:	04/06/2011 1812			Final Weight/Volume:	100 mL
Prep Date:	04/06/2011 0830				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		7060	X	1.4	4.6
Antimony		0.35	U	0.35	0.55
Arsenic		2.0		0.60	0.91
Barium		55.0	X	0.069	0.46
Beryllium		0.030	U	0.030	0.18
Boron		0.89	U	0.89	1.8
Cadmium		0.084	B M	0.037	0.18
Calcium		4390	X	12.9	45.6
Chromium		10.4	X	0.053	0.18
Cobalt		6.8	X	0.091	0.91
Copper		15.9		0.20	0.91
Iron		20100	X	3.5	4.6
Lead		4.1		0.25	0.46
Magnesium		3850	X	3.4	18.2
Manganese		232	X	0.091	0.91
Molybdenum		0.30	B	0.24	1.8
Nickel		9.8	X	0.11	3.6
Potassium		1050		37.4	273
Selenium		0.78	U	0.78	0.91
Silicon		262	X	5.2	9.1
Silver		0.15	U	0.15	0.18
Sodium		212		53.8	109
Vanadium		49.6		0.086	1.8
Zinc		44.8	X	0.36	0.91

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-61031	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-60306	Lab File ID:	110405AB.txt
Dilution:	1.0			Initial Weight/Volume:	0.66 g
Analysis Date:	04/05/2011 2057			Final Weight/Volume:	50 mL
Prep Date:	04/05/2011 1345				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.031		0.0054	0.017

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0C5**

Lab Sample ID: 280-14083-2
Client Matrix: Solid
% Moisture: 7.9

Date Sampled: 03/29/2011 1320
Date Received: 03/31/2011 0900

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-61070	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-60350	Lab File ID:	25A3040611.asc
Dilution:	1.0			Initial Weight/Volume:	1.18 g
Analysis Date:	04/06/2011 1821			Final Weight/Volume:	100 mL
Prep Date:	04/06/2011 0830				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		6750	X	1.4	4.6
Antimony		0.39	B	0.35	0.55
Arsenic		2.4		0.61	0.92
Barium		77.7	X	0.070	0.46
Beryllium		0.030	U	0.030	0.18
Boron		0.90	U	0.90	1.8
Cadmium		0.17	B	0.038	0.18
Calcium		7480	X	13.0	46.0
Chromium		11.5	X	0.053	0.18
Cobalt		7.7	X	0.092	0.92
Copper		21.0		0.20	0.92
Iron		19900	X	3.5	4.6
Lead		6.9		0.25	0.46
Magnesium		4210	X	3.4	18.4
Manganese		261	X	0.092	0.92
Molybdenum		0.56	B	0.24	1.8
Nickel		12.0	X	0.11	3.7
Potassium		986		37.7	276
Selenium		0.79	U	0.79	0.92
Silicon		270	X	5.2	9.2
Silver		0.15	U	0.15	0.18
Sodium		302		54.3	110
Vanadium		49.9		0.086	1.8
Zinc		60.7	X	0.37	0.92

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-61031	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-60306	Lab File ID:	110405AB.txt
Dilution:	1.0			Initial Weight/Volume:	0.60 g
Analysis Date:	04/05/2011 2059			Final Weight/Volume:	50 mL
Prep Date:	04/05/2011 1345				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.092	M	0.0060	0.018

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0K2**

Lab Sample ID: 280-14129-1
Client Matrix: Solid
% Moisture: 13.2

Date Sampled: 03/30/2011 0840
Date Received: 04/01/2011 0830

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-61777	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-60623	Lab File ID:	26b041111.asc
Dilution:	1.0			Initial Weight/Volume:	1.02 g
Analysis Date:	04/11/2011 1822			Final Weight/Volume:	100 mL
Prep Date:	04/11/2011 0930				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		7390		1.7	5.6
Antimony		0.43	U	0.43	0.68
Arsenic		1.5	M	0.75	1.1
Barium		39.7		0.086	0.56
Beryllium		0.037	U	0.037	0.23
Boron		1.1	U	1.1	2.3
Cadmium		0.10	B	0.046	0.23
Calcium		2860		15.9	56.4
Chromium		12.8		0.065	0.23
Cobalt		4.7		0.11	1.1
Copper		14.2		0.24	1.1
Iron		15900	X	4.3	5.6
Lead		4.1		0.30	0.56
Magnesium		3840		4.2	22.6
Manganese		141		0.11	1.1
Molybdenum		0.46	B	0.29	2.3
Nickel		10.2		0.14	4.5
Potassium		1160		46.3	339
Selenium		0.97	U	0.97	1.1
Silicon		271	N	6.4	11.3
Silver		0.18	U	0.18	0.23
Sodium		170		66.6	135
Vanadium		39.9		0.11	2.3
Zinc		52.1		0.45	1.1

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-61031	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-60730	Lab File ID:	110405AB.txt
Dilution:	1.0			Initial Weight/Volume:	0.62 g
Analysis Date:	04/05/2011 1957			Final Weight/Volume:	50 mL
Prep Date:	04/05/2011 1345				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0076	B	0.0062	0.019

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Client Sample ID: **J1H0K3**

Lab Sample ID: 280-14129-2
Client Matrix: Solid
% Moisture: 9.9

Date Sampled: 03/30/2011 0810
Date Received: 04/01/2011 0830

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-61777	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-60623	Lab File ID:	26b041111.asc
Dilution:	1.0			Initial Weight/Volume:	1.11 g
Analysis Date:	04/11/2011 1831			Final Weight/Volume:	100 mL
Prep Date:	04/11/2011 0930				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		4860		1.5	5.0
Antimony		0.38	U	0.38	0.60
Arsenic		1.5		0.66	1.0
Barium		59.1		0.076	0.50
Beryllium		0.033	U	0.033	0.20
Boron		0.98	U	0.98	2.0
Cadmium		0.25		0.041	0.20
Calcium		4400		14.1	50.0
Chromium		10.3		0.058	0.20
Cobalt		4.4		0.10	1.0
Copper		24.4		0.22	1.0
Iron		12300	X	3.8	5.0
Lead		7.7		0.27	0.50
Magnesium		2720		3.7	20.0
Manganese		167		0.10	1.0
Molybdenum		0.73	B	0.26	2.0
Nickel		7.6		0.12	4.0
Potassium		685		41.0	300
Selenium		1.1		0.86	1.0
Silicon		192	N	5.7	10
Silver		0.16	U	0.16	0.20
Sodium		135		59.0	120
Vanadium		34.8		0.094	2.0
Zinc		71.3		0.40	1.0

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-61031	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-60730	Lab File ID:	110405AB.txt
Dilution:	1.0			Initial Weight/Volume:	0.63 g
Analysis Date:	04/05/2011 1959			Final Weight/Volume:	50 mL
Prep Date:	04/05/2011 1345				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.21	N	0.0058	0.018

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

General Chemistry

Client Sample ID: **J1H0C3**

Lab Sample ID: 280-14083-1
Client Matrix: Solid
% Moisture: 7.0

Date Sampled: 03/29/2011 1245
Date Received: 03/31/2011 0900

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate Nitrite as N-Soluble	13.1	N	mg/Kg	0.39	0.81	1.0	353.2
Analysis Batch: 280-60502	Analysis Date: 04/02/2011 1109						DryWt Corrected: Y
Chloride-Soluble	2.1	U	mg/Kg	2.1	5.4	1.0	9056M
Analysis Batch: 280-60645	Analysis Date: 04/01/2011 1419						DryWt Corrected: Y
Nitrate as N-Soluble	11.7		mg/Kg	0.34	2.7	1.0	9056M
Analysis Batch: 280-60646	Analysis Date: 04/01/2011 1419						DryWt Corrected: Y
Bromide-Soluble	0.42	U	mg/Kg	0.42	2.2	1.0	9056M
Analysis Batch: 280-60645	Analysis Date: 04/01/2011 1419						DryWt Corrected: Y
Nitrite as N-Soluble	0.36	U	mg/Kg	0.36	2.7	1.0	9056M
Analysis Batch: 280-60646	Analysis Date: 04/01/2011 1419						DryWt Corrected: Y
Orthophosphate as P-Soluble	1.3	U N	mg/Kg	1.3	5.4	1.0	9056M
Analysis Batch: 280-60646	Analysis Date: 04/01/2011 1419						DryWt Corrected: Y
Sulfate-Soluble	125		mg/Kg	1.9	5.4	1.0	9056M
Analysis Batch: 280-60645	Analysis Date: 04/01/2011 1419						DryWt Corrected: Y
Fluoride-Soluble	0.88	U	mg/Kg	0.88	5.4	1.0	9056M
Analysis Batch: 280-60645	Analysis Date: 04/01/2011 1419						DryWt Corrected: Y

Analyte	Result	Qual	Units	RL	RL	Dil	Method
pH adj. to 25 deg C-Soluble	7.52		SU	0.0100	0.0100	1.0	9045C
Analysis Batch: 280-60188	Analysis Date: 03/31/2011 1343						DryWt Corrected: N
Percent Moisture	7.0		%	0.10	0.10	1.0	D-2216
Analysis Batch: 280-60161	Analysis Date: 03/31/2011 1200						DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

General Chemistry

Client Sample ID: **J1H0C5**

Lab Sample ID: 280-14083-2
Client Matrix: Solid
% Moisture: 7.9

Date Sampled: 03/29/2011 1320
Date Received: 03/31/2011 0900

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate Nitrite as N-Soluble	63.8		mg/Kg	0.38	0.81	1.0	353.2
Analysis Batch: 280-60502	Analysis Date: 04/02/2011 1114						DryWt Corrected: Y
Chloride-Soluble	3.8	B	mg/Kg	2.1	5.4	1.0	9056M
Analysis Batch: 280-60645	Analysis Date: 04/01/2011 1543						DryWt Corrected: Y
Nitrate as N-Soluble	57.2		mg/Kg	0.34	2.7	1.0	9056M
Analysis Batch: 280-60646	Analysis Date: 04/01/2011 1543						DryWt Corrected: Y
Bromide-Soluble	0.42	U	mg/Kg	0.42	2.2	1.0	9056M
Analysis Batch: 280-60645	Analysis Date: 04/01/2011 1543						DryWt Corrected: Y
Nitrite as N-Soluble	0.36	U	mg/Kg	0.36	2.7	1.0	9056M
Analysis Batch: 280-60646	Analysis Date: 04/01/2011 1543						DryWt Corrected: Y
Orthophosphate as P-Soluble	1.3	U	mg/Kg	1.3	5.4	1.0	9056M
Analysis Batch: 280-60646	Analysis Date: 04/01/2011 1543						DryWt Corrected: Y
Sulfate-Soluble	424		mg/Kg	1.9	5.4	1.0	9056M
Analysis Batch: 280-60645	Analysis Date: 04/01/2011 1543						DryWt Corrected: Y
Fluoride-Soluble	0.91	B	mg/Kg	0.88	5.4	1.0	9056M
Analysis Batch: 280-60645	Analysis Date: 04/01/2011 1543						DryWt Corrected: Y

Analyte	Result	Qual	Units	RL	RL	Dil	Method
pH adj. to 25 deg C-Soluble	8.13		SU	0.0100	0.0100	1.0	9045C
Analysis Batch: 280-60188	Analysis Date: 03/31/2011 1348						DryWt Corrected: N
Percent Moisture	7.9		%	0.10	0.10	1.0	D-2216
Analysis Batch: 280-60161	Analysis Date: 03/31/2011 1200						DryWt Corrected: N

General Chemistry

Client Sample ID: **J1H0K2**

Lab Sample ID: 280-14129-1
Client Matrix: Solid
% Moisture: 13.2

Date Sampled: 03/30/2011 0840
Date Received: 04/01/2011 0830

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate Nitrite as N-Soluble	21.2	N	mg/Kg	0.40	0.83	1.0	353.2
Analysis Batch: 280-60832	Analysis Date: 04/05/2011 1253						DryWt Corrected: Y
Chloride-Soluble	2.3	U	mg/Kg	2.3	5.8	1.0	9056M
Analysis Batch: 280-60988	Analysis Date: 04/06/2011 0312						DryWt Corrected: Y
Nitrate as N-Soluble	20.0		mg/Kg	0.36	2.9	1.0	9056M
Analysis Batch: 280-60991	Analysis Date: 04/06/2011 0312						DryWt Corrected: Y
Bromide-Soluble	0.45	U	mg/Kg	0.45	2.3	1.0	9056M
Analysis Batch: 280-60988	Analysis Date: 04/06/2011 0312						DryWt Corrected: Y
Nitrite as N-Soluble	0.39	U	mg/Kg	0.39	2.9	1.0	9056M
Analysis Batch: 280-60991	Analysis Date: 04/06/2011 0312						DryWt Corrected: Y
Orthophosphate as P-Soluble	1.4	U N	mg/Kg	1.4	5.8	1.0	9056M
Analysis Batch: 280-60991	Analysis Date: 04/06/2011 0312						DryWt Corrected: Y
Sulfate-Soluble	111		mg/Kg	2.0	5.8	1.0	9056M
Analysis Batch: 280-60988	Analysis Date: 04/06/2011 0312						DryWt Corrected: Y
Fluoride-Soluble	0.95	U N	mg/Kg	0.95	5.8	1.0	9056M
Analysis Batch: 280-60988	Analysis Date: 04/06/2011 0312						DryWt Corrected: Y

Analyte	Result	Qual	Units	RL	RL	Dil	Method
pH adj. to 25 deg C-Soluble	5.57		SU	0.0100	0.0100	1.0	9045C
Analysis Batch: 280-60499	Analysis Date: 04/02/2011 1012						DryWt Corrected: N
Percent Moisture	13.2		%	0.10	0.10	1.0	D-2216
Analysis Batch: 280-60379	Analysis Date: 04/01/2011 1315						DryWt Corrected: N

General Chemistry

Client Sample ID: **J1H0K3**

Lab Sample ID: 280-14129-2
Client Matrix: Solid

% Moisture: 9.9

Date Sampled: 03/30/2011 0810
Date Received: 04/01/2011 0830

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Nitrate Nitrite as N-Soluble	29.3		mg/Kg	0.39	0.81	1.0	353.2
Analysis Batch: 280-60832	Analysis Date: 04/05/2011 1258						DryWt Corrected: Y
Chloride-Soluble	2.5	B	mg/Kg	2.2	5.5	1.0	9056M
Analysis Batch: 280-60988	Analysis Date: 04/06/2011 0436						DryWt Corrected: Y
Nitrate as N-Soluble	28.6		mg/Kg	0.35	2.8	1.0	9056M
Analysis Batch: 280-60991	Analysis Date: 04/06/2011 0436						DryWt Corrected: Y
Bromide-Soluble	0.43	U	mg/Kg	0.43	2.2	1.0	9056M
Analysis Batch: 280-60988	Analysis Date: 04/06/2011 0436						DryWt Corrected: Y
Nitrite as N-Soluble	0.37	U	mg/Kg	0.37	2.8	1.0	9056M
Analysis Batch: 280-60991	Analysis Date: 04/06/2011 0436						DryWt Corrected: Y
Orthophosphate as P-Soluble	1.8	B	mg/Kg	1.4	5.5	1.0	9056M
Analysis Batch: 280-60991	Analysis Date: 04/06/2011 0436						DryWt Corrected: Y
Sulfate-Soluble	143		mg/Kg	1.9	5.5	1.0	9056M
Analysis Batch: 280-60988	Analysis Date: 04/06/2011 0436						DryWt Corrected: Y
Fluoride-Soluble	1.9	B	mg/Kg	0.91	5.5	1.0	9056M
Analysis Batch: 280-60988	Analysis Date: 04/06/2011 0436						DryWt Corrected: Y

Analyte	Result	Qual	Units	RL	RL	Dil	Method
pH adj. to 25 deg C-Soluble	7.97		SU	0.0100	0.0100	1.0	9045C
Analysis Batch: 280-60499	Analysis Date: 04/02/2011 1014						DryWt Corrected: N
Percent Moisture	9.9		%	0.10	0.10	1.0	D-2216
Analysis Batch: 280-60379	Analysis Date: 04/01/2011 1315						DryWt Corrected: N

QUALITY CONTROL RESULTS

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Prep Batch: 280-60736					
LCS 280-60736/2-A	Lab Control Sample	T	Solid	5030B	
LCSD 280-60736/3-A	Lab Control Sample Duplicate	T	Solid	5030B	
MB 280-60736/1-A	Method Blank	T	Solid	5030B	
280-14083-1	J1H0C3	T	Solid	5030B	
280-14083-2	J1H0C5	T	Solid	5030B	
280-14083-2MS	Matrix Spike	T	Solid	5030B	
280-14083-2MSD	Matrix Spike Duplicate	T	Solid	5030B	
280-14129-2	J1H0K3	T	Solid	5030B	
280-14129-2MS	Matrix Spike	T	Solid	5030B	
280-14129-2MSD	Matrix Spike Duplicate	T	Solid	5030B	
Prep Batch: 280-60901					
LCS 280-60901/2-A	Lab Control Sample	T	Solid	5030B	
LCSD 280-60901/3-A	Lab Control Sample Duplicate	T	Solid	5030B	
MB 280-60901/1-A	Method Blank	T	Solid	5030B	
280-14129-1	J1H0K2	T	Solid	5030B	
280-14129-1MS	Matrix Spike	T	Solid	5030B	
280-14129-1MSD	Matrix Spike Duplicate	T	Solid	5030B	
Analysis Batch:280-60985					
LCS 280-60736/2-A	Lab Control Sample	T	Solid	8260B	280-60736
LCSD 280-60736/3-A	Lab Control Sample Duplicate	T	Solid	8260B	280-60736
MB 280-60736/1-A	Method Blank	T	Solid	8260B	280-60736
280-14083-1	J1H0C3	T	Solid	8260B	280-60736
280-14083-2	J1H0C5	T	Solid	8260B	280-60736
280-14083-2MS	Matrix Spike	T	Solid	8260B	280-60736
280-14083-2MSD	Matrix Spike Duplicate	T	Solid	8260B	280-60736
280-14129-2	J1H0K3	T	Solid	8260B	280-60736
280-14129-2MS	Matrix Spike	T	Solid	8260B	280-60736
280-14129-2MSD	Matrix Spike Duplicate	T	Solid	8260B	280-60736
Analysis Batch:280-61383					
LCS 280-60901/2-A	Lab Control Sample	T	Solid	8260B	280-60901
LCSD 280-60901/3-A	Lab Control Sample Duplicate	T	Solid	8260B	280-60901
MB 280-60901/1-A	Method Blank	T	Solid	8260B	280-60901
280-14129-1	J1H0K2	T	Solid	8260B	280-60901
280-14129-1MS	Matrix Spike	T	Solid	8260B	280-60901
280-14129-1MSD	Matrix Spike Duplicate	T	Solid	8260B	280-60901

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 280-60672					
LCS 280-60672/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-60672/1-A	Method Blank	T	Solid	3550C	
280-14083-1	J1H0C3	T	Solid	3550C	
280-14083-1MS	Matrix Spike	T	Solid	3550C	
280-14083-1MSD	Matrix Spike Duplicate	T	Solid	3550C	
280-14083-2	J1H0C5	T	Solid	3550C	
Analysis Batch:280-61044					
LCS 280-60672/2-A	Lab Control Sample	T	Solid	8270C	280-60672
MB 280-60672/1-A	Method Blank	T	Solid	8270C	280-60672
280-14083-1	J1H0C3	T	Solid	8270C	280-60672
280-14083-1MS	Matrix Spike	T	Solid	8270C	280-60672
280-14083-1MSD	Matrix Spike Duplicate	T	Solid	8270C	280-60672
280-14083-2	J1H0C5	T	Solid	8270C	280-60672
Prep Batch: 280-61769					
LCS 280-61769/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-61769/1-A	Method Blank	T	Solid	3550C	
280-14129-1	J1H0K2	T	Solid	3550C	
280-14129-1MS	Matrix Spike	T	Solid	3550C	
280-14129-1MSD	Matrix Spike Duplicate	T	Solid	3550C	
280-14129-2	J1H0K3	T	Solid	3550C	
Analysis Batch:280-62353					
LCS 280-61769/2-A	Lab Control Sample	T	Solid	8270C	280-61769
MB 280-61769/1-A	Method Blank	T	Solid	8270C	280-61769
280-14129-1	J1H0K2	T	Solid	8270C	280-61769
280-14129-1MS	Matrix Spike	T	Solid	8270C	280-61769
280-14129-1MSD	Matrix Spike Duplicate	T	Solid	8270C	280-61769
280-14129-2	J1H0K3	T	Solid	8270C	280-61769

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 280-60667					
LCS 280-60667/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-60667/1-A	Method Blank	T	Solid	3550C	
280-14083-1	J1H0C3	T	Solid	3550C	
280-14083-2	J1H0C5	T	Solid	3550C	
280-14083-2MS	Matrix Spike	T	Solid	3550C	
280-14083-2MSD	Matrix Spike Duplicate	T	Solid	3550C	
Prep Batch: 280-60678					
LCS 280-60678/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-60678/1-A	Method Blank	T	Solid	3550C	
280-14083-1	J1H0C3	T	Solid	3550C	
280-14083-2	J1H0C5	T	Solid	3550C	
280-14083-2MS	Matrix Spike	T	Solid	3550C	
280-14083-2MSD	Matrix Spike Duplicate	T	Solid	3550C	
Prep Batch: 280-60900					
LCS 280-60900/2-A	Lab Control Sample	T	Solid	8151A	
MB 280-60900/1-A	Method Blank	T	Solid	8151A	
280-14083-1	J1H0C3	T	Solid	8151A	
280-14083-2	J1H0C5	T	Solid	8151A	
280-14083-2MS	Matrix Spike	T	Solid	8151A	
280-14083-2MSD	Matrix Spike Duplicate	T	Solid	8151A	
280-14129-1	J1H0K2	T	Solid	8151A	
280-14129-2	J1H0K3	T	Solid	8151A	
Prep Batch: 280-61224					
LCS 280-61224/2-A	Lab Control Sample	T	Solid	3550C	
LCSD 280-61224/3-A	Lab Control Sample Duplicate	T	Solid	3550C	
MB 280-61224/1-A	Method Blank	T	Solid	3550C	
280-14083-1	J1H0C3	T	Solid	3550C	
280-14083-2	J1H0C5	T	Solid	3550C	
Analysis Batch:280-61259					
LCS 280-60678/2-A	Lab Control Sample	T	Solid	8082	280-60678
MB 280-60678/1-A	Method Blank	T	Solid	8082	280-60678
280-14083-1	J1H0C3	T	Solid	8082	280-60678
280-14083-2	J1H0C5	T	Solid	8082	280-60678
280-14083-2MS	Matrix Spike	T	Solid	8082	280-60678
280-14083-2MSD	Matrix Spike Duplicate	T	Solid	8082	280-60678

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Analysis Batch:280-61261					
LCS 280-60678/2-A	Lab Control Sample	T	Solid	8082	280-60678
MB 280-60678/1-A	Method Blank	T	Solid	8082	280-60678
280-14083-1	J1H0C3	T	Solid	8082	280-60678
280-14083-2	J1H0C5	T	Solid	8082	280-60678
280-14083-2MS	Matrix Spike	T	Solid	8082	280-60678
280-14083-2MSD	Matrix Spike Duplicate	T	Solid	8082	280-60678
Analysis Batch:280-61327					
LCS 280-60667/2-A	Lab Control Sample	T	Solid	8081A	280-60667
MB 280-60667/1-A	Method Blank	T	Solid	8081A	280-60667
280-14083-1	J1H0C3	T	Solid	8081A	280-60667
280-14083-2	J1H0C5	T	Solid	8081A	280-60667
280-14083-2MS	Matrix Spike	T	Solid	8081A	280-60667
280-14083-2MSD	Matrix Spike Duplicate	T	Solid	8081A	280-60667
Analysis Batch:280-61394					
LCS 280-60900/2-A	Lab Control Sample	T	Solid	8151A	280-60900
MB 280-60900/1-A	Method Blank	T	Solid	8151A	280-60900
280-14083-1	J1H0C3	T	Solid	8151A	280-60900
280-14083-2	J1H0C5	T	Solid	8151A	280-60900
280-14083-2MS	Matrix Spike	T	Solid	8151A	280-60900
280-14083-2MSD	Matrix Spike Duplicate	T	Solid	8151A	280-60900
280-14129-1	J1H0K2	T	Solid	8151A	280-60900
280-14129-2	J1H0K3	T	Solid	8151A	280-60900
Analysis Batch:280-61645					
LCS 280-61224/2-A	Lab Control Sample	T	Solid	NWTPH-Dx	280-61224
LCSD 280-61224/3-A	Lab Control Sample Duplicate	T	Solid	NWTPH-Dx	280-61224
MB 280-61224/1-A	Method Blank	T	Solid	NWTPH-Dx	280-61224
280-14083-1	J1H0C3	T	Solid	NWTPH-Dx	280-61224
280-14083-2	J1H0C5	T	Solid	NWTPH-Dx	280-61224
Prep Batch: 280-61768					
LCS 280-61768/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-61768/1-A	Method Blank	T	Solid	3550C	
280-14129-1	J1H0K2	T	Solid	3550C	
280-14129-2	J1H0K3	T	Solid	3550C	
280-14129-2MS	Matrix Spike	T	Solid	3550C	
280-14129-2MSD	Matrix Spike Duplicate	T	Solid	3550C	

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 280-61773					
LCS 280-61773/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-61773/1-A	Method Blank	T	Solid	3550C	
280-14129-1	J1H0K2	T	Solid	3550C	
280-14129-2	J1H0K3	T	Solid	3550C	
280-14129-2MS	Matrix Spike	T	Solid	3550C	
280-14129-2MSD	Matrix Spike Duplicate	T	Solid	3550C	
Prep Batch: 280-61774					
LCS 280-61774/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-61774/1-A	Method Blank	T	Solid	3550C	
280-14129-1	J1H0K2	T	Solid	3550C	
280-14129-2	J1H0K3	T	Solid	3550C	
280-14129-2MS	Matrix Spike	T	Solid	3550C	
280-14129-2MSD	Matrix Spike Duplicate	T	Solid	3550C	
Analysis Batch:280-62400					
LCS 280-61768/2-A	Lab Control Sample	T	Solid	8081A	280-61768
MB 280-61768/1-A	Method Blank	T	Solid	8081A	280-61768
280-14129-1	J1H0K2	T	Solid	8081A	280-61768
280-14129-2	J1H0K3	T	Solid	8081A	280-61768
280-14129-2MS	Matrix Spike	T	Solid	8081A	280-61768
280-14129-2MSD	Matrix Spike Duplicate	T	Solid	8081A	280-61768
Analysis Batch:280-62436					
LCS 280-61774/2-A	Lab Control Sample	T	Solid	8082	280-61774
MB 280-61774/1-A	Method Blank	T	Solid	8082	280-61774
280-14129-1	J1H0K2	T	Solid	8082	280-61774
280-14129-2	J1H0K3	T	Solid	8082	280-61774
280-14129-2MS	Matrix Spike	T	Solid	8082	280-61774
280-14129-2MSD	Matrix Spike Duplicate	T	Solid	8082	280-61774
Prep Batch: 280-62528					
LCS 280-62528/2-A	Lab Control Sample	T	Solid	3550C	
LCSD 280-62528/3-A	Lab Control Sample Duplicate	T	Solid	3550C	
MB 280-62528/1-A	Method Blank	T	Solid	3550C	
280-14129-2	J1H0K3	T	Solid	3550C	
Analysis Batch:280-62713					
LCS 280-61773/2-A	Lab Control Sample	T	Solid	NWTPH-Dx	280-61773
MB 280-61773/1-A	Method Blank	T	Solid	NWTPH-Dx	280-61773
280-14129-1	J1H0K2	T	Solid	NWTPH-Dx	280-61773
280-14129-2	J1H0K3	T	Solid	NWTPH-Dx	280-61773
280-14129-2MS	Matrix Spike	T	Solid	NWTPH-Dx	280-61773
280-14129-2MSD	Matrix Spike Duplicate	T	Solid	NWTPH-Dx	280-61773

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Analysis Batch:280-62727					
LCS 280-61774/2-A	Lab Control Sample	T	Solid	8082	280-61774
280-14129-2	J1H0K3	T	Solid	8082	280-61774
280-14129-2MS	Matrix Spike	T	Solid	8082	280-61774
280-14129-2MSD	Matrix Spike Duplicate	T	Solid	8082	280-61774
Analysis Batch:280-62903					
LCS 280-62528/2-A	Lab Control Sample	T	Solid	8082	280-62528
LCSD 280-62528/3-A	Lab Control Sample Duplicate	T	Solid	8082	280-62528
MB 280-62528/1-A	Method Blank	T	Solid	8082	280-62528
280-14129-2	J1H0K3	T	Solid	8082	280-62528
Analysis Batch:280-62904					
LCS 280-62528/2-A	Lab Control Sample	T	Solid	8082	280-62528
LCSD 280-62528/3-A	Lab Control Sample Duplicate	T	Solid	8082	280-62528
MB 280-62528/1-A	Method Blank	T	Solid	8082	280-62528
280-14129-2	J1H0K3	T	Solid	8082	280-62528

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-60306					
LCS 280-60306/2-A	Lab Control Sample	T	Solid	7471A	
MB 280-60306/1-A	Method Blank	T	Solid	7471A	
280-14083-1	J1H0C3	T	Solid	7471A	
280-14083-2	J1H0C5	T	Solid	7471A	
280-14083-2DU	Duplicate	T	Solid	7471A	
280-14083-2MS	Matrix Spike	T	Solid	7471A	
Prep Batch: 280-60350					
LCS 280-60350/2-A	Lab Control Sample	T	Solid	3050B	
MB 280-60350/1-A	Method Blank	T	Solid	3050B	
280-14083-1	J1H0C3	T	Solid	3050B	
280-14083-1DU	Duplicate	T	Solid	3050B	
280-14083-1MS	Matrix Spike	T	Solid	3050B	
280-14083-2	J1H0C5	T	Solid	3050B	
Prep Batch: 280-60623					
LCS 280-60623/2-A	Lab Control Sample	T	Solid	3050B	
MB 280-60623/1-A	Method Blank	T	Solid	3050B	
280-14129-1	J1H0K2	T	Solid	3050B	
280-14129-1DU	Duplicate	T	Solid	3050B	
280-14129-1MS	Matrix Spike	T	Solid	3050B	
280-14129-2	J1H0K3	T	Solid	3050B	
Prep Batch: 280-60730					
LCS 280-60730/2-A	Lab Control Sample	T	Solid	7471A	
MB 280-60730/1-A	Method Blank	T	Solid	7471A	
280-14129-1	J1H0K2	T	Solid	7471A	
280-14129-2	J1H0K3	T	Solid	7471A	
280-14129-2DU	Duplicate	T	Solid	7471A	
280-14129-2MS	Matrix Spike	T	Solid	7471A	
Analysis Batch:280-61031					
LCS 280-60306/2-A	Lab Control Sample	T	Solid	7471A	280-60306
MB 280-60306/1-A	Method Blank	T	Solid	7471A	280-60306
LCS 280-60730/2-A	Lab Control Sample	T	Solid	7471A	280-60730
MB 280-60730/1-A	Method Blank	T	Solid	7471A	280-60730
280-14083-1	J1H0C3	T	Solid	7471A	280-60306
280-14083-2	J1H0C5	T	Solid	7471A	280-60306
280-14083-2DU	Duplicate	T	Solid	7471A	280-60306
280-14083-2MS	Matrix Spike	T	Solid	7471A	280-60306
280-14129-1	J1H0K2	T	Solid	7471A	280-60730
280-14129-2	J1H0K3	T	Solid	7471A	280-60730
280-14129-2DU	Duplicate	T	Solid	7471A	280-60730
280-14129-2MS	Matrix Spike	T	Solid	7471A	280-60730

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:280-61070					
LCS 280-60350/2-A	Lab Control Sample	T	Solid	6010B	280-60350
MB 280-60350/1-A	Method Blank	T	Solid	6010B	280-60350
280-14083-1	J1H0C3	T	Solid	6010B	280-60350
280-14083-1DU	Duplicate	T	Solid	6010B	280-60350
280-14083-1MS	Matrix Spike	T	Solid	6010B	280-60350
280-14083-2	J1H0C5	T	Solid	6010B	280-60350
Analysis Batch:280-61777					
LCS 280-60623/2-A	Lab Control Sample	T	Solid	6010B	280-60623
MB 280-60623/1-A	Method Blank	T	Solid	6010B	280-60623
280-14129-1	J1H0K2	T	Solid	6010B	280-60623
280-14129-1DU	Duplicate	T	Solid	6010B	280-60623
280-14129-1MS	Matrix Spike	T	Solid	6010B	280-60623
280-14129-2	J1H0K3	T	Solid	6010B	280-60623

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-60161					
280-14083-1	J1H0C3	T	Solid	D-2216	
280-14083-1DU	Duplicate	T	Solid	D-2216	
280-14083-2	J1H0C5	T	Solid	D-2216	
Prep Batch: 280-60167					
280-14083-1	J1H0C3	S	Solid	DI Leach	
280-14083-1DU	Duplicate	S	Solid	DI Leach	
280-14083-2	J1H0C5	S	Solid	DI Leach	
Analysis Batch:280-60188					
LCS 280-60188/4	Lab Control Sample	T	Water	9045C	
LCSD 280-60188/5	Lab Control Sample Duplicate	T	Water	9045C	
280-14083-1	J1H0C3	S	Solid	9045C	
280-14083-1DU	Duplicate	S	Solid	9045C	
280-14083-2	J1H0C5	S	Solid	9045C	
Prep Batch: 280-60332					
LCS 280-60332/2-A	Lab Control Sample	S	Solid	DI Leach	
MB 280-60332/1-A	Method Blank	S	Solid	DI Leach	
280-14083-1	J1H0C3	S	Solid	DI Leach	
280-14083-1DU	Duplicate	S	Solid	DI Leach	
280-14083-1MS	Matrix Spike	S	Solid	DI Leach	
280-14083-2	J1H0C5	S	Solid	DI Leach	
Analysis Batch:280-60379					
280-14129-1	J1H0K2	T	Solid	D-2216	
280-14129-1DU	Duplicate	T	Solid	D-2216	
280-14129-2	J1H0K3	T	Solid	D-2216	
Prep Batch: 280-60384					
LCS 280-60384/2-A	Lab Control Sample	S	Solid	DI Leach	
MB 280-60384/1-A	Method Blank	S	Solid	DI Leach	
280-14083-1	J1H0C3	S	Solid	DI Leach	
280-14083-1DU	Duplicate	S	Solid	DI Leach	
280-14083-1MS	Matrix Spike	S	Solid	DI Leach	
280-14083-2	J1H0C5	S	Solid	DI Leach	
Prep Batch: 280-60474					
280-14129-1	J1H0K2	S	Solid	DI Leach	
280-14129-2	J1H0K3	S	Solid	DI Leach	
Analysis Batch:280-60499					
280-14129-1	J1H0K2	S	Solid	9045C	
280-14129-2	J1H0K3	S	Solid	9045C	

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-60502					
LCS 280-60384/2-A	Lab Control Sample	S	Solid	353.2	
MB 280-60384/1-A	Method Blank	S	Solid	353.2	
280-14083-1	J1H0C3	S	Solid	353.2	
280-14083-1DU	Duplicate	S	Solid	353.2	
280-14083-1MS	Matrix Spike	S	Solid	353.2	
280-14083-2	J1H0C5	S	Solid	353.2	
Analysis Batch:280-60645					
LCS 280-60332/2-A	Lab Control Sample	S	Solid	9056M	
MB 280-60332/1-A	Method Blank	S	Solid	9056M	
280-14083-1	J1H0C3	S	Solid	9056M	
280-14083-1DU	Duplicate	S	Solid	9056M	
280-14083-1MS	Matrix Spike	S	Solid	9056M	
280-14083-2	J1H0C5	S	Solid	9056M	
Analysis Batch:280-60646					
LCS 280-60332/2-A	Lab Control Sample	S	Solid	9056M	
MB 280-60332/1-A	Method Blank	S	Solid	9056M	
280-14083-1	J1H0C3	S	Solid	9056M	
280-14083-1DU	Duplicate	S	Solid	9056M	
280-14083-1MS	Matrix Spike	S	Solid	9056M	
280-14083-2	J1H0C5	S	Solid	9056M	
Prep Batch: 280-60708					
LCS 280-60708/2-A	Lab Control Sample	S	Solid	DI Leach	
MB 280-60708/1-A	Method Blank	S	Solid	DI Leach	
280-14129-1	J1H0K2	S	Solid	DI Leach	
280-14129-1DU	Duplicate	S	Solid	DI Leach	
280-14129-1MS	Matrix Spike	S	Solid	DI Leach	
280-14129-2	J1H0K3	S	Solid	DI Leach	
Analysis Batch:280-60832					
LCS 280-60708/2-A	Lab Control Sample	S	Solid	353.2	
MB 280-60708/1-A	Method Blank	S	Solid	353.2	
280-14129-1	J1H0K2	S	Solid	353.2	
280-14129-1DU	Duplicate	S	Solid	353.2	
280-14129-1MS	Matrix Spike	S	Solid	353.2	
280-14129-2	J1H0K3	S	Solid	353.2	

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Prep Batch: 280-60848					
LCS 280-60848/1-A	Lab Control Sample	S	Solid	DI Leach	
MB 280-60848/2-A	Method Blank	S	Solid	DI Leach	
280-14129-1	J1H0K2	S	Solid	DI Leach	
280-14129-1DU	Duplicate	S	Solid	DI Leach	
280-14129-1MS	Matrix Spike	S	Solid	DI Leach	
280-14129-2	J1H0K3	S	Solid	DI Leach	
Analysis Batch:280-60988					
LCS 280-60848/1-A	Lab Control Sample	S	Solid	9056M	
MB 280-60848/2-A	Method Blank	S	Solid	9056M	
280-14129-1	J1H0K2	S	Solid	9056M	
280-14129-1DU	Duplicate	S	Solid	9056M	
280-14129-1MS	Matrix Spike	S	Solid	9056M	
280-14129-2	J1H0K3	S	Solid	9056M	
Analysis Batch:280-60991					
LCS 280-60848/1-A	Lab Control Sample	S	Solid	9056M	
MB 280-60848/2-A	Method Blank	S	Solid	9056M	
280-14129-1	J1H0K2	S	Solid	9056M	
280-14129-1DU	Duplicate	S	Solid	9056M	
280-14129-1MS	Matrix Spike	S	Solid	9056M	
280-14129-2	J1H0K3	S	Solid	9056M	

Report Basis
S = Soluble
T = Total

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
HPLC/IC					
Prep Batch: 280-60733					
LCS 280-60733/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-60733/1-A	Method Blank	T	Solid	3550C	
280-14083-1	J1H0C3	T	Solid	3550C	
280-14083-1MS	Matrix Spike	T	Solid	3550C	
280-14083-1MSD	Matrix Spike Duplicate	T	Solid	3550C	
280-14083-2	J1H0C5	T	Solid	3550C	
Analysis Batch:280-61359					
LCS 280-60733/2-A	Lab Control Sample	T	Solid	8310	280-60733
MB 280-60733/1-A	Method Blank	T	Solid	8310	280-60733
280-14083-1	J1H0C3	T	Solid	8310	280-60733
280-14083-1MS	Matrix Spike	T	Solid	8310	280-60733
280-14083-1MSD	Matrix Spike Duplicate	T	Solid	8310	280-60733
280-14083-2	J1H0C5	T	Solid	8310	280-60733
Prep Batch: 280-61770					
LCS 280-61770/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-61770/1-A	Method Blank	T	Solid	3550C	
280-14129-1	J1H0K2	T	Solid	3550C	
280-14129-2	J1H0K3	T	Solid	3550C	
280-14129-2MS	Matrix Spike	T	Solid	3550C	
280-14129-2MSD	Matrix Spike Duplicate	T	Solid	3550C	
Analysis Batch:280-62017					
LCS 280-61770/2-A	Lab Control Sample	T	Solid	8310	280-61770
MB 280-61770/1-A	Method Blank	T	Solid	8310	280-61770
280-14129-1	J1H0K2	T	Solid	8310	280-61770
280-14129-2	J1H0K3	T	Solid	8310	280-61770
280-14129-2MS	Matrix Spike	T	Solid	8310	280-61770
280-14129-2MSD	Matrix Spike Duplicate	T	Solid	8310	280-61770

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Method Blank - Batch: 280-60736

Method: 8260B
Preparation: 5030B

Lab Sample ID:	MB 280-60736/1-A	Analysis Batch:	280-60985	Instrument ID:	MSV_J
Client Matrix:	Solid	Prep Batch:	280-60736	Lab File ID:	J5864.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5.04 g
Analysis Date:	04/05/2011 0941	Units:	ug/Kg	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acetone	5.4	U	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)	4.4	U	4.4	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)	108	58 - 140
Toluene-d8 (Surr)	112	80 - 126
4-Bromofluorobenzene (Surr)	108	76 - 127
Dibromofluoromethane (Surr)	112	75 - 121

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Method Blank TICs- Batch: 280-60736

Cas Number	Analyte	RT	Est. Result	Qual
87-61-6	1,2,3-Trichlorobenzene	15.89	1.05	J N
120-82-1	1,2,4-Trichlorobenzene	15.32	0.895	J N
87-68-3	Hexachlorobutadiene	15.47	2.38	J N
91-20-3	Naphthalene	15.61	1.05	J N
	Unknown	2.24	91.4	N J

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-60736

Method: 8260B
Preparation: 5030B

LCS Lab Sample ID:	LCS 280-60736/2-A	Analysis Batch:	280-60985	Instrument ID:	MSV_J
Client Matrix:	Solid	Prep Batch:	280-60736	Lab File ID:	J5861.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 g
Analysis Date:	04/05/2011 0825	Units:	ug/Kg	Final Weight/Volume:	5 mL
Prep Date:	04/05/2011 0600				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-60736/3-A	Analysis Batch:	280-60985	Instrument ID:	MSV_J
Client Matrix:	Solid	Prep Batch:	280-60736	Lab File ID:	J5862.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 g
Analysis Date:	04/05/2011 0848	Units:	ug/Kg	Final Weight/Volume:	5 mL
Prep Date:	04/05/2011 0600				
Leach Date:	N/A				

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene	110	110	76 - 120	1	20		
Bromodichloromethane	104	106	74 - 125	1	20		
Carbon tetrachloride	107	111	69 - 147	4	20		
Chlorobenzene	106	108	74 - 120	1	20		
Chloroform	102	105	77 - 125	2	20		
1,3-Dichlorobenzene	105	109	74 - 120	4	20		
1,1-Dichloroethane	101	103	74 - 120	2	20		
trans-1,2-Dichloroethene	112	114	80 - 127	2	20		
1,1-Dichloroethene	108	111	77 - 143	2	20		
1,2-Dichloropropane	105	104	74 - 120	2	20		
Ethylbenzene	108	111	78 - 120	3	20		
Methylene Chloride	110	111	76 - 137	1	21		
Tetrachloroethene	109	113	71 - 120	3	20		
Toluene	109	111	72 - 120	2	20		
1,1,1-Trichloroethane	105	108	67 - 143	2	20		
Trichloroethene	109	112	78 - 120	2	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	103	103	58 - 140
Toluene-d8 (Surr)	114	113	80 - 126
4-Bromofluorobenzene (Surr)	102	102	76 - 127
Dibromofluoromethane (Surr)	105	105	75 - 121

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-60736

Method: 8260B
Preparation: 5030B

MS Lab Sample ID:	280-14129-2	Analysis Batch:	280-60985	Instrument ID:	MSV_J
Client Matrix:	Solid	Prep Batch:	280-60736	Lab File ID:	J5871.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5.222 g
Analysis Date:	04/05/2011 1232			Final Weight/Volume:	5 mL
Prep Date:	04/05/2011 0600				
Leach Date:	N/A				

MSD Lab Sample ID:	280-14129-2	Analysis Batch:	280-60985	Instrument ID:	MSV_J
Client Matrix:	Solid	Prep Batch:	280-60736	Lab File ID:	J5872.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5.472 g
Analysis Date:	04/05/2011 1255			Final Weight/Volume:	5 mL
Prep Date:	04/05/2011 0600				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Benzene	112	88	76 - 120	29	20		*
Bromodichloromethane	103	82	74 - 125	27	20		*
Carbon tetrachloride	112	77	69 - 147	42	20		*
Chlorobenzene	109	72	74 - 120	45	20	T	T *
Chloroform	107	84	77 - 125	29	20		*
1,3-Dichlorobenzene	112	54	74 - 120	75	20	T	T *
1,1-Dichloroethane	106	86	74 - 120	26	20		*
trans-1,2-Dichloroethene	119	93	80 - 127	29	20		*
1,1-Dichloroethene	116	90	77 - 143	29	20		*
1,2-Dichloropropane	104	84	74 - 120	26	20		*
Ethylbenzene	112	69	78 - 120	52	20	T	T *
Methylene Chloride	112	95	76 - 137	21	21		
Tetrachloroethene	115	68	71 - 120	55	20	T	T *
Toluene	112	80	72 - 120	38	20		*
1,1,1-Trichloroethane	112	81	67 - 143	37	20		*
Trichloroethene	113	80	78 - 120	38	20		*

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	102	105	58 - 140
Toluene-d8 (Surr)	121	118	80 - 126
4-Bromofluorobenzene (Surr)	126	108	76 - 127
Dibromofluoromethane (Surr)	106	107	75 - 121

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-60736

Method: 8260B
Preparation: 5030B

MS Lab Sample ID:	280-14083-2	Analysis Batch:	280-60985	Instrument ID:	MSV_J
Client Matrix:	Solid	Prep Batch:	280-60736	Lab File ID:	J5873.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5.275 g
Analysis Date:	04/05/2011 1318			Final Weight/Volume:	5 mL
Prep Date:	04/05/2011 1235				
Leach Date:	N/A				

MSD Lab Sample ID:	280-14083-2	Analysis Batch:	280-60985	Instrument ID:	MSV_J
Client Matrix:	Solid	Prep Batch:	280-60736	Lab File ID:	J5874.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5.230 g
Analysis Date:	04/05/2011 1341			Final Weight/Volume:	5 mL
Prep Date:	04/05/2011 1235				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Benzene	112	103	76 - 120	7	20		
Bromodichloromethane	104	98	74 - 125	6	20		
Carbon tetrachloride	110	100	69 - 147	9	20		
Chlorobenzene	110	99	74 - 120	10	20		
Chloroform	106	97	77 - 125	8	20		
1,3-Dichlorobenzene	114	102	74 - 120	11	20		
1,1-Dichloroethane	104	96	74 - 120	8	20		
trans-1,2-Dichloroethene	116	106	80 - 127	8	20		
1,1-Dichloroethene	112	101	77 - 143	9	20		
1,2-Dichloropropane	104	98	74 - 120	6	20		
Ethylbenzene	113	101	78 - 120	10	20		
Methylene Chloride	112	105	76 - 137	5	21		
Tetrachloroethene	116	100	71 - 120	14	20		
Toluene	113	103	72 - 120	8	20		
1,1,1-Trichloroethane	109	98	67 - 143	10	20		
Trichloroethene	112	100	78 - 120	10	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	103	104	58 - 140
Toluene-d8 (Surr)	118	116	80 - 126
4-Bromofluorobenzene (Surr)	112	112	76 - 127
Dibromofluoromethane (Surr)	107	106	75 - 121

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Method Blank - Batch: 280-60901

Method: 8260B
Preparation: 5030B

Lab Sample ID:	MB 280-60901/1-A	Analysis Batch:	280-61383	Instrument ID:	MSV_J
Client Matrix:	Solid	Prep Batch:	280-60901	Lab File ID:	J5895.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5.0 g
Analysis Date:	04/06/2011 0924	Units:	ug/Kg	Final Weight/Volume:	5 mL
Prep Date:	04/06/2011 0600				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acetone	5.4	U	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)	4.4	U	4.4	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)	116	80 - 126
4-Bromofluorobenzene (Surr)	116	76 - 127
Dibromofluoromethane (Surr)	106	75 - 121

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Method Blank TICs- Batch: 280-60901

Cas Number	Analyte	RT	Est. Result	Qual
87-68-3	Hexachlorobutadiene	15.49	2.09	J J N
	Tentatively Identified Compound		None	

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-60901

Method: 8260B
Preparation: 5030B

LCS Lab Sample ID:	LCS 280-60901/2-A	Analysis Batch:	280-61383	Instrument ID:	MSV_J
Client Matrix:	Solid	Prep Batch:	280-60901	Lab File ID:	J5892.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 g
Analysis Date:	04/06/2011 0816	Units:	ug/Kg	Final Weight/Volume:	5 mL
Prep Date:	04/06/2011 0600				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-60901/3-A	Analysis Batch:	280-61383	Instrument ID:	MSV_J
Client Matrix:	Solid	Prep Batch:	280-60901	Lab File ID:	J5893.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 g
Analysis Date:	04/06/2011 0839	Units:	ug/Kg	Final Weight/Volume:	5 mL
Prep Date:	04/06/2011 0600				
Leach Date:	N/A				

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene	115	110	76 - 120	4	20		
Bromodichloromethane	101	99	74 - 125	2	20		
Carbon tetrachloride	105	98	69 - 147	7	20		
Chlorobenzene	110	104	74 - 120	6	20		
Chloroform	100	97	77 - 125	3	20		
1,3-Dichlorobenzene	108	103	74 - 120	4	20		
1,1-Dichloroethane	108	102	74 - 120	5	20		
trans-1,2-Dichloroethene	114	108	80 - 127	5	20		
1,1-Dichloroethene	110	103	77 - 143	7	20		
1,2-Dichloropropane	113	109	74 - 120	3	20		
Ethylbenzene	115	108	78 - 120	6	20		
Methylene Chloride	108	105	76 - 137	3	21		
Tetrachloroethene	113	104	71 - 120	9	20		
Toluene	112	107	72 - 120	4	20		
1,1,1-Trichloroethane	103	97	67 - 143	7	20		
Trichloroethene	109	104	78 - 120	4	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	96	98	58 - 140
Toluene-d8 (Surr)	121	120	80 - 126
4-Bromofluorobenzene (Surr)	114	110	76 - 127
Dibromofluoromethane (Surr)	103	103	75 - 121

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-60901

Method: 8260B
Preparation: 5030B

MS Lab Sample ID:	280-14129-1	Analysis Batch:	280-61383	Instrument ID:	MSV_J
Client Matrix:	Solid	Prep Batch:	280-60901	Lab File ID:	J5907.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5.710 g
Analysis Date:	04/06/2011 1518			Final Weight/Volume:	5 mL
Prep Date:	04/06/2011 0917				
Leach Date:	N/A				

MSD Lab Sample ID:	280-14129-1	Analysis Batch:	280-61383	Instrument ID:	MSV_J
Client Matrix:	Solid	Prep Batch:	280-60901	Lab File ID:	J5908.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5.358 g
Analysis Date:	04/06/2011 1541			Final Weight/Volume:	5 mL
Prep Date:	04/06/2011 0917				
Leach Date:	N/A				

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Benzene	108	112	76 - 120	11	20		
Bromodichloromethane	95	100	74 - 125	11	20		
Carbon tetrachloride	95	101	69 - 147	13	20		
Chlorobenzene	100	106	74 - 120	12	20		
Chloroform	95	100	77 - 125	11	20		
1,3-Dichlorobenzene	102	109	74 - 120	13	20		
1,1-Dichloroethane	100	105	74 - 120	11	20		
trans-1,2-Dichloroethene	106	113	80 - 127	13	20		
1,1-Dichloroethene	100	108	77 - 143	14	20		
1,2-Dichloropropane	106	111	74 - 120	11	20		
Ethylbenzene	104	112	78 - 120	13	20		
Methylene Chloride	106	111	76 - 137	11	21		
Tetrachloroethene	98	105	71 - 120	13	20		
Toluene	104	110	72 - 120	11	20		
1,1,1-Trichloroethane	93	100	67 - 143	13	20		
Trichloroethene	101	105	78 - 120	11	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	97	97	58 - 140
Toluene-d8 (Surr)	120	120	80 - 126
4-Bromofluorobenzene (Surr)	113	114	76 - 127
Dibromofluoromethane (Surr)	104	103	75 - 121

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Method Blank - Batch: 280-60672

Method: 8270C
Preparation: 3550C

Lab Sample ID:	MB 280-60672/1-A	Analysis Batch:	280-61044	Instrument ID:	MSS_Y
Client Matrix:	Solid	Prep Batch:	280-60672	Lab File ID:	Y9314.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.9 g
Analysis Date:	04/05/2011 1854	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	04/04/2011 2115			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acenaphthene	10	U	10	320
Acenaphthylene	17	U	17	320
Anthracene	17	U	17	320
Benzo[a]anthracene	19	U	19	320
Benzo[a]pyrene	19	U	19	320
Benzo[b]fluoranthene	25	U	25	320
Benzo[ghi]perylene	16	U	16	320
Benzo[k]fluoranthene	39	U	39	320
Bis(2-chloroethoxy)methane	22	U	22	320
Bis(2-chloroethyl)ether	16	U	16	320
bis (2-chloroisopropyl) ether	22	U	22	320
Bis(2-ethylhexyl) phthalate	80.3	J	45	320
4-Bromophenyl phenyl ether	18	U	18	320
Butyl benzyl phthalate	42	U	42	320
Carbazole	35	U	35	320
4-Chloroaniline	80	U	80	320
4-Chloro-3-methylphenol	64	U	64	320
2-Chloronaphthalene	9.7	U	9.7	320
2-Chlorophenol	20	U	20	320
4-Chlorophenyl phenyl ether	20	U	20	320
Chrysene	26	U	26	320
Dibenz(a,h)anthracene	18	U	18	320
Dibenzofuran	19	U	19	320
1,2-Dichlorobenzene	21	U	21	320
1,3-Dichlorobenzene	12	U	12	320
1,4-Dichlorobenzene	13	U	13	320
3,3'-Dichlorobenzidine	87	U	87	640
2,4-Dichlorophenol	9.7	U	9.7	320
Diethyl phthalate	25	U	25	320
2,4-Dimethylphenol	64	U	64	320
Dimethyl phthalate	22	U	22	320
Di-n-butyl phthalate	28	U	28	320
4,6-Dinitro-2-methylphenol	320	U	320	640
2,4-Dinitrophenol	320	U	320	800
2,4-Dinitrotoluene	64	U	64	320
2,6-Dinitrotoluene	27	U	27	320
Di-n-octyl phthalate	14	U	14	320
Fluoranthene	35	U	35	320
Fluorene	17	U	17	320
Hexachlorobenzene	28	U	28	320
Hexachlorobutadiene	9.7	U	9.7	320
Hexachlorocyclopentadiene	49	U	49	320
Hexachloroethane	21	U	21	320
Indeno[1,2,3-cd]pyrene	21	U	21	320
Isophorone	17	U	17	320

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Method Blank - Batch: 280-60672

Method: 8270C
Preparation: 3550C

Lab Sample ID:	MB 280-60672/1-A	Analysis Batch:	280-61044	Instrument ID:	MSS_Y
Client Matrix:	Solid	Prep Batch:	280-60672	Lab File ID:	Y9314.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.9 g
Analysis Date:	04/05/2011 1854	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	04/04/2011 2115			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
2-Methylnaphthalene	18	U	18	320
2-Methylphenol	13	U	13	320
3 & 4 Methylphenol	32	U	32	320
Naphthalene	30	U	30	320
2-Nitroaniline	49	U	49	320
3-Nitroaniline	71	U	71	320
4-Nitroaniline	70	U	70	320
Nitrobenzene	21	U	21	320
2-Nitrophenol	9.7	U	9.7	320
4-Nitrophenol	94	U	94	640
N-Nitrosodi-n-propylamine	30	U	30	320
N-Nitrosodiphenylamine	20	U	20	320
Pentachlorophenol	320	U	320	640
Phenanthrene	17	U	17	320
Phenol	17	U	17	320
Pyrene	12	U	12	320
1,2,4-Trichlorobenzene	27	U	27	320
2,4,5-Trichlorophenol	9.7	U	9.7	320
2,4,6-Trichlorophenol	9.7	U	9.7	320

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	86	50 - 120
2-Fluorophenol	85	53 - 120
Nitrobenzene-d5	85	50 - 120
Phenol-d5	89	52 - 120
Terphenyl-d14	97	55 - 120
2,4,6-Tribromophenol	80	51 - 120

Method Blank TICs- Batch: 280-60672

Cas Number	Analyte	RT	Est. Result	Qual
2213-23-2	Heptane, 2,4-dimethyl-	2.98	177	N J
2216-30-0	Heptane, 2,5-dimethyl-	3.09	231	N J
	Unknown	3.18	3260	N J

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Lab Control Sample - Batch: 280-60672

Method: 8270C
Preparation: 3550C

Lab Sample ID:	LCS 280-60672/2-A	Analysis Batch:	280-61044	Instrument ID:	MSS_Y
Client Matrix:	Solid	Prep Batch:	280-60672	Lab File ID:	Y9315.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.5 g
Analysis Date:	04/05/2011 1914	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	04/04/2011 2115			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acenaphthene	2540	2210	87	52 - 120	
Anthracene	2540	2370	93	57 - 120	
Carbazole	2540	2380	94	54 - 120	
4-Chloro-3-methylphenol	2540	2310	91	57 - 120	
2-Chlorophenol	2540	2120	83	53 - 120	
1,4-Dichlorobenzene	2540	1940	76	46 - 120	
2,4-Dinitrotoluene	2540	2550	100	53 - 120	
2-Methylnaphthalene	2540	2150	85	55 - 120	
2-Methylphenol	2540	2150	85	51 - 120	
4-Nitrophenol	2540	2370	93	41 - 120	
N-Nitrosodi-n-propylamine	2540	2110	83	51 - 120	
Pentachlorophenol	2540	2120	84	30 - 120	
Phenol	2540	2210	87	54 - 120	
Pyrene	2540	2450	96	50 - 120	
1,2,4-Trichlorobenzene	2540	1940	77	50 - 120	
2,4,6-Trichlorophenol	2540	2250	89	50 - 120	

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	84	50 - 120
2-Fluorophenol	83	53 - 120
Nitrobenzene-d5	84	50 - 120
Phenol-d5	86	52 - 120
Terphenyl-d14	93	55 - 120
2,4,6-Tribromophenol	88	51 - 120

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-60672

Method: 8270C
Preparation: 3550C

MS Lab Sample ID:	280-14083-1	Analysis Batch:	280-61044	Instrument ID:	MSS_Y
Client Matrix:	Solid	Prep Batch:	280-60672	Lab File ID:	Y9327.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.9 g
Analysis Date:	04/05/2011 2317			Final Weight/Volume:	1000 uL
Prep Date:	04/04/2011 2115			Injection Volume:	0.5 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-14083-1	Analysis Batch:	280-61044	Instrument ID:	MSS_Y
Client Matrix:	Solid	Prep Batch:	280-60672	Lab File ID:	Y9328.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	32.4 g
Analysis Date:	04/05/2011 2337			Final Weight/Volume:	1000 uL
Prep Date:	04/04/2011 2115			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acenaphthene	81	80	52 - 120	7	30		
Anthracene	92	85	57 - 120	12	30		
Carbazole	92	86	54 - 120	12	30		
4-Chloro-3-methylphenol	90	85	57 - 120	10	30		
2-Chlorophenol	71	72	53 - 120	4	30		
1,4-Dichlorobenzene	63	63	46 - 120	5	30		
2,4-Dinitrotoluene	96	90	53 - 120	11	30		
2-Methylnaphthalene	74	74	55 - 120	4	30		
2-Methylphenol	75	77	51 - 120	2	30		
4-Nitrophenol	92	89	41 - 120	8	30		
N-Nitrosodi-n-propylamine	73	72	51 - 120	6	30		
Pentachlorophenol	89	83	30 - 120	11	30		
Phenol	76	77	54 - 120	3	30		
Pyrene	96	90	50 - 120	11	38		
1,2,4-Trichlorobenzene	64	65	50 - 120	4	30		
2,4,6-Trichlorophenol	87	84	50 - 120	8	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
2-Fluorobiphenyl	75	75	50 - 120
2-Fluorophenol	70	70	53 - 120
Nitrobenzene-d5	69	70	50 - 120
Phenol-d5	74	75	52 - 120
Terphenyl-d14	92	86	55 - 120
2,4,6-Tribromophenol	87	82	51 - 120

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Method Blank - Batch: 280-61769

Method: 8270C
Preparation: 3550C

Lab Sample ID:	MB 280-61769/1-A	Analysis Batch:	280-62353	Instrument ID:	MSS_B
Client Matrix:	Solid	Prep Batch:	280-61769	Lab File ID:	B4260.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.3 g
Analysis Date:	04/14/2011 0901	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	04/12/2011 1105			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acenaphthene	10	U	10	330
Acenaphthylene	17	U	17	330
Anthracene	17	U	17	330
Benzo[a]anthracene	20	U	20	330
Benzo[a]pyrene	20	U	20	330
Benzo[b]fluoranthene	26	U	26	330
Benzo[ghi]perylene	16	U	16	330
Benzo[k]fluoranthene	40	U	40	330
Bis(2-chloroethoxy)methane	23	U	23	330
Bis(2-chloroethyl)ether	16	U	16	330
bis (2-chloroisopropyl) ether	23	U	23	330
Bis(2-ethylhexyl) phthalate	46	U	46	330
4-Bromophenyl phenyl ether	19	U	19	330
Butyl benzyl phthalate	43	U	43	330
Carbazole	36	U	36	330
4-Chloroaniline	81	U	81	330
4-Chloro-3-methylphenol	65	U	65	330
2-Chloronaphthalene	9.9	U	9.9	330
2-Chlorophenol	21	U	21	330
4-Chlorophenyl phenyl ether	21	U	21	330
Chrysene	27	U	27	330
Dibenz(a,h)anthracene	19	U	19	330
Dibenzofuran	20	U	20	330
1,2-Dichlorobenzene	22	U	22	330
1,3-Dichlorobenzene	12	U	12	330
1,4-Dichlorobenzene	13	U	13	330
3,3'-Dichlorobenzidine	89	U	89	650
2,4-Dichlorophenol	9.9	U	9.9	330
Diethyl phthalate	26	U	26	330
2,4-Dimethylphenol	65	U	65	330
Dimethyl phthalate	23	U	23	330
Di-n-butyl phthalate	29	U	29	330
4,6-Dinitro-2-methylphenol	330	U	330	650
2,4-Dinitrophenol	330	U	330	820
2,4-Dinitrotoluene	65	U	65	330
2,6-Dinitrotoluene	28	U	28	330
Di-n-octyl phthalate	14	U	14	330
Fluoranthene	36	U	36	330
Fluorene	18	U	18	330
Hexachlorobenzene	29	U	29	330
Hexachlorobutadiene	9.9	U	9.9	330
Hexachlorocyclopentadiene	50	U	50	330
Hexachloroethane	21	U	21	330
Indeno[1,2,3-cd]pyrene	22	U	22	330
Isophorone	17	U	17	330

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Method Blank - Batch: 280-61769

Method: 8270C
Preparation: 3550C

Lab Sample ID:	MB 280-61769/1-A	Analysis Batch:	280-62353	Instrument ID:	MSS_B
Client Matrix:	Solid	Prep Batch:	280-61769	Lab File ID:	B4260.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.3 g
Analysis Date:	04/14/2011 0901	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	04/12/2011 1105			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
2-Methylnaphthalene	19	U	19	330
2-Methylphenol	13	U	13	330
3 & 4 Methylphenol	33	U	33	330
Naphthalene	31	U	31	330
2-Nitroaniline	50	U	50	330
3-Nitroaniline	72	U	72	330
4-Nitroaniline	72	U	72	330
Nitrobenzene	22	U	22	330
2-Nitrophenol	9.9	U	9.9	330
4-Nitrophenol	96	U	96	650
N-Nitrosodi-n-propylamine	31	U	31	330
N-Nitrosodiphenylamine	21	U	21	330
Pentachlorophenol	330	U	330	650
Phenanthrene	17	U	17	330
Phenol	18	U	18	330
Pyrene	12	U	12	330
1,2,4-Trichlorobenzene	28	U	28	330
2,4,5-Trichlorophenol	9.9	U	9.9	330
2,4,6-Trichlorophenol	9.9	U	9.9	330

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	77	50 - 120
2-Fluorophenol	81	53 - 120
Nitrobenzene-d5	80	50 - 120
Phenol-d5	82	52 - 120
Terphenyl-d14	82	55 - 120
2,4,6-Tribromophenol	78	51 - 120

Method Blank TICs- Batch: 280-61769

Cas Number	Analyte	RT	Est. Result	Qual
2213-23-2	Heptane, 2,4-dimethyl-	3.05	175	N J
2216-30-0	Heptane, 2,5-dimethyl-	3.19	228	N J
	Unknown	1.75	132	N J
	Unknown	2.99	146	N J
	Unknown	3.27	3090	N J

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Lab Control Sample - Batch: 280-61769

Method: 8270C
Preparation: 3550C

Lab Sample ID:	LCS 280-61769/2-A	Analysis Batch:	280-62353	Instrument ID:	MSS_B
Client Matrix:	Solid	Prep Batch:	280-61769	Lab File ID:	B4261.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	32.5 g
Analysis Date:	04/14/2011 0920	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	04/12/2011 1105			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acenaphthene	2460	2040	83	52 - 120	
Anthracene	2460	2220	90	57 - 120	
Carbazole	2460	2200	89	54 - 120	
4-Chloro-3-methylphenol	2460	2170	88	57 - 120	
2-Chlorophenol	2460	2080	84	53 - 120	
1,4-Dichlorobenzene	2460	1900	77	46 - 120	
2,4-Dinitrotoluene	2460	2360	96	53 - 120	
2-Methylnaphthalene	2460	1980	81	55 - 120	
2-Methylphenol	2460	1990	81	51 - 120	
4-Nitrophenol	2460	2280	93	41 - 120	
N-Nitrosodi-n-propylamine	2460	1980	80	51 - 120	
Pentachlorophenol	2460	2300	93	30 - 120	
Phenol	2460	2020	82	54 - 120	
Pyrene	2460	2210	90	50 - 120	
1,2,4-Trichlorobenzene	2460	1860	76	50 - 120	
2,4,6-Trichlorophenol	2460	2150	87	50 - 120	

Surrogate	% Rec	Acceptance Limits
2-Fluorobiphenyl	80	50 - 120
2-Fluorophenol	81	53 - 120
Nitrobenzene-d5	80	50 - 120
Phenol-d5	80	52 - 120
Terphenyl-d14	88	55 - 120
2,4,6-Tribromophenol	90	51 - 120

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-61769

Method: 8270C
Preparation: 3550C

MS Lab Sample ID:	280-14129-1	Analysis Batch:	280-62353	Instrument ID:	MSS_B
Client Matrix:	Solid	Prep Batch:	280-61769	Lab File ID:	B4267.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.4 g
Analysis Date:	04/14/2011 1117			Final Weight/Volume:	1000 uL
Prep Date:	04/12/2011 1105			Injection Volume:	0.5 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-14129-1	Analysis Batch:	280-62353	Instrument ID:	MSS_B
Client Matrix:	Solid	Prep Batch:	280-61769	Lab File ID:	B4268.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.2 g
Analysis Date:	04/14/2011 1136			Final Weight/Volume:	1000 uL
Prep Date:	04/12/2011 1105			Injection Volume:	0.5 uL
Leach Date:	N/A				

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acenaphthene	83	83	52 - 120	0	30		
Anthracene	87	90	57 - 120	4	30		
Carbazole	87	89	54 - 120	3	30		
4-Chloro-3-methylphenol	92	92	57 - 120	1	30		
2-Chlorophenol	84	81	53 - 120	3	30		
1,4-Dichlorobenzene	75	74	46 - 120	0	30		
2,4-Dinitrotoluene	94	95	53 - 120	2	30		
2-Methylnaphthalene	81	77	55 - 120	4	30		
2-Methylphenol	83	81	51 - 120	2	30		
4-Nitrophenol	96	96	41 - 120	1	30		
N-Nitrosodi-n-propylamine	80	78	51 - 120	2	30		
Pentachlorophenol	98	99	30 - 120	3	30		
Phenol	83	80	54 - 120	3	30		
Pyrene	87	91	50 - 120	5	38		
1,2,4-Trichlorobenzene	75	73	50 - 120	3	30		
2,4,6-Trichlorophenol	91	92	50 - 120	2	30		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
2-Fluorobiphenyl	82	78	50 - 120
2-Fluorophenol	81	77	53 - 120
Nitrobenzene-d5	82	77	50 - 120
Phenol-d5	82	79	52 - 120
Terphenyl-d14	85	88	55 - 120
2,4,6-Tribromophenol	94	94	51 - 120

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Method Blank - Batch: 280-60667

Method: 8081A
Preparation: 3550C

Lab Sample ID:	MB 280-60667/1-A	Analysis Batch:	280-61327	Instrument ID:	GCS_P1
Client Matrix:	Solid	Prep Batch:	280-60667	Lab File ID:	043F4301.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.6 g
Analysis Date:	04/08/2011 0215	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	04/04/2011 1900			Injection Volume:	
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
4,4'-DDD	0.54	U	0.54	1.7
4,4'-DDE	0.23	U	0.23	1.7
4,4'-DDT	0.58	U	0.58	1.7
Aldrin	0.25	U	0.25	1.6
alpha-BHC	0.21	U	0.21	1.6
beta-BHC	0.65	U	0.65	1.6
delta-BHC	0.39	U	0.39	1.6
gamma-BHC (Lindane)	0.45	U	0.45	1.6
Heptachlor	0.21	U	0.21	1.6
Heptachlor epoxide	0.42	U	0.42	1.6
Endosulfan I	0.17	U	0.17	1.6
Endosulfan II	0.28	U	0.28	1.7
Endosulfan sulfate	0.27	U	0.27	1.7
Endrin	0.30	U	0.30	1.7
Endrin aldehyde	0.17	U	0.17	1.7
Endrin ketone	0.48	U	0.48	1.7
gamma-Chlordane	0.26	U	0.26	1.7
Methoxychlor	0.44	U	0.44	3.2
alpha-Chlordane	0.32	U	0.32	1.7
Dieldrin	0.21	U	0.21	1.7
Toxaphene	15	U	15	160

Surrogate	% Rec	Acceptance Limits
Tetrachloro-m-xylene	64	59 - 115
Decachlorobiphenyl	90	63 - 124

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Lab Control Sample - Batch: 280-60667

Method: 8081A
Preparation: 3550C

Lab Sample ID:	LCS 280-60667/2-A	Analysis Batch:	280-61327	Instrument ID:	GCS_P1
Client Matrix:	Solid	Prep Batch:	280-60667	Lab File ID:	041F4101.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.7 g
Analysis Date:	04/08/2011 0141	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	04/04/2011 1900			Injection Volume:	
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
4,4'-DDD	15.8	9.95	63	57 - 118	
4,4'-DDE	15.8	10.1	64	61 - 115	
4,4'-DDT	15.8	12.8	81	53 - 125	
Aldrin	15.8	12.8	81	60 - 115	
alpha-BHC	15.8	12.9	82	54 - 115	
beta-BHC	15.8	13.3	85	58 - 115	
delta-BHC	15.8	13.7	87	62 - 115	
gamma-BHC (Lindane)	15.8	13.3	84	59 - 115	
Heptachlor	15.8	14.0	89	61 - 115	
Heptachlor epoxide	15.8	13.5	85	62 - 112	
Endosulfan I	15.8	12.8	81	55 - 115	
Endosulfan II	15.8	13.9	88	60 - 115	
Endosulfan sulfate	15.8	13.5	86	58 - 118	
Endrin	15.8	16.0	101	61 - 121	
Endrin aldehyde	15.8	11.7	74	54 - 115	
Endrin ketone	15.8	12.4	78	61 - 118	
gamma-Chlordane	15.8	12.8	81	60 - 115	
Methoxychlor	15.8	15.1	95	52 - 123	
alpha-Chlordane	15.8	12.5	79	60 - 115	
Dieldrin	15.8	13.9	88	63 - 117	

Surrogate	% Rec	Acceptance Limits
Tetrachloro-m-xylene	70	59 - 115
Decachlorobiphenyl	98	63 - 124

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-60667

Method: 8081A
Preparation: 3550C

MS Lab Sample ID:	280-14083-2	Analysis Batch:	280-61327	Instrument ID:	GCS_P1
Client Matrix:	Solid	Prep Batch:	280-60667	Lab File ID:	048F4801.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.4 g
Analysis Date:	04/08/2011 0338			Final Weight/Volume:	10000 uL
Prep Date:	04/04/2011 1900			Injection Volume:	
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-14083-2	Analysis Batch:	280-61327	Instrument ID:	GCS_P1
Client Matrix:	Solid	Prep Batch:	280-60667	Lab File ID:	049F4901.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.5 g
Analysis Date:	04/08/2011 0354			Final Weight/Volume:	10000 uL
Prep Date:	04/04/2011 1900			Injection Volume:	
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
4,4'-DDD	60	57	57 - 118	6	20		
4,4'-DDE	51	61	61 - 115	17	15	N	*
4,4'-DDT	70	77	53 - 125	9	29		
Aldrin	85	92	60 - 115	7	50		
alpha-BHC	81	89	54 - 115	9	17		
beta-BHC	104	112	58 - 115	7	17		
delta-BHC	94	98	62 - 115	4	19		
gamma-BHC (Lindane)	84	90	59 - 115	7	24		
Heptachlor	93	100	61 - 115	6	18		
Heptachlor epoxide	79	85	62 - 112	7	18		
Endosulfan I	74	81	55 - 115	8	26		
Endosulfan II	83	85	60 - 115	3	20		
Endosulfan sulfate	77	81	58 - 118	5	22		
Endrin	96	102	61 - 121	6	30		
Endrin aldehyde	72	68	54 - 115	6	29		
Endrin ketone	78	80	61 - 118	3	20		
gamma-Chlordane	69	79	60 - 115	12	21		
Methoxychlor	83	82	52 - 123	2	23		
alpha-Chlordane	73	81	60 - 115	10	18		
Dieldrin	93	96	63 - 117	3	25		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Tetrachloro-m-xylene	69	78	59 - 115
Decachlorobiphenyl	96	102	63 - 124

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Method Blank - Batch: 280-61768

Method: 8081A
Preparation: 3550C

Lab Sample ID:	MB 280-61768/1-A	Analysis Batch:	280-62400	Instrument ID:	GCS_P1
Client Matrix:	Solid	Prep Batch:	280-61768	Lab File ID:	024F2401.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	32.3 g
Analysis Date:	04/14/2011 1649	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	04/12/2011 1105			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
4,4'-DDD	0.51	U	0.51	1.6
4,4'-DDE	0.22	U	0.22	1.6
4,4'-DDT	0.55	U	0.55	1.6
Aldrin	0.23	U	0.23	1.5
alpha-BHC	0.20	U	0.20	1.5
beta-BHC	0.62	U	0.62	1.5
delta-BHC	0.37	U	0.37	1.5
gamma-BHC (Lindane)	0.43	U	0.43	1.5
Heptachlor	0.20	U	0.20	1.5
Heptachlor epoxide	0.40	U	0.40	1.5
Endosulfan I	0.16	U	0.16	1.5
Endosulfan II	0.27	U	0.27	1.6
Endosulfan sulfate	0.26	U	0.26	1.6
Endrin	0.28	U	0.28	1.6
Endrin aldehyde	0.16	U	0.16	1.6
Endrin ketone	0.45	U	0.45	1.6
gamma-Chlordane	0.25	U	0.25	1.6
Methoxychlor	0.42	U	0.42	3.1
alpha-Chlordane	0.30	U	0.30	1.6
Dieldrin	0.20	U	0.20	1.6
Toxaphene	15	U	15	150

Surrogate	% Rec	Acceptance Limits
Tetrachloro-m-xylene	84	59 - 115
Decachlorobiphenyl	86	63 - 124

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Lab Control Sample - Batch: 280-61768

Method: 8081A
Preparation: 3550C

Lab Sample ID:	LCS 280-61768/2-A	Analysis Batch:	280-62400	Instrument ID:	GCS_P1
Client Matrix:	Solid	Prep Batch:	280-61768	Lab File ID:	019F1901.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0 g
Analysis Date:	04/14/2011 1526	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	04/12/2011 1105			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
4,4'-DDD	16.7	14.4	86	57 - 118	
4,4'-DDE	16.7	14.7	88	61 - 115	
4,4'-DDT	16.7	15.5	93	53 - 125	
Aldrin	16.7	14.6	87	60 - 115	
alpha-BHC	16.7	15.1	91	54 - 115	
beta-BHC	16.7	15.5	93	58 - 115	
delta-BHC	16.7	15.7	94	62 - 115	
gamma-BHC (Lindane)	16.7	15.2	91	59 - 115	
Heptachlor	16.7	15.6	93	61 - 115	
Heptachlor epoxide	16.7	15.8	95	62 - 112	
Endosulfan I	16.7	14.7	88	55 - 115	
Endosulfan II	16.7	15.8	95	60 - 115	
Endosulfan sulfate	16.7	16.1	97	58 - 118	
Endrin	16.7	18.3	110	61 - 121	
Endrin aldehyde	16.7	13.5	81	54 - 115	
Endrin ketone	16.7	14.3	86	61 - 118	
gamma-Chlordane	16.7	15.0	90	60 - 115	
Methoxychlor	16.7	16.7	100	52 - 123	
alpha-Chlordane	16.7	14.8	89	60 - 115	
Dieldrin	16.7	15.5	93	63 - 117	

Surrogate	% Rec	Acceptance Limits
Tetrachloro-m-xylene	88	59 - 115
Decachlorobiphenyl	101	63 - 124

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-61768

Method: 8081A
Preparation: 3550C

MS Lab Sample ID:	280-14129-2	Analysis Batch:	280-62400	Instrument ID:	GCS_P1
Client Matrix:	Solid	Prep Batch:	280-61768	Lab File ID:	022F2201.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.7 g
Analysis Date:	04/14/2011 1616			Final Weight/Volume:	10000 uL
Prep Date:	04/12/2011 1105			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-14129-2	Analysis Batch:	280-62400	Instrument ID:	GCS_P1
Client Matrix:	Solid	Prep Batch:	280-61768	Lab File ID:	023F2301.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.7 g
Analysis Date:	04/14/2011 1632			Final Weight/Volume:	10000 uL
Prep Date:	04/12/2011 1105			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
4,4'-DDD	76	76	57 - 118	0	20		
4,4'-DDE	76	77	61 - 115	1	15		
4,4'-DDT	92	88	53 - 125	5	29		
Aldrin	80	79	60 - 115	2	50		
alpha-BHC	87	87	54 - 115	1	17		
beta-BHC	88	82	58 - 115	6	17		
delta-BHC	89	88	62 - 115	1	19		
gamma-BHC (Lindane)	90	87	59 - 115	3	24		
Heptachlor	92	90	61 - 115	2	18		
Heptachlor epoxide	87	88	62 - 112	1	18		
Endosulfan I	79	80	55 - 115	1	26		
Endosulfan II	79	80	60 - 115	1	20		
Endosulfan sulfate	76	78	58 - 118	3	22		
Endrin	131	125	61 - 121	4	30	N	N
Endrin aldehyde	66	68	54 - 115	4	29		
Endrin ketone	79	78	61 - 118	0	20		
gamma-Chlordane	89	90	60 - 115	1	21		
Methoxychlor	81	84	52 - 123	4	23		
alpha-Chlordane	83	84	60 - 115	2	18		
Dieldrin	101	101	63 - 117	0	25		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Tetrachloro-m-xylene	98	99	59 - 115
Decachlorobiphenyl	91	98	63 - 124

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Method Blank - Batch: 280-60678

Method: 8082
Preparation: 3550C

Lab Sample ID:	MB 280-60678/1-A	Analysis Batch:	280-61261	Instrument ID:	GCS_P3
Client Matrix:	Solid	Prep Batch:	280-60678	Lab File ID:	035F3501.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.8 g
Analysis Date:	04/06/2011 2332	Units:	ug/Kg	Final Weight/Volume:	5000 uL
Prep Date:	04/04/2011 2205			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Aroclor 1016	2.6	U	2.6	9.4
Aroclor 1221	7.6	U	7.6	16
Aroclor 1232	1.9	U	1.9	9.4
Aroclor 1242	4.4	U	4.4	9.4
Aroclor 1248	4.4	U	4.4	9.4
Aroclor 1254	2.5	U	2.5	9.4
Aroclor 1260	2.5	U	2.5	9.4

Surrogate	% Rec	Acceptance Limits
Decachlorobiphenyl	107	59 - 130
Tetrachloro-m-xylene	99	53 - 128

Lab Control Sample - Batch: 280-60678

Method: 8082
Preparation: 3550C

Lab Sample ID:	LCS 280-60678/2-A	Analysis Batch:	280-61261	Instrument ID:	GCS_P3
Client Matrix:	Solid	Prep Batch:	280-60678	Lab File ID:	037F3701.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.2 g
Analysis Date:	04/07/2011 0015	Units:	ug/Kg	Final Weight/Volume:	5000 uL
Prep Date:	04/04/2011 2205			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aroclor 1016	33.1	34.6	104	54 - 132	
Aroclor 1260	33.1	36.9	111	62 - 129	

Surrogate	% Rec	Acceptance Limits
Decachlorobiphenyl	116	59 - 130
Tetrachloro-m-xylene	104	53 - 128

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-60678

Method: 8082
Preparation: 3550C

MS Lab Sample ID:	280-14083-2	Analysis Batch:	280-61261	Instrument ID:	GCS_P3
Client Matrix:	Solid	Prep Batch:	280-60678	Lab File ID:	040F4001.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.3 g
Analysis Date:	04/07/2011 0120			Final Weight/Volume:	5000 uL
Prep Date:	04/04/2011 2205			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-14083-2	Analysis Batch:	280-61261	Instrument ID:	GCS_P3
Client Matrix:	Solid	Prep Batch:	280-60678	Lab File ID:	041F4101.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.7 g
Analysis Date:	04/07/2011 0141			Final Weight/Volume:	5000 uL
Prep Date:	04/04/2011 2205			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Aroclor 1016	113	122	54 - 132	6	26		
Aroclor 1260	64	84	62 - 129	14	26		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Decachlorobiphenyl	84	89	59 - 130
Tetrachloro-m-xylene	108	104	53 - 128

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Method Blank - Batch: 280-61774

Method: 8082
Preparation: 3550C

Lab Sample ID:	MB 280-61774/1-A	Analysis Batch:	280-62436	Instrument ID:	GCS_P3
Client Matrix:	Solid	Prep Batch:	280-61774	Lab File ID:	031B3101.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	32.0 g
Analysis Date:	04/14/2011 2225	Units:	ug/Kg	Final Weight/Volume:	5000 uL
Prep Date:	04/12/2011 1105			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Aroclor 1016	2.6	U	2.6	9.4
Aroclor 1221	7.5	U	7.5	15
Aroclor 1232	1.9	U	1.9	9.4
Aroclor 1242	4.4	U	4.4	9.4
Aroclor 1248	4.4	U	4.4	9.4
Aroclor 1254	2.4	U	2.4	9.4
Aroclor 1260	2.4	U	2.4	9.4

Surrogate	% Rec	Acceptance Limits
Decachlorobiphenyl	102	59 - 130
Tetrachloro-m-xylene	94	53 - 128

Lab Control Sample - Batch: 280-61774

Method: 8082
Preparation: 3550C

Lab Sample ID:	LCS 280-61774/2-A	Analysis Batch:	280-62436	Instrument ID:	GCS_P3
Client Matrix:	Solid	Prep Batch:	280-61774	Lab File ID:	032B3201.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.1 g
Analysis Date:	04/14/2011 2246	Units:	ug/Kg	Final Weight/Volume:	5000 uL
Prep Date:	04/12/2011 1105			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aroclor 1016	33.2	35.5	107	54 - 132	
Aroclor 1260	33.2	45.8	138	62 - 129	N

Surrogate	% Rec		Acceptance Limits
Decachlorobiphenyl	137	*	59 - 130
Tetrachloro-m-xylene	95		53 - 128

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-61774

Method: 8082
Preparation: 3550C

MS Lab Sample ID:	280-14129-2	Analysis Batch:	280-62436	Instrument ID:	GCS_P3
Client Matrix:	Solid	Prep Batch:	280-61774	Lab File ID:	035B3501.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.6 g
Analysis Date:	04/14/2011 2350			Final Weight/Volume:	5000 uL
Prep Date:	04/12/2011 1105			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-14129-2	Analysis Batch:	280-62436	Instrument ID:	GCS_P3
Client Matrix:	Solid	Prep Batch:	280-61774	Lab File ID:	037B3701.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.2 g
Analysis Date:	04/15/2011 0033			Final Weight/Volume:	5000 uL
Prep Date:	04/12/2011 1105			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Aroclor 1016	445	143	54 - 132	102	26	N	N *
Aroclor 1260	175	97	62 - 129	37	26	N	*

Surrogate	MS % Rec		MSD % Rec	Acceptance Limits
Decachlorobiphenyl	115		88	59 - 130
Tetrachloro-m-xylene	552	*	95	53 - 128

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Method Blank - Batch: 280-62528

Method: 8082
Preparation: 3550C

Lab Sample ID:	MB 280-62528/1-A	Analysis Batch:	280-62904	Instrument ID:	GCS_P3
Client Matrix:	Solid	Prep Batch:	280-62528	Lab File ID:	004F0401.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.6 g
Analysis Date:	04/18/2011 1239	Units:	ug/Kg	Final Weight/Volume:	5000 uL
Prep Date:	04/15/2011 1915			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Aroclor 1016	2.7	U	2.7	9.8
Aroclor 1221	7.9	U	7.9	16
Aroclor 1232	2.0	U	2.0	9.8
Aroclor 1242	4.6	U	4.6	9.8
Aroclor 1248	4.6	U	4.6	9.8
Aroclor 1254	2.5	U	2.5	9.8
Aroclor 1260	2.5	U	2.5	9.8

Surrogate	% Rec	Acceptance Limits
Decachlorobiphenyl	93	59 - 130
Tetrachloro-m-xylene	91	53 - 128

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-62528

Method: 8082
Preparation: 3550C

LCS Lab Sample ID:	LCS 280-62528/2-A	Analysis Batch:	280-62904	Instrument ID:	GCS_P3
Client Matrix:	Solid	Prep Batch:	280-62528	Lab File ID:	005F0501.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.5 g
Analysis Date:	04/18/2011 1300	Units:	ug/Kg	Final Weight/Volume:	5000 uL
Prep Date:	04/15/2011 1915			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

LCSD Lab Sample ID:	LCSD 280-62528/3-A	Analysis Batch:	280-62904	Instrument ID:	GCS_P3
Client Matrix:	Solid	Prep Batch:	280-62528	Lab File ID:	006F0601.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	32.5 g
Analysis Date:	04/18/2011 1321	Units:	ug/Kg	Final Weight/Volume:	5000 uL
Prep Date:	04/15/2011 1915			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Aroclor 1016	102	109	54 - 132	4	26		
Aroclor 1260	90	105	62 - 129	12	26		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
Decachlorobiphenyl	88	93	59 - 130
Tetrachloro-m-xylene	84	92	53 - 128

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Method Blank - Batch: 280-60900

Method: 8151A
Preparation: 8151A

Lab Sample ID:	MB 280-60900/1-A	Analysis Batch:	280-61394	Instrument ID:	GCS_M
Client Matrix:	Solid	Prep Batch:	280-60900	Lab File ID:	026B2601.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	52.7 g
Analysis Date:	04/07/2011 2143	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	04/06/2011 1045			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
2,4,5-T	2.2	U	2.2	19
2,4-Dichlorophenoxyacetic acid	13	U	13	76
2,4-DB	2.7	U	2.7	76
Dalapon	1.3	U	1.3	38
Dicamba	1.3	U	1.3	38
Dichlorprop	3.0	U	3.0	76
Dinoseb	1.3	U	1.3	11
MCPA	1900	U	1900	7600
2,4,5-TP (Silvex)	1.3	U	1.3	19
MCPP	1900	U	1900	7600

Surrogate	% Rec	Acceptance Limits
DCAA	85	31 - 105

Lab Control Sample - Batch: 280-60900

Method: 8151A
Preparation: 8151A

Lab Sample ID:	LCS 280-60900/2-A	Analysis Batch:	280-61394	Instrument ID:	GCS_M
Client Matrix:	Solid	Prep Batch:	280-60900	Lab File ID:	019B1901.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	51.9 g
Analysis Date:	04/07/2011 1912	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	04/06/2011 1045			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
2,4,5-T	92.5	77.7	84	24 - 98	
2,4-Dichlorophenoxyacetic acid	88.6	69.5	78	32 - 97	J
2,4-DB	96.3	66.8	69	37 - 119	J
Dalapon	100	58.3	58	11 - 87	
Dicamba	88.6	69.7	79	11 - 87	
Dichlorprop	88.6	67.5	76	35 - 115	J
Dinoseb	88.6	4.06	5	5 - 166	J
MCPA	8980	7860	88	37 - 115	
2,4,5-TP (Silvex)	88.6	76.8	87	53 - 134	
MCPP	8990	8610	96	48 - 132	

Surrogate	% Rec	Acceptance Limits
DCAA	78	31 - 105

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-60900

Method: 8151A
Preparation: 8151A

MS Lab Sample ID:	280-14083-2	Analysis Batch:	280-61394	Instrument ID:	GCS_M
Client Matrix:	Solid	Prep Batch:	280-60900	Lab File ID:	022B2201.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	53.1 g
Analysis Date:	04/07/2011 2017			Final Weight/Volume:	10000 uL
Prep Date:	04/06/2011 1045			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-14083-2	Analysis Batch:	280-61394	Instrument ID:	GCS_M
Client Matrix:	Solid	Prep Batch:	280-60900	Lab File ID:	023B2301.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50.6 g
Analysis Date:	04/07/2011 2038			Final Weight/Volume:	10000 uL
Prep Date:	04/06/2011 1045			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
2,4,5-T	86	78	24 - 98	4	40		
2,4-Dichlorophenoxyacetic acid	92	81	32 - 97	8	40		J
2,4-DB	87	74	37 - 119	11	50		J
Dalapon	67	74	11 - 87	15	50		
Dicamba	79	77	11 - 87	2	50		
Dichlorprop	75	69	35 - 115	3	50	J	J
Dinoseb	13	0	5 - 166	NC	50		U N
MCPA	101	94	37 - 115	2	50		
2,4,5-TP (Silvex)	84	80	53 - 134	1	40		
MCPP	96	93	48 - 132	2	50		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
DCAA	94	81	31 - 105

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Method Blank - Batch: 280-61224

Method: NWTPH-Dx
Preparation: 3550C

Lab Sample ID:	MB 280-61224/1-A	Analysis Batch:	280-61645	Instrument ID:	GCS_U
Client Matrix:	Solid	Prep Batch:	280-61224	Lab File ID:	038B3801.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.7 g
Analysis Date:	04/09/2011 0201	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	04/07/2011 1555			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
C10-C36	970	U	970	3900
C10-C28	660	U	660	3900

Surrogate	% Rec		Acceptance Limits
o-Terphenyl	143	*	49 - 115

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-61224

Method: NWTPH-Dx
Preparation: 3550C

LCS Lab Sample ID:	LCS 280-61224/2-A	Analysis Batch:	280-61645	Instrument ID:	GCS_U
Client Matrix:	Solid	Prep Batch:	280-61224	Lab File ID:	039B3901.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.6 g
Analysis Date:	04/09/2011 0229	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	04/07/2011 1555			Injection Volume:	1 uL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-61224/3-A	Analysis Batch:	280-61645	Instrument ID:	GCS_U
Client Matrix:	Solid	Prep Batch:	280-61224	Lab File ID:	040B4001.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.9 g
Analysis Date:	04/09/2011 0256	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	04/07/2011 1555			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
C10-C36	102	101	57 - 115	2	23		
C10-C28	102	101	53 - 115	2	23		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
o-Terphenyl	86	88	49 - 115

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Method Blank - Batch: 280-61773

Method: NWTPH-Dx
Preparation: 3550C

Lab Sample ID:	MB 280-61773/1-A	Analysis Batch:	280-62713	Instrument ID:	GCS_U
Client Matrix:	Solid	Prep Batch:	280-61773	Lab File ID:	009B0901.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.5 g
Analysis Date:	04/15/2011 1510	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	04/12/2011 1640			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
C10-C36	980	U	980	3900
C10-C28	670	U	670	3900

Surrogate	% Rec	Acceptance Limits
o-Terphenyl	82	49 - 115

Lab Control Sample - Batch: 280-61773

Method: NWTPH-Dx
Preparation: 3550C

Lab Sample ID:	LCS 280-61773/2-A	Analysis Batch:	280-62713	Instrument ID:	GCS_U
Client Matrix:	Solid	Prep Batch:	280-61773	Lab File ID:	010B1001.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.2 g
Analysis Date:	04/15/2011 1539	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	04/12/2011 1640			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
C10-C36	66200	66500	100	57 - 115	
C10-C28	66200	66400	100	53 - 115	

Surrogate	% Rec	Acceptance Limits
o-Terphenyl	87	49 - 115

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-61773

Method: NWTPH-Dx
Preparation: 3550C

MS Lab Sample ID:	280-14129-2	Analysis Batch:	280-62713	Instrument ID:	GCS_U
Client Matrix:	Solid	Prep Batch:	280-61773	Lab File ID:	013B1301.D
Dilution:	2.0	Leach Batch:	N/A	Initial Weight/Volume:	30.1 g
Analysis Date:	04/15/2011 1703			Final Weight/Volume:	1000 uL
Prep Date:	04/12/2011 1640			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-14129-2	Analysis Batch:	280-62713	Instrument ID:	GCS_U
Client Matrix:	Solid	Prep Batch:	280-61773	Lab File ID:	014B1401.D
Dilution:	2.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0 g
Analysis Date:	04/15/2011 1732			Final Weight/Volume:	1000 uL
Prep Date:	04/12/2011 1640			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
C10-C36	214	65	57 - 115	30	23	N	*
C10-C28	154	82	56 - 115	25	23	N	*

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
o-Terphenyl	108	100	49 - 115

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Method Blank - Batch: 280-60733

Method: 8310
Preparation: 3550C

Lab Sample ID:	MB 280-60733/1-A	Analysis Batch:	280-61359	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-60733	Lab File ID:	G0408039.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0 g
Analysis Date:	04/09/2011 0827	Units:	ug/Kg	Final Weight/Volume:	4000 uL
Prep Date:	04/05/2011 1150			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Acenaphthene	10	U	10	100
Acenaphthylene	9.0	U	9.0	100
Anthracene	3.1	U	3.1	20
Benzo[a]anthracene	3.2	U	3.2	15
Benzo[a]pyrene	6.4	U	6.4	15
Benzo[b]fluoranthene	4.2	U	4.2	15
Benzo[g,h,i]perylene	7.2	U	7.2	30
Benzo[k]fluoranthene	3.9	U	3.9	15
Chrysene	4.8	U	4.8	40
Dibenzo(a,h)anthracene	11	U	11	30
Fluoranthene	13	U	13	40
Fluorene	5.3	U	5.3	30
Indeno[1,2,3-cd]pyrene	12	U	12	30
Naphthalene	12	U	12	100
Phenanthrene	12	U	12	40
Pyrene	12	U	12	40

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

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Lab Control Sample - Batch: 280-60733

Method: 8310
Preparation: 3550C

Lab Sample ID:	LCS 280-60733/2-A	Analysis Batch:	280-61359	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-60733	Lab File ID:	G0408040.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.0 g
Analysis Date:	04/09/2011 0858	Units:	ug/Kg	Final Weight/Volume:	4000 uL
Prep Date:	04/05/2011 1150			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acenaphthene	1940	1880	97	72 - 115	
Acenaphthylene	1940	1850	95	60 - 115	
Anthracene	1940	1760	91	61 - 115	
Benzo[a]anthracene	1940	2100	109	76 - 115	
Benzo[a]pyrene	1940	1760	91	69 - 115	
Benzo[b]fluoranthene	1940	1970	102	81 - 115	
Benzo[g,h,i]perylene	1940	1980	103	71 - 115	
Benzo[k]fluoranthene	1940	1890	98	85 - 115	
Chrysene	1940	1950	101	70 - 115	
Dibenzo(a,h)anthracene	1940	2000	103	79 - 115	
Fluoranthene	1940	1950	101	67 - 115	
Fluorene	1940	1910	99	72 - 115	
Indeno[1,2,3-cd]pyrene	1940	2120	110	76 - 115	
Naphthalene	1940	1890	98	77 - 115	
Phenanthrene	1940	1960	101	79 - 115	
Pyrene	1940	1960	101	77 - 115	

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

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-60733

Method: 8310
Preparation: 3550C

MS Lab Sample ID:	280-14083-1	Analysis Batch:	280-61359	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-60733	Lab File ID:	G0408042.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.5 g
Analysis Date:	04/09/2011 0959			Final Weight/Volume:	4000 uL
Prep Date:	04/05/2011 1150			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-14083-1	Analysis Batch:	280-61359	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-60733	Lab File ID:	G0408043.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.4 g
Analysis Date:	04/09/2011 1030			Final Weight/Volume:	4000 uL
Prep Date:	04/05/2011 1150			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acenaphthene	100	96	72 - 115	4	20		
Acenaphthylene	95	95	60 - 115	0	21		
Anthracene	90	93	61 - 115	4	20		
Benzo[a]anthracene	111	107	76 - 115	4	20		
Benzo[a]pyrene	90	90	69 - 115	0	20		
Benzo[b]fluoranthene	101	102	81 - 115	1	20		
Benzo[g,h,i]perylene	101	102	71 - 115	1	20		
Benzo[k]fluoranthene	99	97	85 - 115	1	20		
Chrysene	99	100	70 - 115	1	20		
Dibenzo(a,h)anthracene	101	102	79 - 115	1	20		
Fluoranthene	101	104	67 - 115	3	20		
Fluorene	98	98	72 - 115	0	20		
Indeno[1,2,3-cd]pyrene	108	109	76 - 115	2	20		
Naphthalene	101	98	77 - 115	2	20		
Phenanthrene	102	101	79 - 115	0	20		
Pyrene	102	100	77 - 115	2	20		

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

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Method Blank - Batch: 280-61770

Method: 8310
Preparation: 3550C

Lab Sample ID:	MB 280-61770/1-A	Analysis Batch:	280-62017	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-61770	Lab File ID:	G0413017.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.3 g
Analysis Date:	04/13/2011 1907	Units:	ug/Kg	Final Weight/Volume:	4000 uL
Prep Date:	04/12/2011 1105			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Acenaphthene	9.6	U	9.6	96
Acenaphthylene	8.6	U	8.6	96
Anthracene	2.9	U	2.9	19
Benzo[a]anthracene	3.1	U	3.1	14
Benzo[a]pyrene	6.1	U	6.1	14
Benzo[b]fluoranthene	4.0	U	4.0	14
Benzo[g,h,i]perylene	6.9	U	6.9	29
Benzo[k]fluoranthene	3.8	U	3.8	14
Chrysene	4.6	U	4.6	38
Dibenzo(a,h)anthracene	11	U	11	29
Fluoranthene	12	U	12	38
Fluorene	5.1	U	5.1	29
Indeno[1,2,3-cd]pyrene	12	U	12	29
Naphthalene	12	U	12	96
Phenanthrene	12	U	12	38
Pyrene	12	U	12	38

Surrogate	% Rec	Acceptance Limits
Terphenyl-d14 (SUR)	93	72 - 115

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Lab Control Sample - Batch: 280-61770

Method: 8310
Preparation: 3550C

Lab Sample ID:	LCS 280-61770/2-A	Analysis Batch:	280-62017	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-61770	Lab File ID:	G0413018.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.0 g
Analysis Date:	04/13/2011 1937	Units:	ug/Kg	Final Weight/Volume:	4000 uL
Prep Date:	04/12/2011 1105			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acenaphthene	1940	2030	105	72 - 115	
Acenaphthylene	1940	1860	96	60 - 115	
Anthracene	1940	1740	90	61 - 115	
Benzo[a]anthracene	1940	2080	107	76 - 115	
Benzo[a]pyrene	1940	1710	88	69 - 115	
Benzo[b]fluoranthene	1940	1950	101	81 - 115	
Benzo[g,h,i]perylene	1940	1980	102	71 - 115	
Benzo[k]fluoranthene	1940	1850	96	85 - 115	
Chrysene	1940	1940	100	70 - 115	
Dibenzo(a,h)anthracene	1940	1980	102	79 - 115	
Fluoranthene	1940	1940	100	67 - 115	
Fluorene	1940	1910	99	72 - 115	
Indeno[1,2,3-cd]pyrene	1940	2140	110	76 - 115	
Naphthalene	1940	1970	102	77 - 115	
Phenanthrene	1940	1950	101	79 - 115	
Pyrene	1940	1960	101	77 - 115	

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

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-61770

Method: 8310
Preparation: 3550C

MS Lab Sample ID:	280-14129-2	Analysis Batch:	280-62017	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-61770	Lab File ID:	G0413021.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.0 g
Analysis Date:	04/13/2011 2109			Final Weight/Volume:	4000 uL
Prep Date:	04/12/2011 1105			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-14129-2	Analysis Batch:	280-62017	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-61770	Lab File ID:	G0413022.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0 g
Analysis Date:	04/13/2011 2139			Final Weight/Volume:	4000 uL
Prep Date:	04/12/2011 1105			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acenaphthene	47	51	72 - 115	2	20	N	N
Acenaphthylene	94	94	60 - 115	3	21		
Anthracene	91	91	61 - 115	2	20		
Benzo[a]anthracene	115	115	76 - 115	4	20		
Benzo[a]anthracene	115	119	76 - 115	7	20		
Benzo[a]pyrene	93	89	69 - 115	1	20		
Benzo[b]fluoranthene	100	98	81 - 115	1	20		
Benzo[g,h,i]perylene	105	106	71 - 115	4	20		
Benzo[k]fluoranthene	107	100	85 - 115	4	20		
Chrysene	99	107	70 - 115	11	20		
Dibenzo(a,h)anthracene	102	103	79 - 115	5	20		
Fluoranthene	101	101	67 - 115	3	20		
Fluorene	99	99	72 - 115	3	20		
Indeno[1,2,3-cd]pyrene	108	109	76 - 115	4	20		
Naphthalene	99	101	77 - 115	5	20		
Phenanthrene	108	107	79 - 115	2	20		
Pyrene	110	105	77 - 115	1	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Terphenyl-d14 (SUR)	91	92	72 - 115

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Method Blank - Batch: 280-60350

Method: 6010B
Preparation: 3050B

Lab Sample ID:	MB 280-60350/1-A	Analysis Batch:	280-61070	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-60350	Lab File ID:	25A3040611.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	04/06/2011 1807	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/06/2011 0830				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Aluminum	1.6	U	1.6	5.0
Antimony	0.38	U	0.38	0.60
Arsenic	0.66	U	0.66	1.0
Barium	0.0810	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	0.0700	B	0.058	0.20
Cobalt	0.10	U	0.10	1.0
Copper	0.22	U	0.22	1.0
Iron	3.8	U	3.8	5.0
Lead	0.27	U	0.27	0.50
Magnesium	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: 280-14083-1
Sdg Number: J01053

Lab Control Sample - Batch: 280-60350

Method: 6010B
Preparation: 3050B

Lab Sample ID:	LCS 280-60350/2-A	Analysis Batch:	280-61070	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-60350	Lab File ID:	25A3040611.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	04/06/2011 1810	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/06/2011 0830				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	200	181.4	91	82 - 116	
Antimony	50.0	46.02	92	82 - 110	
Arsenic	100	91.59	92	85 - 110	
Barium	200	201.4	101	87 - 112	
Beryllium	5.00	4.68	94	84 - 114	
Boron	100	89.23	89	81 - 110	
Cadmium	10.0	9.90	99	87 - 110	
Calcium	5000	4900	98	82 - 114	
Chromium	20.0	19.51	98	84 - 114	
Cobalt	50.0	47.65	95	87 - 110	
Copper	25.0	23.33	93	88 - 110	
Iron	100	95.27	95	87 - 120	
Lead	50.0	45.85	92	86 - 110	
Magnesium	5000	4601	92	90 - 110	
Manganese	50.0	48.31	97	88 - 110	
Molybdenum	100	97.05	97	86 - 110	
Nickel	50.0	47.87	96	87 - 110	
Potassium	5000	5144	103	89 - 110	
Selenium	200	188.2	94	83 - 110	
Silicon	1000	149.4	15	10 - 70	
Silver	5.00	4.95	99	87 - 114	
Sodium	5000	5287	106	90 - 112	
Vanadium	50.0	49.33	99	88 - 110	
Zinc	50.0	45.86	92	76 - 114	

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Matrix Spike - Batch: 280-60350

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-14083-1	Analysis Batch:	280-61070	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-60350	Lab File ID:	25A3040611.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.06 g
Analysis Date:	04/06/2011 1816	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/06/2011 0830				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	7060		203	9068	991	50 - 200	4
Antimony	0.35	U	50.7	27.52	54	20 - 200	
Arsenic	2.0		101	86.87	84	76 - 111	
Barium	55.0		203	254.2	98	52 - 159	
Beryllium	0.030	U	5.07	4.35	86	72 - 105	
Boron	0.89	U	101	80.36	79	75 - 107	
Cadmium	0.084	B	10.1	9.36	91	40 - 130	
Calcium	4390		5070	9918	109	43 - 165	
Chromium	10.4		20.3	30.37	98	70 - 200	
Cobalt	6.8		50.7	50.14	85	72 - 106	
Copper	15.9		25.4	37.83	87	37 - 187	
Iron	20100		101	19910	-232	70 - 200	4
Lead	4.1		50.7	45.19	81	70 - 200	
Magnesium	3850		5070	8649	95	64 - 145	
Manganese	232		50.7	291.2	116	40 - 200	4
Molybdenum	0.30	B	101	87.81	86	75 - 103	
Nickel	9.8		50.7	53.36	86	61 - 126	
Potassium	1050		5070	6206	102	56 - 172	
Selenium	0.78	U	203	172.7	85	76 - 104	
Silicon	262		1010	465.5	20	20 - 200	
Silver	0.15	U	5.07	4.67	92	75 - 141	
Sodium	212		5070	5353	101	78 - 111	
Vanadium	49.6		50.7	100.2	100	50 - 169	
Zinc	44.8		50.7	87.75	85	70 - 200	

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Duplicate - Batch: 280-60350

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-14083-1	Analysis Batch:	280-61070	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-60350	Lab File ID:	25A3040611.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.07 g
Analysis Date:	04/06/2011 1819	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/06/2011 0830				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Aluminum	7060		6311	11	40	
Antimony	0.35	U	0.38	NC	40	U
Arsenic	2.0		1.62	21	30	
Barium	55.0		52.58	4	30	
Beryllium	0.030	U	0.033	NC	30	U
Boron	0.89	U	0.99	NC	30	U
Cadmium	0.084	B	0.120	35	30	B M
Calcium	4390		3848	13	30	
Chromium	10.4		9.74	7	40	
Cobalt	6.8		6.22	8	30	
Copper	15.9		15.78	0.4	30	
Iron	20100		17860	12	40	
Lead	4.1		3.77	8	40	
Magnesium	3850		3498	10	30	
Manganese	232		196.9	17	40	
Molybdenum	0.30	B	0.26	NC	30	U
Nickel	9.8		8.30	17	30	
Potassium	1050		1000	5	40	
Selenium	0.78	U	0.86	NC	30	U
Silicon	262		326.8	22	40	
Silver	0.15	U	0.16	NC	30	U
Sodium	212		200.8	5	30	
Vanadium	49.6		44.46	11	30	
Zinc	44.8		48.00	7	40	

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Method Blank - Batch: 280-60623

Method: 6010B
Preparation: 3050B

Lab Sample ID:	MB 280-60623/1-A	Analysis Batch:	280-61777	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-60623	Lab File ID:	26b041111.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	04/11/2011 1817	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/11/2011 0930				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Aluminum	1.6	U	1.6	5.0
Antimony	0.38	U	0.38	0.60
Arsenic	0.66	U	0.66	1.0
Barium	0.076	U	0.076	0.50
Beryllium	0.033	U	0.033	0.20
Boron	0.98	U	0.98	2.0
Cadmium	0.041	U	0.041	0.20
Calcium	14.1	U	14.1	50.0
Chromium	0.058	U	0.058	0.20
Cobalt	0.10	U	0.10	1.0
Copper	0.22	U	0.22	1.0
Iron	3.8	U	3.8	5.0
Lead	0.27	U	0.27	0.50
Magnesium	3.7	U	3.7	20.0
Manganese	0.10	U	0.10	1.0
Molybdenum	0.26	U	0.26	2.0
Nickel	0.12	U	0.12	4.0
Potassium	41.0	U	41.0	300
Selenium	0.86	U	0.86	1.0
Silicon	6.64	B	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: 280-14083-1
Sdg Number: J01053

Lab Control Sample - Batch: 280-60623

Method: 6010B
Preparation: 3050B

Lab Sample ID:	LCS 280-60623/2-A	Analysis Batch:	280-61777	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-60623	Lab File ID:	26b041111.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	04/11/2011 1820	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/11/2011 0930				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	200	183.0	92	82 - 116	
Antimony	50.0	48.19	96	82 - 110	
Arsenic	100	98.57	99	85 - 110	
Barium	200	183.3	92	87 - 112	
Beryllium	5.00	4.58	92	84 - 114	
Boron	100	88.28	88	81 - 110	
Cadmium	10.0	9.02	90	87 - 110	
Calcium	5000	4492	90	82 - 114	
Chromium	20.0	18.87	94	84 - 114	
Cobalt	50.0	46.39	93	87 - 110	
Copper	25.0	22.98	92	88 - 110	
Iron	100	98.76	99	87 - 120	
Lead	50.0	49.46	99	86 - 110	
Magnesium	5000	4492	90	90 - 110	
Manganese	50.0	45.98	92	88 - 110	
Molybdenum	100	101.5	101	86 - 110	
Nickel	50.0	47.70	95	87 - 110	
Potassium	5000	4681	94	89 - 110	
Selenium	200	191.5	96	83 - 110	
Silicon	1000	58.22	6	10 - 70	N
Silver	5.00	4.54	91	87 - 114	
Sodium	5000	4811	96	90 - 112	
Vanadium	50.0	46.06	92	88 - 110	
Zinc	50.0	45.21	90	76 - 114	

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Matrix Spike - Batch: 280-60623

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-14129-1	Analysis Batch:	280-61777	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-60623	Lab File ID:	26b041111.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.09 g
Analysis Date:	04/11/2011 1828	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/11/2011 0930				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	7390		211	8851	693	50 - 200	4
Antimony	0.43	U	52.8	28.02	53	20 - 200	
Arsenic	1.5		106	96.37	90	76 - 111	
Barium	39.7		211	235.1	92	52 - 159	
Beryllium	0.037	U	5.28	4.43	84	72 - 105	
Boron	1.1	U	106	85.52	81	75 - 107	
Cadmium	0.10	B	10.6	9.08	85	40 - 130	
Calcium	2860		5280	8426	105	43 - 165	
Chromium	12.8		21.1	33.56	98	70 - 200	
Cobalt	4.7		52.8	50.52	87	72 - 106	
Copper	14.2		26.4	37.68	89	37 - 187	
Iron	15900		106	16960	1000	70 - 200	4
Lead	4.1		52.8	53.17	93	70 - 200	
Magnesium	3840		5280	8607	90	64 - 145	
Manganese	141		52.8	207.9	127	40 - 200	
Molybdenum	0.46	B	106	99.17	93	75 - 103	
Nickel	10.2		52.8	57.56	90	61 - 126	
Potassium	1160		5280	6069	93	56 - 172	
Selenium	0.97	U	211	185.7	88	76 - 104	
Silicon	271		1060	424.2	14	20 - 200	N
Silver	0.18	U	5.28	4.52	86	75 - 141	
Sodium	170		5280	5237	96	78 - 111	
Vanadium	39.9		52.8	92.90	100	50 - 169	
Zinc	52.1		52.8	98.67	88	70 - 200	

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Duplicate - Batch: 280-60623

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-14129-1	Analysis Batch:	280-61777	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-60623	Lab File ID:	26b041111.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.11 g
Analysis Date:	04/11/2011 1826	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	04/11/2011 0930				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Aluminum	7390		7372	0.2	40	
Antimony	0.43	U	0.39	NC	40	U
Arsenic	1.5		1.06	35	30	M
Barium	39.7		41.25	4	30	
Beryllium	0.037	U	0.034	NC	30	U
Boron	1.1	U	1.0	NC	30	U
Cadmium	0.10	B	0.123	19	30	B
Calcium	2860		2833	0.9	30	
Chromium	12.8		13.11	2	40	
Cobalt	4.7		4.72	0.09	30	
Copper	14.2		13.76	3	30	
Iron	15900		15180	5	40	
Lead	4.1		4.06	0.9	40	
Magnesium	3840		3923	2	30	
Manganese	141		143.3	2	40	
Molybdenum	0.46	B	0.27	NC	30	U
Nickel	10.2		10.79	6	30	
Potassium	1160		1165	0.7	40	
Selenium	0.97	U	0.89	NC	30	U
Silicon	271		283.9	5	40	N
Silver	0.18	U	0.17	NC	30	U
Sodium	170		151.1	12	30	
Vanadium	39.9		38.14	5	30	
Zinc	52.1		53.31	2	40	

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Method Blank - Batch: 280-60306

Method: 7471A
Preparation: 7471A

Lab Sample ID:	MB 280-60306/1-A	Analysis Batch:	280-61031	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-60306	Lab File ID:	110405AB.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	04/05/2011 2052	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	04/05/2011 1345				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	0.0055	U	0.0055	0.017

Lab Control Sample - Batch: 280-60306

Method: 7471A
Preparation: 7471A

Lab Sample ID:	LCS 280-60306/2-A	Analysis Batch:	280-61031	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-60306	Lab File ID:	110405AB.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	04/05/2011 2054	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	04/05/2011 1345				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.417	0.371	89	87 - 111	

Matrix Spike - Batch: 280-60306

Method: 7471A
Preparation: 7471A

Lab Sample ID:	280-14083-2	Analysis Batch:	280-61031	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-60306	Lab File ID:	110405AB.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.66 g
Analysis Date:	04/05/2011 2104	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	04/05/2011 1345				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.092	0.411	0.506	100	87 - 111	

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Duplicate - Batch: 280-60306

Method: 7471A
Preparation: 7471A

Lab Sample ID:	280-14083-2	Analysis Batch:	280-61031	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-60306	Lab File ID:	110405AB.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.68 g
Analysis Date:	04/05/2011 2101	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	04/05/2011 1345				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Mercury	0.092	0.254	93	20	M

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Method Blank - Batch: 280-60730

Method: 7471A
Preparation: 7471A

Lab Sample ID:	MB 280-60730/1-A	Analysis Batch:	280-61031	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-60730	Lab File ID:	110405AB.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	04/05/2011 1952	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	04/05/2011 1345				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	0.0055	U	0.0055	0.017

Lab Control Sample - Batch: 280-60730

Method: 7471A
Preparation: 7471A

Lab Sample ID:	LCS 280-60730/2-A	Analysis Batch:	280-61031	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-60730	Lab File ID:	110405AB.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.60 g
Analysis Date:	04/05/2011 1955	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	04/05/2011 1345				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.417	0.404	97	87 - 111	

Matrix Spike - Batch: 280-60730

Method: 7471A
Preparation: 7471A

Lab Sample ID:	280-14129-2	Analysis Batch:	280-61031	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-60730	Lab File ID:	110405AB.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.56 g
Analysis Date:	04/05/2011 2004	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	04/05/2011 1345				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.21	0.495	0.855	130	87 - 111	N

Quality Control Results

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Duplicate - Batch: 280-60730

Method: 7471A
Preparation: 7471A

Lab Sample ID:	280-14129-2	Analysis Batch:	280-61031	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-60730	Lab File ID:	110405AB.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.62 g
Analysis Date:	04/05/2011 2002	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	04/05/2011 1345				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Mercury	0.21	0.238	12	20	

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Method Blank - Batch: 280-60502

Method: 353.2
Preparation: N/A

Lab Sample ID:	MB 280-60384/1-A	Analysis Batch:	280-60502	Instrument ID:	WC_Alp 2
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0402ANXN
Dilution:	1.0	Leach Batch:	280-60384	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/02/2011 1106	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	04/01/2011 1025				

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

Method Reporting Limit Check - Batch: 280-60502

Method: 353.2
Preparation: N/A

Lab Sample ID:	MRL 280-60502/17	Analysis Batch:	280-60502	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0402ANXN
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	04/02/2011 1103	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate Nitrite as N-Soluble	0.100	0.0696	70	50 - 150	B

Lab Control Sample - Batch: 280-60502

Method: 353.2
Preparation: N/A

Lab Sample ID:	LCS 280-60384/2-A	Analysis Batch:	280-60502	Instrument ID:	WC_Alp 2
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0402ANXN
Dilution:	1.0	Leach Batch:	280-60384	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/02/2011 1108	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	04/01/2011 1025				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate Nitrite as N-Soluble	50.0	50.56	101	90 - 110	

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Matrix Spike - Batch: 280-60502

Method: 353.2
Preparation: N/A

Lab Sample ID:	280-14083-1	Analysis Batch:	280-60502	Instrument ID:	WC_Alp 2
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0402ANXN
Dilution:	1.0	Leach Batch:	280-60384	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/02/2011 1112	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	04/01/2011 1025				

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate Nitrite as N-Soluble	13.1	41.0	59.77	114	90 - 110	N

Duplicate - Batch: 280-60502

Method: 353.2
Preparation: N/A

Lab Sample ID:	280-14083-1	Analysis Batch:	280-60502	Instrument ID:	WC_Alp 2
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0402ANXN
Dilution:	1.0	Leach Batch:	280-60384	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/02/2011 1111	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	04/01/2011 1025				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Nitrate Nitrite as N-Soluble	13.1	13.46	2	10	

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Method Blank - Batch: 280-60832

Method: 353.2
Preparation: N/A

Lab Sample ID:	MB 280-60708/1-A	Analysis Batch:	280-60832	Instrument ID:	WC_Alp 2
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0405NXN.
Dilution:	1.0	Leach Batch:	280-60708	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/05/2011 1250	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	04/02/2011 1105				

Analyte	Result	Qual	MDL	RL
Nitrate Nitrite as N-Soluble	0.36	U	0.36	0.75

Method Reporting Limit Check - Batch: 280-60832

Method: 353.2
Preparation: N/A

Lab Sample ID:	MRL 280-60832/17	Analysis Batch:	280-60832	Instrument ID:	WC_Alp 2
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0405NXN.
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	04/05/2011 1223	Units:	mg/L	Final Weight/Volume:	100 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate Nitrite as N-Soluble	0.100	0.0693	69	50 - 150	B

Lab Control Sample - Batch: 280-60832

Method: 353.2
Preparation: N/A

Lab Sample ID:	LCS 280-60708/2-A	Analysis Batch:	280-60832	Instrument ID:	WC_Alp 2
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0405NXN.
Dilution:	1.0	Leach Batch:	280-60708	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/05/2011 1252	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	04/02/2011 1105				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate Nitrite as N-Soluble	48.5	47.06	97	90 - 110	

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Matrix Spike - Batch: 280-60832

Method: 353.2
Preparation: N/A

Lab Sample ID:	280-14129-1	Analysis Batch:	280-60832	Instrument ID:	WC_Alp 2
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0405NXN.
Dilution:	1.0	Leach Batch:	280-60708	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/05/2011 1256	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	04/02/2011 1105				

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate Nitrite as N-Soluble	21.2	44.7	70.65	111	90 - 110	N

Duplicate - Batch: 280-60832

Method: 353.2
Preparation: N/A

Lab Sample ID:	280-14129-1	Analysis Batch:	280-60832	Instrument ID:	WC_Alp 2
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	C:\FLOW_4\0405NXN.
Dilution:	1.0	Leach Batch:	280-60708	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/05/2011 1255	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	04/02/2011 1105				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Nitrate Nitrite as N-Soluble	21.2	20.58	3	10	

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-60188

Method: 9045C
Preparation: N/A

LCS Lab Sample ID:	LCS 280-60188/4	Analysis Batch:	280-60188	Instrument ID:	WC_pH Probe
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	03/31/2011 1341	Units:	SU	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-60188/5	Analysis Batch:	280-60188	Instrument ID:	WC_pH Probe
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	03/31/2011 1341	Units:	SU	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

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

Duplicate - Batch: 280-60188

Method: 9045C
Preparation: N/A

Lab Sample ID:	280-14083-1	Analysis Batch:	280-60188	Instrument ID:	WC_pH Probe
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	280-60167	Initial Weight/Volume:	1.0 mL
Analysis Date:	03/31/2011 1344	Units:	SU	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	03/31/2011 1223				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
pH adj. to 25 deg C-Soluble	7.52	7.590	0.9	5	

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Method Blank - Batch: 280-60645

Method: 9056M
Preparation: N/A

Lab Sample ID:	MB 280-60332/1-A	Analysis Batch:	280-60645	Instrument ID:	WC_IC8
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	124.TXT
Dilution:	1.0	Leach Batch:	280-60332	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/01/2011 1403	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	04/01/2011 1027				

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: 280-60645

Method: 9056M
Preparation: N/A

Lab Sample ID:	MRL 280-60645/3	Analysis Batch:	280-60645	Instrument ID:	WC_IC8
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	112.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/01/2011 0940	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chloride-Soluble	1.00	1.00	100	50 - 150	B
Bromide-Soluble	0.200	0.203	102	50 - 150	B
Sulfate-Soluble	1.00	0.990	99	50 - 150	B
Fluoride-Soluble	0.200	0.192	96	50 - 150	B

Lab Control Sample - Batch: 280-60645

Method: 9056M
Preparation: N/A

Lab Sample ID:	LCS 280-60332/2-A	Analysis Batch:	280-60645	Instrument ID:	WC_IC8
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	123.TXT
Dilution:	1.0	Leach Batch:	280-60332	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/01/2011 1346	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	04/01/2011 1027				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chloride-Soluble	248	246.7	100	90 - 110	
Bromide-Soluble	49.5	49.46	100	90 - 110	
Sulfate-Soluble	248	249.1	101	90 - 110	
Fluoride-Soluble	49.5	50.44	102	90 - 110	

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Matrix Spike - Batch: 280-60645

Method: 9056M
Preparation: N/A

Lab Sample ID:	280-14083-1	Analysis Batch:	280-60645	Instrument ID:	WC_IC8
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	129.TXT
Dilution:	1.0	Leach Batch:	280-60332	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/01/2011 1527	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	04/01/2011 1027				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Chloride-Soluble	2.1	U	266	273.6	103	80 - 120	
Bromide-Soluble	0.42	U	53.2	53.56	101	80 - 120	
Sulfate-Soluble	125		266	407.4	106	80 - 120	
Fluoride-Soluble	0.88	U	53.2	44.16	83	80 - 120	

Duplicate - Batch: 280-60645

Method: 9056M
Preparation: N/A

Lab Sample ID:	280-14083-1	Analysis Batch:	280-60645	Instrument ID:	WC_IC8
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	128.TXT
Dilution:	1.0	Leach Batch:	280-60332	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/01/2011 1510	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	04/01/2011 1027				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Chloride-Soluble	2.1	U	2.1	NC	15	U
Bromide-Soluble	0.42	U	0.42	NC	15	U
Sulfate-Soluble	125		133.0	6	15	
Fluoride-Soluble	0.88	U	0.947	NC	15	B

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Method Blank - Batch: 280-60646

Method: 9056M
Preparation: N/A

Lab Sample ID:	MB 280-60332/1-A	Analysis Batch:	280-60646	Instrument ID:	WC_IC8
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	124.TXT
Dilution:	1.0	Leach Batch:	280-60332	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/01/2011 1403	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	04/01/2011 1027				

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

Method Reporting Limit Check - Batch: 280-60646

Method: 9056M
Preparation: N/A

Lab Sample ID:	MRL 280-60646/3	Analysis Batch:	280-60646	Instrument ID:	WC_IC8
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	112.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/01/2011 0940	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate as N-Soluble	0.200	0.197	98	50 - 150	B
Nitrite as N-Soluble	0.200	0.194	97	50 - 150	B
Orthophosphate as P-Soluble	0.200	0.19	90	50 - 150	U

Lab Control Sample - Batch: 280-60646

Method: 9056M
Preparation: N/A

Lab Sample ID:	LCS 280-60332/2-A	Analysis Batch:	280-60646	Instrument ID:	WC_IC8
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	123.TXT
Dilution:	1.0	Leach Batch:	280-60332	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/01/2011 1346	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	04/01/2011 1027				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate as N-Soluble	49.5	49.75	101	90 - 110	
Nitrite as N-Soluble	49.5	49.18	99	90 - 110	
Orthophosphate as P-Soluble	49.5	49.04	99	90 - 110	

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Matrix Spike - Batch: 280-60646

Method: 9056M
Preparation: N/A

Lab Sample ID:	280-14083-1	Analysis Batch:	280-60646	Instrument ID:	WC_IC8
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	129.TXT
Dilution:	1.0	Leach Batch:	280-60332	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/01/2011 1527	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	04/01/2011 1027				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Nitrate as N-Soluble	11.7		53.2	66.59	103	80 - 120	
Nitrite as N-Soluble	0.36	U	53.2	53.18	100	80 - 120	
Orthophosphate as P-Soluble	1.3	U	53.3	40.35	76	80 - 120	N

Duplicate - Batch: 280-60646

Method: 9056M
Preparation: N/A

Lab Sample ID:	280-14083-1	Analysis Batch:	280-60646	Instrument ID:	WC_IC8
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	128.TXT
Dilution:	1.0	Leach Batch:	280-60332	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/01/2011 1510	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	04/01/2011 1027				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Nitrate as N-Soluble	11.7		11.96	2	15	
Nitrite as N-Soluble	0.36	U	0.36	NC	15	U
Orthophosphate as P-Soluble	1.3	U	1.3	NC	15	U

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Method Blank - Batch: 280-60988

Method: 9056M
Preparation: N/A

Lab Sample ID:	MB 280-60848/2-A	Analysis Batch:	280-60988	Instrument ID:	WC_IC8
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	170.TXT
Dilution:	1.0	Leach Batch:	280-60848	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/06/2011 0255	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	04/05/2011 1600				

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: 280-60988

Method: 9056M
Preparation: N/A

Lab Sample ID:	MRL 280-60988/3	Analysis Batch:	280-60988	Instrument ID:	WC_IC8
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	112.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/05/2011 1040	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chloride-Soluble	1.00	0.981	98	50 - 150	B
Bromide-Soluble	0.200	0.182	91	50 - 150	B
Sulfate-Soluble	1.00	0.946	95	50 - 150	B
Fluoride-Soluble	0.200	0.191	96	50 - 150	B

Lab Control Sample - Batch: 280-60988

Method: 9056M
Preparation: N/A

Lab Sample ID:	LCS 280-60848/1-A	Analysis Batch:	280-60988	Instrument ID:	WC_IC8
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	169.TXT
Dilution:	1.0	Leach Batch:	280-60848	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/06/2011 0238	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	04/05/2011 1600				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chloride-Soluble	250	258.7	103	90 - 110	
Bromide-Soluble	50.0	51.53	103	90 - 110	
Sulfate-Soluble	250	260.4	104	90 - 110	
Fluoride-Soluble	50.0	52.50	105	90 - 110	

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Matrix Spike - Batch: 280-60988

Method: 9056M
Preparation: N/A

Lab Sample ID:	280-14129-1	Analysis Batch:	280-60988	Instrument ID:	WC_IC8
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	173.TXT
Dilution:	1.0	Leach Batch:	280-60848	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/06/2011 0345	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	04/05/2011 1600				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Chloride-Soluble	2.3	U	288	285.6	99	80 - 120	
Bromide-Soluble	0.45	U	57.6	55.45	96	80 - 120	
Sulfate-Soluble	111		288	434.2	112	80 - 120	
Fluoride-Soluble	0.95	U	57.6	23.99	42	80 - 120	N

Duplicate - Batch: 280-60988

Method: 9056M
Preparation: N/A

Lab Sample ID:	280-14129-1	Analysis Batch:	280-60988	Instrument ID:	WC_IC8
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	172.TXT
Dilution:	1.0	Leach Batch:	280-60848	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/06/2011 0329	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	04/05/2011 1600				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Chloride-Soluble	2.3	U	2.3	NC	15	U
Bromide-Soluble	0.45	U	0.45	NC	15	U
Sulfate-Soluble	111		110.6	0.07	15	
Fluoride-Soluble	0.95	U	0.95	NC	15	U

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Method Blank - Batch: 280-60991

Method: 9056M
Preparation: N/A

Lab Sample ID:	MB 280-60848/2-A	Analysis Batch:	280-60991	Instrument ID:	WC_IC8
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	170.TXT
Dilution:	1.0	Leach Batch:	280-60848	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/06/2011 0255	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	04/05/2011 1600				

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

Method Reporting Limit Check - Batch: 280-60991

Method: 9056M
Preparation: N/A

Lab Sample ID:	MRL 280-60991/3	Analysis Batch:	280-60991	Instrument ID:	WC_IC8
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	112.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/05/2011 1040	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate as N-Soluble	0.200	0.198	99	50 - 150	B
Nitrite as N-Soluble	0.200	0.192	96	50 - 150	B
Orthophosphate as P-Soluble	0.200	0.216	108	50 - 150	B

Lab Control Sample - Batch: 280-60991

Method: 9056M
Preparation: N/A

Lab Sample ID:	LCS 280-60848/1-A	Analysis Batch:	280-60991	Instrument ID:	WC_IC8
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	169.TXT
Dilution:	1.0	Leach Batch:	280-60848	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/06/2011 0238	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	04/05/2011 1600				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrate as N-Soluble	50.0	52.54	105	90 - 110	
Nitrite as N-Soluble	50.0	51.64	103	90 - 110	
Orthophosphate as P-Soluble	50.0	47.40	95	90 - 110	

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Matrix Spike - Batch: 280-60991

Method: 9056M
Preparation: N/A

Lab Sample ID:	280-14129-1	Analysis Batch:	280-60991	Instrument ID:	WC_IC8
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	173.TXT
Dilution:	1.0	Leach Batch:	280-60848	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/06/2011 0345	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	04/05/2011 1600				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Nitrate as N-Soluble	20.0		57.6	77.54	100	80 - 120	
Nitrite as N-Soluble	0.39	U	57.6	55.55	96	80 - 120	
Orthophosphate as P-Soluble	1.4	U	57.6	14.66	25	80 - 120	N

Duplicate - Batch: 280-60991

Method: 9056M
Preparation: N/A

Lab Sample ID:	280-14129-1	Analysis Batch:	280-60991	Instrument ID:	WC_IC8
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	172.TXT
Dilution:	1.0	Leach Batch:	280-60848	Initial Weight/Volume:	1.0 mL
Analysis Date:	04/06/2011 0329	Units:	mg/Kg	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	04/05/2011 1600				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Nitrate as N-Soluble	20.0		20.07	0.1	15	
Nitrite as N-Soluble	0.39	U	0.39	NC	15	U
Orthophosphate as P-Soluble	1.4	U	1.4	NC	15	U

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Duplicate - Batch: 280-60161

Method: D-2216
Preparation: N/A

Lab Sample ID:	280-14083-1	Analysis Batch:	280-60161	Instrument ID:	No Equipment
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	03/31/2011 1200	Units:	%	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Moisture	7.0	7.4	5	20	

Client: Washington Closure Hanford

Job Number: 280-14083-1
Sdg Number: J01053

Duplicate - Batch: 280-60379

Method: D-2216
Preparation: N/A

Lab Sample ID:	280-14129-1	Analysis Batch:	280-60379	Instrument ID:	No Equipment
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	04/01/2011 1315	Units:	%	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Moisture	13.2	13.1	0.4	20	

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-190-041	Page 1 of 2

Collector BC Koelling	Company Contact Joan Kessner	Telephone No. 375-4688	Project Coordinator KESSNER, JH
Price Code 8L	Data Turnaround 21 Days		
Project Designation 100N Field Remediation - Soil In-Process	Sampling Location 124-N-2		SAF No. RC-190
Ice Chest No. WCH-08-017	Field Logbook No. EL-1652-2	COA R11NX3Y000	Method of Shipment Fed Ex
Shipped To TestAmerica Incorporated, ~~Richland~~ Denver MAB 3-28-11	Offsite Property No. NA		Bill of Lading/Air Bill No. ~~See OSPC~~ AJ 3-30-11 7945 9252 5120

POSSIBLE SAMPLE HAZARDS/REMARKS

~~Potential Radio Activity~~ None MAB 3-28-11

Special Handling and/or Storage

Cool 4°C MAB 3-28-11

Preservation	Cool 4C	None	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C
Type of Container	G/P	G/P	G/P	G/P	G	G	aG	aG	aG	aG
No. of Container(s)	1	1	1	0	1	1	1	0	0	0
Volume	120mL	120mL	60mL	120mL	60mL	120mL	250mL	250mL	250mL	250mL

SAMPLE ANALYSIS

Sample No.	Matrix *	Sample Date	Sample Time	See item (1) in Special Instructions.	See item (2) in Special Instructions.	Chromium Hex - 7196 (Hexavalent Chromium) MAB 3-28-11	See item (3) in Special Instructions.	TPH-Diesel Range - WTPH-D +	VOA - 8260A (TCL)	Semi-VOA - 8270A (TCL)	PCBs - 8082	PAHs - 8310	Pesticides - 8081	
J1H0C3	SOIL	3/29/11	1245	✓	✓		✓	✓	✓	✓	✓	✓	✓	RCF 27432
J1H0C5	SOIL	3/29/11	1320	✓	✓		✓	✓	✓	✓	✓	✓	✓	27433

CHAIN OF POSSESSION

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Bartunikiellung	1400 3/29/11	MA Bamberger MABamberger	1400 3/29/11
MA Bamberger	1620 3-29-11	J.E. Bahl	1620 3-29-11
J.E. Bahl	1030 3-30-11	Fed Ex	
		~~Received By/Stored In~~	3/31/11 0900

Sign/Print Names

SPECIAL INSTRUCTIONS

Leach and Hold TCLP metals per Joan Kessner

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

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

(3) IC Anions - 9056 Modified {Bromide, Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Phosphorous in phosphate, Sulfate}; NO2/NO3 - 353.2 {Nitrogen in Nitrite and Nitrate}; pH (Soil) - 9045 {pH Measurement}

SDG# J01053

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 AJ DATE 3-30-11

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

WCH-EE-011

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-190-041	Page 2 of 2

Collector BC Koelling	Company Contact Joan Kessner	Telephone No. 375-4688	Project Coordinator KESSNER, JH
Price Code 8L	Data Turnaround 21 Days		
Project Designation 100N Field Remediation - Soil In-Process	Sampling Location 124-N-2		SAF No. RC-190
Ice Chest No. WHC-08-017	Field Logbook No. EL-1652-2	COA R11NX3Y000	Method of Shipment Fed Ex
Shipped To MAB 3-28-11 TestAmerica Incorporated, ~~Richland~~ Denver	Offsite Property No. NA		Bill of Lading/Air Bill No. ~~See OSPC~~ AJ 3-30-11 7945 9252 5120

POSSIBLE SAMPLE HAZARDS/REMARKS

~~Potential Radio Activity~~ None MAB 3-28-11

Special Handling and/or Storage

Cool 4° C MAB 3-28-11

Preservation	Cool 4C	None	None	None	None	None	None				
Type of Container	aG	G/P	G/P	G/P	G/P	G/P	G/P				
No. of Container(s)	1	1	0	0	0	0	1				
Volume	60mL	500mL	500mL	500mL	500mL	500mL	60mL				
SAMPLE ANALYSIS	Chloro-Herbicides - EPA8151	See item (1) in Special Instructions.	Carbon-14 Low Level; Tritium - H3 Low Level Soil	Nickel-63	Strontium-89,90 -- Total Sr	Technetium-99	RCF GEA Shipping Screen				
Sample No. / Matrix * / Sample Date / Sample Time					MAB 3-28-11						RCF
J1H0C3 / SOIL / 3/29/11 / 1245	✓										27432
J1H0C5 / SOIL / 3/29/11 / 1320	✓										27433

CHAIN OF POSSESSION	Date/Time	Sign/Print Names: Received By/Stored In	Date/Time
Relinquished By/Removed From: BC Koelling	3/29/11 1400	Received By/Stored In: MA Bamberger	3/29/11 1400
Relinquished By/Removed From: MA Bamberger	3-29-11 1620	Received By/Stored In: J.E. Bahl	1620 3-29-11
Relinquished By/Removed From: J.E. Bahl	3-30-11 1030	Received By/Stored In: Fed Ex	
Relinquished By/Removed From		Received By/Stored In	3/31/11 900
Relinquished By/Removed From		Received By/Stored In	
Relinquished By/Removed From		Received By/Stored In	

SPECIAL INSTRUCTIONS

Leach and Hold TCLP metals per Joan Kessner

(1) Gamma Spec (Client List) {Americium-241, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155, Radium-226}

SOGH J01053

REVIEWED BY AJ
DATE 3-30-11

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

3.4°; 4.2°; 2.7°C IR1 4/1/11

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-190-042	Page 1 of 2

Collector BC Koelling	Company Contact Joan Kessner	Telephone No. 375-4688	Project Coordinator KESSNER, JH
Price Code 8L	Data Turnaround 21 Days		
Project Designation 100N Field Remediation - Soil In-Process	Sampling Location 124-N-2		SAF No. RC-190
Ice Chest No. WCH-08-042	Field Logbook No. EL-1652-2	COA R11NX3Y000	Method of Shipment Fed Ex
Shipped To TestAmerica Incorporated, ~~Richland~~ Denver MAB 3-29-11	Offsite Property No. NA		Bill of Lading/Air Bill No. ~~See OSPC~~ ~~NA~~ JEB 3-30-11 MAB 3-29-11 7969 3631 4598

POSSIBLE SAMPLE HAZARDS/REMARKS
NONE MAB 3-29-11

Special Handling and/or Storage
Cool 4°C MAB 3-29-11

Preservation	Cool 4C	None	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Cool 4C
Type of Container	G/P	G/P	G/P	G/P	G	G	aG	aG	aG	aG
No. of Container(s)	1	1	1	0	1	1	1	0	0	0
Volume	120mL	120mL	60mL	120mL	60mL	120mL	250mL	250mL	250mL	250mL
SAMPLE ANALYSIS	See item (1) in Special Instructions.	See item (2) in Special Instructions.	Chromium Hex - 7196 (Hexavalent Chromium) MAB 3-29-11	See item (3) in Special Instructions.	TPH-Diesel Range - WTPH-D +	VOA - 8260A (TCL)	Semi-VOA - 8270A (TCL)	PCBs - 8082	PAHs - 8310	Pesticides - 8081

Sample No.	Matrix *	Sample Date	Sample Time										
J1H0K2	SOIL	3/30/11	0840	✓	✓		✓	✓	✓	✓	✓	✓	✓
J1H0K3	SOIL	3/30/11	~~0840~~	✓	✓		✓	✓	✓	✓	✓	✓	✓
			0810 MAB 3-30-11										

RCF 27433

CHAIN OF POSSESSION		Sign/Print Names	
Relinquished By/Removed From BC Koelling	Date/Time 1020 3/30/11	Received By/Stored In MA Bamberger	Date/Time 1020 3/30/11
Relinquished By/Removed From MA Bamberger	Date/Time 1500 3-30-11	Received By/Stored In J.E. Beckl	Date/Time 1500 3-30-11
Relinquished By/Removed From J.E. Beckl WCH	Date/Time 1000 3-31-11	Received By/Stored In FED EX	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time 4/1/11 8:00
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
Leach and Hold TCLP metals per Joan Kessner

(1) ICP Metals - 6010TR (Client List) {Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Molybdenum, Nickel, Potassium, Selenium, Silicon, Silver, Sodium, Vanadium, Zinc}; Mercury - 7471 - (CV) {Mercury}
(2) Metals by ICP (TCLP) - 1311/6010 {Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver}; Mercury (TCLP) - 1311/7470 {Mercury}
(3) IC Anions - 9056 Modified {Bromide, Chloride, Fluoride, Nitrogen in Nitrate, Nitrogen in Nitrite, Phosphorous in phosphate, Sulfate}; NO2/NO3 - 353.2 {Nitrogen in Nitrite and Nitrate}; pH (Soil) - 9045 {pH Measurement}

JG10688 MD 4/1/11
53

REVIEWED BY AJ
DATE 3-31-11

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

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

WCH-EE-011

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-190-042	Page 2 of 2

Collector BC Koelling	Company Contact Joan Kessner	Telephone No. 375-4688	Project Coordinator KESSNER, JH	Price Code 8L	Data Turnaround 21 Days
Project Designation 100N Field Remediation - Soil In-Process	Sampling Location 124-N-2		SAF No. RC-190		
Ice Chest No. WCH-08-042	Field Logbook No. EL-1652-2	COA R11NX3Y000	Method of Shipment Fed Ex		
Shipped To TestAmerica Incorporated, ~~Richland~~ Denver MAB 3-29-11	Offsite Property No. NA		Bill of Lading/Air Bill No. ~~See OSPC~~ ~~NA~~ AJ 3-31-11 7969 3631 4598 MAB 3-29-11		

POSSIBLE SAMPLE HAZARDS/REMARKS

NONE MAB 3-29-11

Special Handling and/or Storage

Cool 4°C MAB 3-29-11

Preservation	Cool 4C	None	None	None	None	None					
Type of Container	aG	G/P	G/P	G/P	G/P	G/P					
No. of Container(s)	1	1	0	0	0	0					
Volume	60mL	500mL	500mL	500mL	500mL	500mL					
SAMPLE ANALYSIS	Chloro-Herbicides - EPA8151	See item (1) in Special Instructions.	Carbon-14 Low Level; Tritium - H3 Low Level Soil	Nickel-63 MAB 3-29-11	Strontium-89,90 -- Total Sr	Technetium-99					
Sample No.	Matrix *	Sample Date	Sample Time								RCF
J1H0K2	SOIL	3/30/11	0810	✓							27933
J1H0K3	SOIL	3/30/11	~~0840~~ 0810 MAB 3-30-11	✓							

CHAIN OF POSSESSION	Date/Time	Sign/Print Names: Received By/Stored In	Date/Time
Relinquished By/Removed From: BC Koelling	3/30/11 1020	MA Bambrayer	3/30/11 1020
Relinquished By/Removed From: MA Bambrayer	1500 3-30-11	Received By/Stored In: J.E. Beahl	1500 3-30-11
Relinquished By/Removed From: J.E. Beahl	1000 3-31-11	Received By/Stored In: FED EX	
Relinquished By/Removed From		Received By/Stored In	4/1/11 8:30
Relinquished By/Removed From		Received By/Stored In	
Relinquished By/Removed From		Received By/Stored In	

SPECIAL INSTRUCTIONS

Leach and Hold TCLP metals per Joan Kessner

(1) Gamma Spec (Client List) {Americium-241, Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155, Radium-226}

JO 1068 53

REVIEWED BY AJ DATE 3-31-11

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

Project 28002142 - 601070 - Solid

Analytical Due:

Report Due: 4/21/11

Sample Check-in List

Date/Time Received: 3/3/11 900 GM Screen Result 12 microR/hr

Client: Washington Closure Hanford SDG #: J01053 NA[ ] SAF #: RC-190 NA [ ]

Job Number: 14083 Chain of Custody # RC-190-041

Shipping Container ID: WCH-08-017 Air Bill # 7945925251 20

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: 3.7 NA [ ] 5. Vermiculite/packing materials is NA [ ] Wet [ ] Dry [✓]
6. Number of samples in shipping container: 2
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: 3/3/11

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on ___ by ___ Person Contacted ___

[ ] No action necessary; process as is.

Project Manager [signature] Date 4/1/11

LS-023, Rev. 7, 1/08

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Project 28002142 -610TR -S1.2

Analytical Due:

Report Due: 4/22/11

Sample Check-in List

Date/Time Received: 4/1/11 8:30 GM Screen Result 12 microR/hr

Client: Washington Closure Hanford SDG #: J01068 53 NA[ ] SAF #: RC-190 NA [ ]

Job Number: ~~14129~~ 14083 Chain of Custody # RC-190-42

Shipping Container ID: WCH-08-042 WCH-08-072 WCH-11-019 Air Bill # 7969 3631 4598 7969 3631 4690 7969 3631 4680

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: 3.4, 4.2, 2.7 NA [ ] 5. Vermiculite/packing materials is NA [ ] Wet [ ] Dry [✓]
6. Number of samples in shipping container: 2
7. Sample holding times exceeded? NA [ ] Yes [ ] No [✓]
8. Samples have:
   - [✓] Tape
   - [✓] Custody Seals
   - [✓] Hazard Lables
   - [✓] Appropriate Sample Lables
9. Samples are:
   - [✓] In Good Condition
   - [ ] Broken
   - [ ] Leaking
   - [ ] Have Air Bubbles
   - (Only for samples requiring no head space.)
10. Sample pH taken? NA [✓] pH<2 [ ] pH>2 [ ] pH>9 [ ] Amount HNO_3 Added _____
11. Sample Location, Sample Collector Listed? *
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: [signature] Date: 4/1/11

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person Contacted _____

[ ] No action necessary; process as is.

Project Manager [signature] Date 4/4/11

LS-023, Rev. 7, 1/08

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

RICHLAND, WA 99354

FedEx. Express

J11151102250225

Ship Date: 30MAR11
ActWgt: 75.0 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 # JILL DOEL
Invoice #
PO #
Dept #

THU - 31 MAR A1
PRIORITY OVERNIGHT

TRK# 7945 9252 5120
0201

XH WHHA

80002
CO-US
DEN

50DG3/26A8/7EFB

After printing this label:
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2. Fold the printed page along the horizontal line.
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From: (509) 375-4640 Origin ID: PSCA
WCH MAILROOM
WASHINGTON CLOSURE HANFORD
2620 FERMI AVE

RICHLAND, WA 99354

J11151102250225

Ship Date: 31MAR11
ActWgt: 84.0 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 3

FRI - 01 APR A1
PRIORITY OVERNIGHT

TRK# 7969 3631 4598
0201

MASTER

XH WHHA

80002
CO-US
DEN

50DG3/26A8/7EFB

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WASHINGTON CLOSURE HANFORD
2620 FERMI AVE

RICHLAND, WA 99354

FedEx. Express

J11151102250225

Ship Date: 31MAR11
ActWgt: 70.0 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 3

FRI - 01 APR A1
PRIORITY OVERNIGHT

MPS# 7969 3631 4690
0263

Mstr# 7969 3631 4598 0201

XH WHHA

80002
CO-US
DEN

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2620 FERMI AVE

RICHLAND, WA 99354

FedEx. Express

J11151102250225

Ship Date: 31MAR11
ActWgt: 31.0 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

3 of 3

FRI - 01 APR A1
PRIORITY OVERNIGHT

MPS# 7969 3631 4680
0263
Mstr# 7969 3631 4598 0201

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