0097302

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

COMPLETE COPY OF DATA PACKAGE TO:

Kathy Wendt H4-21 KW 6/16/11
NITIAL/DATE

RECEIVED
JUN 23 2011
EDMC

COMMENTS:

SDG JP0196 SAF-RC-107

Rad only ☑ Chem only Rad & Chem

☑ Complete Partial

Waste Site: 600-151 verification resampling

Analytical Data Package Prepared For

Washington Closure Hanford

RECEIVED
JUN 2011

Radiochemical Analysis By

TestAmerica

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

Assigned Laboratory Code: TARL

Data Package Contains 30 ***Pages***

Report No.: 46935

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.
JP0196	RC-107	J1JDW8	J1F070511-1	MJ28X1AA	9MJ28X10	1160030
		J1JDW9	J1F070511-2	MJ2841AA	9MJ28410	1160030
		J1JDX0	J1F070511-3	MJ2871AA	9MJ28710	1160030
		J1JDX1	J1F070511-4	MJ2881AA	9MJ28810	1160030
		J1JDX2	J1F070511-5	MJ2891AA	9MJ28910	1160030
		J1JDX3	J1F070511-6	MJ29A1AA	9MJ29A10	1160030
		J1JDX4	J1F070511-7	MJ28C1AA	9MJ28C10	1160030

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

TestAmerica Laboratories, Inc.

Washington Hanford Closure
2620 Fermi Avenue
Richland, WA 99354

June 13, 2011

Attention: Joan Kessner

SAF Number	:	RC-107
Date SDG Closed	:	June 7, 2011
Number of Samples	:	Seven (7)
Sample Type	:	Soil
SDG Number	:	JP0196
Data Deliverable	:	7 Day Summary

CASE NARRATIVE

I. Introduction

On June 7, 2011, seven soil samples were received at TestAmerica for chemistry 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
J1JDW8	MJ28X	SOIL	6/7/11
J1JDW9	MJ284	SOIL	6/7/11
J1JDX0	MJ287	SOIL	6/7/11
J1JDX1	MJ288	SOIL	6/7/11
J1JDX2	MJ289	SOIL	6/7/11
J1JDX3	MJ29A	SOIL	6/7/11
J1JDX4	MJ29C	SOIL	6/7/11

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 analysis was:

Chemical Analysis
Hexavalent Chromium by EPA method 7196A

IV. Quality Control

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

QC and sample results are reported in the same units.

V. Comments

Chemical Analysis
Hexavalent Chromium by EPA method 7196A:
An insufficient amount was recovered from the matrix spike, requiring a Post Digestive Matrix Spike (PDMS) to be preformed. The matrix spike most likely failed due to matrix interference; this can be shown by the successful LCS in combination with the successful recoveries from the more robust PbCr spike and PDMS.

The PDMS was made using the "daily cal", a solution of 50 mg/L, instead of "monthly cal", a solution of 1000 mg/L. The correct information to show this has been entered into the excel spreadsheet, and the calculated recovery was well within quality specifications at 95.873%. Except as noted: The LCS, batch blank, sample, sample duplicate (J1JDW8) and the sample matrix spike (J1JDW8) 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:

for Whitney Potter
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: 13-Jun-11

Report No. : 46935

SDG No: JP0196

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDC or MDA	CRDL	RPD
1160030	7196_CR6								
	J1JDW8								
	MJ28X1AA	HEXCHROME	2.02E-01 +- 0.0E+00		mg/kg	N/A	1.55E-01	1.55E-01	
	MJ28X1AD	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	3.50E-01	26.3
	J1JDW9								
	MJ2841AA	HEXCHROME	2.59E-01 +- 0.0E+00		mg/kg	N/A	1.55E-01	1.55E-01	
	J1JDX0								
	MJ2871AA	HEXCHROME	3.06E-01 +- 0.0E+00		mg/kg	N/A	1.55E-01	1.55E-01	
	J1JDX1								
	MJ2881AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	J1JDX2								
	MJ2891AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	J1JDX3								
	MJ29A1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	J1JDX4								
	MJ28C1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01		

No. of Results: 8

TestAmerica

rptSTLRchSaSummary2 V5.2.15 A2002

RPD - Relative Percent Difference.

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

QC Results Summary

TestAmerica TARL

Ordered by Method, Batch No, QC Type,.

Date: 13-Jun-11

Report No. : 46935

SDG No.: JP0196

Batch Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDC|MDA
7196_CR6								
1160030 MATRIX SPIKE, J1JDW8								
MJ28X1AA	HEXCHROME	7.59E+00 +- 0.0E+00		mg/kg	N/A	72%	-0.3	1.55E-01
1160030 LCS,								
MJ38F1AC	HEXCHROME	1.84E+01 +- 0.0E+00		mg/kg	N/A	92%	-0.1	1.55E-01
1160030 BLANK QC,								
MJ38F1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A			1.55E-01

No. of Results: 3

TestAmerica
rptSTLRchQcSummary V5.2.15
A2002

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

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

FORM I

SAMPLE RESULTS

Date: 13-Jun-11

Lab Name:	TestAmerica	**SDG:**	JP0196	**Collection Date:**	6/7/2011 8:20:00 AM
Lot-Sample No.:	J1F070511-1	**Report No. :**	46935	**Received Date:**	6/7/2011 4:30:00 PM
Client Sample ID:	J1JDW8	**COC No. :**	RC-107-076	**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: 1160030	7196_CR6			**Work Order:**	MJ28X1AA		**Report DB ID:**	9MJ28X10				
HEXCHROME	***2.02E-01***			0.0E+00	1.55E-01	mg/kg	N/A	*(1.3)*	6/9/11 10:45 a		2.5	
							1.55E-01	*N/A*			g	

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

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

TestAmerica Laboratories, Inc.

FORM I

SAMPLE RESULTS

Date: 13-Jun-11

Lab Name:	**TestAmerica**	**SDG:**	JP0196	**Collection Date:**	6/7/2011 8:35:00 AM
Lot-Sample No.:	**J1F070511-2**	**Report No. :**	46935	**Received Date:**	6/7/2011 4:30:00 PM
Client Sample ID:	**J1JDW9**	**COC No. :**	RC-107-076	**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: 1160030	7196_CR6			**Work Order:** MJ2841AA			**Report DB ID:** 9MJ28410					
HEXCHROME	***2.59E-01***			0.0E+00	1.55E-01	mg/kg	N/A	*(1.7)*	6/9/11 10:45 a		2.5	
							1.55E-01	*N/A*			g	

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

TestAmerica
rptSTLRchSample
V5.2.15 A2002

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

FORM I

SAMPLE RESULTS

Date: 13-Jun-11

Lab Name:	TestAmerica	**SDG:**	JP0196	**Collection Date:**	6/7/2011 8:55:00 AM
Lot-Sample No.:	J1F070511-3	**Report No. :**	46935	**Received Date:**	6/7/2011 4:30:00 PM
Client Sample ID:	J1JDX0	**COC No. :**	RC-107-076	**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: 1160030	7196_CR6			**Work Order:** MJ2871AA			**Report DB ID:** 9MJ28710					
HEXCHROME	***3.06E-01***			0.0E+00	1.55E-01	mg/kg	N/A	*(2.)*	6/9/11 10:45 a		2.5	
							1.55E-01	*N/A*			g	

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

TestAmerica
rptSTLRchSample
V5.2.15 A2002

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

FORM I

SAMPLE RESULTS

Date: 13-Jun-11

Lab Name:	TestAmerica	**SDG:**	JP0196	**Collection Date:**	6/7/2011 9:10:00 AM
Lot-Sample No.:	J1F070511-4	**Report No. :**	46935	**Received Date:**	6/7/2011 4:30:00 PM
Client Sample ID:	J1JDX1	**COC No. :**	RC-107-076	**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: 1160030	7196_CR6			**Work Order:** MJ2881AA			**Report DB ID:** 9MJ28810					
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	6/9/11 10:45 a		2.5	
							1.55E-01	*N/A*			g	

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

TestAmerica
rptSTLRchSample
V5.2.15 A2002

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

FORM I

SAMPLE RESULTS

Date: 13-Jun-11

Lab Name:	TestAmerica	**SDG:**	JP0196	**Collection Date:**	6/7/2011 10:40:00 AM
Lot-Sample No.:	J1F070511-5	**Report No. :**	46935	**Received Date:**	6/7/2011 4:30:00 PM
Client Sample ID:	J1JDX2	**COC No. :**	RC-107-076	**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: 1160030	7196_CR6			**Work Order:** MJ2891AA			**Report DB ID:** 9MJ28910					
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	6/9/11 10:45 a		2.5	
							1.55E-01	*N/A*			g	

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

TestAmerica
rptSTLRchSample
V5.2.15 A2002

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

FORM I

SAMPLE RESULTS

Date: 13-Jun-11

Lab Name:	TestAmerica	**SDG:**	JP0196	**Collection Date:**	6/7/2011 9:35:00 AM
Lot-Sample No.:	J1F070511-6	**Report No. :**	46935	**Received Date:**	6/7/2011 4:30:00 PM
Client Sample ID:	J1JDX3	**COC No. :**	RC-107-076	**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: 1160030	7196_CR6			**Work Order:** MJ29A1AA			**Report DB ID:** 9MJ29A10					
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	6/9/11 10:45 a		2.5	
							1.55E-01	*N/A*			g	

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

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

FORM I

SAMPLE RESULTS

Date: 13-Jun-11

Lab Name:	TestAmerica	**SDG:**	JP0196	**Collection Date:**	6/7/2011 9:40:00 AM
Lot-Sample No.:	J1F070511-7	**Report No. :**	46935	**Received Date:**	6/7/2011 4:30:00 PM
Client Sample ID:	J1JDX4	**COC No. :**	RC-107-076	**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: 1160030	7196_CR6			**Work Order:** MJ28C1AA			**Report DB ID:** 9MJ28C10					
HEXCHROME	***1.55E-01***	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	6/9/11 10:45 a		2.5	
								N/A			g	

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

TestAmerica
rptSTLRchSample
V5.2.15 A2002

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

FORM I

SAMPLE RESULTS

Date: 13-Jun-11

Lab Name:	TestAmerica	SDG:	JP0196	Collection Date:	6/7/2011 9:40:00 AM
Lot-Sample No.:	J1F070511-7	Report No. :	46935	Received Date:	6/7/2011 4:30:00 PM
Client Sample ID:	J1JDX4	COC No. :	RC-107-076	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
V5.2.15 A2002

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

FORM II

Date: 13-Jun-11

DUPLICATE RESULTS

Lab Name:	TestAmerica	**SDG:**	JP0196	**Collection Date:**	6/7/2011 8:20:00 AM
Lot-Sample No.:	J1F070511-1	**Report No. :**	46935	**Received Date:**	6/7/2011 4:30:00 PM
Client Sample ID:	J1JDW8	**COC No. :**	RC-107-076	**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: 1160030	7196_CR6			**Work Order:** MJ28X1AD		**Report DB ID:** MJ28X1ER			**Orig Sa DB ID:** 9MJ28X10			
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	1.	6/9/11 10:45 a		2.5	
	2.02E-01		**RPD**	**26.3**		3.50E-01		N/A			g	

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

RPD - Relative Percent Difference.

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

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

FORM II

BLANK RESULTS

Date: 13-Jun-11

Lab Name: TestAmerica

Matrix: SOIL

SDG: JP0196

Report No. : 46935

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: 1160030	7196_CR6			Work Order:	MJ38F1AA		Report DB ID:	MJ38F1AB				
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	1.	6/9/11 10:45 a		2.5	
						1.55E-01		N/A			g	

No. of Results: 1 Comments:

TestAmerica
rptSTLRchBlank
V5.2.15 A2002

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

TestAmerica Laboratories, Inc.

FORM II

LCS RESULTS

Date: 13-Jun-11

Lab Name: TestAmerica

Matrix: SOIL

SDG: JP0196

Report No. : 46935

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: 1160030	7196_CR6			Work Order:	MJ38F1AC		Report DB ID:	MJ38F1AS					
HEXCHROME	1.84E+01			0.0E+00	1.55E-01	mg/kg	N/A	2.00E+01		92%	6/9/11 10:45 a	2.5	
							Rec Limits:	80	120	-0.1		g	

No. of Results: 1 Comments:

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

rptSTLRchLcs
V5.2.15 A2002

FORM II

MATRIX SPIKE RESULTS

Date: 13-Jun-11

Lab Name: TestAmerica **SDG:** JP0196

Lot-Sample No.: J1F070511-1, J1JDW8 **Report No. :** 46935 **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: 1160030	Work Order: MJ28X1AA			Report DB ID: MJ28X1CW			Orig Sa DB ID: 9MJ28X10					
HEXCHROME	7.59E+00			0.0E+00	1.55E-01	mg/kg	N/A	72.40%	1.05E+01	6/9/11 10:45 a	2.5	7196_CR6
	2.02E-01										g	

Number of Results: 1

Comments:

TestAmerica
rptSTLRchMs
V5.2.15 A2002

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

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Richland Laboratory
Data Review Check List
Hexavalent Chromium

Batch Number(s): **1160030**

Lab Sample Numbers or SDG:**JP0196**

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?				✓
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?			✓	✓
6. ICP only: CRDL standard (CRI or CRA) analyzed at required frequency?			✓	✓
7. ICP only: Interference check samples (ICSA, ICSAB) and HICAL analyzed at the required frequencies and within QC limits?			✓	✓

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?	✓			✓

Comments on any "No"

An insufficient amount of hexavalent chromium was recovered from the matrix spike, requiring a PDMS be performed. The matrix spike most likely failed due to matrix interference; this can be shown by the successful LCS in combination with the successful recoveries from the more robust PbCr spike and PDMS.

The PDMS was made using the "daily cal", a solution of 50 mg/L hexavalent chromium, instead of "monthly cal", a solution of 1000 mg/L of hexavalent chromium. The correct information to show this has been entered into the excel spreadsheet, and the calculated recovery was well within quality specifications at 95.873%.

Analyst: _____ Date: 6/10/11

Second-Level Review: _____ Date: 6/10/11

Clouseau
Nonconformance Memo

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

NCM #: 10-18523
NCM Initiated By: David Smith
Date Opened: 06/10/2011
Date Closed:

Classification: Anomaly
Status: PMREVIEW
Production Area: Classical Chemistry
Tests: 7196A
Lot #'s (Sample #'s): J1F070511 (1,2,3,4,5,6,7), J1F090000 (30),
QC Batches: 1160030,

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

Problem Description / Root Cause

Name	Date	Description
David Smith	06/10/2011	An insufficient amount of hexavalent chromium was recovered from the matrix spike.

Corrective Action

Name	Date	Corrective Action
David Smith	06/10/2011	A post digestion matrix spike was performed. The PDMS recovered 95.873% of the hexavalent chromium. The matrix spike most likely failed due to matrix interference; this can be shown by the successful LCS in combination with the successful recoveries from the more robust PbCr spike and the PDMS.

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

6/10/11

Clouseau
Nonconformance Memo

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

NCM #: **10-18527**
NCM Initiated By: David Smith
Date Opened: 06/10/2011
Date Closed:

Classification: **Deficiency**
Status: **PMREVIEW**
Production Area: Classical Chemistry
Tests: 7196A
Lot #'s (Sample #'s): J1F070511 (1,2,3,4,5,6,7), J1F090000 (30),
QC Batches: 1160030,

Nonconformance: One-time Procedure Variance
Subcategory: Incorrect reagent used

Problem Description / Root Cause

Name	Date	Description
David Smith	06/10/2011	An insufficient amount of hexavalent chromium was recovered from the matrix spike. A PDMS was run using the daily solution instead of the monthly.

Corrective Action

Name	Date	Corrective Action
David Smith	06/10/2011	The PDMS was made using the "daily cal", a solution of 50 mg/L hexavalent chromium, instead of "monthly cal", a solution of 1000 mg/L of hexavalent chromium. The correct information to show this has been entered into the excel spreadsheet, and the calculated recovery was well within quality specifications at 95.873%.

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

6/10/11

Date Printed: 6/10/2011

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-107-076	Page 1 of 2

Collector: Q Stowe	Company Contact: Joan Kessner	Telephone No.: 509-375-4688	Project Coordinator: KESSNER, JH
Price Code: ~~8L~~ 8B	Data Turnaround: ~~21~~ 7 Days		
Project Designation: 100-H Remaining Sites Burial Grounds - Soil Full Protocol	Sampling Location: 600-151 verification resampling		SAF No.: RC-107
Ice Chest No.: NA	Field Logbook No.: EL 1627-05	COA: 0601512000	Method of Shipment: Government Vehicle/FedEx
Shipped To: TestAmerica Incorporated, Richland	Offsite Property No.: NA		Bill of Lading/Air Bill No.: NA

Due 6.14.11

POSSIBLE SAMPLE HAZARDS/REMARKS

None

Special Handling and/or Storage

Cool 4 deg C

Preservation	None	Cool 4C	Cool 4C	Freeze	Cool 4C	Cool 4C	Cool 4C			
Type of Container	G/P	G/P	G	Gs*	aG	aG	aG			
No. of Container(s)	1	1	1	5	1	1	1			
Volume	60mL	60mL	120mL	40mL	120mL	120mL	120mL			
SAMPLE ANALYSIS	See item (1) in Special Instructions.	Chromium Hex - 7196	TPH-Diesel Range - WTPH-D +	VOA - 5035/8260 (TCL)	PCBs - 8082	PAHs - 8310	Pesticides - 8081			

J1F070511

Sample No.	Matrix *	Sample Date	Sample Time									
J1JDW8	SOIL	6/7/11	0820		X					MJ284		
J1JDW9	SOIL	6/7/11	0835		X					MJ285		
J1JDX0	SOIL	6/7/11	0855		X					MJ287		
J1JDX1	SOIL	6/7/11	0910		X					MJ288		
J1JDX2	SOIL	6/7/11	1040		X					MJ289		

CHAIN OF POSSESSION — Sign/Print Names

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Quincy Stowe	6/7/11 1100	JV Fuller	6/7/11 1100
JV Fuller	6-7-11 1230	1060 #1 A PORTER	6/7/11 1230
A PORTER 1060 #1	6/7/11 1630	TALR RYAN	6-7-11 1630

SPECIAL INSTRUCTIONS

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

REVIEWED BY AJ
DATE 6-7-11

JP0196

Matrix *
S=Soil
SE=Sediment
SO=Solid
SJ=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.

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-107-076	Page 2 of 2

Collector: G Stowe	Company Contact: Joan Kessner	Telephone No.: 509-375-4688	Project Coordinator: KESSNER, JH
Price Code: 8L 8B	Data Turnaround: 21 Days 7		
Project Designation: 100-H Remaining Sites Burial Grounds - Soil Full Protocol	Sampling Location: 600-151 verification resampling		SAF No.: RC-107
Ice Chest No.: NA	Field Logbook No.: EL 1627-05	COA: 0601512000	Method of Shipment: Government Vehicle/FedEx
Shipped To: TestAmerica Incorporated, Richland	Offsite Property No.: NA		Bill of Lading/Air Bill No.: NA

POSSIBLE SAMPLE HAZARDS/REMARKS

None

Special Handling and/or Storage

Cool 4 deg C

Preservation	None	Cool 4C	Cool 4C	Freeze	Cool 4C	Cool 4C	Cool 4C			
Type of Container	G/P	G/P	G	Gs*	aG	aG	aG			
No. of Container(s)	1	1	1	5	1	1	1			
Volume	60mL	60mL	120mL	40mL	120mL	120mL	120mL			
SAMPLE ANALYSIS	See Item (1) in Special Instructions.	Chromium Hex - 7196	TPH-Diesel Range - WTPH-D +	VOA - 5035/8260 (TCL)	PCBs - 8082	PAHs - 8310	Pesticides - 8081			
Sample No. / Matrix * / Sample Date / Sample Time										
J1JDX3 / SOIL / 6/7/11 / 0935		X				MJ24A				
J1JDX4 / SOIL / 6/7/11 / 0940		X				MJ24C				

CHAIN OF POSSESSION	Date/Time	Sign/Print Names: Received By/Stored In	Date/Time
Relinquished By/Removed From: Quincy Stowe	6/7/11 1100	Received By/Stored In: JV Fullmer	1100 6/7/11
Relinquished By/Removed From: JV Fullmer	1230 6-7-11	Received By/Stored In: 1060#1 A. PORTER	1230 6/7/11
Relinquished By/Removed From: 1060#1 A. PORTER	1630 6/7/11	Received By/Stored In: TALR RYAN	6-7-11 1630
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time

SPECIAL INSTRUCTIONS

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

REVIEWED BY AJ DATE 6-7-11

JP0196

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

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

WCH-EE-011

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 6.7.11 1630 GM Screen Result: (Airlock) N/A Initials[RK]
(Sample Receiving) 5 Initials[RK]

Client: WCH SDG #: JP0196 NA [ ] SAF #: RC-107-076 NA [ ]

Work Order Number: J1F070511

Chain of Custody # RC-107-076

Shipping Container ID: Hand Delivered NA [ ]

Samples received inside shipping container/cooler/box Yes [✓] Continue with 1 through 4. Initial appropriate response.

No [ ] Go to 5.

1. Custody Seals on shipping container intact? Yes [ ] No [ ] No Custody Seal [RK]
2. Custody Seals dated and signed? Yes [ ] No [ ] No Custody Seal [RK]
3. Cooler temperature: 22 °C NA [✓]
4. Vermiculite/packing materials is NA [RK] Wet [ ] Dry [ ]

Item 5 through 16 for samples. Initial appropriate response.

5. Chain of Custody record present? Yes [RK] No [ ]
6. Number of samples received (Each sample may contain multiple bottles): 7 Samples @ 1 per
7. Containers received: 7

8. Sample holding times exceeded? NA [ ] Yes [ ] No [RK]
9. Samples have:
   ____ tape
   RK custody seals
   ____ hazard labels
   RK appropriate sample labels

   J1F070511
10. Matrix:
    RK A (FLT, Wipe, Solid, Soil)
    ____ S (Air, Niosh 7400)
    ____ I (Water)
    ____ T (Biological, Ni-63)
11. Samples:
    RK are in good condition
    ____ are broken
    ____ Other
    ____ are leaking
    ____ have air bubbles (Only for samples requiring no head space)
12. Sample pH appropriate for analysis requested Yes [ ] No [ ] NA [RK]
    (If acidification is necessary, then document sample ID, initial pH, amount of HNO_3 added and pH after addition on table overleaf)

    RPL ID # of preservative used :
13. Were any anomalies identified in sample receipt? Yes [ ] No [RK]
14. Description of anomalies (include sample numbers): NA RK

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

16. Additional Information: N/A

Sample Custodian: [signature] Date: 6-7-11 1630

Client Informed on _____ by _____ Person contacted _____

[✓] No action necessary; process as is

Project Manager [signature] Date 6/8/11

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

6/9/2011 10:14:57 AM

Sample Preparation/Analysis

Balance Id:

127642, Washington Closure Hanford LLC
Bechtel Hanford, Inc.

DW Alkaline Digestion by method 3060A
EA Chromium, Hexavalent (7196A)

Pipet #:

AnalyDueDate: 06/14/2011

5I CLIENT: HANFORD

Sep1 DT/Tm Tech:

Batch: 1160030 SOIL mg/kg

PM, Quote: RW2, 27038

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 1160030 DWEA,

Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 MJ28X-1-AA J1F070511-1-SAMP 06/07/2011 08:20		AmtRec: 1X60MLAG	#Containers: 1					Scr:	Alpha:	Beta:
2 MJ28X-1-AC-S J1F070511-1-MS 06/07/2011 08:20		AmtRec: 1X60MLAG	#Containers: 1					Scr:	Alpha:	Beta:
3 MJ28X-1-AD-X J1F070511-1-DUP 06/07/2011 08:20		AmtRec: 1X60MLAG	#Containers: 1					Scr:	Alpha:	Beta:
4 MJ284-1-AA J1F070511-2-SAMP 06/07/2011 08:35		AmtRec: 1X60MLAG	#Containers: 1					Scr:	Alpha:	Beta:
5 MJ287-1-AA J1F070511-3-SAMP 06/07/2011 08:55		AmtRec: 1X60MLAG	#Containers: 1					Scr:	Alpha:	Beta:
6 MJ288-1-AA J1F070511-4-SAMP 06/07/2011 09:10		AmtRec: 1X60MLAG	#Containers: 1					Scr:	Alpha:	Beta:
7 MJ289-1-AA J1F070511-5-SAMP 06/07/2011 10:40		AmtRec: 1X60MLAG	#Containers: 1					Scr:	Alpha:	Beta:

TestAmerica Laboratories, Inc.

6/9/2011 10:14:58 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

AnalyDueDate: 06/14/2011

Batch: 1160030 SOIL mg/kg PM, Quote: RW2, 27038
SEQ Batch, Test: None

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

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 MJ29A-1-AA J1F070511-6-SAMP 06/07/2011 09:35		AmtRec: 1X60MLAG	#Containers: 1					Scr:	Alpha:	Beta:
9 MJ29C-1-AA J1F070511-7-SAMP 06/07/2011 09:40		AmtRec: 1X60MLAG	#Containers: 1					Scr:	Alpha:	Beta:
10 MJ38F-1-AA-B J1F090000-30-BLK 06/09/2011 10:14 pd		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:
11 MJ38F-1-AC-C J1F090000-30-LCS 06/09/2011 10:14 pd		AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:

Comments:

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

MJ28X1AA-SAMP Constituent List:
HEXCHROME RDL:0.1548 mg/kg LCL:80 UCL:120 RPD:20
MJ28X1AC-MS Constituent List:

MJ38F1AA-BLK:

MJ38F1AC-LCS:

TestAmerica Laboratories, Inc.

Sample Preparation/Analysis

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

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

AnalyDueDate: 06/14/2011

Batch: 1160030 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:

```
MJ28X1AA-SAMP Calc Info:
    Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
MJ28X1AC-MS Calc Info:
    Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
MJ38F1AA-BLK:
    Uncert Level (#s).: 2     Decay to SaDt: Y     Blk Subt.: N     Sci.Not.: Y     ODRs: B
MJ38F1AC-LCS:
    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: 280-16674-1

SDG Number: JP0196

Job Description: SAF# RC-107

RECEIVED
JUN 2011

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

Attention: Joan H Kessner

Approved for release.
Kae E Yoder
Project Manager II
6/15/2011 1:02 PM

Kae E Yoder
Project Manager II
kae.yoder@testamericainc.com
06/15/2011

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: 280-16674-1

SDG #: JP0196
SAF#: RC-107

Date SDG Closed: June 8, 2011
Data Deliverable: 7 Day / Summary

CLIENT ID	LAB ID	ANALYSES REQUESTED	ANALYSES PERFORMED
J1JDX5	280-16674-1	8260	8260B
J1JDW8	280-16674-2	6010/7471/WTPH-D+/8260/8082/8310/8081	6010B/7471A/NWTPH-Dx/8260B/8082/8310/8081A
J1JDW9	280-16674-3	6010/7471/WTPH-D+/8260/8082/8310/8081	6010B/7471A/NWTPH-Dx/8260B/8082/8310/8081A
J1JDX0	280-16674-4	6010/7471/WTPH-D+/8260/8082/8310/8081	6010B/7471A/NWTPH-Dx/8260B/8082/8310/8081A
J1JDX1	280-16674-5	6010/7471/WTPH-D+/8260/8082/8310/8081	6010B/7471A/NWTPH-Dx/8260B/8082/8310/8081A
J1JDX2	280-16674-6	6010/7471/WTPH-D+/8260/8082/8310/8081	6010B/7471A/NWTPH-Dx/8260B/8082/8310/8081A
J1JDX3	280-16674-7	6010/7471/WTPH-D+/8260/8082/8310/8081	6010B/7471A/NWTPH-Dx/8260B/8082/8310/8081A
J1JDX4	280-16674-8	6010/7471/WTPH-D+/8260/8082/8310/8081	6010B/7471A/NWTPH-Dx/8260B/8082/8310/8081A

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

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

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

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

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

RECEIPT
The samples were received on 6/8/2011; the samples arrived in good condition, properly preserved and on ice. The temperatures of the coolers at receipt were -0.3 C and 5.6 C.

It can be noted that all samples requesting 5035/8260 VOA analysis were received at the laboratory frozen. The cooler received at a temperature of -0.3 C contained the 5035/8260 VOA samples.

GC/MS VOLATILES - SW846 8260B
Low levels of Carbon disulfide and Methylene Chloride are present in the method blank associated with batch 280-71004. 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".

The MS/MSD performed on sample J1JDW9 exhibited RPD data outside the control limits. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary.

A deviation from the Percent Moisture in Soils and Wastes SOP occurred for the %Moisture analysis of sample J1JDX5 requesting 5035/8260B VOA analysis. The SOP states that 15 grams (±2 grams) of sample should be used; however, due to the limited sample volume submitted by the client, 15 grams were not available for use.

No other anomalies were encountered.

GC SEMIVOLATILES - SW846 8081A - PESTICIDEs
Endosulfan sulfate exceeded the RPD limit in the MS/MSD performed on sample J1JDX1. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary.

No other anomalies were encountered.

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

GC SEMIVOLATILES - NWTPH-Dx - DRO
The MS aliquot of the MS/MSD performed on sample J1JDX0 exhibited spike compound recoveries outside the control limits, and the associated sample results have been flagged "N". In addition, the RPD limit was exceeded for C10-C36. 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".

Continuing Calibration Verification (CCV) standards exhibited %Difference (%D) values >15%, biased high, on one of the dual columns for Benzo[a]pyrene (+15.5%, +16.8%, +18.3%), Benzo[g,h,i]perylene (+20.9%) and Dibenzo(a,h)anthracene (+40.6%). The results were reported from the column where the compounds were within limits.

No other anomalies were encountered.

TOTAL METALS - SW846 6010B/7471A
Serial dilution of a digestate in batch 280-70972 indicates that physical and chemical interferences are present for Copper. Results have been flagged with an "X".

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 J1JDW8; therefore, control limits are not applicable.

Silicon was recovered outside the control limits in the Matrix Spike performed on sample J1JDW8, and the associated sample result has been flagged "N". There is no indication that the analytical system was operating out of control, and method accuracy has been verified by the acceptable LCS analysis data; therefore, corrective action is deemed unnecessary.

The duplicate analysis of sample J1JDW8 exhibited RPD data outside the control limits for Selenium and Mercury, and the associated sample results have been flagged "M". There is no indication that the analytical system was operating out of control, and method accuracy has been verified by the acceptable LCS analysis data; therefore, corrective action is deemed unnecessary.

No other anomalies were encountered.

DATA REPORTING QUALIFIERS

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

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
	*	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 Semi VOA		
	U	Analyzed for but not detected.
	N	MS, MSD: Spike recovery exceeds upper or lower control limits.
	*	MS/MSD RPD exceeded the control limit
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
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.

DATA REPORTING QUALIFIERS

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Lab Section	Qualifier	Description
General Chemistry		
	U	Analyzed for but not detected.
HPLC/IC		
	U	Analyzed for but not detected.
	X	More than 40% difference between columns, lower result reported.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

METHOD SUMMARY

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Volatile Organic Compounds (GC/MS)	TAL DEN	SW846 8260B	
Closed System Purge and Trap	TAL DEN		SW846 5035
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
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
ASTM D-2216	TAL DEN	ASTM D-2216	

Lab References:

TAL DEN = TestAmerica Denver

Method References:

ASTM = ASTM International

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: 280-16674-1
Sdg Number: JP0196

Method	Analyst	Analyst ID
SW846 8260B	Jablonski, Kayla A	KAJ
SW846 8081A	Ream, Brian E	BER
SW846 8082	Jackson, Todd D	TDJ
NWTPH NWTPH-Dx	Birdsell, Matthew R	MRB
SW846 6010B	Bowen, Heidi E	HEB
SW846 7471A	Niman, Katie M	KMN
ASTM D-2216	Taylor, Juli M	JMT
SW846 8310	Hall, Koley J	KJH

SAMPLE SUMMARY

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-16674-1	J1JDX5	Solid	06/07/2011 0800	06/08/2011 0930
280-16674-2	J1JDW8	Solid	06/07/2011 0820	06/08/2011 0930
280-16674-3	J1JDW9	Solid	06/07/2011 0835	06/08/2011 0930
280-16674-4	J1JDX0	Solid	06/07/2011 0855	06/08/2011 0930
280-16674-5	J1JDX1	Solid	06/07/2011 0910	06/08/2011 0930
280-16674-6	J1JDX2	Solid	06/07/2011 1040	06/08/2011 0930
280-16674-7	J1JDX3	Solid	06/07/2011 0935	06/08/2011 0930
280-16674-8	J1JDX4	Solid	06/07/2011 0940	06/08/2011 0930

SAMPLE RESULTS

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDX5**

Lab Sample ID: 280-16674-1
Client Matrix: Solid
% Moisture: 0.0

Date Sampled: 06/07/2011 0800
Date Received: 06/08/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-71801	Instrument ID:	MSV_G
Prep Method:	5035	Prep Batch:	280-71004	Lab File ID:	G6162.D
Dilution:	1.0			Initial Weight/Volume:	4.189 g
Analysis Date:	06/13/2011 1049			Final Weight/Volume:	5 mL
Prep Date:	06/08/2011 1357				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		9.9	J	6.4	24
Benzene		0.56	U	0.56	6.0
Bromodichloromethane		0.26	U	0.26	6.0
Bromoform		0.27	U	0.27	6.0
Bromomethane		0.60	U	0.60	12
2-Butanone (MEK)		12		2.2	12
Carbon disulfide		0.50	U	0.50	6.0
Carbon tetrachloride		0.75	U	0.75	6.0
Chlorobenzene		0.64	U	0.64	6.0
Dibromochloromethane		0.68	U	0.68	6.0
Chloroethane		1.1	U	1.1	12
Chloroform		0.35	U	0.35	6.0
Chloromethane		0.92	U	0.92	12
1,1-Dichloroethane		0.25	U	0.25	6.0
1,2-Dichloroethane		0.84	U	0.84	6.0
1,1-Dichloroethene		0.70	U	0.70	6.0
1,2-Dichloroethene, Total		0.47	U	0.47	6.0
1,2-Dichloropropane		0.66	U	0.66	6.0
cis-1,3-Dichloropropene		1.5	U	1.5	6.0
trans-1,3-Dichloropropene		0.80	U	0.80	6.0
Ethylbenzene		0.80	U	0.80	6.0
2-Hexanone		5.8	U	5.8	24
Methylene Chloride		4.1	J B	0.90	6.0
4-Methyl-2-pentanone (MIBK)		5.2	U	5.2	12
Styrene		0.75	U	0.75	6.0
1,1,2,2-Tetrachloroethane		0.73	U	0.73	6.0
Tetrachloroethene		0.70	U	0.70	6.0
Toluene		0.82	U	0.82	6.0
1,1,1-Trichloroethane		0.62	U	0.62	6.0
1,1,2-Trichloroethane		1.1	U	1.1	6.0
Trichloroethene		0.27	U	0.27	6.0
Vinyl chloride		1.6	U	1.6	6.0
Xylenes, Total		0.73	U	0.73	6.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	75		58 - 140
Toluene-d8 (Surr)	93		80 - 126
4-Bromofluorobenzene (Surr)	83		76 - 127
Dibromofluoromethane (Surr)	84		75 - 121

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDX5**

Lab Sample ID: 280-16674-1
Client Matrix: Solid

% Moisture: 0.0

Date Sampled: 06/07/2011 0800
Date Received: 06/08/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-71801	Instrument ID:	MSV_G
Prep Method:	5035	Prep Batch:	280-71004	Lab File ID:	G6162.D
Dilution:	1.0			Initial Weight/Volume:	4.189 g
Analysis Date:	06/13/2011 1049			Final Weight/Volume:	5 mL
Prep Date:	06/08/2011 1357				

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	3.69	130	N J

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDW8**

Lab Sample ID: 280-16674-2
Client Matrix: Solid
% Moisture: 4.6

Date Sampled: 06/07/2011 0820
Date Received: 06/08/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-71801	Instrument ID:	MSV_G
Prep Method:	5035	Prep Batch:	280-71004	Lab File ID:	G6163.D
Dilution:	1.0			Initial Weight/Volume:	5.426 g
Analysis Date:	06/13/2011 1112			Final Weight/Volume:	5 mL
Prep Date:	06/08/2011 1357				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		5.2	U	5.2	19
Benzene		0.45	U	0.45	4.8
Bromodichloromethane		0.21	U	0.21	4.8
Bromoform		0.22	U	0.22	4.8
Bromomethane		0.48	U	0.48	9.7
2-Butanone (MEK)		1.8	U	1.8	9.7
Carbon disulfide		0.41	U	0.41	4.8
Carbon tetrachloride		0.61	U	0.61	4.8
Chlorobenzene		0.52	U	0.52	4.8
Dibromochloromethane		0.55	U	0.55	4.8
Chloroethane		0.86	U	0.86	9.7
Chloroform		0.28	U	0.28	4.8
Chloromethane		0.74	U	0.74	9.7
1,1-Dichloroethane		0.20	U	0.20	4.8
1,2-Dichloroethane		0.68	U	0.68	4.8
1,1-Dichloroethene		0.57	U	0.57	4.8
1,2-Dichloroethene, Total		0.38	U	0.38	4.8
1,2-Dichloropropane		0.53	U	0.53	4.8
cis-1,3-Dichloropropene		1.2	U	1.2	4.8
trans-1,3-Dichloropropene		0.65	U	0.65	4.8
Ethylbenzene		0.65	U	0.65	4.8
2-Hexanone		4.7	U	4.7	19
Methylene Chloride		6.1	B	0.72	4.8
4-Methyl-2-pentanone (MIBK)		4.2	U	4.2	9.7
Styrene		0.61	U	0.61	4.8
1,1,2,2-Tetrachloroethane		0.59	U	0.59	4.8
Tetrachloroethene		0.57	U	0.57	4.8
Toluene		0.67	U	0.67	4.8
1,1,1-Trichloroethane		0.50	U	0.50	4.8
1,1,2-Trichloroethane		0.85	U	0.85	4.8
Trichloroethene		0.22	U	0.22	4.8
Vinyl chloride		1.3	U	1.3	4.8
Xylenes, Total		0.59	U	0.59	4.8

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	74		58 - 140
Toluene-d8 (Surr)	92		80 - 126
4-Bromofluorobenzene (Surr)	83		76 - 127
Dibromofluoromethane (Surr)	83		75 - 121

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDW8**

Lab Sample ID: 280-16674-2
Client Matrix: Solid

% Moisture: 4.6

Date Sampled: 06/07/2011 0820
Date Received: 06/08/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-71801	Instrument ID:	MSV_G
Prep Method:	5035	Prep Batch:	280-71004	Lab File ID:	G6163.D
Dilution:	1.0			Initial Weight/Volume:	5.426 g
Analysis Date:	06/13/2011 1112			Final Weight/Volume:	5 mL
Prep Date:	06/08/2011 1357				

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	3.70	110	J N

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDW9**

Lab Sample ID: 280-16674-3
Client Matrix: Solid
% Moisture: 10.0

Date Sampled: 06/07/2011 0835
Date Received: 06/08/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-71948	Instrument ID:	MSV_J
Prep Method:	5035	Prep Batch:	280-71004	Lab File ID:	J7105.D
Dilution:	1.0			Initial Weight/Volume:	4.999 g
Analysis Date:	06/14/2011 0954			Final Weight/Volume:	5 mL
Prep Date:	06/08/2011 1357				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		6.0	U	6.0	22
Benzene		0.52	U	0.52	5.6
Bromodichloromethane		0.24	U	0.24	5.6
Bromoform		0.26	U	0.26	5.6
Bromomethane		0.56	U	0.56	11
2-Butanone (MEK)		2.0	U	2.0	11
Carbon disulfide		0.47	U	0.47	5.6
Carbon tetrachloride		0.70	U	0.70	5.6
Chlorobenzene		0.60	U	0.60	5.6
Dibromochloromethane		0.63	U	0.63	5.6
Chloroethane		0.99	U	0.99	11
Chloroform		0.32	U	0.32	5.6
Chloromethane		0.86	U	0.86	11
1,1-Dichloroethane		0.23	U	0.23	5.6
1,2-Dichloroethane		0.78	U	0.78	5.6
1,1-Dichloroethene		0.66	U	0.66	5.6
1,2-Dichloroethene, Total		0.43	U	0.43	5.6
1,2-Dichloropropane		0.61	U	0.61	5.6
cis-1,3-Dichloropropene		1.4	U	1.4	5.6
trans-1,3-Dichloropropene		0.74	U	0.74	5.6
Ethylbenzene		0.74	U	0.74	5.6
2-Hexanone		5.4	U	5.4	22
Methylene Chloride		1.2	J B	0.83	5.6
4-Methyl-2-pentanone (MIBK)		4.8	U	4.8	11
Styrene		0.70	U	0.70	5.6
1,1,2,2-Tetrachloroethane		0.68	U	0.68	5.6
Tetrachloroethene		0.66	U	0.66	5.6
Toluene		0.77	U	0.77	5.6
1,1,1-Trichloroethane		0.58	U	0.58	5.6
1,1,2-Trichloroethane		0.98	U	0.98	5.6
Trichloroethene		0.26	U	0.26	5.6
Vinyl chloride		1.5	U	1.5	5.6
Xylenes, Total		0.68	U	0.68	5.6

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	92		58 - 140
Toluene-d8 (Surr)	106		80 - 126
4-Bromofluorobenzene (Surr)	108		76 - 127
Dibromofluoromethane (Surr)	97		75 - 121

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDW9**

Lab Sample ID: 280-16674-3
Client Matrix: Solid
% Moisture: 10.0

Date Sampled: 06/07/2011 0835
Date Received: 06/08/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-71948	Instrument ID:	MSV_J
Prep Method:	5035	Prep Batch:	280-71004	Lab File ID:	J7105.D
Dilution:	1.0			Initial Weight/Volume:	4.999 g
Analysis Date:	06/14/2011 0954			Final Weight/Volume:	5 mL
Prep Date:	06/08/2011 1357				

Tentatively Identified Compounds **Number TIC's Found:** **0**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDX0**

Lab Sample ID: 280-16674-4
Client Matrix: Solid
% Moisture: 2.8

Date Sampled: 06/07/2011 0855
Date Received: 06/08/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-71801	Instrument ID:	MSV_G
Prep Method:	5035	Prep Batch:	280-71004	Lab File ID:	G6167.D
Dilution:	1.0			Initial Weight/Volume:	4.915 g
Analysis Date:	06/13/2011 1253			Final Weight/Volume:	5 mL
Prep Date:	06/08/2011 1357				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		5.6	U	5.6	21
Benzene		0.49	U	0.49	5.2
Bromodichloromethane		0.23	U	0.23	5.2
Bromoform		0.24	U	0.24	5.2
Bromomethane		0.52	U	0.52	10
2-Butanone (MEK)		1.9	U	1.9	10
Carbon disulfide		0.44	U	0.44	5.2
Carbon tetrachloride		0.66	U	0.66	5.2
Chlorobenzene		0.57	U	0.57	5.2
Dibromochloromethane		0.60	U	0.60	5.2
Chloroethane		0.93	U	0.93	10
Chloroform		0.30	U	0.30	5.2
Chloromethane		0.81	U	0.81	10
1,1-Dichloroethane		0.22	U	0.22	5.2
1,2-Dichloroethane		0.73	U	0.73	5.2
1,1-Dichloroethene		0.62	U	0.62	5.2
1,2-Dichloroethene, Total		0.41	U	0.41	5.2
1,2-Dichloropropane		0.58	U	0.58	5.2
cis-1,3-Dichloropropene		1.4	U	1.4	5.2
trans-1,3-Dichloropropene		0.70	U	0.70	5.2
Ethylbenzene		0.70	U	0.70	5.2
2-Hexanone		5.1	U	5.1	21
Methylene Chloride		1.2	J B	0.78	5.2
4-Methyl-2-pentanone (MIBK)		4.6	U	4.6	10
Styrene		0.66	U	0.66	5.2
1,1,2,2-Tetrachloroethane		0.64	U	0.64	5.2
Tetrachloroethene		0.62	U	0.62	5.2
Toluene		0.72	U	0.72	5.2
1,1,1-Trichloroethane		0.54	U	0.54	5.2
1,1,2-Trichloroethane		0.92	U	0.92	5.2
Trichloroethene		0.24	U	0.24	5.2
Vinyl chloride		1.4	U	1.4	5.2
Xylenes, Total		0.64	U	0.64	5.2

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	76		58 - 140
Toluene-d8 (Surr)	88		80 - 126
4-Bromofluorobenzene (Surr)	87		76 - 127
Dibromofluoromethane (Surr)	84		75 - 121

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDX0**

Lab Sample ID: 280-16674-4
Client Matrix: Solid

% Moisture: 2.8

Date Sampled: 06/07/2011 0855
Date Received: 06/08/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-71801	Instrument ID:	MSV_G
Prep Method:	5035	Prep Batch:	280-71004	Lab File ID:	G6167.D
Dilution:	1.0			Initial Weight/Volume:	4.915 g
Analysis Date:	06/13/2011 1253			Final Weight/Volume:	5 mL
Prep Date:	06/08/2011 1357				

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	3.69	140	J N

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDX1**

Lab Sample ID: 280-16674-5
Client Matrix: Solid
% Moisture: 3.6

Date Sampled: 06/07/2011 0910
Date Received: 06/08/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-71801	Instrument ID:	MSV_G
Prep Method:	5035	Prep Batch:	280-71004	Lab File ID:	G6168.D
Dilution:	1.0			Initial Weight/Volume:	4.927 g
Analysis Date:	06/13/2011 1314			Final Weight/Volume:	5 mL
Prep Date:	06/08/2011 1428				

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		0.44	U	0.44	5.3
Carbon tetrachloride		0.66	U	0.66	5.3
Chlorobenzene		0.57	U	0.57	5.3
Dibromochloromethane		0.60	U	0.60	5.3
Chloroethane		0.94	U	0.94	11
Chloroform		0.31	U	0.31	5.3
Chloromethane		0.81	U	0.81	11
1,1-Dichloroethane		0.22	U	0.22	5.3
1,2-Dichloroethane		0.74	U	0.74	5.3
1,1-Dichloroethene		0.62	U	0.62	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	0.71	5.3
2-Hexanone		5.2	U	5.2	21
Methylene Chloride		1.0	J B	0.79	5.3
4-Methyl-2-pentanone (MIBK)		4.6	U	4.6	11
Styrene		0.66	U	0.66	5.3
1,1,2,2-Tetrachloroethane		0.64	U	0.64	5.3
Tetrachloroethene		0.62	U	0.62	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		0.64	U	0.64	5.3

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	94		58 - 140
Toluene-d8 (Surr)	113		80 - 126
4-Bromofluorobenzene (Surr)	109		76 - 127
Dibromofluoromethane (Surr)	103		75 - 121

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDX1**

Lab Sample ID: 280-16674-5
Client Matrix: Solid

% Moisture: 3.6

Date Sampled: 06/07/2011 0910
Date Received: 06/08/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-71801	Instrument ID:	MSV_G
Prep Method:	5035	Prep Batch:	280-71004	Lab File ID:	G6168.D
Dilution:	1.0			Initial Weight/Volume:	4.927 g
Analysis Date:	06/13/2011 1314			Final Weight/Volume:	5 mL
Prep Date:	06/08/2011 1428				

Tentatively Identified Compounds **Number TIC's Found:** 0

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDX2**

Lab Sample ID: 280-16674-6
Client Matrix: Solid
% Moisture: 19.5

Date Sampled: 06/07/2011 1040
Date Received: 06/08/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-71801	Instrument ID:	MSV_G
Prep Method:	5035	Prep Batch:	280-71004	Lab File ID:	G6169.D
Dilution:	1.0			Initial Weight/Volume:	5.799 g
Analysis Date:	06/13/2011 1336			Final Weight/Volume:	5 mL
Prep Date:	06/08/2011 1428				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		5.8	U	5.8	21
Benzene		0.50	U	0.50	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		0.45	U	0.45	5.4
Carbon tetrachloride		0.67	U	0.67	5.4
Chlorobenzene		0.58	U	0.58	5.4
Dibromochloromethane		0.61	U	0.61	5.4
Chloroethane		0.95	U	0.95	11
Chloroform		0.31	U	0.31	5.4
Chloromethane		0.82	U	0.82	11
1,1-Dichloroethane		0.22	U	0.22	5.4
1,2-Dichloroethane		0.75	U	0.75	5.4
1,1-Dichloroethene		0.63	U	0.63	5.4
1,2-Dichloroethene, Total		0.42	U	0.42	5.4
1,2-Dichloropropane		0.59	U	0.59	5.4
cis-1,3-Dichloropropene		1.4	U	1.4	5.4
trans-1,3-Dichloropropene		0.72	U	0.72	5.4
Ethylbenzene		0.72	U	0.72	5.4
2-Hexanone		5.2	U	5.2	21
Methylene Chloride		1.9	J B	0.80	5.4
4-Methyl-2-pentanone (MIBK)		4.7	U	4.7	11
Styrene		0.67	U	0.67	5.4
1,1,2,2-Tetrachloroethane		0.65	U	0.65	5.4
Tetrachloroethene		0.63	U	0.63	5.4
Toluene		0.74	U	0.74	5.4
1,1,1-Trichloroethane		0.56	U	0.56	5.4
1,1,2-Trichloroethane		0.94	U	0.94	5.4
Trichloroethene		0.25	U	0.25	5.4
Vinyl chloride		1.4	U	1.4	5.4
Xylenes, Total		0.65	U	0.65	5.4

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	74		58 - 140
Toluene-d8 (Surr)	88		80 - 126
4-Bromofluorobenzene (Surr)	84		76 - 127
Dibromofluoromethane (Surr)	82		75 - 121

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDX2**

Lab Sample ID: 280-16674-6
Client Matrix: Solid

% Moisture: 19.5

Date Sampled: 06/07/2011 1040
Date Received: 06/08/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-71801	Instrument ID:	MSV_G
Prep Method:	5035	Prep Batch:	280-71004	Lab File ID:	G6169.D
Dilution:	1.0			Initial Weight/Volume:	5.799 g
Analysis Date:	06/13/2011 1336			Final Weight/Volume:	5 mL
Prep Date:	06/08/2011 1428				

Tentatively Identified Compounds **Number TIC's Found:** **0**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDX3**

Lab Sample ID: 280-16674-7
Client Matrix: Solid
% Moisture: 5.8

Date Sampled: 06/07/2011 0935
Date Received: 06/08/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-71801	Instrument ID:	MSV_G
Prep Method:	5035	Prep Batch:	280-71004	Lab File ID:	G6170.D
Dilution:	1.0			Initial Weight/Volume:	4.581 g
Analysis Date:	06/13/2011 1358			Final Weight/Volume:	5 mL
Prep Date:	06/08/2011 1428				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		6.2	U	6.2	23
Benzene		0.54	U	0.54	5.8
Bromodichloromethane		0.25	U	0.25	5.8
Bromoform		0.27	U	0.27	5.8
Bromomethane		0.58	U	0.58	12
2-Butanone (MEK)		2.1	U	2.1	12
Carbon disulfide		0.49	U	0.49	5.8
Carbon tetrachloride		0.73	U	0.73	5.8
Chlorobenzene		0.63	U	0.63	5.8
Dibromochloromethane		0.66	U	0.66	5.8
Chloroethane		1.0	U	1.0	12
Chloroform		0.34	U	0.34	5.8
Chloromethane		0.89	U	0.89	12
1,1-Dichloroethane		0.24	U	0.24	5.8
1,2-Dichloroethane		0.81	U	0.81	5.8
1,1-Dichloroethene		0.68	U	0.68	5.8
1,2-Dichloroethene, Total		0.45	U	0.45	5.8
1,2-Dichloropropane		0.64	U	0.64	5.8
cis-1,3-Dichloropropene		1.5	U	1.5	5.8
trans-1,3-Dichloropropene		0.78	U	0.78	5.8
Ethylbenzene		0.78	U	0.78	5.8
2-Hexanone		5.7	U	5.7	23
Methylene Chloride		1.3	J B	0.87	5.8
4-Methyl-2-pentanone (MIBK)		5.1	U	5.1	12
Styrene		0.73	U	0.73	5.8
1,1,2,2-Tetrachloroethane		0.71	U	0.71	5.8
Tetrachloroethene		0.68	U	0.68	5.8
Toluene		0.80	U	0.80	5.8
1,1,1-Trichloroethane		0.60	U	0.60	5.8
1,1,2-Trichloroethane		1.0	U	1.0	5.8
Trichloroethene		0.27	U	0.27	5.8
Vinyl chloride		1.6	U	1.6	5.8
Xylenes, Total		0.71	U	0.71	5.8

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	77		58 - 140
Toluene-d8 (Surr)	90		80 - 126
4-Bromofluorobenzene (Surr)	89		76 - 127
Dibromofluoromethane (Surr)	84		75 - 121

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDX3**

Lab Sample ID: 280-16674-7
Client Matrix: Solid

% Moisture: 5.8

Date Sampled: 06/07/2011 0935
Date Received: 06/08/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-71801	Instrument ID:	MSV_G
Prep Method:	5035	Prep Batch:	280-71004	Lab File ID:	G6170.D
Dilution:	1.0			Initial Weight/Volume:	4.581 g
Analysis Date:	06/13/2011 1358			Final Weight/Volume:	5 mL
Prep Date:	06/08/2011 1428				

Tentatively Identified Compounds **Number TIC's Found:** **0**

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Tentatively Identified Compound		None	

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDX4**

Lab Sample ID: 280-16674-8
Client Matrix: Solid
% Moisture: 12.7

Date Sampled: 06/07/2011 0940
Date Received: 06/08/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-71801	Instrument ID:	MSV_G
Prep Method:	5035	Prep Batch:	280-71004	Lab File ID:	G6171.D
Dilution:	1.0			Initial Weight/Volume:	3.674 g
Analysis Date:	06/13/2011 1419			Final Weight/Volume:	5 mL
Prep Date:	06/08/2011 1428				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		8.4	U	8.4	31
Benzene		0.73	U	0.73	7.8
Bromodichloromethane		0.34	U	0.34	7.8
Bromoform		0.36	U	0.36	7.8
Bromomethane		0.78	U	0.78	16
2-Butanone (MEK)		2.9	U	2.9	16
Carbon disulfide		0.65	U	0.65	7.8
Carbon tetrachloride		0.98	U	0.98	7.8
Chlorobenzene		0.84	U	0.84	7.8
Dibromochloromethane		0.89	U	0.89	7.8
Chloroethane		1.4	U	1.4	16
Chloroform		0.45	U	0.45	7.8
Chloromethane		1.2	U	1.2	16
1,1-Dichloroethane		0.33	U	0.33	7.8
1,2-Dichloroethane		1.1	U	1.1	7.8
1,1-Dichloroethene		0.92	U	0.92	7.8
1,2-Dichloroethene, Total		0.61	U	0.61	7.8
1,2-Dichloropropane		0.86	U	0.86	7.8
cis-1,3-Dichloropropene		2.0	U	2.0	7.8
trans-1,3-Dichloropropene		1.0	U	1.0	7.8
Ethylbenzene		1.0	U	1.0	7.8
2-Hexanone		7.6	U	7.6	31
Methylene Chloride		1.2	J B	1.2	7.8
4-Methyl-2-pentanone (MIBK)		6.8	U	6.8	16
Styrene		0.98	U	0.98	7.8
1,1,2,2-Tetrachloroethane		0.95	U	0.95	7.8
Tetrachloroethene		0.92	U	0.92	7.8
Toluene		1.1	U	1.1	7.8
1,1,1-Trichloroethane		0.81	U	0.81	7.8
1,1,2-Trichloroethane		1.4	U	1.4	7.8
Trichloroethene		0.36	U	0.36	7.8
Vinyl chloride		2.1	U	2.1	7.8
Xylenes, Total		0.95	U	0.95	7.8

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	91		58 - 140
Toluene-d8 (Surr)	108		80 - 126
4-Bromofluorobenzene (Surr)	110		76 - 127
Dibromofluoromethane (Surr)	102		75 - 121

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDX4**

Lab Sample ID: 280-16674-8
Client Matrix: Solid
% Moisture: 12.7

Date Sampled: 06/07/2011 0940
Date Received: 06/08/2011 0930

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-71801	Instrument ID:	MSV_G
Prep Method:	5035	Prep Batch:	280-71004	Lab File ID:	G6171.D
Dilution:	1.0			Initial Weight/Volume:	3.674 g
Analysis Date:	06/13/2011 1419			Final Weight/Volume:	5 mL
Prep Date:	06/08/2011 1428				

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	4.44	12	J N

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDW8**

Lab Sample ID: 280-16674-2
Client Matrix: Solid
% Moisture: 4.6

Date Sampled: 06/07/2011 0820
Date Received: 06/08/2011 0930

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-71647	Instrument ID:	GCS_P1
Prep Method:	3550C	Prep Batch:	280-71032	Initial Weight/Volume:	31.6 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	06/10/2011 1613			Injection Volume:	1 uL
Prep Date:	06/08/2011 1635			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.54	U	0.54	1.7
4,4'-DDE		0.24	U	0.24	1.7
4,4'-DDT		0.59	U	0.59	1.7
Aldrin		0.25	U	0.25	1.6
alpha-BHC		0.21	U	0.21	1.6
beta-BHC		0.66	U	0.66	1.6
delta-BHC		0.40	U	0.40	1.6
gamma-BHC (Lindane)		0.46	U	0.46	1.6
Heptachlor		0.21	U	0.21	1.6
Heptachlor epoxide		0.42	U	0.42	1.6
Endosulfan I		0.18	U	0.18	1.6
Endosulfan II		0.29	U	0.29	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		0.49	U	0.49	1.7
gamma-Chlordane		0.26	U	0.26	1.7
Methoxychlor		0.45	U	0.45	3.3
alpha-Chlordane		0.32	U	0.32	1.7
Dieldrin		0.21	U	0.21	1.7
Toxaphene		16	U	16	160

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	85		59 - 115
Decachlorobiphenyl	93		63 - 124

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDW9**

Lab Sample ID: 280-16674-3
Client Matrix: Solid
% Moisture: 10.0

Date Sampled: 06/07/2011 0835
Date Received: 06/08/2011 0930

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-71647	Instrument ID:	GCS_P1
Prep Method:	3550C	Prep Batch:	280-71032	Initial Weight/Volume:	30.8 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	06/10/2011 1630			Injection Volume:	1 uL
Prep Date:	06/08/2011 1635			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		0.26	U	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		0.19	U	0.19	1.8
Endrin ketone		0.53	U	0.53	1.8
gamma-Chlordane		0.29	U	0.29	1.8
Methoxychlor		0.49	U	0.49	3.6
alpha-Chlordane		0.35	U	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	84		59 - 115
Decachlorobiphenyl	97		63 - 124

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDX0**

Lab Sample ID: 280-16674-4
Client Matrix: Solid

% Moisture: 2.8

Date Sampled: 06/07/2011 0855
Date Received: 06/08/2011 0930

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-71647	Instrument ID:	GCS_P1
Prep Method:	3550C	Prep Batch:	280-71032	Initial Weight/Volume:	32.7 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	06/10/2011 1646			Injection Volume:	1 uL
Prep Date:	06/08/2011 1635			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.52	U	0.52	1.6
4,4'-DDE		0.22	U	0.22	1.6
4,4'-DDT		0.56	U	0.56	1.6
Aldrin		0.24	U	0.24	1.6
alpha-BHC		0.20	U	0.20	1.6
beta-BHC		0.63	U	0.63	1.6
delta-BHC		0.38	U	0.38	1.6
gamma-BHC (Lindane)		0.44	U	0.44	1.6
Heptachlor		0.20	U	0.20	1.6
Heptachlor epoxide		0.40	U	0.40	1.6
Endosulfan I		0.17	U	0.17	1.6
Endosulfan II		0.27	U	0.27	1.6
Endosulfan sulfate		0.26	U	0.26	1.6
Endrin		0.29	U	0.29	1.6
Endrin aldehyde		0.16	U	0.16	1.6
Endrin ketone		0.46	U	0.46	1.6
gamma-Chlordane		0.25	U	0.25	1.6
Methoxychlor		0.42	U	0.42	3.1
alpha-Chlordane		0.30	U	0.30	1.6
Dieldrin		0.20	U	0.20	1.6
Toxaphene		15	U	15	160

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	82		59 - 115
Decachlorobiphenyl	95		63 - 124

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDX1**

Lab Sample ID: 280-16674-5
Client Matrix: Solid
% Moisture: 3.6

Date Sampled: 06/07/2011 0910
Date Received: 06/08/2011 0930

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-71647	Instrument ID:	GCS_P1
Prep Method:	3550C	Prep Batch:	280-71032	Initial Weight/Volume:	31.7 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	06/10/2011 1842			Injection Volume:	1 uL
Prep Date:	06/08/2011 1635			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	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)		0.46	U	0.46	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		16	U	16	160

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	86		59 - 115
Decachlorobiphenyl	85		63 - 124

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDX2**

Lab Sample ID: 280-16674-6
Client Matrix: Solid
% Moisture: 19.5

Date Sampled: 06/07/2011 1040
Date Received: 06/08/2011 0930

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-71647	Instrument ID:	GCS_P1
Prep Method:	3550C	Prep Batch:	280-71032	Initial Weight/Volume:	31.9 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	06/10/2011 1703			Injection Volume:	1 uL
Prep Date:	06/08/2011 1635			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
4,4'-DDD		0.64	U	0.64	2.0
4,4'-DDE		0.28	U	0.28	2.0
4,4'-DDT		0.69	U	0.69	2.0
Aldrin		0.29	U	0.29	1.9
alpha-BHC		0.25	U	0.25	1.9
beta-BHC		0.78	U	0.78	1.9
delta-BHC		0.47	U	0.47	1.9
gamma-BHC (Lindane)		0.54	U	0.54	1.9
Heptachlor		0.25	U	0.25	1.9
Heptachlor epoxide		0.50	U	0.50	1.9
Endosulfan I		0.21	U	0.21	1.9
Endosulfan II		0.34	U	0.34	2.0
Endosulfan sulfate		0.32	U	0.32	2.0
Endrin		0.36	U	0.36	2.0
Endrin aldehyde		0.20	U	0.20	2.0
Endrin ketone		0.57	U	0.57	2.0
gamma-Chlordane		0.31	U	0.31	2.0
Methoxychlor		0.53	U	0.53	3.9
alpha-Chlordane		0.38	U	0.38	2.0
Dieldrin		0.25	U	0.25	2.0
Toxaphene		18	U	18	190

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	80		59 - 115
Decachlorobiphenyl	75		63 - 124

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDX3**

Lab Sample ID: 280-16674-7
Client Matrix: Solid
% Moisture: 5.8

Date Sampled: 06/07/2011 0935
Date Received: 06/08/2011 0930

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-71647	Instrument ID:	GCS_P1
Prep Method:	3550C	Prep Batch:	280-71032	Initial Weight/Volume:	31.2 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	06/10/2011 1720			Injection Volume:	1 uL
Prep Date:	06/08/2011 1635			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	89		59 - 115
Decachlorobiphenyl	81		63 - 124

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDX4**

Lab Sample ID: 280-16674-8
Client Matrix: Solid
% Moisture: 12.7

Date Sampled: 06/07/2011 0940
Date Received: 06/08/2011 0930

8081A Organochlorine Pesticides (GC)

Analysis Method:	8081A	Analysis Batch:	280-71647	Instrument ID:	GCS_P1
Prep Method:	3550C	Prep Batch:	280-71032	Initial Weight/Volume:	31.6 g
Dilution:	1.0			Final Weight/Volume:	10000 uL
Analysis Date:	06/10/2011 1932			Injection Volume:	1 uL
Prep Date:	06/08/2011 1635			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		0.26	U	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		0.44	U	0.44	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		0.19	U	0.19	1.8
Endrin ketone		0.53	U	0.53	1.8
gamma-Chlordane		0.29	U	0.29	1.8
Methoxychlor		0.49	U	0.49	3.6
alpha-Chlordane		0.35	U	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	79		59 - 115
Decachlorobiphenyl	86		63 - 124

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDW8**

Lab Sample ID: 280-16674-2
Client Matrix: Solid
% Moisture: 4.6

Date Sampled: 06/07/2011 0820
Date Received: 06/08/2011 0930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-71603	Instrument ID:	GCS_W
Prep Method:	3550C	Prep Batch:	280-71061	Initial Weight/Volume:	30.9 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/10/2011 1746			Injection Volume:	1 uL
Prep Date:	06/08/2011 2040			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		2.8	U	2.8	10
Aroclor 1221		8.2	U	8.2	17
Aroclor 1232		2.0	U	2.0	10
Aroclor 1242		4.7	U	4.7	10
Aroclor 1248		4.7	U	4.7	10
Aroclor 1254		2.6	U	2.6	10
Aroclor 1260		2.6	U	2.6	10

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

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDW9**

Lab Sample ID: 280-16674-3
Client Matrix: Solid
% Moisture: 10.0

Date Sampled: 06/07/2011 0835
Date Received: 06/08/2011 0930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-71603	Instrument ID:	GCS_W
Prep Method:	3550C	Prep Batch:	280-71061	Initial Weight/Volume:	32.0 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/10/2011 1818			Injection Volume:	1 uL
Prep Date:	06/08/2011 2040			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		2.7	U	2.7	10

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	85		59 - 130
Tetrachloro-m-xylene	92		53 - 128

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDX0**

Lab Sample ID: 280-16674-4
Client Matrix: Solid
% Moisture: 2.8

Date Sampled: 06/07/2011 0855
Date Received: 06/08/2011 0930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-71603	Instrument ID:	GCS_W
Prep Method:	3550C	Prep Batch:	280-71061	Initial Weight/Volume:	30.5 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/10/2011 1849			Injection Volume:	1 uL
Prep Date:	06/08/2011 2040			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		2.8	U	2.8	10
Aroclor 1221		8.1	U	8.1	17
Aroclor 1232		2.0	U	2.0	10
Aroclor 1242		4.7	U	4.7	10
Aroclor 1248		4.7	U	4.7	10
Aroclor 1254		2.6	U	2.6	10
Aroclor 1260		2.6	U	2.6	10

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	82		59 - 130
Tetrachloro-m-xylene	94		53 - 128

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDX1**

Lab Sample ID: 280-16674-5
Client Matrix: Solid
% Moisture: 3.6

Date Sampled: 06/07/2011 0910
Date Received: 06/08/2011 0930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-71603	Instrument ID:	GCS_W
Prep Method:	3550C	Prep Batch:	280-71061	Initial Weight/Volume:	30.9 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/10/2011 1921			Injection Volume:	1 uL
Prep Date:	06/08/2011 2040			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		2.8	U	2.8	10
Aroclor 1221		8.1	U	8.1	17
Aroclor 1232		2.0	U	2.0	10
Aroclor 1242		4.7	U	4.7	10
Aroclor 1248		4.7	U	4.7	10
Aroclor 1254		2.6	U	2.6	10
Aroclor 1260		2.6	U	2.6	10

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	86		59 - 130
Tetrachloro-m-xylene	91		53 - 128

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDX2**

Lab Sample ID: 280-16674-6
Client Matrix: Solid
% Moisture: 19.5

Date Sampled: 06/07/2011 1040
Date Received: 06/08/2011 0930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-71603	Instrument ID:	GCS_W
Prep Method:	3550C	Prep Batch:	280-71061	Initial Weight/Volume:	33.0 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/10/2011 1953			Injection Volume:	1 uL
Prep Date:	06/08/2011 2040			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		3.1	U	3.1	11
Aroclor 1221		9.1	U	9.1	19
Aroclor 1232		2.3	U	2.3	11
Aroclor 1242		5.3	U	5.3	11
Aroclor 1248		5.3	U	5.3	11
Aroclor 1254		2.9	U	2.9	11
Aroclor 1260		2.9	U	2.9	11

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	85		59 - 130
Tetrachloro-m-xylene	82		53 - 128

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDX3**

Lab Sample ID: 280-16674-7
Client Matrix: Solid
% Moisture: 5.8

Date Sampled: 06/07/2011 0935
Date Received: 06/08/2011 0930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-71603	Instrument ID:	GCS_W
Prep Method:	3550C	Prep Batch:	280-71061	Initial Weight/Volume:	31.7 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/10/2011 2056			Injection Volume:	1 uL
Prep Date:	06/08/2011 2040			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		2.8	U	2.8	10
Aroclor 1221		8.1	U	8.1	17
Aroclor 1232		2.0	U	2.0	10
Aroclor 1242		4.7	U	4.7	10
Aroclor 1248		4.7	U	4.7	10
Aroclor 1254		2.6	U	2.6	10
Aroclor 1260		2.6	U	2.6	10

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	87		59 - 130
Tetrachloro-m-xylene	93		53 - 128

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDX4**

Lab Sample ID: 280-16674-8
Client Matrix: Solid
% Moisture: 12.7

Date Sampled: 06/07/2011 0940
Date Received: 06/08/2011 0930

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-71603	Instrument ID:	GCS_W
Prep Method:	3550C	Prep Batch:	280-71061	Initial Weight/Volume:	31.8 g
Dilution:	1.0			Final Weight/Volume:	5000 uL
Analysis Date:	06/10/2011 2232			Injection Volume:	1 uL
Prep Date:	06/08/2011 2040			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		3.0	U	3.0	11
Aroclor 1221		8.7	U	8.7	18
Aroclor 1232		2.2	U	2.2	11
Aroclor 1242		5.0	U	5.0	11
Aroclor 1248		5.0	U	5.0	11
Aroclor 1254		2.8	U	2.8	11
Aroclor 1260		2.8	U	2.8	11

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	109		59 - 130
Tetrachloro-m-xylene	91		53 - 128

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDW8**

Lab Sample ID: 280-16674-2
Client Matrix: Solid
% Moisture: 4.6

Date Sampled: 06/07/2011 0820
Date Received: 06/08/2011 0930

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-71673	Instrument ID:	GCS_U
Prep Method:	3550C	Prep Batch:	280-71058	Lab File ID:	062B6201.D
Dilution:	1.0			Initial Weight/Volume:	31.9 g
Analysis Date:	06/10/2011 1937			Final Weight/Volume:	1000 uL
Prep Date:	06/08/2011 2122			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		31000		980	3900
C10-C28		19000		670	3900

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	107		49 - 115

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDW9**

Lab Sample ID: 280-16674-3
Client Matrix: Solid
% Moisture: 10.0

Date Sampled: 06/07/2011 0835
Date Received: 06/08/2011 0930

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-71673	Instrument ID:	GCS_U
Prep Method:	3550C	Prep Batch:	280-71058	Lab File ID:	063B6301.D
Dilution:	1.0			Initial Weight/Volume:	31.1 g
Analysis Date:	06/10/2011 2004			Final Weight/Volume:	1000 uL
Prep Date:	06/08/2011 2122			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		7200		1100	4300
C10-C28		4000	J	730	4300

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	102		49 - 115

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDX0**

Lab Sample ID: 280-16674-4
Client Matrix: Solid
% Moisture: 2.8

Date Sampled: 06/07/2011 0855
Date Received: 06/08/2011 0930

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-71673	Instrument ID:	GCS_U
Prep Method:	3550C	Prep Batch:	280-71058	Lab File ID:	064B6401.D
Dilution:	1.0			Initial Weight/Volume:	32.4 g
Analysis Date:	06/10/2011 2032			Final Weight/Volume:	1000 uL
Prep Date:	06/08/2011 2122			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		9100	N	950	3800
C10-C28		5000	N	650	3800

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	105		49 - 115

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDX1**

Lab Sample ID: 280-16674-5
Client Matrix: Solid
% Moisture: 3.6

Date Sampled: 06/07/2011 0910
Date Received: 06/08/2011 0930

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-71673	Instrument ID:	GCS_U
Prep Method:	3550C	Prep Batch:	280-71058	Lab File ID:	067B6701.D
Dilution:	1.0			Initial Weight/Volume:	31.6 g
Analysis Date:	06/10/2011 2155			Final Weight/Volume:	1000 uL
Prep Date:	06/08/2011 2122			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		7700		980	3900
C10-C28		4000		670	3900

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	104		49 - 115

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDX2**

Lab Sample ID: 280-16674-6
Client Matrix: Solid
% Moisture: 19.5

Date Sampled: 06/07/2011 1040
Date Received: 06/08/2011 0930

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-71673	Instrument ID:	GCS_U
Prep Method:	3550C	Prep Batch:	280-71058	Lab File ID:	068B6801.D
Dilution:	1.0			Initial Weight/Volume:	30.2 g
Analysis Date:	06/10/2011 2223			Final Weight/Volume:	1000 uL
Prep Date:	06/08/2011 2122			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		5700		1200	4900
C10-C28		3300	J	840	4900

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	103		49 - 115

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDX3**

Lab Sample ID: 280-16674-7
Client Matrix: Solid
% Moisture: 5.8

Date Sampled: 06/07/2011 0935
Date Received: 06/08/2011 0930

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-71673	Instrument ID:	GCS_U
Prep Method:	3550C	Prep Batch:	280-71058	Lab File ID:	069B6901.D
Dilution:	1.0			Initial Weight/Volume:	30.3 g
Analysis Date:	06/10/2011 2250			Final Weight/Volume:	1000 uL
Prep Date:	06/08/2011 2122			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		11000		1000	4200
C10-C28		4000	J	710	4200

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	104		49 - 115

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDX4**

Lab Sample ID: 280-16674-8
Client Matrix: Solid
% Moisture: 12.7

Date Sampled: 06/07/2011 0940
Date Received: 06/08/2011 0930

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-71673	Instrument ID:	GCS_U
Prep Method:	3550C	Prep Batch:	280-71058	Lab File ID:	071B7101.D
Dilution:	1.0			Initial Weight/Volume:	31.5 g
Analysis Date:	06/10/2011 2346			Final Weight/Volume:	1000 uL
Prep Date:	06/08/2011 2122			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		32000		1100	4400
C10-C28		21000		740	4400

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	102		49 - 115

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDW8**

Lab Sample ID: 280-16674-2
Client Matrix: Solid

% Moisture: 4.6

Date Sampled: 06/07/2011 0820
Date Received: 06/08/2011 0930

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-71227	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-71035	Initial Weight/Volume:	31.5 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	06/11/2011 1400			Injection Volume:	20 uL
Prep Date:	06/08/2011 1635			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	100
Acenaphthylene		9.0	U	9.0	100
Anthracene		7.4	J X	3.0	20
Benzo[a]anthracene		130		3.2	15
Benzo[a]pyrene		110		6.4	15
Benzo[b]fluoranthene		73		4.2	15
Benzo[g,h,i]perylene		75		7.2	30
Benzo[k]fluoranthene		33		3.9	15
Chrysene		90		4.8	40
Dibenzo(a,h)anthracene		22	J	11	30
Fluoranthene		160		13	40
Fluorene		5.3	U	5.3	30
Indeno[1,2,3-cd]pyrene		77		12	30
Naphthalene		12	U	12	100
Phenanthrene		79		12	40
Pyrene		200		12	40

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

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDW9**

Lab Sample ID: 280-16674-3
Client Matrix: Solid
% Moisture: 10.0

Date Sampled: 06/07/2011 0835
Date Received: 06/08/2011 0930

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-71227	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-71035	Initial Weight/Volume:	30.4 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	06/11/2011 1431			Injection Volume:	20 uL
Prep Date:	06/08/2011 1635			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		11	U	11	110
Acenaphthylene		9.9	U	9.9	110
Anthracene		3.3	U	3.3	22
Benzo[a]anthracene		11	J X	3.5	16
Benzo[a]pyrene		30		7.0	16
Benzo[b]fluoranthene		21		4.6	16
Benzo[g,h,i]perylene		20	J	7.9	33
Benzo[k]fluoranthene		9.3	J	4.3	16
Chrysene		22	J	5.3	44
Dibenzo(a,h)anthracene		12	U	12	33
Fluoranthene		40	J	14	44
Fluorene		5.8	U	5.8	33
Indeno[1,2,3-cd]pyrene		25	J	13	33
Naphthalene		13	U	13	110
Phenanthrene		19	J	13	44
Pyrene		55		13	44

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

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDX0**

Lab Sample ID: 280-16674-4
Client Matrix: Solid
% Moisture: 2.8

Date Sampled: 06/07/2011 0855
Date Received: 06/08/2011 0930

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-71227	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-71035	Initial Weight/Volume:	30.8 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	06/11/2011 1501			Injection Volume:	20 uL
Prep Date:	06/08/2011 1635			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	100
Acenaphthylene		9.0	U	9.0	100
Anthracene		3.1	U	3.1	20
Benzo[a]anthracene		53	X	3.2	15
Benzo[a]pyrene		74		6.4	15
Benzo[b]fluoranthene		48		4.2	15
Benzo[g,h,i]perylene		52		7.2	30
Benzo[k]fluoranthene		32		3.9	15
Chrysene		62		4.8	40
Dibenzo(a,h)anthracene		11	U	11	30
Fluoranthene		100		13	40
Fluorene		5.3	U	5.3	30
Indeno[1,2,3-cd]pyrene		47		12	30
Naphthalene		12	U	12	100
Phenanthrene		55		12	40
Pyrene		140		12	40

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

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDX1**

Lab Sample ID: 280-16674-5
Client Matrix: Solid
% Moisture: 3.6

Date Sampled: 06/07/2011 0910
Date Received: 06/08/2011 0930

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-71227	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-71035	Initial Weight/Volume:	30.0 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	06/11/2011 1532			Injection Volume:	20 uL
Prep Date:	06/08/2011 1635			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	100
Acenaphthylene		9.3	U	9.3	100
Anthracene		3.2	U	3.2	21
Benzo[a]anthracene		40		3.3	16
Benzo[a]pyrene		43		6.7	16
Benzo[b]fluoranthene		26		4.4	16
Benzo[g,h,i]perylene		24	J	7.5	31
Benzo[k]fluoranthene		13	J	4.1	16
Chrysene		35	J	5.0	42
Dibenzo(a,h)anthracene		11	U	11	31
Fluoranthene		56		13	42
Fluorene		5.5	U	5.5	31
Indeno[1,2,3-cd]pyrene		27	J	12	31
Naphthalene		12	U	12	100
Phenanthrene		20	J	12	42
Pyrene		85		12	42

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	90		72 - 115

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDX2**

Lab Sample ID: 280-16674-6
Client Matrix: Solid
% Moisture: 19.5

Date Sampled: 06/07/2011 1040
Date Received: 06/08/2011 0930

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-71227	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-71035	Initial Weight/Volume:	30.3 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	06/11/2011 1603			Injection Volume:	20 uL
Prep Date:	06/08/2011 1635			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		12	U	12	120
Acenaphthylene		11	U	11	120
Anthracene		3.8	U	3.8	25
Benzo[a]anthracene		11	J	3.9	18
Benzo[a]pyrene		14	J	7.9	18
Benzo[b]fluoranthene		13	J	5.2	18
Benzo[g,h,i]perylene		8.9	U	8.9	37
Benzo[k]fluoranthene		4.8	U	4.8	18
Chrysene		14	J	6.0	49
Dibenzo(a,h)anthracene		14	U	14	37
Fluoranthene		23	J	16	49
Fluorene		6.5	U	6.5	37
Indeno[1,2,3-cd]pyrene		15	U	15	37
Naphthalene		15	U	15	120
Phenanthrene		15	U	15	49
Pyrene		25	J	15	49

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

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDX3**

Lab Sample ID: 280-16674-7
Client Matrix: Solid
% Moisture: 5.8

Date Sampled: 06/07/2011 0935
Date Received: 06/08/2011 0930

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-71227	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-71035	Initial Weight/Volume:	31.4 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	06/11/2011 1734			Injection Volume:	20 uL
Prep Date:	06/08/2011 1635			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	100
Acenaphthylene		9.1	U	9.1	100
Anthracene		6.9	J X	3.1	20
Benzo[a]anthracene		48		3.2	15
Benzo[a]pyrene		62		6.5	15
Benzo[b]fluoranthene		42		4.3	15
Benzo[g,h,i]perylene		39		7.3	30
Benzo[k]fluoranthene		24		4.0	15
Chrysene		55		4.9	41
Dibenzo(a,h)anthracene		11	U	11	30
Fluoranthene		120		13	41
Fluorene		5.4	U	5.4	30
Indeno[1,2,3-cd]pyrene		42		12	30
Naphthalene		12	U	12	100
Phenanthrene		78		12	41
Pyrene		140		12	41

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

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDX4**

Lab Sample ID: 280-16674-8
Client Matrix: Solid
% Moisture: 12.7

Date Sampled: 06/07/2011 0940
Date Received: 06/08/2011 0930

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-71227	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-71035	Initial Weight/Volume:	31.1 g
Dilution:	1.0			Final Weight/Volume:	4000 uL
Analysis Date:	06/11/2011 1835			Injection Volume:	20 uL
Prep Date:	06/08/2011 1635			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		11	U	11	110
Acenaphthylene		28	J X	9.9	110
Anthracene		48	X	3.4	22
Benzo[a]anthracene		440		3.5	17
Benzo[a]pyrene		560		7.1	17
Benzo[b]fluoranthene		570		4.6	17
Benzo[g,h,i]perylene		330		8.0	33
Benzo[k]fluoranthene		210		4.4	17
Chrysene		500		5.3	44
Dibenzo(a,h)anthracene		57	X	12	33
Fluoranthene		1000		14	44
Fluorene		42	X	5.8	33
Indeno[1,2,3-cd]pyrene		340		13	33
Naphthalene		13	U	13	110
Phenanthrene		550		13	44
Pyrene		1200		13	44

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	110		72 - 115

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDW8**

Lab Sample ID: 280-16674-2
Client Matrix: Solid
% Moisture: 4.6

Date Sampled: 06/07/2011 0820
Date Received: 06/08/2011 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-71295	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-70972	Lab File ID:	26b060911.asc
Dilution:	1.0			Initial Weight/Volume:	1.02 g
Analysis Date:	06/10/2011 0046			Final Weight/Volume:	100 mL
Prep Date:	06/09/2011 0745				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		7140		1.6	5.1
Arsenic		3.2		0.68	1.0
Barium		59.0		0.078	0.51
Beryllium		0.087	B	0.034	0.21
Boron		1.9	B	1.0	2.1
Cadmium		0.11	B	0.042	0.21
Calcium		3950		14.5	51.4
Chromium		11.8		0.060	0.21
Cobalt		6.9		0.10	1.0
Copper		16.1	X	0.22	1.0
Lead		8.1		0.28	0.51
Magnesium		4320		3.8	20.5
Manganese		275		0.10	1.0
Molybdenum		0.47	B	0.27	2.1
Nickel		11.5		0.13	4.1
Selenium		0.94	B M	0.88	1.0
Silver		0.16	U	0.16	0.21
Vanadium		41.0		0.097	2.1
Zinc		47.0		0.41	1.0

Analysis Method:	6010B	Analysis Batch:	280-71606	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-70972	Lab File ID:	26a061011.asc
Dilution:	1.0			Initial Weight/Volume:	1.02 g
Analysis Date:	06/10/2011 1455			Final Weight/Volume:	100 mL
Prep Date:	06/09/2011 0745				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.39	U	0.39	0.62
Iron		16500		3.9	5.1
Potassium		1540		42.1	308
Silicon		261	N	5.8	10.3
Sodium		214		60.6	123

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-71912	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-70981	Lab File ID:	110613TA.txt
Dilution:	1.0			Initial Weight/Volume:	0.67 g
Analysis Date:	06/13/2011 1448			Final Weight/Volume:	50 mL
Prep Date:	06/13/2011 1240				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.010	B M	0.0052	0.016

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDW9**

Lab Sample ID: 280-16674-3
Client Matrix: Solid
% Moisture: 10.0

Date Sampled: 06/07/2011 0835
Date Received: 06/08/2011 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-71295	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-70972	Lab File ID:	26b060911.asc
Dilution:	1.0			Initial Weight/Volume:	1.04 g
Analysis Date:	06/10/2011 0106			Final Weight/Volume:	100 mL
Prep Date:	06/09/2011 0745				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		9820		1.7	5.3
Arsenic		5.0		0.71	1.1
Barium		92.5		0.081	0.53
Beryllium		0.19	B	0.035	0.21
Boron		2.5		1.0	2.1
Cadmium		0.12	B	0.044	0.21
Calcium		3560		15.1	53.4
Chromium		14.0		0.062	0.21
Cobalt		8.6		0.11	1.1
Copper		17.7	X	0.23	1.1
Lead		16.1		0.29	0.53
Magnesium		4820		4.0	21.4
Manganese		352		0.11	1.1
Molybdenum		0.28	U	0.28	2.1
Nickel		13.7		0.13	4.3
Selenium		0.92	U	0.92	1.1
Silver		0.17	U	0.17	0.21
Vanadium		44.4		0.10	2.1
Zinc		48.1		0.43	1.1

Analysis Method:	6010B	Analysis Batch:	280-71606	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-70972	Lab File ID:	26a061011.asc
Dilution:	1.0			Initial Weight/Volume:	1.04 g
Analysis Date:	06/10/2011 1517			Final Weight/Volume:	100 mL
Prep Date:	06/09/2011 0745				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.41	U	0.41	0.64
Iron		19500		4.1	5.3
Potassium		2650		43.8	321
Silicon		305		6.1	10.7
Sodium		221		63.1	128

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-71912	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-70981	Lab File ID:	110613TA.txt
Dilution:	1.0			Initial Weight/Volume:	0.63 g
Analysis Date:	06/13/2011 1455			Final Weight/Volume:	50 mL
Prep Date:	06/13/2011 1240				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.010	B	0.0059	0.018

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDX0**

Lab Sample ID: 280-16674-4
Client Matrix: Solid
% Moisture: 2.8

Date Sampled: 06/07/2011 0855
Date Received: 06/08/2011 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-71295	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-70972	Lab File ID:	26b060911.asc
Dilution:	1.0			Initial Weight/Volume:	1.05 g
Analysis Date:	06/10/2011 0108			Final Weight/Volume:	100 mL
Prep Date:	06/09/2011 0745				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		6410		1.5	4.9
Arsenic		9.7		0.65	0.98
Barium		53.9		0.074	0.49
Beryllium		0.063	B	0.032	0.20
Boron		1.2	B	0.96	2.0
Cadmium		0.12	B	0.040	0.20
Calcium		3680		13.8	49.0
Chromium		11.6		0.057	0.20
Cobalt		6.4		0.098	0.98
Copper		15.2	X	0.21	0.98
Lead		23.5		0.26	0.49
Magnesium		4050		3.6	19.6
Manganese		263		0.098	0.98
Molybdenum		0.25	U	0.25	2.0
Nickel		11.8		0.12	3.9
Selenium		0.84	U	0.84	0.98
Silver		0.16	U	0.16	0.20
Vanadium		40.0		0.092	2.0
Zinc		39.3		0.39	0.98

Analysis Method:	6010B	Analysis Batch:	280-71606	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-70972	Lab File ID:	26a061011.asc
Dilution:	1.0			Initial Weight/Volume:	1.05 g
Analysis Date:	06/10/2011 1520			Final Weight/Volume:	100 mL
Prep Date:	06/09/2011 0745				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.37	U	0.37	0.59
Iron		15200		3.7	4.9
Potassium		1090		40.2	294
Silicon		208		5.5	9.8
Sodium		198		57.8	118

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-71912	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-70981	Lab File ID:	110613TA.txt
Dilution:	1.0			Initial Weight/Volume:	0.67 g
Analysis Date:	06/13/2011 1457			Final Weight/Volume:	50 mL
Prep Date:	06/13/2011 1240				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.010	B	0.0051	0.016

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDX1**

Lab Sample ID: 280-16674-5
Client Matrix: Solid
% Moisture: 3.6

Date Sampled: 06/07/2011 0910
Date Received: 06/08/2011 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-71295	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-70972	Lab File ID:	26b060911.asc
Dilution:	1.0			Initial Weight/Volume:	1.13 g
Analysis Date:	06/10/2011 0111			Final Weight/Volume:	100 mL
Prep Date:	06/09/2011 0745				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8440		1.4	4.6
Arsenic		37.5		0.61	0.92
Barium		75.9		0.070	0.46
Beryllium		0.14	B	0.030	0.18
Boron		1.5	B	0.90	1.8
Cadmium		0.11	B	0.038	0.18
Calcium		3800		12.9	45.9
Chromium		12.3		0.053	0.18
Cobalt		7.5		0.092	0.92
Copper		16.8	X	0.20	0.92
Lead		85.9		0.25	0.46
Magnesium		4490		3.4	18.4
Manganese		310		0.092	0.92
Molybdenum		0.24	U	0.24	1.8
Nickel		12.1		0.11	3.7
Selenium		0.79	U	0.79	0.92
Silver		0.15	U	0.15	0.18
Vanadium		40.9		0.086	1.8
Zinc		40.4		0.37	0.92

Analysis Method:	6010B	Analysis Batch:	280-71606	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-70972	Lab File ID:	26a061011.asc
Dilution:	1.0			Initial Weight/Volume:	1.13 g
Analysis Date:	06/10/2011 1522			Final Weight/Volume:	100 mL
Prep Date:	06/09/2011 0745				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.35	U	0.35	0.55
Iron		16900		3.5	4.6
Potassium		1390		37.7	276
Silicon		313		5.2	9.2
Sodium		219		54.2	110

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-71912	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-70981	Lab File ID:	110613TA.txt
Dilution:	1.0			Initial Weight/Volume:	0.68 g
Analysis Date:	06/13/2011 1459			Final Weight/Volume:	50 mL
Prep Date:	06/13/2011 1240				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.012	B	0.0051	0.016

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDX2**

Lab Sample ID: 280-16674-6
Client Matrix: Solid
% Moisture: 19.5

Date Sampled: 06/07/2011 1040
Date Received: 06/08/2011 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-71295	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-70972	Lab File ID:	26b060911.asc
Dilution:	1.0			Initial Weight/Volume:	1.12 g
Analysis Date:	06/10/2011 0113			Final Weight/Volume:	100 mL
Prep Date:	06/09/2011 0745				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8230		1.7	5.5
Arsenic		3.3		0.73	1.1
Barium		77.0		0.084	0.55
Beryllium		0.16	B	0.037	0.22
Boron		1.6	B	1.1	2.2
Cadmium		0.15	B	0.045	0.22
Calcium		3810		15.6	55.4
Chromium		12.3		0.064	0.22
Cobalt		7.2		0.11	1.1
Copper		14.4	X	0.24	1.1
Lead		12.3		0.30	0.55
Magnesium		4340		4.1	22.2
Manganese		302		0.11	1.1
Molybdenum		0.29	U	0.29	2.2
Nickel		11.9		0.14	4.4
Selenium		0.95	U	0.95	1.1
Silver		0.18	U	0.18	0.22
Vanadium		36.2		0.10	2.2
Zinc		42.1		0.44	1.1

Analysis Method:	6010B	Analysis Batch:	280-71606	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-70972	Lab File ID:	26a061011.asc
Dilution:	1.0			Initial Weight/Volume:	1.12 g
Analysis Date:	06/10/2011 1525			Final Weight/Volume:	100 mL
Prep Date:	06/09/2011 0745				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.42	U	0.42	0.67
Iron		16200		4.2	5.5
Potassium		1630		45.5	333
Silicon		307		6.3	11.1
Sodium		208		65.4	133

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-71912	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-70981	Lab File ID:	110613TA.txt
Dilution:	1.0			Initial Weight/Volume:	0.67 g
Analysis Date:	06/13/2011 1502			Final Weight/Volume:	50 mL
Prep Date:	06/13/2011 1240				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0083	B	0.0062	0.019

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDX3**

Lab Sample ID: 280-16674-7
Client Matrix: Solid
% Moisture: 5.8

Date Sampled: 06/07/2011 0935
Date Received: 06/08/2011 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-71295	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-70972	Lab File ID:	26b060911.asc
Dilution:	1.0			Initial Weight/Volume:	1.07 g
Analysis Date:	06/10/2011 0125			Final Weight/Volume:	100 mL
Prep Date:	06/09/2011 0745				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8400		1.5	5.0
Arsenic		5.0		0.65	0.99
Barium		74.5		0.075	0.50
Beryllium		0.14	B	0.033	0.20
Boron		1.6	B	0.97	2.0
Cadmium		0.11	B	0.041	0.20
Calcium		3960		14.0	49.6
Chromium		12.2		0.058	0.20
Cobalt		7.4		0.099	0.99
Copper		16.0	X	0.22	0.99
Lead		11.5		0.27	0.50
Magnesium		4400		3.7	19.8
Manganese		309		0.099	0.99
Molybdenum		0.26	U	0.26	2.0
Nickel		11.8		0.12	4.0
Selenium		0.85	U	0.85	0.99
Silver		0.16	U	0.16	0.20
Vanadium		40.3		0.093	2.0
Zinc		40.2		0.39	0.99

Analysis Method:	6010B	Analysis Batch:	280-71606	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-70972	Lab File ID:	26a061011.asc
Dilution:	1.0			Initial Weight/Volume:	1.07 g
Analysis Date:	06/10/2011 1527			Final Weight/Volume:	100 mL
Prep Date:	06/09/2011 0745				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.38	U	0.38	0.60
Iron		17400		3.8	5.0
Potassium		1490		40.7	298
Silicon		272		5.6	9.9
Sodium		210		58.6	119

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-71912	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-70981	Lab File ID:	110613TA.txt
Dilution:	1.0			Initial Weight/Volume:	0.64 g
Analysis Date:	06/13/2011 1504			Final Weight/Volume:	50 mL
Prep Date:	06/13/2011 1240				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.013	B	0.0055	0.017

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Client Sample ID: **J1JDX4**

Lab Sample ID: 280-16674-8
Client Matrix: Solid
% Moisture: 12.7

Date Sampled: 06/07/2011 0940
Date Received: 06/08/2011 0930

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-71295	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-70972	Lab File ID:	26b060911.asc
Dilution:	1.0			Initial Weight/Volume:	1.13 g
Analysis Date:	06/10/2011 0128			Final Weight/Volume:	100 mL
Prep Date:	06/09/2011 0745				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		9500		1.6	5.1
Arsenic		66.2		0.67	1.0
Barium		92.1		0.077	0.51
Beryllium		0.19	B	0.033	0.20
Boron		2.1		0.99	2.0
Cadmium		0.21		0.042	0.20
Calcium		3510		14.3	50.7
Chromium		13.1		0.059	0.20
Cobalt		7.9		0.10	1.0
Copper		15.6	X	0.22	1.0
Lead		219		0.27	0.51
Magnesium		4450		3.8	20.3
Manganese		354		0.10	1.0
Molybdenum		0.26	U	0.26	2.0
Nickel		12.1		0.12	4.1
Selenium		0.87	U	0.87	1.0
Silver		0.16	U	0.16	0.20
Vanadium		41.3		0.095	2.0
Zinc		49.6		0.40	1.0

Analysis Method:	6010B	Analysis Batch:	280-71606	Instrument ID:	MT_026
Prep Method:	3050B	Prep Batch:	280-70972	Lab File ID:	26a061011.asc
Dilution:	1.0			Initial Weight/Volume:	1.13 g
Analysis Date:	06/10/2011 1530			Final Weight/Volume:	100 mL
Prep Date:	06/09/2011 0745				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Antimony		0.39	U	0.39	0.61
Iron		18400		3.9	5.1
Potassium		2050		41.6	304
Silicon		258		5.7	10.1
Sodium		211		59.8	122

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-71912	Instrument ID:	MT_034
Prep Method:	7471A	Prep Batch:	280-70981	Lab File ID:	110613TA.txt
Dilution:	1.0			Initial Weight/Volume:	0.68 g
Analysis Date:	06/13/2011 1511			Final Weight/Volume:	50 mL
Prep Date:	06/13/2011 1240				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.011	B	0.0056	0.017

General Chemistry

Client Sample ID: **J1JDX5**

Lab Sample ID: 280-16674-1
Client Matrix: Solid

Date Sampled: 06/07/2011 0800
Date Received: 06/08/2011 0930

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

Analysis Batch: 280-71177 Analysis Date: 06/09/2011 1308 DryWt Corrected: N

General Chemistry

Client Sample ID: **J1JDW8**

Lab Sample ID: 280-16674-2
Client Matrix: Solid

Date Sampled: 06/07/2011 0820
Date Received: 06/08/2011 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	4.6		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-71177 Analysis Date: 06/09/2011 1308 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

General Chemistry

Client Sample ID: **J1JDW9**

Lab Sample ID: 280-16674-3
Client Matrix: Solid

Date Sampled: 06/07/2011 0835
Date Received: 06/08/2011 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	10.0		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-71177 Analysis Date: 06/09/2011 1308 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

General Chemistry

Client Sample ID: **J1JDX0**

Lab Sample ID: 280-16674-4
Client Matrix: Solid

Date Sampled: 06/07/2011 0855
Date Received: 06/08/2011 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	2.8		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-71177 Analysis Date: 06/09/2011 1308 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

General Chemistry

Client Sample ID: **J1JDX1**

Lab Sample ID: 280-16674-5
Client Matrix: Solid

Date Sampled: 06/07/2011 0910
Date Received: 06/08/2011 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	3.6		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-71177 Analysis Date: 06/09/2011 1308 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

General Chemistry

Client Sample ID: **J1JDX2**

Lab Sample ID: 280-16674-6
Client Matrix: Solid

Date Sampled: 06/07/2011 1040
Date Received: 06/08/2011 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	19.5		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-71177 Analysis Date: 06/09/2011 1308 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

General Chemistry

Client Sample ID: **J1JDX3**

Lab Sample ID: 280-16674-7
Client Matrix: Solid

Date Sampled: 06/07/2011 0935
Date Received: 06/08/2011 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	5.8		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-71177 Analysis Date: 06/09/2011 1308 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

General Chemistry

Client Sample ID: **J1JDX4**

Lab Sample ID: 280-16674-8
Client Matrix: Solid

Date Sampled: 06/07/2011 0940
Date Received: 06/08/2011 0930

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	12.7		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-71177 Analysis Date: 06/09/2011 1308 DryWt Corrected: N

QUALITY CONTROL RESULTS

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Prep Batch: 280-71004					
LCS 280-71004/3-A	Lab Control Sample	T	Solid	5035	
LCSD 280-71004/4-A	Lab Control Sample Duplicate	T	Solid	5035	
MB 280-71004/1-A	Method Blank	T	Solid	5035	
280-16674-1	J1JDX5	T	Solid	5035	
280-16674-2	J1JDW8	T	Solid	5035	
280-16674-3	J1JDW9	T	Solid	5035	
280-16674-3MS	Matrix Spike	T	Solid	5035	
280-16674-3MSD	Matrix Spike Duplicate	T	Solid	5035	
280-16674-4	J1JDX0	T	Solid	5035	
280-16674-5	J1JDX1	T	Solid	5035	
280-16674-6	J1JDX2	T	Solid	5035	
280-16674-7	J1JDX3	T	Solid	5035	
280-16674-8	J1JDX4	T	Solid	5035	
Analysis Batch:280-71801					
LCS 280-71004/3-A	Lab Control Sample	T	Solid	8260B	280-71004
LCSD 280-71004/4-A	Lab Control Sample Duplicate	T	Solid	8260B	280-71004
MB 280-71004/1-A	Method Blank	T	Solid	8260B	280-71004
280-16674-1	J1JDX5	T	Solid	8260B	280-71004
280-16674-2	J1JDW8	T	Solid	8260B	280-71004
280-16674-4	J1JDX0	T	Solid	8260B	280-71004
280-16674-5	J1JDX1	T	Solid	8260B	280-71004
280-16674-6	J1JDX2	T	Solid	8260B	280-71004
280-16674-7	J1JDX3	T	Solid	8260B	280-71004
280-16674-8	J1JDX4	T	Solid	8260B	280-71004
Analysis Batch:280-71948					
LCS 280-71004/3-A	Lab Control Sample	T	Solid	8260B	280-71004
LCSD 280-71004/4-A	Lab Control Sample Duplicate	T	Solid	8260B	280-71004
280-16674-3	J1JDW9	T	Solid	8260B	280-71004
280-16674-3MS	Matrix Spike	T	Solid	8260B	280-71004
280-16674-3MSD	Matrix Spike Duplicate	T	Solid	8260B	280-71004

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 280-71032					
LCS 280-71032/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-71032/1-A	Method Blank	T	Solid	3550C	
280-16674-2	J1JDW8	T	Solid	3550C	
280-16674-3	J1JDW9	T	Solid	3550C	
280-16674-4	J1JDX0	T	Solid	3550C	
280-16674-5	J1JDX1	T	Solid	3550C	
280-16674-5MS	Matrix Spike	T	Solid	3550C	
280-16674-5MSD	Matrix Spike Duplicate	T	Solid	3550C	
280-16674-6	J1JDX2	T	Solid	3550C	
280-16674-7	J1JDX3	T	Solid	3550C	
280-16674-8	J1JDX4	T	Solid	3550C	
Prep Batch: 280-71058					
LCS 280-71058/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-71058/1-A	Method Blank	T	Solid	3550C	
280-16674-2	J1JDW8	T	Solid	3550C	
280-16674-3	J1JDW9	T	Solid	3550C	
280-16674-4	J1JDX0	T	Solid	3550C	
280-16674-4MS	Matrix Spike	T	Solid	3550C	
280-16674-4MSD	Matrix Spike Duplicate	T	Solid	3550C	
280-16674-5	J1JDX1	T	Solid	3550C	
280-16674-6	J1JDX2	T	Solid	3550C	
280-16674-7	J1JDX3	T	Solid	3550C	
280-16674-8	J1JDX4	T	Solid	3550C	
Prep Batch: 280-71061					
LCS 280-71061/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-71061/1-A	Method Blank	T	Solid	3550C	
280-16674-2	J1JDW8	T	Solid	3550C	
280-16674-3	J1JDW9	T	Solid	3550C	
280-16674-4	J1JDX0	T	Solid	3550C	
280-16674-5	J1JDX1	T	Solid	3550C	
280-16674-6	J1JDX2	T	Solid	3550C	
280-16674-7	J1JDX3	T	Solid	3550C	
280-16674-7MS	Matrix Spike	T	Solid	3550C	
280-16674-7MSD	Matrix Spike Duplicate	T	Solid	3550C	
280-16674-8	J1JDX4	T	Solid	3550C	

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Analysis Batch:280-71603					
LCS 280-71061/2-A	Lab Control Sample	T	Solid	8082	280-71061
MB 280-71061/1-A	Method Blank	T	Solid	8082	280-71061
280-16674-2	J1JDW8	T	Solid	8082	280-71061
280-16674-3	J1JDW9	T	Solid	8082	280-71061
280-16674-4	J1JDX0	T	Solid	8082	280-71061
280-16674-5	J1JDX1	T	Solid	8082	280-71061
280-16674-6	J1JDX2	T	Solid	8082	280-71061
280-16674-7	J1JDX3	T	Solid	8082	280-71061
280-16674-7MS	Matrix Spike	T	Solid	8082	280-71061
280-16674-7MSD	Matrix Spike Duplicate	T	Solid	8082	280-71061
280-16674-8	J1JDX4	T	Solid	8082	280-71061
Analysis Batch:280-71647					
LCS 280-71032/2-A	Lab Control Sample	T	Solid	8081A	280-71032
MB 280-71032/1-A	Method Blank	T	Solid	8081A	280-71032
280-16674-2	J1JDW8	T	Solid	8081A	280-71032
280-16674-3	J1JDW9	T	Solid	8081A	280-71032
280-16674-4	J1JDX0	T	Solid	8081A	280-71032
280-16674-5	J1JDX1	T	Solid	8081A	280-71032
280-16674-5MS	Matrix Spike	T	Solid	8081A	280-71032
280-16674-5MSD	Matrix Spike Duplicate	T	Solid	8081A	280-71032
280-16674-6	J1JDX2	T	Solid	8081A	280-71032
280-16674-7	J1JDX3	T	Solid	8081A	280-71032
280-16674-8	J1JDX4	T	Solid	8081A	280-71032
Analysis Batch:280-71673					
LCS 280-71058/2-A	Lab Control Sample	T	Solid	NWTPH-Dx	280-71058
MB 280-71058/1-A	Method Blank	T	Solid	NWTPH-Dx	280-71058
280-16674-2	J1JDW8	T	Solid	NWTPH-Dx	280-71058
280-16674-3	J1JDW9	T	Solid	NWTPH-Dx	280-71058
280-16674-4	J1JDX0	T	Solid	NWTPH-Dx	280-71058
280-16674-4MS	Matrix Spike	T	Solid	NWTPH-Dx	280-71058
280-16674-4MSD	Matrix Spike Duplicate	T	Solid	NWTPH-Dx	280-71058
280-16674-5	J1JDX1	T	Solid	NWTPH-Dx	280-71058
280-16674-6	J1JDX2	T	Solid	NWTPH-Dx	280-71058
280-16674-7	J1JDX3	T	Solid	NWTPH-Dx	280-71058
280-16674-8	J1JDX4	T	Solid	NWTPH-Dx	280-71058

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-70972					
LCS 280-70972/2-A	Lab Control Sample	T	Solid	3050B	
MB 280-70972/1-A	Method Blank	T	Solid	3050B	
280-16674-2	J1JDW8	T	Solid	3050B	
280-16674-2DU	Duplicate	T	Solid	3050B	
280-16674-2MS	Matrix Spike	T	Solid	3050B	
280-16674-3	J1JDW9	T	Solid	3050B	
280-16674-4	J1JDX0	T	Solid	3050B	
280-16674-5	J1JDX1	T	Solid	3050B	
280-16674-6	J1JDX2	T	Solid	3050B	
280-16674-7	J1JDX3	T	Solid	3050B	
280-16674-8	J1JDX4	T	Solid	3050B	
Prep Batch: 280-70981					
LCS 280-70981/2-A	Lab Control Sample	T	Solid	7471A	
MB 280-70981/1-A	Method Blank	T	Solid	7471A	
280-16674-2	J1JDW8	T	Solid	7471A	
280-16674-2DU	Duplicate	T	Solid	7471A	
280-16674-2MS	Matrix Spike	T	Solid	7471A	
280-16674-3	J1JDW9	T	Solid	7471A	
280-16674-4	J1JDX0	T	Solid	7471A	
280-16674-5	J1JDX1	T	Solid	7471A	
280-16674-6	J1JDX2	T	Solid	7471A	
280-16674-7	J1JDX3	T	Solid	7471A	
280-16674-8	J1JDX4	T	Solid	7471A	
Analysis Batch:280-71295					
LCS 280-70972/2-A	Lab Control Sample	T	Solid	6010B	280-70972
MB 280-70972/1-A	Method Blank	T	Solid	6010B	280-70972
280-16674-2	J1JDW8	T	Solid	6010B	280-70972
280-16674-2DU	Duplicate	T	Solid	6010B	280-70972
280-16674-2MS	Matrix Spike	T	Solid	6010B	280-70972
280-16674-3	J1JDW9	T	Solid	6010B	280-70972
280-16674-4	J1JDX0	T	Solid	6010B	280-70972
280-16674-5	J1JDX1	T	Solid	6010B	280-70972
280-16674-6	J1JDX2	T	Solid	6010B	280-70972
280-16674-7	J1JDX3	T	Solid	6010B	280-70972
280-16674-8	J1JDX4	T	Solid	6010B	280-70972

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:280-71606					
LCS 280-70972/2-A	Lab Control Sample	T	Solid	6010B	280-70972
MB 280-70972/1-A	Method Blank	T	Solid	6010B	280-70972
280-16674-2	J1JDW8	T	Solid	6010B	280-70972
280-16674-2DU	Duplicate	T	Solid	6010B	280-70972
280-16674-2MS	Matrix Spike	T	Solid	6010B	280-70972
280-16674-3	J1JDW9	T	Solid	6010B	280-70972
280-16674-4	J1JDX0	T	Solid	6010B	280-70972
280-16674-5	J1JDX1	T	Solid	6010B	280-70972
280-16674-6	J1JDX2	T	Solid	6010B	280-70972
280-16674-7	J1JDX3	T	Solid	6010B	280-70972
280-16674-8	J1JDX4	T	Solid	6010B	280-70972
Analysis Batch:280-71912					
LCS 280-70981/2-A	Lab Control Sample	T	Solid	7471A	280-70981
MB 280-70981/1-A	Method Blank	T	Solid	7471A	280-70981
280-16674-2	J1JDW8	T	Solid	7471A	280-70981
280-16674-2DU	Duplicate	T	Solid	7471A	280-70981
280-16674-2MS	Matrix Spike	T	Solid	7471A	280-70981
280-16674-3	J1JDW9	T	Solid	7471A	280-70981
280-16674-4	J1JDX0	T	Solid	7471A	280-70981
280-16674-5	J1JDX1	T	Solid	7471A	280-70981
280-16674-6	J1JDX2	T	Solid	7471A	280-70981
280-16674-7	J1JDX3	T	Solid	7471A	280-70981
280-16674-8	J1JDX4	T	Solid	7471A	280-70981

Report Basis
T = Total

General Chemistry

Analysis Batch:280-71177				
280-16674-1	J1JDX5	T	Solid	D-2216
280-16674-2	J1JDW8	T	Solid	D-2216
280-16674-2DU	Duplicate	T	Solid	D-2216
280-16674-3	J1JDW9	T	Solid	D-2216
280-16674-4	J1JDX0	T	Solid	D-2216
280-16674-5	J1JDX1	T	Solid	D-2216
280-16674-6	J1JDX2	T	Solid	D-2216
280-16674-7	J1JDX3	T	Solid	D-2216
280-16674-8	J1JDX4	T	Solid	D-2216

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
HPLC/IC					
Prep Batch: 280-71035					
LCS 280-71035/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-71035/1-A	Method Blank	T	Solid	3550C	
280-16674-2	J1JDW8	T	Solid	3550C	
280-16674-3	J1JDW9	T	Solid	3550C	
280-16674-4	J1JDX0	T	Solid	3550C	
280-16674-5	J1JDX1	T	Solid	3550C	
280-16674-6	J1JDX2	T	Solid	3550C	
280-16674-6MS	Matrix Spike	T	Solid	3550C	
280-16674-6MSD	Matrix Spike Duplicate	T	Solid	3550C	
280-16674-7	J1JDX3	T	Solid	3550C	
280-16674-8	J1JDX4	T	Solid	3550C	
Analysis Batch:280-71227					
LCS 280-71035/2-A	Lab Control Sample	T	Solid	8310	280-71035
MB 280-71035/1-A	Method Blank	T	Solid	8310	280-71035
280-16674-2	J1JDW8	T	Solid	8310	280-71035
280-16674-3	J1JDW9	T	Solid	8310	280-71035
280-16674-4	J1JDX0	T	Solid	8310	280-71035
280-16674-5	J1JDX1	T	Solid	8310	280-71035
280-16674-6	J1JDX2	T	Solid	8310	280-71035
280-16674-6MS	Matrix Spike	T	Solid	8310	280-71035
280-16674-6MSD	Matrix Spike Duplicate	T	Solid	8310	280-71035
280-16674-7	J1JDX3	T	Solid	8310	280-71035
280-16674-8	J1JDX4	T	Solid	8310	280-71035

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Method Blank - Batch: 280-71004

Method: 8260B
Preparation: 5035

Lab Sample ID:	MB 280-71004/1-A	Analysis Batch:	280-71801	Instrument ID:	MSV_G
Client Matrix:	Solid	Prep Batch:	280-71004	Lab File ID:	G6161.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5.041 g
Analysis Date:	06/13/2011 1027	Units:	ug/Kg	Final Weight/Volume:	5 mL
Prep Date:	06/08/2011 1357				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acetone	5.3	U	5.3	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	9.9
2-Butanone (MEK)	1.8	U	1.8	9.9
Carbon disulfide	0.505	J	0.42	5.0
Carbon tetrachloride	0.62	U	0.62	5.0
Chlorobenzene	0.54	U	0.54	5.0
Dibromochloromethane	0.57	U	0.57	5.0
Chloroethane	0.88	U	0.88	9.9
Chloroform	0.29	U	0.29	5.0
Chloromethane	0.76	U	0.76	9.9
1,3-Dichlorobenzene	0.48	U	0.48	5.0
1,1-Dichloroethane	0.21	U	0.21	5.0
1,2-Dichloroethane	0.69	U	0.69	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	0.66	U	0.66	5.0
Ethylbenzene	0.66	U	0.66	5.0
2-Hexanone	4.9	U	4.9	20
Methylene Chloride	1.36	J	0.74	5.0
4-Methyl-2-pentanone (MIBK)	4.3	U	4.3	9.9
Styrene	0.62	U	0.62	5.0
1,1,2,2-Tetrachloroethane	0.61	U	0.61	5.0
Tetrachloroethene	0.59	U	0.59	5.0
Toluene	0.68	U	0.68	5.0
1,1,1-Trichloroethane	0.52	U	0.52	5.0
1,1,2-Trichloroethane	0.87	U	0.87	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)	79	58 - 140
Toluene-d8 (Surr)	103	80 - 126
4-Bromofluorobenzene (Surr)	90	76 - 127
Dibromofluoromethane (Surr)	92	75 - 121

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Method Blank TICs- Batch: 280-71004

Cas Number	Analyte	RT	Est. Result	Qual
	Tentatively Identified Compound		None	

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-71004

Method: 8260B
Preparation: 5035

LCS Lab Sample ID:	LCS 280-71004/3-A	Analysis Batch:	280-71801	Instrument ID:	MSV_G
Client Matrix:	Solid	Prep Batch:	280-71004	Lab File ID:	G6158.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 g
Analysis Date:	06/13/2011 0909	Units:	ug/Kg	Final Weight/Volume:	5 mL
Prep Date:	06/08/2011 1357				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-71004/4-A	Analysis Batch:	280-71801	Instrument ID:	MSV_G
Client Matrix:	Solid	Prep Batch:	280-71004	Lab File ID:	G6159.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 g
Analysis Date:	06/13/2011 0932	Units:	ug/Kg	Final Weight/Volume:	5 mL
Prep Date:	06/08/2011 1357				
Leach Date:	N/A				

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene	92	85	76 - 120	9	20		
Bromodichloromethane	95	89	74 - 125	6	20		
Carbon tetrachloride	109	93	69 - 147	15	20		
Chlorobenzene	92	84	74 - 120	8	20		
Chloroform	93	87	77 - 125	8	20		
1,3-Dichlorobenzene	91	83	74 - 120	9	20		
1,1-Dichloroethane	94	85	74 - 120	10	20		
trans-1,2-Dichloroethene	104	93	80 - 127	11	20		
1,1-Dichloroethene	107	93	77 - 143	14	20		
1,2-Dichloropropane	88	81	74 - 120	8	20		
Ethylbenzene	104	86	78 - 120	19	20		
Methylene Chloride	94	91	76 - 137	4	21		
Tetrachloroethene	101	85	71 - 120	17	20		
Toluene	94	86	72 - 120	9	20		
1,1,1-Trichloroethane	99	85	67 - 143	15	20		
Trichloroethene	95	84	78 - 120	12	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	71	72	58 - 140
Toluene-d8 (Surr)	92	92	80 - 126
4-Bromofluorobenzene (Surr)	81	86	76 - 127
Dibromofluoromethane (Surr)	82	84	75 - 121

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-71004

Method: 8260B
Preparation: 5035

LCS Lab Sample ID:	LCS 280-71004/3-A	Analysis Batch:	280-71948	Instrument ID:	MSV_J
Client Matrix:	Solid	Prep Batch:	280-71004	Lab File ID:	J7100.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 g
Analysis Date:	06/14/2011 0751	Units:	ug/Kg	Final Weight/Volume:	5 mL
Prep Date:	06/08/2011 1357				
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-71004/4-A	Analysis Batch:	280-71948	Instrument ID:	MSV_J
Client Matrix:	Solid	Prep Batch:	280-71004	Lab File ID:	J7101.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 g
Analysis Date:	06/14/2011 0814	Units:	ug/Kg	Final Weight/Volume:	5 mL
Prep Date:	06/08/2011 1357				
Leach Date:	N/A				

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene	110	97	76 - 120	12	20		
Bromodichloromethane	102	92	74 - 125	11	20		
Carbon tetrachloride	105	92	69 - 147	12	20		
Chlorobenzene	112	99	74 - 120	12	20		
Chloroform	102	90	77 - 125	12	20		
1,3-Dichlorobenzene	114	103	74 - 120	10	20		
1,1-Dichloroethane	103	91	74 - 120	13	20		
trans-1,2-Dichloroethene	107	95	80 - 127	12	20		
1,1-Dichloroethene	113	100	77 - 143	12	20		
1,2-Dichloropropane	106	96	74 - 120	11	20		
Ethylbenzene	114	102	78 - 120	11	20		
Methylene Chloride	107	95	76 - 137	13	21		
Tetrachloroethene	111	97	71 - 120	13	20		
Toluene	109	96	72 - 120	12	20		
1,1,1-Trichloroethane	101	90	67 - 143	11	20		
Trichloroethene	110	97	78 - 120	12	20		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	96	87	58 - 140
Toluene-d8 (Surr)	111	102	80 - 126
4-Bromofluorobenzene (Surr)	108	100	76 - 127
Dibromofluoromethane (Surr)	95	88	75 - 121

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-71004

Method: 8260B
Preparation: 5035

MS Lab Sample ID:	280-16674-3	Analysis Batch:	280-71948	Instrument ID:	MSV_J
Client Matrix:	Solid	Prep Batch:	280-71004	Lab File ID:	J7106.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	4.68 g
Analysis Date:	06/14/2011 1018			Final Weight/Volume:	5 mL
Prep Date:	06/08/2011 1357				
Leach Date:	N/A				

MSD Lab Sample ID:	280-16674-3	Analysis Batch:	280-71948	Instrument ID:	MSV_J
Client Matrix:	Solid	Prep Batch:	280-71004	Lab File ID:	J7107.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5.852 g
Analysis Date:	06/14/2011 1040			Final Weight/Volume:	5 mL
Prep Date:	06/08/2011 1357				
Leach Date:	N/A				

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Benzene	83	84	76 - 120	22	20		*
Bromodichloromethane	81	82	74 - 125	22	20		*
Carbon tetrachloride	76	78	69 - 147	19	20		
Chlorobenzene	87	88	74 - 120	21	20		*
Chloroform	79	80	77 - 125	21	20		*
1,3-Dichlorobenzene	88	88	74 - 120	22	20		*
1,1-Dichloroethane	79	81	74 - 120	20	20		
trans-1,2-Dichloroethene	80	81	80 - 127	22	20		*
1,1-Dichloroethene	84	85	77 - 143	21	20		*
1,2-Dichloropropane	86	85	74 - 120	23	20		*
Ethylbenzene	87	87	78 - 120	22	20		*
Methylene Chloride	84	90	76 - 137	15	21		
Tetrachloroethene	80	84	71 - 120	18	20		
Toluene	84	83	72 - 120	23	20		*
1,1,1-Trichloroethane	75	77	67 - 143	19	20		
Trichloroethene	82	82	78 - 120	21	20		*

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	89	93	58 - 140
Toluene-d8 (Surr)	101	109	80 - 126
4-Bromofluorobenzene (Surr)	96	104	76 - 127
Dibromofluoromethane (Surr)	88	93	75 - 121

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Method Blank - Batch: 280-71032

Method: 8081A
Preparation: 3550C

Lab Sample ID:	MB 280-71032/1-A	Analysis Batch:	280-71647	Instrument ID:	GCS_P1
Client Matrix:	Solid	Prep Batch:	280-71032	Lab File ID:	029F2901.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	32.3 g
Analysis Date:	06/10/2011 1736	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	06/08/2011 1635			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	86	59 - 115
Decachlorobiphenyl	93	63 - 124

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Lab Control Sample - Batch: 280-71032

Method: 8081A
Preparation: 3550C

Lab Sample ID:	LCS 280-71032/2-A	Analysis Batch:	280-71647	Instrument ID:	GCS_P1
Client Matrix:	Solid	Prep Batch:	280-71032	Lab File ID:	023F2301.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.1 g
Analysis Date:	06/10/2011 1557	Units:	ug/Kg	Final Weight/Volume:	10000 uL
Prep Date:	06/08/2011 1635			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
4,4'-DDD	16.1	11.9	74	57 - 118	
4,4'-DDE	16.1	12.9	80	61 - 115	
4,4'-DDT	16.1	14.6	91	53 - 125	
Aldrin	16.1	12.2	76	60 - 115	
alpha-BHC	16.1	13.1	81	54 - 115	
beta-BHC	16.1	13.3	83	58 - 115	
delta-BHC	16.1	13.5	84	62 - 115	
gamma-BHC (Lindane)	16.1	13.1	81	59 - 115	
Heptachlor	16.1	14.0	87	61 - 115	
Heptachlor epoxide	16.1	13.8	86	62 - 112	
Endosulfan I	16.1	13.6	84	55 - 115	
Endosulfan II	16.1	14.4	89	60 - 115	
Endosulfan sulfate	16.1	15.1	94	58 - 118	
Endrin	16.1	16.2	101	61 - 121	
Endrin aldehyde	16.1	13.4	83	54 - 115	
Endrin ketone	16.1	12.9	80	61 - 118	
gamma-Chlordane	16.1	13.7	85	60 - 115	
Methoxychlor	16.1	13.1	82	52 - 123	
alpha-Chlordane	16.1	13.8	86	60 - 115	
Dieldrin	16.1	14.4	89	63 - 117	

Surrogate	% Rec	Acceptance Limits
Tetrachloro-m-xylene	83	59 - 115
Decachlorobiphenyl	89	63 - 124

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-71032

Method: 8081A
Preparation: 3550C

MS Lab Sample ID:	280-16674-5	Analysis Batch:	280-71647	Instrument ID:	GCS_P1
Client Matrix:	Solid	Prep Batch:	280-71032	Lab File ID:	034F3401.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.2 g
Analysis Date:	06/10/2011 1859			Final Weight/Volume:	10000 uL
Prep Date:	06/08/2011 1635			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-16674-5	Analysis Batch:	280-71647	Instrument ID:	GCS_P1
Client Matrix:	Solid	Prep Batch:	280-71032	Lab File ID:	035F3501.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.3 g
Analysis Date:	06/10/2011 1916			Final Weight/Volume:	10000 uL
Prep Date:	06/08/2011 1635			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	75	77	57 - 118	2	20		
4,4'-DDE	83	86	61 - 115	3	15		
4,4'-DDT	87	89	53 - 125	2	29		
Aldrin	86	88	60 - 115	1	50		
alpha-BHC	87	89	54 - 115	2	17		
beta-BHC	85	88	58 - 115	3	17		
delta-BHC	84	88	62 - 115	4	19		
gamma-BHC (Lindane)	87	88	59 - 115	1	24		
Heptachlor	89	91	61 - 115	2	18		
Heptachlor epoxide	90	91	62 - 112	1	18		
Endosulfan I	86	88	55 - 115	1	26		
Endosulfan II	74	85	60 - 115	13	20		
Endosulfan sulfate	61	79	58 - 118	25	22		*
Endrin	103	105	61 - 121	1	30		
Endrin aldehyde	70	74	54 - 115	6	29		
Endrin ketone	71	76	61 - 118	8	20		
gamma-Chlordane	88	89	60 - 115	1	21		
Methoxychlor	56	69	52 - 123	21	23		
alpha-Chlordane	89	90	60 - 115	1	18		
Dieldrin	92	93	63 - 117	1	25		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Tetrachloro-m-xylene	89	91	59 - 115
Decachlorobiphenyl	87	96	63 - 124

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Method Blank - Batch: 280-71061

Method: 8082
Preparation: 3550C

Lab Sample ID:	MB 280-71061/1-A	Analysis Batch:	280-71603	Instrument ID:	GCS_W
Client Matrix:	Solid	Prep Batch:	280-71061	Lab File ID:	016F1601.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.5 g
Analysis Date:	06/10/2011 1643	Units:	ug/Kg	Final Weight/Volume:	5000 uL
Prep Date:	06/08/2011 2040			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	2.6	U	2.6	9.8
Aroclor 1260	2.6	U	2.6	9.8

Surrogate	% Rec	Acceptance Limits
Decachlorobiphenyl	103	59 - 130
Tetrachloro-m-xylene	97	53 - 128

Lab Control Sample - Batch: 280-71061

Method: 8082
Preparation: 3550C

Lab Sample ID:	LCS 280-71061/2-A	Analysis Batch:	280-71603	Instrument ID:	GCS_W
Client Matrix:	Solid	Prep Batch:	280-71061	Lab File ID:	017F1701.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	32.3 g
Analysis Date:	06/10/2011 1714	Units:	ug/Kg	Final Weight/Volume:	5000 uL
Prep Date:	06/08/2011 2040			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aroclor 1016	31.0	30.8	100	54 - 132	
Aroclor 1260	31.0	32.6	105	62 - 129	

Surrogate	% Rec	Acceptance Limits
Decachlorobiphenyl	97	59 - 130
Tetrachloro-m-xylene	89	53 - 128

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-71061

Method: 8082
Preparation: 3550C

MS Lab Sample ID:	280-16674-7	Analysis Batch:	280-71603	Instrument ID:	GCS_W
Client Matrix:	Solid	Prep Batch:	280-71061	Lab File ID:	025F2501.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.5 g
Analysis Date:	06/10/2011 2128			Final Weight/Volume:	5000 uL
Prep Date:	06/08/2011 2040			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-16674-7	Analysis Batch:	280-71603	Instrument ID:	GCS_W
Client Matrix:	Solid	Prep Batch:	280-71061	Lab File ID:	026F2601.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.8 g
Analysis Date:	06/10/2011 2200			Final Weight/Volume:	5000 uL
Prep Date:	06/08/2011 2040			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Aroclor 1016	102	102	54 - 132	0	26		
Aroclor 1260	104	98	62 - 129	7	26		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Decachlorobiphenyl	88	84	59 - 130
Tetrachloro-m-xylene	92	91	53 - 128

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Method Blank - Batch: 280-71058

Method: NWTPH-Dx
Preparation: 3550C

Lab Sample ID:	MB 280-71058/1-A	Analysis Batch:	280-71673	Instrument ID:	GCS_U
Client Matrix:	Solid	Prep Batch:	280-71058	Lab File ID:	060B6001.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.6 g
Analysis Date:	06/10/2011 1841	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	06/08/2011 2122			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
C10-C36	980	U	980	3900
C10-C28	660	U	660	3900

Surrogate	% Rec	Acceptance Limits
o-Terphenyl	107	49 - 115

Lab Control Sample - Batch: 280-71058

Method: NWTPH-Dx
Preparation: 3550C

Lab Sample ID:	LCS 280-71058/2-A	Analysis Batch:	280-71673	Instrument ID:	GCS_U
Client Matrix:	Solid	Prep Batch:	280-71058	Lab File ID:	061B6101.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.4 g
Analysis Date:	06/10/2011 1909	Units:	ug/Kg	Final Weight/Volume:	1000 uL
Prep Date:	06/08/2011 2122			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
C10-C36	63700	66800	105	57 - 115	
C10-C28	63700	66600	105	53 - 115	

Surrogate	% Rec	Acceptance Limits
o-Terphenyl	105	49 - 115

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-71058

Method: NWTPH-Dx
Preparation: 3550C

MS Lab Sample ID:	280-16674-4	Analysis Batch:	280-71673	Instrument ID:	GCS_U
Client Matrix:	Solid	Prep Batch:	280-71058	Lab File ID:	065B6501.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0 g
Analysis Date:	06/10/2011 2100			Final Weight/Volume:	1000 uL
Prep Date:	06/08/2011 2122			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-16674-4	Analysis Batch:	280-71673	Instrument ID:	GCS_U
Client Matrix:	Solid	Prep Batch:	280-71058	Lab File ID:	066B6601.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.3 g
Analysis Date:	06/10/2011 2127			Final Weight/Volume:	1000 uL
Prep Date:	06/08/2011 2122			Injection Volume:	1 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
C10-C36	141	102	57 - 115	33	23	N	*
C10-C28	122	101	56 - 115	22	23	N	

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
o-Terphenyl	107	107	49 - 115

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Method Blank - Batch: 280-71035

Method: 8310
Preparation: 3550C

Lab Sample ID:	MB 280-71035/1-A	Analysis Batch:	280-71227	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-71035	Lab File ID:	SIG10090.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.4 g
Analysis Date:	06/11/2011 1259	Units:	ug/Kg	Final Weight/Volume:	4000 uL
Prep Date:	06/08/2011 1635			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Acenaphthene	9.9	U	9.9	99
Acenaphthylene	8.9	U	8.9	99
Anthracene	3.0	U	3.0	20
Benzo[a]anthracene	3.1	U	3.1	15
Benzo[a]pyrene	6.3	U	6.3	15
Benzo[b]fluoranthene	4.1	U	4.1	15
Benzo[g,h,i]perylene	7.1	U	7.1	30
Benzo[k]fluoranthene	3.9	U	3.9	15
Chrysene	4.8	U	4.8	39
Dibenzo(a,h)anthracene	11	U	11	30
Fluoranthene	13	U	13	39
Fluorene	5.2	U	5.2	30
Indeno[1,2,3-cd]pyrene	12	U	12	30
Naphthalene	12	U	12	99
Phenanthrene	12	U	12	39
Pyrene	12	U	12	39

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

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Lab Control Sample - Batch: 280-71035

Method: 8310
Preparation: 3550C

Lab Sample ID:	LCS 280-71035/2-A	Analysis Batch:	280-71227	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-71035	Lab File ID:	SIG10091.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.1 g
Analysis Date:	06/11/2011 1330	Units:	ug/Kg	Final Weight/Volume:	4000 uL
Prep Date:	06/08/2011 1635			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acenaphthene	1990	1900	96	72 - 115	
Acenaphthylene	1990	1920	96	60 - 115	
Anthracene	1990	1830	92	61 - 115	
Benzo[a]anthracene	1990	2140	108	76 - 115	
Benzo[a]pyrene	1990	2150	108	69 - 115	
Benzo[b]fluoranthene	1990	2020	101	81 - 115	
Benzo[g,h,i]perylene	1990	2130	107	71 - 115	
Benzo[k]fluoranthene	1990	2020	101	85 - 115	
Chrysene	1990	1970	99	70 - 115	
Dibenzo(a,h)anthracene	1990	2030	102	79 - 115	
Fluoranthene	1990	2010	101	67 - 115	
Fluorene	1990	1950	98	72 - 115	
Indeno[1,2,3-cd]pyrene	1990	2190	110	76 - 115	
Naphthalene	1990	1980	100	77 - 115	
Phenanthrene	1990	1990	100	79 - 115	
Pyrene	1990	2080	104	77 - 115	

Surrogate	% Rec	Acceptance Limits
Terphenyl-d14 (SUR)	94	72 - 115

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-71035

Method: 8310
Preparation: 3550C

MS Lab Sample ID:	280-16674-6	Analysis Batch:	280-71227	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-71035	Lab File ID:	SIG10097.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.5 g
Analysis Date:	06/11/2011 1633			Final Weight/Volume:	4000 uL
Prep Date:	06/08/2011 1635			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-16674-6	Analysis Batch:	280-71227	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-71035	Lab File ID:	SIG10098.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.1 g
Analysis Date:	06/11/2011 1704			Final Weight/Volume:	4000 uL
Prep Date:	06/08/2011 1635			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acenaphthene	95	95	72 - 115	2	20		
Acenaphthylene	94	94	60 - 115	2	21		
Anthracene	91	90	61 - 115	3	20		
Benzo[a]anthracene	110	107	76 - 115	5	20		
Benzo[a]pyrene	111	108	69 - 115	5	20		
Benzo[b]fluoranthene	102	99	81 - 115	4	20		
Benzo[g,h,i]perylene	108	105	71 - 115	4	20		
Benzo[k]fluoranthene	102	100	85 - 115	4	20		
Chrysene	101	98	70 - 115	5	20		
Dibenzo(a,h)anthracene	100	100	79 - 115	2	20		
Fluoranthene	109	101	67 - 115	9	20		
Fluorene	97	95	72 - 115	3	20		
Indeno[1,2,3-cd]pyrene	111	109	76 - 115	4	20		
Naphthalene	99	99	77 - 115	2	20		
Phenanthrene	104	99	79 - 115	7	20		
Pyrene	113	105	77 - 115	10	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Terphenyl-d14 (SUR)	98	93	72 - 115

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Method Blank - Batch: 280-70972

Method: 6010B
Preparation: 3050B

Lab Sample ID:	MB 280-70972/1-A	Analysis Batch:	280-71295	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-70972	Lab File ID:	26b060911.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	06/10/2011 0041	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	06/09/2011 0745				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Aluminum	1.6	U	1.6	5.0
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
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
Selenium	0.86	U	0.86	1.0
Silver	0.16	U	0.16	0.20
Vanadium	0.094	U	0.094	2.0
Zinc	0.40	U	0.40	1.0

Method Blank - Batch: 280-70972

Method: 6010B
Preparation: 3050B

Lab Sample ID:	MB 280-70972/1-A	Analysis Batch:	280-71606	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-70972	Lab File ID:	26a061011.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	06/10/2011 1450	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	06/09/2011 0745				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Antimony	0.38	U	0.38	0.60
Iron	3.8	U	3.8	5.0
Potassium	41.0	U	41.0	300
Silicon	5.7	U	5.7	10.0
Sodium	59.0	U	59.0	120

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Lab Control Sample - Batch: 280-70972

Method: 6010B
Preparation: 3050B

Lab Sample ID:	LCS 280-70972/2-A	Analysis Batch:	280-71295	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-70972	Lab File ID:	26b060911.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	06/10/2011 0044	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	06/09/2011 0745				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	200	193.2	97	82 - 116	
Arsenic	100	99.13	99	85 - 110	
Barium	200	206.0	103	87 - 112	
Beryllium	5.00	4.46	89	84 - 114	
Boron	100	97.49	97	81 - 110	
Cadmium	10.0	10.07	101	87 - 110	
Calcium	5000	4512	90	82 - 114	
Chromium	20.0	19.74	99	84 - 114	
Cobalt	50.0	48.49	97	87 - 110	
Copper	25.0	25.30	101	88 - 110	
Lead	50.0	48.80	98	86 - 110	
Magnesium	5000	4808	96	90 - 110	
Manganese	50.0	47.88	96	88 - 110	
Molybdenum	100	99.19	99	86 - 110	
Nickel	50.0	48.59	97	87 - 110	
Selenium	200	199.7	100	83 - 110	
Silver	5.00	4.97	99	87 - 114	
Vanadium	50.0	48.88	98	88 - 110	
Zinc	50.0	47.23	94	76 - 114	

Lab Control Sample - Batch: 280-70972

Method: 6010B
Preparation: 3050B

Lab Sample ID:	LCS 280-70972/2-A	Analysis Batch:	280-71606	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-70972	Lab File ID:	26a061011.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1 g
Analysis Date:	06/10/2011 1453	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	06/09/2011 0745				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Antimony	50.0	50.06	100	82 - 110	
Iron	100	95.25	95	87 - 120	
Potassium	5000	4826	97	89 - 110	
Silicon	1000	197.5	20	10 - 70	
Sodium	5000	5161	103	90 - 112	

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Matrix Spike - Batch: 280-70972

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-16674-2	Analysis Batch:	280-71295	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-70972	Lab File ID:	26b060911.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.07 g
Analysis Date:	06/10/2011 0051	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	06/09/2011 0745				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	7140		196	8796	843	50 - 200	4
Arsenic	3.2		97.9	93.23	92	76 - 111	
Barium	59.0		196	252.8	99	52 - 159	
Beryllium	0.087	B	4.90	4.13	83	72 - 105	
Boron	1.9	B	97.9	88.12	88	75 - 107	
Cadmium	0.11	B	9.79	9.30	94	40 - 130	
Calcium	3950		4900	8804	99	43 - 165	
Chromium	11.8		19.6	30.97	98	70 - 200	
Cobalt	6.9		49.0	50.66	89	72 - 106	
Copper	16.1		24.5	39.19	94	37 - 187	
Lead	8.1		49.0	51.25	88	70 - 200	
Magnesium	4320		4900	8881	93	64 - 145	
Manganese	275		49.0	326.6	105	40 - 200	4
Molybdenum	0.47	B	97.9	88.19	90	75 - 103	
Nickel	11.5		49.0	54.80	88	61 - 126	
Selenium	0.94	B	196	180.2	92	76 - 104	
Silver	0.16	U	4.90	4.46	91	75 - 141	
Vanadium	41.0		49.0	88.21	96	50 - 169	
Zinc	47.0		49.0	89.31	86	70 - 200	

Matrix Spike - Batch: 280-70972

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-16674-2	Analysis Batch:	280-71606	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-70972	Lab File ID:	26a061011.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.07 g
Analysis Date:	06/10/2011 1500	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	06/09/2011 0745				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Antimony	0.39	U	49.0	28.07	57	20 - 200	
Iron	16500		97.9	16350	-149	70 - 200	4
Potassium	1540		4900	6023	91	56 - 172	
Silicon	261		979	394.3	14	20 - 200	N
Sodium	214		4900	5130	100	78 - 111	

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Duplicate - Batch: 280-70972

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-16674-2	Analysis Batch:	280-71295	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-70972	Lab File ID:	26b060911.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.07 g
Analysis Date:	06/10/2011 0053	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	06/09/2011 0745				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Aluminum	7140		7019	2	40	
Arsenic	3.2		3.33	3	30	
Barium	59.0		58.77	0.4	30	
Beryllium	0.087	B	0.0823	6	30	B
Boron	1.9	B	1.97	2	30	B
Cadmium	0.11	B	0.0999	10	30	B
Calcium	3950		3926	0.7	30	
Chromium	11.8		11.68	1	40	
Cobalt	6.9		6.50	6	30	
Copper	16.1		15.36	5	30	
Lead	8.1		7.22	12	40	
Magnesium	4320		4115	5	30	
Manganese	275		264.7	4	40	
Molybdenum	0.47	B	0.507	8	30	B
Nickel	11.5		10.70	7	30	
Selenium	0.94	B	1.34	35	30	M
Silver	0.16	U	0.16	NC	30	U
Vanadium	41.0		38.61	6	30	
Zinc	47.0		44.72	5	40	

Duplicate - Batch: 280-70972

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-16674-2	Analysis Batch:	280-71606	Instrument ID:	MT_026
Client Matrix:	Solid	Prep Batch:	280-70972	Lab File ID:	26a061011.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.07 g
Analysis Date:	06/10/2011 1503	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	06/09/2011 0745				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Antimony	0.39	U	0.37	NC	40	U
Iron	16500		15670	5	40	
Potassium	1540		1494	3	40	
Silicon	261		261.6	0.2	40	
Sodium	214		218.1	2	30	

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Method Blank - Batch: 280-70981

Method: 7471A
Preparation: 7471A

Lab Sample ID:	MB 280-70981/1-A	Analysis Batch:	280-71912	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-70981	Lab File ID:	110613TA.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.6 g
Analysis Date:	06/13/2011 1443	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	06/13/2011 1240				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	0.0055	U	0.0055	0.017

Lab Control Sample - Batch: 280-70981

Method: 7471A
Preparation: 7471A

Lab Sample ID:	LCS 280-70981/2-A	Analysis Batch:	280-71912	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-70981	Lab File ID:	110613TA.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.6 g
Analysis Date:	06/13/2011 1445	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	06/13/2011 1240				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.417	0.406	97	87 - 111	

Matrix Spike - Batch: 280-70981

Method: 7471A
Preparation: 7471A

Lab Sample ID:	280-16674-2	Analysis Batch:	280-71912	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-70981	Lab File ID:	110613TA.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.61 g
Analysis Date:	06/13/2011 1452	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	06/13/2011 1240				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.010	B	0.430	0.451	103	87 - 111	

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Duplicate - Batch: 280-70981

Method: 7471A
Preparation: 7471A

Lab Sample ID:	280-16674-2	Analysis Batch:	280-71912	Instrument ID:	MT_034
Client Matrix:	Solid	Prep Batch:	280-70981	Lab File ID:	110613TA.txt
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.63 g
Analysis Date:	06/13/2011 1450	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	06/13/2011 1240				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Mercury	0.010	B	0.0138	30	20	B M

Client: Washington Closure Hanford

Job Number: 280-16674-1
Sdg Number: JP0196

Duplicate - Batch: 280-71177

Method: D-2216
Preparation: N/A

Lab Sample ID:	280-16674-2	Analysis Batch:	280-71177	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:	06/09/2011 1308	Units:	%	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Moisture	4.6	4.6	1	20	

5.6 ~~0.0~~, -0-3 1R1 SC 618

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-107-078	Page 1 of 1

Collector: G Stowe	Company Contact: Joan Kessner	Telephone No.: 509-375-4688	Project Coordinator: KESSNER, JH
Price Code: ~~8L~~ 8B	Data Turnaround: ~~21~~ 7 Days		
Project Designation: 100-H Remaining Sites Burial Grounds - Soil Full Protocol	Sampling Location: 600-151 verification resampling	SAF No.: RC-107	
Ice Chest No.: AFS-04-121	Field Logbook No.: EL-1627-05	COA: 0601512000	Method of Shipment: FedEx
Shipped To: TestAmerica Incorporated, ~~Richland~~ Denver	Offsite Property No.: NA	Bill of Lading/Air Bill No.: 7948 3900 3184	

POSSIBLE SAMPLE HAZARDS/REMARKS: None

Special Handling and/or Storage: Freeze

SAMPLE ANALYSIS													
Preservation				Freeze									
Type of Container				Gs*									
No. of Container(s)				5									
Volume				40mL									
				VOA - 5035/8260 (TCL) * **									
Sample No.	Matrix *	Sample Date	Sample Time										
J1JDX5	SOIL	6/7/11	0800	X									

CHAIN OF POSSESSION	Sign/Print Names		
Relinquished By/Removed From: Quincy Stowe	Date/Time: 6/7/11 1100	Received By/Stored In: JV Fuller	Date/Time: 1100 6/7/11
Relinquished By/Removed From: JV Fuller	Date/Time: 1230 6-7-11	Received By/Stored In: A. Freier	Date/Time: 1230 6-7-11
Relinquished By/Removed From: WCH A. Freier	Date/Time: ~~1310~~ 6-7-11 1315	Received By/Stored In: Fed Ex	Date/Time:
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time: 6/8/11 930
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

* 20 ml vial → % moisture

** frozen upon receipt

AJ 6-7-11

REVIEWED BY DATE 6/7/11

Voa Samples Frozen Upon Collection

JP0196

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

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

WCH-EE-011

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-107-076	Page 1 of 2

Collector: Q Stowe	Company Contact: Joan Kessner — Telephone No.: 509-375-4688	Project Coordinator: KESSNER, JH	Price Code: ~~8L~~ 88 — Data Turnaround: ~~21 Days~~ 7
Project Designation: 100-H Remaining Sites Burial Grounds - Soil Full Protocol	Sampling Location: 600-151 verification resampling	SAF No.: RC-107	
Ice Chest No.: AFS-04-121	Field Logbook No.: EL 1627-05 — COA: 0601512000	Method of Shipment: Government Vehicle/FedEx	
Shipped To: TestAmerica Incorporated, ~~Richland~~ Denver	Offsite Property No.: NA	Bill of Lading/Air Bill No.: 7948 3900 3184	

POSSIBLE SAMPLE HAZARDS/REMARKS

None

Special Handling and/or Storage

Cool 4 deg C

Preservation	None	Cool 4C	Cool 4C	Freeze	Cool 4C	Cool 4C	Cool 4C				
Type of Container	G/P	G/P	G	Gs*	aG	aG	aG				
No. of Container(s)	1	1	1	5	1	1	1				
Volume	60mL	60mL	120mL	40mL	120mL	120mL	120mL				
SAMPLE ANALYSIS	See item (1) in Special Instructions.	Chromium Hex - 7196	TPH-Diesel Range - WTPH-D +	VOA - 5035/8260 (TCL) * **	PCBs - 8082	PAHs - 8310	Pesticides - 8081				
Sample No. / Matrix * / Sample Date / Sample Time											
J1JDW8 / SOIL / 6/7/11 / 0830	X		X	X	X	X	X				
J1JDW9 / SOIL / 6/7/11 / 0835	X		X	X	X	X	X				
J1JDX0 / SOIL / 6/7/11 / 0855	X		X	X	X	X	X				
J1JDX1 / SOIL / 6/7/11 / 0910	X		X	X	X	X	X				
J1JDX2 / SOIL / 6/7/11 / 1040	X		X	X	X	X	X				

CHAIN OF POSSESSION — Sign/Print Names

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Quincy Stowe	6/7/11 1100	JV Fullar	6/7/11 1100
JV Fullar	6-7-11 1230	A. PORTER	6/7/11 1230
WCH A. PORTER	6/7/11 1315	Fed Ex	
			6/8/11 930

SPECIAL INSTRUCTIONS

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

* 20 ml vial → % moisture

** frozen upon receipt.

AJ 6-7-11

REVIEWED BY AJ DATE 6-7-11

Voa Samples Frozen Upon Collection

JP0196

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

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

WCH-EE-011

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-107-076	Page 2 of 2

Collector: Q Stowe	Company Contact: Joan Kessner	Telephone No.: 509-375-4688	Project Coordinator: KESSNER, JH
Price Code: ~~81~~ 8B	Data Turnaround: ~~21~~ 7 Days		
Project Designation: 100-H Remaining Sites Burial Grounds - Soil Full Protocol	Sampling Location: 600-151 verification resampling		SAF No.: RC-107
Ice Chest No.: AFS-04-121	Field Logbook No.: EL 1627-05	COA: 0601512000	Method of Shipment: Government Vehicle/FedEx
Shipped To: TestAmerica Incorporated, ~~Richland~~ Denver	Offsite Property No.: NA		Bill of Lading/Air Bill No.: 7948 3900 3184

POSSIBLE SAMPLE HAZARDS/REMARKS

None

Special Handling and/or Storage

Cool 4 deg C

Preservation	None	Cool 4C	Cool 4C	Freeze	Cool 4C	Cool 4C	Cool 4C			
Type of Container	G/P	G/P	G	Gs*	aG	aG	aG			
No. of Container(s)	1	1	1	5	1	1	1			
Volume	60mL	60mL	120mL	40mL	120mL	120mL	120mL			
SAMPLE ANALYSIS	See item (1) in Special Instructions.	Chromium Hex 7196	TPH-Diesel Range - WTPH-D +	VOA - 5035/8260 (TCL) * XX	PCBs - 8082	PAHs - 8310	Pesticides - 8081			

Sample No.	Matrix *	Sample Date	Sample Time										
J1JDX3	SOIL	6/7/11	0935	X		X	X	X	X	X			
J1JDX4	SOIL	6/7/11	0940	X		X	X	X	X	X			

CHAIN OF POSSESSION — Sign/Print Names

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Quincy Stowe	6/7/11 1100	JV Fullmer	6/7/11 1100
JV Fullmer	6-7-11 1230	A. PORTER	6/7/11 1230
A. PORTER	6/7/11 1315	Fed Ex	
			6/8/11 930

SPECIAL INSTRUCTIONS

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

* 20 mL vial → % moisture

XX freeze upon receipt AP 6/7/11

Voa Samples Frozen Upon Collection

REVIEWED BY DATE 6-7-11

JP0196

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

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

WCH-EE-011

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Project 28002142 -6010TR -Solid

Analytical Due:

Report Due: 6/15/11 (Rush 5 day TAT)

Sample Check-in List

Date/Time Received: 6/8/11 930 GM Screen Result 13 microR/hr

Client: Washington Closure Hanford SDG #: JP0196 NA[ ] SAF #: RC-107 NA [ ]

Job Number: 16674 Chain of Custody # RC-107-076, -078

Shipping Container ID: AFS-04-121, WCH-11-030 Air Bill # 7948 3900 3184, 7948 3900 3118

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? 5.6 mg 6/8/11 NA [ ] Yes [✓] No [ ]
4. Cooler Temperature °C: -0.3, ~~0.0~~ NA [ ] 5. Vermiculite/packing materials is NA [ ] Wet [ ] Dry [✓]
6. Number of samples in shipping container: 8
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: 6/8/11 930

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on ___ by ___ Person Contacted ___

[ ] No action necessary; process as is.

Project Manager [signature] Date 6/9/11

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: 07JUN11
ActWgt: 61.0 LB
CAD: 8897843/INET3130

Delivery Address Bar Code

Ref #
Invoice #
PO #
Dept #

SHIP TO: (303) 736-0100 BILL SENDER

Sample Recieving
Test America Denver
4955 YARROW ST

ARVADA, CO 80002

1 of 2

WED - 08 JUN A1
PRIORITY OVERNIGHT

TRK# 7948 3900 3184
0201

MASTER

XH WHHA

80002
CO-US
DEN

50DG1/0CB0/7EFB

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From: (509) 375-4840 Origin ID: PSCA
WCH MAILROOM
WASHINGTON CLOSURE HANFORD
2620 FERMI AVE

RICHLAND, WA 99354

FedEx. Express

J11151102250225

Ship Date: 07JUN11
ActWgt: 45.0 LB
CAD: 8897843/INET3130

Delivery Address Bar Code

Ref #
Invoice #
PO #
Dept #

SHIP TO: (303) 736-0100 BILL SENDER

Sample Recieving
Test America Denver
4955 YARROW ST

ARVADA, CO 80002

2 of 2

WED - 08 JUN A1
PRIORITY OVERNIGHT

MPS# 7948 3900 3118
0263
Mstr# 7948 3900 3184 0201

XH WHHA

80002
CO-US
DEN

50DG1/0CB0/7EFB

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