SAF-RC-189
100N Field Remediation – Soil Full Protocol
FINAL DATA PACKAGE

COMPLETE COPY OF DATA PACKAGE TO:

Kathy Wendt H4-21 KW 5/19/15
INITIAL/DATE

COMMENTS:

SDG JP0962 SAF RC-189

Rad only ☑ Chem only Rad & Chem

☑ Complete Partial

Sample Location: 100-N-96 (SPA, verification)

Analytical Data Package Prepared For

Washington Closure Hanford

Radiochemical Analysis By

TestAmerica Inc

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

Assigned Laboratory Code: TARL

Data Package Contains 33 *Pages*

Report No.: 65672

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.
JP0962	RC-189	J1V703	J5E040424-1	M6QL41AA	9M6QL410	5125016
		J1V704	J5E040424-2	M6QL51AA	9M6QL510	5125016
		J1V705	J5E040424-3	M6QL61AA	9M6QL610	5125016
		J1V706	J5E040424-4	M6QL71AA	9M6QL710	5125016
		J1V707	J5E040424-5	M6QL81AA	9M6QL810	5125016
		J1V708	J5E040424-6	M6QL91AA	9M6QL910	5125016
		J1V709	J5E040424-7	M6QMA1AA	9M6QMA10	5125016
		J1V710	J5E040424-8	M6QMC1AA	9M6QMC10	5125016
		J1V711	J5E040424-9	M6QMD1AA	9M6QMD10	5125016
		J1V712	J5E040424-10	M6QME1AA	9M6QME10	5125016
	RC-189	J1V713	J5E040424-11	M6QMF1AA	9M6QMF10	5125016
		J1V714	J5E040424-12	M6QMG1AA	9M6QMG10	5125016
		J1V715	J5E040424-13	M6QMH1AA	9M6QMH10	5125016

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

Washington Hanford Closure
2620 Fermi Avenue
Richland, WA 99354

May 8, 2015

Attention: Joan Kessner

SAF Number	:	RC-189
Date SDG Closed	:	May 4, 2015
Number of Samples	:	Thirteen (13)
Sample Type	:	Soil
SDG Number	:	JP0962
Data Deliverable	:	7-Day / Summary

CASE NARRATIVE

I. Introduction

On May 4, 2015, thirteen soil samples were received at TestAmerica for chemistry analysis. Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the Washington Closure Hanford (WCH) specific ID:

WCH ID#	TARL ID#	MATRIX	DATE OF RECEIPT
J1V703	M6QL4	SOIL	5/04/15
J1V704	M6QL5	SOIL	5/04/15
J1V705	M6QL6	SOIL	5/04/15
J1V706	M6QL7	SOIL	5/04/15
J1V707	M6QL8	SOIL	5/04/15
J1V708	M6QL9	SOIL	5/04/15
J1V709	M6QMA	SOIL	5/04/15
J1V710	M6QMC	SOIL	5/04/15
J1V711	M6QMD	SOIL	5/04/15
J1V712	M6QME	SOIL	5/04/15
J1V713	M6QMF	SOIL	5/04/15
J1V714	M6QMG	SOIL	5/04/15
J1V715	M6QMH	SOIL	5/04/15

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:
The LCS, batch blank, samples, sample duplicate (J1V703) and sample matrix spike (J1V703) results are within contractual requirements.

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

Reviewed and approved:

Rhonda Wagar
Project Manager

Drinking Water Method Cross References

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

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

Uncertainty Estimation

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

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

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

Report Definitions

Action Lev	An agreed upon activity level used to trigger some action when the final result is greater than or equal to the Action Level. Often the Action Level is related to the Decision Limit.
Batch	The QC preparation batch number that relates laboratory samples to QC samples that were prepared and analyzed together.
Bias	Defined by the equation (Result/Expected)-1 as defined by ANSI N13.30.
COC No	Chain of Custody Number assigned by the Client or TestAmerica.
Count Error (#s)	Poisson counting statistics of the gross sample count and background. The uncertainty is absolute and in the same units as the result. For Liquid Scintillation Counting (LSC) the batch blank count is the background.
CSU (#s) ***u_c Combined Standard Uncert.***	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 standard 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 Inc TARL

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

Date: 08-May-15

Report No. : 65672

SDG No: JP0962

Batch	Client Id Work Order	Parameter	Result +- CSU (2 s)	Qual	Units	Tracer Yield	MDL	CRDL	RPD
5125016	7196_CR6								
	J1V703								
	M6QL41AA	HEXCHROME	2.30E-01 +- 0.0E+00		mg/kg	N/A	1.55E-01	1.55E-01	
	M6QL41AD	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	39.0
	J1V704								
	M6QL51AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	J1V705								
	M6QL61AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	J1V706								
	M6QL71AA	HEXCHROME	1.91E-01 +- 0.0E+00		mg/kg	N/A	1.55E-01	1.55E-01	
	J1V707								
	M6QL81AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	J1V708								
	M6QL91AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	J1V709								
	M6QMA1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	J1V710								
	M6QMC1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	J1V711								
	M6QMD1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	J1V712								
	M6QME1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	J1V713								
	M6QMF1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	J1V714								
	M6QMG1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	
	J1V715								
	M6QMH1AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A	1.55E-01	1.55E-01	

No. of Results: 14

TestAmerica Inc

rptTALRchSaSummary2 V5.3.6.8 A2002

RPD - Relative Percent Difference.

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

QC Results Summary

Date: 08-May-15

TestAmerica Inc TARL

Ordered by Method, Batch No, QC Type,.

Report No. : 65672

SDG No.: JP0962

Batch Work Order	Parameter	Result +- CSU (2 s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDL
7196_CR6								
5125016 MATRIX SPIKE, J1V703								
M6QL41AC	HEXCHROME	2.67E+01 +- 0.0E+00		mg/kg	N/A	88%	-0.1	1.55E-01
5125016 LCS,								
M6QM21AC	HEXCHROME	1.97E+01 +- 0.0E+00		mg/kg	N/A	98%	0.0	1.55E-01
5125016 BLANK QC,								
M6QM21AA	HEXCHROME	1.55E-01 +- 0.0E+00	U	mg/kg	N/A			1.55E-01

No. of Results: 3

TestAmerica Inc
rptSTLRchQcSummary V5.3.6.8
A2002

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

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

FORM I

SAMPLE RESULTS

Date: 08-May-15

Lab Name:	**TestAmerica Inc**	**SDG:**	JP0962	**Collection Date:**	4/30/2015 11:48:00 AM
Lot-Sample No.:	**J5E040424-1**	**Report No. :**	65672	**Received Date:**	5/4/2015 2:45:00 PM
Client Sample ID:	**J1V703**	**COC No. :**	RC-189-312	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5125016	7196_CR6			**Work Order:**	M6QL41AA		**Report DB ID:**	9M6QL410				
HEXCHROME	**2.30E-01**			0.0E+00	1.55E-01	mg/kg	N/A	*(1.5)*	5/6/15 04:07 p		2.5054	
							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, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 08-May-15

Lab Name:	**TestAmerica Inc**	**SDG:**	JP0962	**Collection Date:**	4/30/2015 11:42:00 AM
Lot-Sample No.:	**J5E040424-2**	**Report No. :**	65672	**Received Date:**	5/4/2015 2:45:00 PM
Client Sample ID:	**J1V704**	**COC No. :**	RC-189-312	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5125016	7196_CR6			**Work Order:**	M6QL51AA		**Report DB ID:**	9M6QL510				
HEXCHROME	**1.55E-01**	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	5/6/15 04:07 p		2.5144	
							1.55E-01	*N/A*			g	

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

TestAmerica Inc
rptSTLRchSample
V5.3.6.8 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, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 08-May-15

Lab Name:	**TestAmerica Inc**	**SDG:**	JP0962	**Collection Date:**	4/30/2015 11:36:00 AM
Lot-Sample No.:	**J5E040424-3**	**Report No. :**	65672	**Received Date:**	5/4/2015 2:45:00 PM
Client Sample ID:	**J1V705**	**COC No. :**	RC-189-312	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5125016	7196_CR6			**Work Order:**	M6QL61AA		**Report DB ID:**	9M6QL610				
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	5/6/15 04:07 p		2.5018	
							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, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 08-May-15

Lab Name:	**TestAmerica Inc**	**SDG:**	JP0962	**Collection Date:**	4/30/2015 11:30:00 AM
Lot-Sample No.:	**J5E040424-4**	**Report No. :**	65672	**Received Date:**	5/4/2015 2:45:00 PM
Client Sample ID:	**J1V706**	**COC No. :**	RC-189-312	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5125016	7196_CR6			**Work Order:**	M6QL71AA		**Report DB ID:**	9M6QL710				
HEXCHROME	1.91E-01			0.0E+00	1.55E-01	mg/kg	N/A	*(1.2)*	5/6/15 04:07 p		2.5008	
							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, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 08-May-15

Lab Name:	TestAmerica Inc	**SDG:**	JP0962	**Collection Date:**	4/30/2015 10:08:00 AM
Lot-Sample No.:	J5E040424-5	**Report No. :**	65672	**Received Date:**	5/4/2015 2:45:00 PM
Client Sample ID:	J1V707	**COC No. :**	RC-189-312	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5125016	7196_CR6			**Work Order:**	M6QL81AA		**Report DB ID:**	9M6QL810				
HEXCHROME	**1.55E-01**	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	5/6/15 04:07 p		2.5015	
							1.55E-01	*N/A*			g	

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

TestAmerica Inc
rptSTLRchSample
V5.3.6.8 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, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 08-May-15

Lab Name:	TestAmerica Inc	**SDG:**	JP0962	**Collection Date:**	4/30/2015 10:00:00 AM
Lot-Sample No.:	J5E040424-6	**Report No. :**	65672	**Received Date:**	5/4/2015 2:45:00 PM
Client Sample ID:	J1V708	**COC No. :**	RC-189-312	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5125016	7196_CR6			**Work Order:** M6QL91AA			**Report DB ID:** 9M6QL910					
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	5/6/15 04:07 p		2.5034	
							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, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 08-May-15

Lab Name:	TestAmerica Inc	**SDG:**	JP0962	**Collection Date:**	4/30/2015 9:39:00 AM
Lot-Sample No.:	J5E040424-7	**Report No. :**	65672	**Received Date:**	5/4/2015 2:45:00 PM
Client Sample ID:	J1V709	**COC No. :**	RC-189-312	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5125016	7196_CR6			**Work Order:**	M6QMA1AA		**Report DB ID:**	9M6QMA10				
HEXCHROME	**1.55E-01**	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	5/6/15 04:07 p		2.5076	
							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, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 08-May-15

Lab Name:	**TestAmerica Inc**	**SDG:**	JP0962	**Collection Date:**	4/30/2015 9:54:00 AM
Lot-Sample No.:	**J5E040424-8**	**Report No. :**	65672	**Received Date:**	5/4/2015 2:45:00 PM
Client Sample ID:	**J1V710**	**COC No. :**	RC-189-312	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5125016	7196_CR6			**Work Order:**	M6QMC1AA		**Report DB ID:**	9M6QMC10				
HEXCHROME	**1.55E-01**	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	5/6/15 04:07 p		2.5032	
							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, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 08-May-15

Lab Name:	**TestAmerica Inc**	**SDG:**	JP0962	**Collection Date:**	4/30/2015 9:48:00 AM
Lot-Sample No.:	**J5E040424-9**	**Report No. :**	65672	**Received Date:**	5/4/2015 2:45:00 PM
Client Sample ID:	**J1V711**	**COC No. :**	RC-189-312	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5125016	7196_CR6			**Work Order:**	M6QMD1AA		**Report DB ID:**	9M6QMD10				
HEXCHROME	**1.55E-01**	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	5/6/15 04:07 p		2.5072	
							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, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 08-May-15

Lab Name:	**TestAmerica Inc**	**SDG:**	JP0962	**Collection Date:**	4/30/2015 9:33:00 AM
Lot-Sample No.:	**J5E040424-10**	**Report No. :**	65672	**Received Date:**	5/4/2015 2:45:00 PM
Client Sample ID:	**J1V712**	**COC No. :**	RC-189-312	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5125016	7196_CR6			**Work Order:**	M6QME1AA		**Report DB ID:**	9M6QME10				
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	5/6/15 04:07 p		2.5044	
							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, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 08-May-15

Lab Name:	TestAmerica Inc	**SDG:**	JP0962	**Collection Date:**	4/30/2015 9:25:00 AM
Lot-Sample No.:	J5E040424-11	**Report No. :**	65672	**Received Date:**	5/4/2015 2:45:00 PM
Client Sample ID:	J1V713	**COC No. :**	RC-189-312	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5125016	7196_CR6			**Work Order:**	M6QMF1AA		**Report DB ID:**	9M6QMF10				
HEXCHROME	**1.55E-01**	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	5/6/15 04:07 p		2.5005	
							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, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 08-May-15

Lab Name:	TestAmerica Inc	**SDG:**	JP0962	**Collection Date:**	4/30/2015 9:13:00 AM
Lot-Sample No.:	J5E040424-12	**Report No. :**	65672	**Received Date:**	5/4/2015 2:45:00 PM
Client Sample ID:	J1V714	**COC No. :**	RC-189-312	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5125016	7196_CR6			**Work Order:**	M6QMG1AA		**Report DB ID:**	9M6QMG10				
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	5/6/15 04:07 p		2.5074	
							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, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 08-May-15

Lab Name:	**TestAmerica Inc**	**SDG:**	JP0962	**Collection Date:**	4/30/2015 9:13:00 AM
Lot-Sample No.:	**J5E040424-13**	**Report No. :**	65672	**Received Date:**	5/4/2015 2:45:00 PM
Client Sample ID:	**J1V715**	**COC No. :**	RC-189-312	**Matrix:**	SOIL

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5125016	7196_CR6			**Work Order:**	M6QMH1AA		**Report DB ID:**	9M6QMH10				
HEXCHROME	**1.55E-01**	U		0.0E+00	1.55E-01	mg/kg	N/A	*1.*	5/6/15 04:07 p		2.5004	
							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, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM II

Date: 08-May-15

DUPLICATE RESULTS

Lab Name:	TestAmerica Inc	**SDG:**	JP0962	**Collection Date:**	4/30/2015 11:48:00 AM
Lot-Sample No.:	J5E040424-1	**Report No. :**	65672	**Received Date:**	5/4/2015 2:45:00 PM
Client Sample ID:	J1V703	**COC No. :**	RC-189-312	**Matrix:**	SOIL

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	CSU (2 s)	MDL, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5125016	7196_CR6			**Work Order:** M6QL41AD		**Report DB ID:** M6QL41ER			**Orig Sa DB ID:** 9M6QL410			
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	1.	5/6/15 04:07 p		2.5021	
	2.30E-01		**RPD**	**39.0**		1.55E-01		N/A			g	

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

TestAmerica Inc
rptSTLRchDupV5.
3.6.8 A2002

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

FORM II

BLANK RESULTS

Date: 08-May-15

Lab Name: TestAmerica Inc

Matrix: SOIL

SDG: JP0962

Report No. : 65672

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL, Lc	Rpt Unit, CRDL	Yield	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 5125016	7196_CR6			**Work Order:**	M6QM21AA	**Report DB ID:**	M6QM21AB					
HEXCHROME	1.55E-01	U		0.0E+00	1.55E-01	mg/kg	N/A	1.	5/6/15 04:07 p		2.5	
						1.55E-01		N/A			g	

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

TestAmerica Inc
rptSTLRchBlank
V5.3.6.8 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, Mdc/Mda/Mdl, Total Uncert, RDL or not identified by gamma scan software.

FORM II

LCS RESULTS

Date: 08-May-15

Lab Name: TestAmerica Inc

Matrix: SOIL

SDG: JP0962

Report No. : 65672

Parameter	Result	Qual	Count Error (2 s)	CSU (2 s)	MDL	Report Unit	Yield	Expected	Expected Uncert	Recovery, Bias	Analysis, Prep Date	Aliquot Size	Primary Detector
Batch: 5125016	7196_CR6			**Work Order:**	M6QM21AC		**Report DB ID:**	M6QM21AS					
HEXCHROME	1.97E+01			0.0E+00	1.55E-01	mg/kg	N/A	2.00E+01		98%	5/6/15 04:07 p	2.5	
							Rec Limits:	80	120	0.0		g	

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

FORM II

MATRIX SPIKE RESULTS

Date: 08-May-15

Lab Name: TestAmerica Inc **SDG:** JP0962

Lot-Sample No.: J5E040424-1, J1V703 **Report No. :** 65672 **Matrix:** SOIL

Parameter	SpikeResult, Orig Rst	Qual	Count Error (2 s)	CSU (2 s)	MDC|MDA	Rpt Unit	Yield	Rec-overy	Expected, Uncert	Analysis, Prep Date	Aliquot Size	Analy Method, Primary Detector
Batch: 5125016	**Work Order:** M6QL41AC			**Report DB ID:** M6QL41CW			**Orig Sa DB ID:** 9M6QL410					
HEXCHROME	2.67E+01			0.0E+00	1.55E-01	mg/kg	N/A	87.71%	3.04E+01	5/6/15 04:07 p	2.5089	7196_CR6
	2.30E-01										g	

Number of Results: 1

Comments:

TestAmerica Inc
rptSTLRchMs
V5.3.6.8 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):	5125016	Lab Sample Numbers or SDG:	JP0962

Method/Test/Parameter: Cr+6 ☐ RL-WC-008(Aqueous) ☐ RL-WC-003(Aqueous) ☒ RL-WC-004(Solid)

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 greater than 0.97?	✓			✓
3. Initial calibration verification (ICV) analyzed immediately after calibration and results within 10% of expected?	✓			✓
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 10% of expected?	✓			✓
2. CCB analyzed at required frequency and all results ≤ reporting limit?	✓			✓
C. Sample Analysis 1. Were any samples with concentrations above the linear range diluted and reanalyzed?			✓	✓
2. Were all sample holding times met?	✓			✓
D. QC Samples 1. All results for the preparation blank below limits?	✓			✓
2. LCS percent recovery within 85-115%	✓			✓
3. $PbCrO_4$ percent recovery within 75-125%?	✓			✓
4. Sample and Duplicate within 20% (aqueous) or 35% (solid) RPD?		✓		✓
5. MS or MS/MSD recoveries within 85-115% (aqueous) or 75-125% (solid)?	✓			✓
6. On MS failure, PDMS within 85-115%?			✓	✓
E. Other 1. Are all nonconformances included and noted?	✓ RW 5/8/15		✓	✓
2. Is the correct date and time of analysis shown?	✓			✓
3. Did the analyst sign and date the front page of the analytical run?	✓			✓
4. Correct methodology used?	✓			✓
5. Transcriptions checked?	✓			✓
6. Calculations checked at minimum frequency?	✓			✓
7. Units checked?	✓			✓

Comments on any "No" response or list NCM number: ~~10-30748~~ RW 5/8/15

Analyst Andrew Carney Date 5/7/15 2nd Review [illegible] Date 5/7/15

CG-231 Rev 2 10/14

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-189-312

Collector: STOWE, QG	Company Contact: Joan Kessner	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Price Code: 8B	Data Turnaround: 7 days		
Project Designation: 100N Field Remediation	Sampling Location: 100-N-96 (SPA, verification)		SAF No.: RC-189
Ice Chest No.: SML-159	Field Logbook No.: EL-1652-12	COA: 000N962000	Method of Shipment: Local Delivery
Shipped To: TestAmerica Richland	Offsite Property No.: N/A		Bill of Lading/Air Bill No.: N/A

Other Labs Shipped To: TestAmerica Denver

POSSIBLE SAMPLE HAZARDS/REMARKS

N/A

Special Handling and/or Storage

cooling as required

Preservation	Cool 4C										
Type of Container	G/P										
No. of Container(s)	1										
Volume	125mL										
Sample Analysis	Chromium Hex - 7196										

Sample No.	Matrix	Sample Date	Sample Time									
J1V703 M6QL4	SOIL	4/30/15	1148	X								
J1V704 M6QL5	SOIL	4/30/15	1142	X								
J1V705 M6QL6	SOIL	4/30/15	1136	X								
J1V706 M6QL7	SOIL	4/30/15	1130	X								
J1V707 M6QL8	SOIL	4/30/15	1008	X								

CHAIN OF POSSESSION — Sign/Print Names

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Quincy Stowe	1222 4-30-15	C. Martinez/C. Martinez	1222 4/30/15
C. Martinez/C. Martinez	1540 4/30/15	C. Bingham	1540 4-30-15
C. Bingham	1615 4-30-15	1060 Battelle, Frisse #3C	1615 4-30-15
1060 Battelle, Frisse #3C	0730 5-4-15	C. Bingham	0730 5-4-15
C. Bingham N/CH	1445 5-4-15	J. Friesz, TARL	1445 5/4/15

FINAL SAMPLE DISPOSITION: Disposal Method | Disposed By | Date/Time

SPECIAL INSTRUCTIONS

J5E040424

Due 5-11-15

J5E040424

SDG:

JP0962

REVIEWED BY Kwood Vaeman DATE 5-4-15

WCH-EE-011

Washington Closure Hanford — CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-189-312

Collector: STOWE, QG	Company Contact: Joan Kessner	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Price Code: 8B	Data Turnaround: 7 days		
Project Designation: 100N Field Remediation	Sampling Location: 100-N-96 (SPA, verification)		SAF No.: RC-189
Ice Chest No.: SML-159	Field Logbook No.: EL-1652-12	COA: 000N962000	Method of Shipment: Local Delivery
Shipped To: TestAmerica Richland	Offsite Property No.: n/A		Bill of Lading/Air Bill No.: n/A

Other Labs Shipped To: TestAmerica Denver

POSSIBLE SAMPLE HAZARDS/REMARKS: N/A

Special Handling and/or Storage: cooling as required

Preservation	Cool 4C										
Type of Container	G/P										
No. of Container(s)	1										
Volume	125mL										
Sample Analysis	Chromium Hex - 7196										

Sample No.	Matrix	Sample Date	Sample Time	Chromium Hex - 7196
J1V708 M6QL9	SOIL	4/30/15	1000	X
J1V709 M6QMA	SOIL	4/30/15	0939	X
J1V710 M6QMC	SOIL	4/30/15	0954	X
J1V711 M6QMD	SOIL	4/30/15	0948	X
J1V712 M6QME	SOIL	4/30/15	0933	X

CHAIN OF POSSESSION — Sign/Print Names

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Quincy Stowe	4-30-15 1222	C Martinez/C Martinez	4/30/15 1222
C Martinez/C Martinez	4/30/15 1540	E Bingham	4-30-15 1540
E Bingham	4-30-15 1615	1060 Battelle, Fridge #3C	4-30-15 1615
1060 Battelle, Fridge #3C	5-4-15 0730	E Bingham	5-4-15 0730
E Bingham WCH	5-4-15 1445	J. Friesz, TARL	5/4/15 1445

FINAL SAMPLE DISPOSITION — Disposal Method: | Disposed By: | Date/Time:

SPECIAL INSTRUCTIONS

JSE040424
Due 5-11-15

REVIEWED BY K.Wood Vlaeman DATE 5-4-15

JP0962

Washington Closure Hanford — CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-189-312

Collector: STOWE, QG	Company Contact: Joan Kessner	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Price Code: 8B	Data Turnaround: 7 days		
Project Designation: 100N Field Remediation	Sampling Location: 100-N-96 (SPA, verification)		SAF No.: RC-189
Ice Chest No.: SML-159	Field Logbook No.: EL-1652-12	COA: 000N962000	Method of Shipment: Local Delivery
Shipped To: TestAmerica Richland	Offsite Property No.: n/A		Bill of Lading/Air Bill No.: n/A

Other Labs Shipped To: TestAmerica Denver

POSSIBLE SAMPLE HAZARDS/REMARKS
N/A

Special Handling and/or Storage
cooling as required

Preservation	Cool 4C										
Type of Container	G/P										
No. of Container(s)	1										
Volume	125mL										
Sample Analysis	Chromium Hex - 7196										

Sample No.	Matrix	Sample Date	Sample Time										
J1V713 M6QMF	SOIL	4/30/15	0925	X									
J1V714 M6QM6	SOIL	4/30/15	0913	X									
J1V715 M6QMH	SOIL	4/30/15	0913	X									
~~J1V716~~ ~~4/30/15~~	~~SOIL~~	n/A	n/A	n/A									

CHAIN OF POSSESSION	Sign/Print Names
Relinquished By/Removed From: Quincy Stowe — Date/Time: 1222 4-30-15	Received By/Stored In: C Martinez/C Martinez — Date/Time: 1222 4/30/15
Relinquished By/Removed From: C Martinez/C. Martinez — Date/Time: 1540 4/30/15	Received By/Stored In: G Bingham — Date/Time: 1540 4-30-15
Relinquished By/Removed From: G Bingham — Date/Time: 1615 4-30-15	Received By/Stored In: 1060 Battelle, Fridge #3C — Date/Time: 1615 4-30-15
Relinquished By/Removed From: 1060 Battelle, Fridge #3C — Date/Time: 0730 5-4-15	Received By/Stored In: G Bingham — Date/Time: 0730 5-4-15
Relinquished By/Removed From: G Bingham WCH — Date/Time: 1445 5-4-15	Received By/Stored In: J. Friesz, TARL — Date/Time: 1445 5/4/15
Relinquished By/Removed From: — Date/Time:	Received By/Stored In: — Date/Time:
Relinquished By/Removed From: — Date/Time:	Received By/Stored In: — Date/Time:

FINAL SAMPLE DISPOSITION — Disposal Method: — Disposed By: — Date/Time:

SPECIAL INSTRUCTIONS

JS E040424
Due 5-11-15

REVIEWED BY Kwood Vineman DATE 5-4-15

JP0962

WCH-EE-011

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 5/4/15 1445 Container GM Screen Result: (Airlock) 60 cpm Initials[JF]
Sample GM Screen Result (Sample Receiving) 20 cpm Initials[JF]

Client: WCH SDG #: JP0962 SAF #: RC-189 NA [ ]

Lot Number: JSE040424

Chain of Custody # RC-189-312

Shipping Container ID or Air Bill Number : _____ NA [B]

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

1. Custody Seals on shipping container intact? Yes [JF] No [ ] No Custody Seal [ ]
2. Custody Seals dated and signed? Yes [JF] No [ ] No Custody Seal [ ]
3. Cooler temperature: 10.8 °C w ICE NA [ ]
4. Vermiculite/packing materials is NA [JF] Wet [ ] Dry [ ]

Item 5 through 16 for samples. Initial appropriate response.

5. Chain of Custody record present? Yes [JF] No [ ]
6. Number of samples received (Each sample may contain multiple bottles): 13
7. Containers received: 13 x 125 mL
8. Sample holding times exceeded? NA [ ] Yes [ ] No [JF]
9. Samples have: ____tape ____hazard labels JF custody seals JF appropriate sample labels
10. Matrix: B A (FLT, Wipe, Solid, Soil) ____I (Water) ____S (Air, Niosh 7400) ____T (Biological, Ni-63)
11. Samples:
    JF are in good condition ____are leaking ____are broken
    ____have air bubbles (Only for samples requiring no head space) ____Other _____
12. Sample pH appropriate for analysis requested Yes [ ] No [ ] NA [B]
    (If acidification is necessary go to pH area & document sample ID, initial pH, amount of HNO_3 added and pH after addition on table)
13. Were any anomalies identified in sample receipt? Yes [ ] No [JF]
14. Description of anomalies (include sample numbers): NA [JF] _____
15. Sample Location, Sample Collector Listed on COC? * Yes [ ] No [JF]
    *For documentation only. No corrective action needed.
16. Additional Information: N/A

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

Sample Check-in List completed by Sample Custodian:
Signature: _____ Date: JF 5/4/15 5/4/15

Client Notification needed? Yes [ ] No [X] Date: _____
By: _____
Person contacted: _____

[X] No action necessary, process as is

Project Manager _____ Date 5/5/15

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5/5/2015 8:16:32 AM

Sample Preparation/Analysis

Balance Id:,,

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

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

Pipet #: _____

AnalyDueDate: 05/11/2015

Sep1 DT/Tm Tech:

Batch: 5125016 SOIL mg/kg PM, Quote: RW2, 27038

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech:

Work Ord, Lot, Sample Date	Total Amt/Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 M6QL4-1-AA													
J5E040424-1-SAMP													
04/30/2015 11:48			AmtRec: 1X125MLP		#Containers: 1				Scr:		Alpha:		Beta:
2 M6QL4-1-AC-S													
J5E040424-1-MS													
04/30/2015 11:48			AmtRec: 1X125MLP		#Containers: 1				Scr:		Alpha:		Beta:
3 M6QL4-1-AD-X													
J5E040424-1-DUP													
04/30/2015 11:48			AmtRec: 1X125MLP		#Containers: 1				Scr:		Alpha:		Beta:
4 M6QL4-1-AE-S													
J5E040424-1-MS													
04/30/2015 11:48			AmtRec: 1X125MLP		#Containers: 1				Scr:		Alpha:		Beta:
5 M6QL5-1-AA													
J5E040424-2-SAMP													
04/30/2015 11:42			AmtRec: 1X125MLP		#Containers: 1				Scr:		Alpha:		Beta:
6 M6QL6-1-AA													
J5E040424-3-SAMP													
04/30/2015 11:36			AmtRec: 1X125MLP		#Containers: 1				Scr:		Alpha:		Beta:
7 M6QL7-1-AA													
J5E040424-4-SAMP													
04/30/2015 11:30			AmtRec: 1X125MLP		#Containers: 1				Scr:		Alpha:		Beta:

5/5/2015 8:16:33 AM

Sample Preparation/Analysis

Balance Id:,,

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

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

Pipet #: _____

AnalyDueDate: 05/11/2015

Sep1 DT/Tm Tech:

Batch: 5125016 SOIL mg/kg PM, Quote: RW2, 27038

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech:

Work Ord, Lot, Sample Date	Total Amt/Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 M6QL8-1-AA J5E040424-5-SAMP 04/30/2015 10:08			AmtRec: 1X125MLP		#Containers: 1				Scr:		Alpha:		Beta:
9 M6QL9-1-AA J5E040424-6-SAMP 04/30/2015 10:00			AmtRec: 1X125MLP		#Containers: 1				Scr:		Alpha:		Beta:
10 M6QMA-1-AA J5E040424-7-SAMP 04/30/2015 09:39			AmtRec: 1X125MLP		#Containers: 1				Scr:		Alpha:		Beta:
11 M6QMC-1-AA J5E040424-8-SAMP 04/30/2015 09:54			AmtRec: 1X125MLP		#Containers: 1				Scr:		Alpha:		Beta:
12 M6QMD-1-AA J5E040424-9-SAMP 04/30/2015 09:48			AmtRec: 1X125MLP		#Containers: 1				Scr:		Alpha:		Beta:
13 M6QME-1-AA J5E040424-10-SAMP 04/30/2015 09:33			AmtRec: 1X125MLP		#Containers: 1				Scr:		Alpha:		Beta:
14 M6QMF-1-AA J5E040424-11-SAMP 04/30/2015 09:25			AmtRec: 1X125MLP		#Containers: 1				Scr:		Alpha:		Beta:

TestAmerica Richland Wa.

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 2
pd - Prep Dt, dc - Date Chg, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ISV - Insufficient Volume for Analysis

WO Cnt: **14**
ICOC v4.9.0

5/5/2015 8:16:34 AM

Sample Preparation/Analysis

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

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

Balance Id:,,

Pipet #: _____

AnalyDueDate: 05/11/2015

Sep1 DT/Tm Tech:

Batch: 5125016 SOIL mg/kg
SEQ Batch, Test: None

PM, Quote: RW2, 27038

Sep2 DT/Tm Tech:

Prep Tech:

Work Ord, Lot, Sample Date	Total Amt/Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
15 M6QMG-1-AA													
J5E040424-12-SAMP													
04/30/2015 09:13			AmtRec: 1X125MLP		#Containers: 1				Scr:		Alpha:		Beta:
16 M6QMH-1-AA													
J5E040424-13-SAMP													
04/30/2015 09:13			AmtRec: 1X125MLP		#Containers: 1				Scr:		Alpha:		Beta:
17 M6QM2-1-AA-B													
J5E050000-16-BLK													
05/05/2015 08:16 pd			AmtRec:		#Containers: 1				Scr:		Alpha:		Beta:
18 M6QM2-1-AC-C													
J5E050000-16-LCS													
05/05/2015 08:16 pd			AmtRec:		#Containers: 1				Scr:		Alpha:		Beta:

5/5/2015 8:16:35 AM

Sample Preparation/Analysis

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

Balance Id:,,

Pipet #: _____

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech:

AnalyDueDate: 05/11/2015

Batch: 5125016 **mg/kg**
SEQ Batch, Test: None

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

Comments:

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

M6QL41AA-SAMP Constituent List:
HEXCHROME RDL:.1548 mg/kg LCL:80 UCL:120 RPD:20 HXCR RDL:.1548 mg/kg LCL:80 UCL:120 RPD:20

M6QL41AC-MS Constituent List:

M6QL41AE-MS:

M6QM21AA-BLK:

M6QM21AC-LCS:

M6QL41AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
M6QL41AC-MS Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
M6QL41AE-MS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
M6QM21AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
M6QM21AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

ANALYTICAL REPORT

Job Number: 280-68747-1

SDG Number: JP0962

Job Description: SAF# RC-189

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

Attention: Joan H Kessner

Approved for release.
Kae E Yoder
Senior Project Manager
5/14/2015 11:59 AM

Kae E Yoder, Senior Project Manager
4955 Yarrow Street, Arvada, CO, 80002
(303)736-0190
kae.yoder@testamericainc.com
05/14/2015

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 4025.

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

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CASE NARRATIVE

Client: Washington Closure Hanford

Project: WASHINGTON CLOSURE HANFORD

Job Number: 280-68747-1

SDG #: JP0962
SAF#: RC-189

Date SDG Closed: May 5, 2015
Data Deliverable: 7 Day / Summary

CLIENT ID	LAB ID	ANALYSES REQUESTED	ANALYSES PERFORMED
J1V703	280-68747-1	6010/7471/8082/8310/WTPH-D+/5035-8260	6010B/7471A/8082/8310/NWTPH-Dx/5035-8260B
J1V704	280-68747-2	6010/7471/8082/8310/WTPH-D+/5035-8260	6010B/7471A/8082/8310/NWTPH-Dx/5035-8260B
J1V705	280-68747-3	6010/7471/8082/8310/WTPH-D+/5035-8260	6010B/7471A/8082/8310/NWTPH-Dx/5035-8260B
J1V706	280-68747-4	6010/7471/8082/8310/WTPH-D+/5035-8260	6010B/7471A/8082/8310/NWTPH-Dx/5035-8260B
J1V707	280-68747-5	6010/7471/8082/8310/WTPH-D+/5035-8260	6010B/7471A/8082/8310/NWTPH-Dx/5035-8260B
J1V708	280-68747-6	6010/7471/8082/8310/WTPH-D+/5035-8260	6010B/7471A/8082/8310/NWTPH-Dx/5035-8260B
J1V709	280-68747-7	6010/7471/8082/8310/WTPH-D+/5035-8260	6010B/7471A/8082/8310/NWTPH-Dx/5035-8260B
J1V710	280-68747-8	6010/7471/8082/8310/WTPH-D+/5035-8260	6010B/7471A/8082/8310/NWTPH-Dx/5035-8260B
J1V711	280-68747-9	6010/7471/8082/8310/WTPH-D+/5035-8260	6010B/7471A/8082/8310/NWTPH-Dx/5035-8260B
J1V712	280-68747-10	6010/7471/8082/8310/WTPH-D+/5035-8260	6010B/7471A/8082/8310/NWTPH-Dx/5035-8260B
J1V713	280-68747-11	6010/7471/8082/8310/WTPH-D+/5035-8260	6010B/7471A/8082/8310/NWTPH-Dx/5035-8260B
J1V714	280-68747-12	6010/7471/8082/8310/WTPH-D+/5035-8260	6010B/7471A/8082/8310/NWTPH-Dx/5035-8260B
J1V715	280-68747-13	6010/7471/8082/8310/WTPH-D+/5035-8260	6010B/7471A/8082/8310/NWTPH-Dx/5035-8260B
J1V716	280-68747-14	6010/7471/8310/5035-8260	6010B/7471A/8310/5035-8260B
J1V717	280-68747-15	5035-8260	5035-8260B

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 5/5/2015 10:05 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 2.3º C, 4.3º C, 4.3º C and 5.8º C.

The Chain of Custody indicates "VOA samples frozen upon collection", and it can be noted that the 5035/8260B VOA samples were placed in the freezer upon receipt at the laboratory. The client was notified on 5/6/2015.

GC/MS VOLATILES - SW846 8260B
Low levels of Acetone, a common laboratory contaminant, are present in the method blank associated with batch 280-276647. Because the concentration in the method blank is not present at a level greater than the reporting limit, corrective action is deemed unnecessary. Associated sample results present above the MDL and/or RL have been flagged with a "B".

No other anomalies were encountered.

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

GC SEMIVOLATILES - NWTPH-Dx - DRO
No anomalies were encountered.

HPLC - SW846 8310 - PAHs
No anomalies were encountered.

TOTAL METALS - SW846 6010B/7471A
Serial dilution of a digestate in batch 280-276082 indicates that physical and chemical interferences are present for Cobalt. Results have been flagged with an “X”.

Low levels of Barium, Calcium and Magnesium are present in the method blank associated with batch 280-276082. Because the concentrations in the method blank are not present at levels greater than half the reporting limit, corrective action is deemed unnecessary.

It can be noted that the sample amount was greater than four times the spike amount for Aluminum, Iron and Manganese in the Matrix Spike performed on sample J1V703; therefore, control limits are not applicable.

The Matrix Spike performed on sample J1V703 exhibited percent recoveries outside the control limits for Silicon and Mercury, and the associated sample results have been flagged “N”. There is no indication that the analytical systems were 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: 280-68747-1
Sdg Number: JP0962

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
	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.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
HPLC/IC		
	U	Analyzed for but not detected.
Metals		
	U	Analyzed for but not detected.
	B	Estimated result. Result is less than the RL, but greater than MDL
	4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
	N	Recovery exceeds upper or lower control limits
	X	Serial dilution in the analytical batch indicates that physical and chemical interferences are present.
	C	The analyte was detected in both the sample and the assoicated QC blank, and the sample concentration was </= 5X the blank concentration.
General Chemistry		
	U	Analyzed for but not detected.

SAMPLE SUMMARY

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-68747-1	J1V703	Solid	04/30/2015 1148	05/05/2015 1005
280-68747-2	J1V704	Solid	04/30/2015 1142	05/05/2015 1005
280-68747-3	J1V705	Solid	04/30/2015 1136	05/05/2015 1005
280-68747-4	J1V706	Solid	04/30/2015 1130	05/05/2015 1005
280-68747-5	J1V707	Solid	04/30/2015 1008	05/05/2015 1005
280-68747-6	J1V708	Solid	04/30/2015 1000	05/05/2015 1005
280-68747-7	J1V709	Solid	04/30/2015 0939	05/05/2015 1005
280-68747-8	J1V710	Solid	04/30/2015 0954	05/05/2015 1005
280-68747-9	J1V711	Solid	04/30/2015 0948	05/05/2015 1005
280-68747-10	J1V712	Solid	04/30/2015 0933	05/05/2015 1005
280-68747-11	J1V713	Solid	04/30/2015 0925	05/05/2015 1005
280-68747-12	J1V714	Solid	04/30/2015 0913	05/05/2015 1005
280-68747-13	J1V715	Solid	04/30/2015 0913	05/05/2015 1005
280-68747-14	J1V716	Solid	04/30/2015 0904	05/05/2015 1005
280-68747-15	J1V717	Solid	04/30/2015 0908	05/05/2015 1005

METHOD SUMMARY

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

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
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: 280-68747-1
Sdg Number: JP0962

Method	Analyst	Analyst ID
SW846 8260B	Meier, Greg P	GPM
SW846 8082	Jackson, Todd D	TDJ
NWTPH NWTPH-Dx	Moore, Tegan E	TEM
SW846 6010B	Rhoades, Chris R	CRR
SW846 7471A	Whyte, Whitney A	WAW
ASTM D-2216	Lawrence, Caitlyn M	CML
SW846 8310	Fiedler, Heather K	HKF

SAMPLE RESULTS

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: J1V703

Lab Sample ID: 280-68747-1
Client Matrix: Solid
% Moisture: 0.7

Date Sampled: 04/30/2015 1148
Date Received: 05/05/2015 1005

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276597	Instrument ID:	VMS_J
Prep Method:	5035	Prep Batch:	280-276647	Lab File ID:	J6602.D
Dilution:	1.0			Initial Weight/Volume:	3.939 g
Analysis Date:	05/08/2015 1144			Final Weight/Volume:	5 mL
Prep Date:	04/30/2015 1148				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		8.3	J B	6.9	26
Benzene		0.60	U	0.60	6.4
Bromodichloromethane		0.28	U	0.28	6.4
Bromoform		0.29	U	0.29	6.4
Bromomethane		0.64	U	0.64	13
2-Butanone (MEK)		2.3	U	2.3	13
Carbon disulfide		0.54	U	0.54	6.4
Carbon tetrachloride		0.81	U	0.81	6.4
Chlorobenzene		0.69	U	0.69	6.4
Dibromochloromethane		0.73	U	0.73	6.4
Chloroethane		1.1	U	1.1	13
Chloroform		0.37	U	0.37	6.4
Chloromethane		0.98	U	0.98	13
1,1-Dichloroethane		0.27	U	0.27	6.4
1,2-Dichloroethane		0.89	U	0.89	6.4
1,1-Dichloroethene		0.75	U	0.75	6.4
1,2-Dichloroethene, Total		0.50	U	0.50	6.4
1,2-Dichloropropane		0.70	U	0.70	6.4
cis-1,3-Dichloropropene		1.6	U	1.6	6.4
trans-1,3-Dichloropropene		0.86	U	0.86	6.4
Ethylbenzene		0.86	U	0.86	6.4
2-Hexanone		6.2	U	6.2	26
Methylene Chloride		2.0	U	2.0	6.4
4-Methyl-2-pentanone (MIBK)		5.6	U	5.6	13
Styrene		0.81	U	0.81	6.4
1,1,2,2-Tetrachloroethane		0.78	U	0.78	6.4
Tetrachloroethene		0.75	U	0.75	6.4
Toluene		0.88	U	0.88	6.4
1,1,1-Trichloroethane		0.66	U	0.66	6.4
1,1,2-Trichloroethane		1.1	U	1.1	6.4
Trichloroethene		0.29	U	0.29	6.4
Vinyl chloride		1.7	U	1.7	6.4
Xylenes, Total		0.78	U	0.78	6.4

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	107		58 - 140
Toluene-d8 (Surr)	103		80 - 126
4-Bromofluorobenzene (Surr)	95		76 - 127
Dibromofluoromethane (Surr)	112		75 - 121

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: J1V703

Lab Sample ID: 280-68747-1
Client Matrix: Solid
% Moisture: 0.7

Date Sampled: 04/30/2015 1148
Date Received: 05/05/2015 1005

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276597	Instrument ID:	VMS_J
Prep Method:	5035	Prep Batch:	280-276647	Lab File ID:	J6602.D
Dilution:	1.0			Initial Weight/Volume:	3.939 g
Analysis Date:	05/08/2015 1144			Final Weight/Volume:	5 mL
Prep Date:	04/30/2015 1148				

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
60-29-7	Ethyl ether	5.21	3.1	J N
	Unknown	6.74	28	J N
110-82-7	Cyclohexane	7.35	1.3	J N B
108-87-2	Methylcyclohexane	8.20	0.57	J N

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: J1V704

Lab Sample ID: 280-68747-2
Client Matrix: Solid
% Moisture: 0.4

Date Sampled: 04/30/2015 1142
Date Received: 05/05/2015 1005

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276597	Instrument ID:	VMS_J
Prep Method:	5035	Prep Batch:	280-276647	Lab File ID:	J6605.D
Dilution:	1.0			Initial Weight/Volume:	4.334 g
Analysis Date:	05/08/2015 1244			Final Weight/Volume:	5 mL
Prep Date:	04/30/2015 1142				

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		1.9	U	1.9	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)	104		58 - 140
Toluene-d8 (Surr)	100		80 - 126
4-Bromofluorobenzene (Surr)	97		76 - 127
Dibromofluoromethane (Surr)	108		75 - 121

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: J1V704

Lab Sample ID: 280-68747-2
Client Matrix: Solid
% Moisture: 0.4

Date Sampled: 04/30/2015 1142
Date Received: 05/05/2015 1005

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276597	Instrument ID:	VMS_J
Prep Method:	5035	Prep Batch:	280-276647	Lab File ID:	J6605.D
Dilution:	1.0			Initial Weight/Volume:	4.334 g
Analysis Date:	05/08/2015 1244			Final Weight/Volume:	5 mL
Prep Date:	04/30/2015 1142				

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	6.73	23	J N
110-82-7	Cyclohexane	7.34	0.61	J N B

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: J1V705

Lab Sample ID: 280-68747-3
Client Matrix: Solid
% Moisture: 0.7

Date Sampled: 04/30/2015 1136
Date Received: 05/05/2015 1005

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276597	Instrument ID:	VMS_J
Prep Method:	5035	Prep Batch:	280-276647	Lab File ID:	J6606.D
Dilution:	1.0			Initial Weight/Volume:	4.288 g
Analysis Date:	05/08/2015 1305			Final Weight/Volume:	5 mL
Prep Date:	04/30/2015 1136				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		6.3	U	6.3	23
Benzene		0.55	U	0.55	5.9
Bromodichloromethane		0.26	U	0.26	5.9
Bromoform		0.27	U	0.27	5.9
Bromomethane		0.59	U	0.59	12
2-Butanone (MEK)		2.1	U	2.1	12
Carbon disulfide		0.49	U	0.49	5.9
Carbon tetrachloride		0.74	U	0.74	5.9
Chlorobenzene		0.63	U	0.63	5.9
Dibromochloromethane		0.67	U	0.67	5.9
Chloroethane		1.0	U	1.0	12
Chloroform		0.34	U	0.34	5.9
Chloromethane		0.90	U	0.90	12
1,1-Dichloroethane		0.25	U	0.25	5.9
1,2-Dichloroethane		0.82	U	0.82	5.9
1,1-Dichloroethene		0.69	U	0.69	5.9
1,2-Dichloroethene, Total		0.46	U	0.46	5.9
1,2-Dichloropropane		0.65	U	0.65	5.9
cis-1,3-Dichloropropene		1.5	U	1.5	5.9
trans-1,3-Dichloropropene		0.79	U	0.79	5.9
Ethylbenzene		0.79	U	0.79	5.9
2-Hexanone		5.7	U	5.7	23
Methylene Chloride		1.9	U	1.9	5.9
4-Methyl-2-pentanone (MIBK)		5.1	U	5.1	12
Styrene		0.74	U	0.74	5.9
1,1,2,2-Tetrachloroethane		0.72	U	0.72	5.9
Tetrachloroethene		0.69	U	0.69	5.9
Toluene		0.81	U	0.81	5.9
1,1,1-Trichloroethane		0.61	U	0.61	5.9
1,1,2-Trichloroethane		1.0	U	1.0	5.9
Trichloroethene		0.27	U	0.27	5.9
Vinyl chloride		1.6	U	1.6	5.9
Xylenes, Total		0.72	U	0.72	5.9

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	106		58 - 140
Toluene-d8 (Surr)	101		80 - 126
4-Bromofluorobenzene (Surr)	95		76 - 127
Dibromofluoromethane (Surr)	112		75 - 121

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: J1V705

Lab Sample ID: 280-68747-3
Client Matrix: Solid
% Moisture: 0.7

Date Sampled: 04/30/2015 1136
Date Received: 05/05/2015 1005

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276597	Instrument ID:	VMS_J
Prep Method:	5035	Prep Batch:	280-276647	Lab File ID:	J6606.D
Dilution:	1.0			Initial Weight/Volume:	4.288 g
Analysis Date:	05/08/2015 1305			Final Weight/Volume:	5 mL
Prep Date:	04/30/2015 1136				

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	4.49	9.5	J N
60-29-7	Ethyl ether	5.21	2.8	J N
	Unknown	6.74	25	J N
110-82-7	Cyclohexane	7.35	0.48	J N B

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: J1V706

Lab Sample ID: 280-68747-4
Client Matrix: Solid
% Moisture: 0.9

Date Sampled: 04/30/2015 1130
Date Received: 05/05/2015 1005

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276597	Instrument ID:	VMS_J
Prep Method:	5035	Prep Batch:	280-276647	Lab File ID:	J6607.D
Dilution:	1.0			Initial Weight/Volume:	4.19 g
Analysis Date:	05/08/2015 1325			Final Weight/Volume:	5 mL
Prep Date:	04/30/2015 1130				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		6.8	J B	6.5	24
Benzene		0.57	U	0.57	6.0
Bromodichloromethane		0.26	U	0.26	6.0
Bromoform		0.28	U	0.28	6.0
Bromomethane		0.60	U	0.60	12
2-Butanone (MEK)		2.2	U	2.2	12
Carbon disulfide		0.51	U	0.51	6.0
Carbon tetrachloride		0.76	U	0.76	6.0
Chlorobenzene		0.65	U	0.65	6.0
Dibromochloromethane		0.69	U	0.69	6.0
Chloroethane		1.1	U	1.1	12
Chloroform		0.35	U	0.35	6.0
Chloromethane		0.93	U	0.93	12
1,1-Dichloroethane		0.25	U	0.25	6.0
1,2-Dichloroethane		0.84	U	0.84	6.0
1,1-Dichloroethene		0.71	U	0.71	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		1.6	U	1.6	6.0
trans-1,3-Dichloropropene		0.81	U	0.81	6.0
Ethylbenzene		0.81	U	0.81	6.0
2-Hexanone		5.9	U	5.9	24
Methylene Chloride		3.2	J	1.9	6.0
4-Methyl-2-pentanone (MIBK)		5.3	U	5.3	12
Styrene		0.76	U	0.76	6.0
1,1,2,2-Tetrachloroethane		0.73	U	0.73	6.0
Tetrachloroethene		0.71	U	0.71	6.0
Toluene		0.83	U	0.83	6.0
1,1,1-Trichloroethane		0.63	U	0.63	6.0
1,1,2-Trichloroethane		1.1	U	1.1	6.0
Trichloroethene		0.28	U	0.28	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)	109		58 - 140
Toluene-d8 (Surr)	101		80 - 126
4-Bromofluorobenzene (Surr)	95		76 - 127
Dibromofluoromethane (Surr)	111		75 - 121

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: J1V706

Lab Sample ID: 280-68747-4
Client Matrix: Solid
% Moisture: 0.9

Date Sampled: 04/30/2015 1130
Date Received: 05/05/2015 1005

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276597	Instrument ID:	VMS_J
Prep Method:	5035	Prep Batch:	280-276647	Lab File ID:	J6607.D
Dilution:	1.0			Initial Weight/Volume:	4.19 g
Analysis Date:	05/08/2015 1325			Final Weight/Volume:	5 mL
Prep Date:	04/30/2015 1130				

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	4.06	7.5	J N
60-29-7	Ethyl ether	5.22	2.9	J N
	Unknown	6.74	27	J N
110-82-7	Cyclohexane	7.35	1.3	J N B

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: J1V707

Lab Sample ID: 280-68747-5
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 04/30/2015 1008
Date Received: 05/05/2015 1005

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276597	Instrument ID:	VMS_J
Prep Method:	5035	Prep Batch:	280-276647	Lab File ID:	J6608.D
Dilution:	1.0			Initial Weight/Volume:	4.432 g
Analysis Date:	05/08/2015 1345			Final Weight/Volume:	5 mL
Prep Date:	04/30/2015 1008				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		6.1	U	6.1	23
Benzene		0.53	U	0.53	5.7
Bromodichloromethane		0.25	U	0.25	5.7
Bromoform		0.26	U	0.26	5.7
Bromomethane		0.57	U	0.57	11
2-Butanone (MEK)		2.1	U	2.1	11
Carbon disulfide		0.48	U	0.48	5.7
Carbon tetrachloride		0.71	U	0.71	5.7
Chlorobenzene		0.61	U	0.61	5.7
Dibromochloromethane		0.65	U	0.65	5.7
Chloroethane		1.0	U	1.0	11
Chloroform		0.33	U	0.33	5.7
Chloromethane		0.87	U	0.87	11
1,1-Dichloroethane		0.24	U	0.24	5.7
1,2-Dichloroethane		0.79	U	0.79	5.7
1,1-Dichloroethene		0.67	U	0.67	5.7
1,2-Dichloroethene, Total		0.44	U	0.44	5.7
1,2-Dichloropropane		0.62	U	0.62	5.7
cis-1,3-Dichloropropene		1.5	U	1.5	5.7
trans-1,3-Dichloropropene		0.76	U	0.76	5.7
Ethylbenzene		0.76	U	0.76	5.7
2-Hexanone		5.5	U	5.5	23
Methylene Chloride		1.8	U	1.8	5.7
4-Methyl-2-pentanone (MIBK)		4.9	U	4.9	11
Styrene		0.71	U	0.71	5.7
1,1,2,2-Tetrachloroethane		0.69	U	0.69	5.7
Tetrachloroethene		0.67	U	0.67	5.7
Toluene		0.78	U	0.78	5.7
1,1,1-Trichloroethane		0.59	U	0.59	5.7
1,1,2-Trichloroethane		1.0	U	1.0	5.7
Trichloroethene		0.26	U	0.26	5.7
Vinyl chloride		1.5	U	1.5	5.7
Xylenes, Total		0.69	U	0.69	5.7

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	108		58 - 140
Toluene-d8 (Surr)	101		80 - 126
4-Bromofluorobenzene (Surr)	98		76 - 127
Dibromofluoromethane (Surr)	111		75 - 121

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V707**

Lab Sample ID: 280-68747-5
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 04/30/2015 1008
Date Received: 05/05/2015 1005

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276597	Instrument ID:	VMS_J
Prep Method:	5035	Prep Batch:	280-276647	Lab File ID:	J6608.D
Dilution:	1.0			Initial Weight/Volume:	4.432 g
Analysis Date:	05/08/2015 1345			Final Weight/Volume:	5 mL
Prep Date:	04/30/2015 1008				

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
60-29-7	Ethyl ether	5.21	2.7	J N
	Unknown	6.74	24	J N
110-82-7	Cyclohexane	7.34	0.66	J N B

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: J1V708

Lab Sample ID: 280-68747-6
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 04/30/2015 1000
Date Received: 05/05/2015 1005

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276597	Instrument ID:	VMS_J
Prep Method:	5035	Prep Batch:	280-276647	Lab File ID:	J6609.D
Dilution:	1.0			Initial Weight/Volume:	7.303 g
Analysis Date:	05/08/2015 1405			Final Weight/Volume:	5 mL
Prep Date:	04/30/2015 1000				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		3.8	J B	3.7	14
Benzene		0.32	U	0.32	3.4
Bromodichloromethane		0.15	U	0.15	3.4
Bromoform		0.16	U	0.16	3.4
Bromomethane		0.34	U	0.34	6.9
2-Butanone (MEK)		1.3	U	1.3	6.9
Carbon disulfide		0.29	U	0.29	3.4
Carbon tetrachloride		0.43	U	0.43	3.4
Chlorobenzene		0.37	U	0.37	3.4
Dibromochloromethane		0.39	U	0.39	3.4
Chloroethane		0.61	U	0.61	6.9
Chloroform		0.20	U	0.20	3.4
Chloromethane		0.53	U	0.53	6.9
1,1-Dichloroethane		0.14	U	0.14	3.4
1,2-Dichloroethane		0.48	U	0.48	3.4
1,1-Dichloroethene		0.62	J	0.41	3.4
1,2-Dichloroethene, Total		0.27	U	0.27	3.4
1,2-Dichloropropane		0.38	U	0.38	3.4
cis-1,3-Dichloropropene		0.89	U	0.89	3.4
trans-1,3-Dichloropropene		0.46	U	0.46	3.4
Ethylbenzene		0.46	U	0.46	3.4
2-Hexanone		3.4	U	3.4	14
Methylene Chloride		1.1	U	1.1	3.4
4-Methyl-2-pentanone (MIBK)		3.0	U	3.0	6.9
Styrene		0.43	U	0.43	3.4
1,1,2,2-Tetrachloroethane		0.42	U	0.42	3.4
Tetrachloroethene		0.41	U	0.41	3.4
Toluene		0.48	U	0.48	3.4
1,1,1-Trichloroethane		0.36	U	0.36	3.4
1,1,2-Trichloroethane		0.61	U	0.61	3.4
Trichloroethene		0.16	U	0.16	3.4
Vinyl chloride		0.92	U	0.92	3.4
Xylenes, Total		0.42	U	0.42	3.4

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	104		58 - 140
Toluene-d8 (Surr)	96		80 - 126
4-Bromofluorobenzene (Surr)	95		76 - 127
Dibromofluoromethane (Surr)	106		75 - 121

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V708**

Lab Sample ID: 280-68747-6
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 04/30/2015 1000
Date Received: 05/05/2015 1005

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276597	Instrument ID:	VMS_J
Prep Method:	5035	Prep Batch:	280-276647	Lab File ID:	J6609.D
Dilution:	1.0			Initial Weight/Volume:	7.303 g
Analysis Date:	05/08/2015 1405			Final Weight/Volume:	5 mL
Prep Date:	04/30/2015 1000				

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	4.95	11	J N
60-29-7	Ethyl ether	5.21	1.7	J N
	Unknown	6.74	14	J N
110-82-7	Cyclohexane	7.33	0.35	J N B

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: J1V709

Lab Sample ID: 280-68747-7
Client Matrix: Solid
% Moisture: 1.5

Date Sampled: 04/30/2015 0939
Date Received: 05/05/2015 1005

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276597	Instrument ID:	VMS_J
Prep Method:	5035	Prep Batch:	280-276647	Lab File ID:	J6610.D
Dilution:	1.0			Initial Weight/Volume:	5.284 g
Analysis Date:	05/08/2015 1425			Final Weight/Volume:	5 mL
Prep Date:	04/30/2015 0938				

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	9.6
2-Butanone (MEK)		1.8	U	1.8	9.6
Carbon disulfide		0.40	U	0.40	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		0.85	U	0.85	9.6
Chloroform		0.28	U	0.28	4.8
Chloromethane		0.74	U	0.74	9.6
1,1-Dichloroethane		0.20	U	0.20	4.8
1,2-Dichloroethane		0.67	U	0.67	4.8
1,1-Dichloroethene		0.57	J	0.57	4.8
1,2-Dichloroethene, Total		0.37	U	0.37	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		0.64	U	0.64	4.8
Ethylbenzene		0.64	U	0.64	4.8
2-Hexanone		4.7	U	4.7	19
Methylene Chloride		1.5	U	1.5	4.8
4-Methyl-2-pentanone (MIBK)		4.2	U	4.2	9.6
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		0.66	U	0.66	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)	106		58 - 140
Toluene-d8 (Surr)	101		80 - 126
4-Bromofluorobenzene (Surr)	94		76 - 127
Dibromofluoromethane (Surr)	109		75 - 121

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V709**

Lab Sample ID: 280-68747-7
Client Matrix: Solid
% Moisture: 1.5

Date Sampled: 04/30/2015 0939
Date Received: 05/05/2015 1005

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276597	Instrument ID:	VMS_J
Prep Method:	5035	Prep Batch:	280-276647	Lab File ID:	J6610.D
Dilution:	1.0			Initial Weight/Volume:	5.284 g
Analysis Date:	05/08/2015 1425			Final Weight/Volume:	5 mL
Prep Date:	04/30/2015 0938				

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
60-29-7	Ethyl ether	5.23	2.3	J N
	Unknown	6.74	18	J N
110-82-7	Cyclohexane	7.35	0.55	J N B

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: J1V710

Lab Sample ID: 280-68747-8
Client Matrix: Solid
% Moisture: 3.9

Date Sampled: 04/30/2015 0954
Date Received: 05/05/2015 1005

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276597	Instrument ID:	VMS_J
Prep Method:	5035	Prep Batch:	280-276647	Lab File ID:	J6611.D
Dilution:	1.0			Initial Weight/Volume:	3.923 g
Analysis Date:	05/08/2015 1445			Final Weight/Volume:	5 mL
Prep Date:	04/30/2015 0954				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		7.1	U	7.1	27
Benzene		0.62	U	0.62	6.6
Bromodichloromethane		0.29	U	0.29	6.6
Bromoform		0.30	U	0.30	6.6
Bromomethane		0.66	U	0.66	13
2-Butanone (MEK)		2.4	U	2.4	13
Carbon disulfide		0.56	U	0.56	6.6
Carbon tetrachloride		0.84	U	0.84	6.6
Chlorobenzene		0.72	U	0.72	6.6
Dibromochloromethane		0.76	U	0.76	6.6
Chloroethane		1.2	U	1.2	13
Chloroform		0.38	U	0.38	6.6
Chloromethane		1.0	U	1.0	13
1,1-Dichloroethane		0.28	U	0.28	6.6
1,2-Dichloroethane		0.93	U	0.93	6.6
1,1-Dichloroethene		0.78	U	0.78	6.6
1,2-Dichloroethene, Total		0.52	U	0.52	6.6
1,2-Dichloropropane		0.73	U	0.73	6.6
cis-1,3-Dichloropropene		1.7	U	1.7	6.6
trans-1,3-Dichloropropene		0.89	U	0.89	6.6
Ethylbenzene		0.89	U	0.89	6.6
2-Hexanone		6.5	U	6.5	27
Methylene Chloride		2.1	U	2.1	6.6
4-Methyl-2-pentanone (MIBK)		5.8	U	5.8	13
Styrene		0.84	U	0.84	6.6
1,1,2,2-Tetrachloroethane		0.81	U	0.81	6.6
Tetrachloroethene		0.78	U	0.78	6.6
Toluene		0.91	U	0.91	6.6
1,1,1-Trichloroethane		0.69	U	0.69	6.6
1,1,2-Trichloroethane		1.2	U	1.2	6.6
Trichloroethene		0.30	U	0.30	6.6
Vinyl chloride		1.8	U	1.8	6.6
Xylenes, Total		0.81	U	0.81	6.6

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	106		58 - 140
Toluene-d8 (Surr)	98		80 - 126
4-Bromofluorobenzene (Surr)	97		76 - 127
Dibromofluoromethane (Surr)	109		75 - 121

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V710**

Lab Sample ID: 280-68747-8
Client Matrix: Solid
% Moisture: 3.9

Date Sampled: 04/30/2015 0954
Date Received: 05/05/2015 1005

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276597	Instrument ID:	VMS_J
Prep Method:	5035	Prep Batch:	280-276647	Lab File ID:	J6611.D
Dilution:	1.0			Initial Weight/Volume:	3.923 g
Analysis Date:	05/08/2015 1445			Final Weight/Volume:	5 mL
Prep Date:	04/30/2015 0954				

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	4.50	7.9	J N
60-29-7	Ethyl ether	5.23	3.1	J N
	Unknown	6.74	29	J N
110-82-7	Cyclohexane	7.34	0.86	J N B

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: J1V711

Lab Sample ID: 280-68747-9
Client Matrix: Solid
% Moisture: 0.9

Date Sampled: 04/30/2015 0948
Date Received: 05/05/2015 1005

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276597	Instrument ID:	VMS_J
Prep Method:	5035	Prep Batch:	280-276647	Lab File ID:	J6612.D
Dilution:	1.0			Initial Weight/Volume:	3.506 g
Analysis Date:	05/08/2015 1506			Final Weight/Volume:	5 mL
Prep Date:	04/30/2015 0948				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		7.7	U	7.7	29
Benzene		0.68	U	0.68	7.2
Bromodichloromethane		0.32	U	0.32	7.2
Bromoform		0.33	U	0.33	7.2
Bromomethane		0.72	U	0.72	14
2-Butanone (MEK)		2.6	U	2.6	14
Carbon disulfide		0.60	U	0.60	7.2
Carbon tetrachloride		0.91	U	0.91	7.2
Chlorobenzene		0.78	U	0.78	7.2
Dibromochloromethane		0.82	U	0.82	7.2
Chloroethane		1.3	U	1.3	14
Chloroform		0.42	U	0.42	7.2
Chloromethane		1.1	U	1.1	14
1,1-Dichloroethane		0.30	U	0.30	7.2
1,2-Dichloroethane		1.0	U	1.0	7.2
1,1-Dichloroethene		0.85	U	0.85	7.2
1,2-Dichloroethene, Total		0.56	U	0.56	7.2
1,2-Dichloropropane		0.79	U	0.79	7.2
cis-1,3-Dichloropropene		1.9	U	1.9	7.2
trans-1,3-Dichloropropene		0.96	U	0.96	7.2
Ethylbenzene		0.96	U	0.96	7.2
2-Hexanone		7.0	U	7.0	29
Methylene Chloride		2.3	U	2.3	7.2
4-Methyl-2-pentanone (MIBK)		6.3	U	6.3	14
Styrene		0.91	U	0.91	7.2
1,1,2,2-Tetrachloroethane		0.88	U	0.88	7.2
Tetrachloroethene		0.85	U	0.85	7.2
Toluene		0.99	U	0.99	7.2
1,1,1-Trichloroethane		0.75	U	0.75	7.2
1,1,2-Trichloroethane		1.3	U	1.3	7.2
Trichloroethene		0.33	U	0.33	7.2
Vinyl chloride		1.9	U	1.9	7.2
Xylenes, Total		0.88	U	0.88	7.2

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	105		58 - 140
Toluene-d8 (Surr)	102		80 - 126
4-Bromofluorobenzene (Surr)	102		76 - 127
Dibromofluoromethane (Surr)	109		75 - 121

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V711**

Lab Sample ID: 280-68747-9
Client Matrix: Solid
% Moisture: 0.9

Date Sampled: 04/30/2015 0948
Date Received: 05/05/2015 1005

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276597	Instrument ID:	VMS_J
Prep Method:	5035	Prep Batch:	280-276647	Lab File ID:	J6612.D
Dilution:	1.0			Initial Weight/Volume:	3.506 g
Analysis Date:	05/08/2015 1506			Final Weight/Volume:	5 mL
Prep Date:	04/30/2015 0948				

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
77758-51-1	Hex-5-ynoic acid, methyl ester	4.74	15	N J
10065-72-2	L-Alanine, methyl ester	5.07	15	N J
60-29-7	Ethyl ether	5.23	3.4	J N J
	Unknown	6.74	30	N J
110-82-7	Cyclohexane	7.33	0.82	J N J B

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: J1V712

Lab Sample ID: 280-68747-10
Client Matrix: Solid
% Moisture: 1.5

Date Sampled: 04/30/2015 0933
Date Received: 05/05/2015 1005

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276597	Instrument ID:	VMS_J
Prep Method:	5035	Prep Batch:	280-276647	Lab File ID:	J6613.D
Dilution:	1.0			Initial Weight/Volume:	4.453 g
Analysis Date:	05/08/2015 1526			Final Weight/Volume:	5 mL
Prep Date:	04/30/2015 0933				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		6.1	U	6.1	23
Benzene		0.54	U	0.54	5.7
Bromodichloromethane		0.25	U	0.25	5.7
Bromoform		0.26	U	0.26	5.7
Bromomethane		0.57	U	0.57	11
2-Butanone (MEK)		2.1	U	2.1	11
Carbon disulfide		0.48	U	0.48	5.7
Carbon tetrachloride		0.72	U	0.72	5.7
Chlorobenzene		0.62	U	0.62	5.7
Dibromochloromethane		0.65	U	0.65	5.7
Chloroethane		1.0	U	1.0	11
Chloroform		0.33	U	0.33	5.7
Chloromethane		0.88	U	0.88	11
1,1-Dichloroethane		0.24	U	0.24	5.7
1,2-Dichloroethane		0.80	U	0.80	5.7
1,1-Dichloroethene		0.93	J	0.67	5.7
1,2-Dichloroethene, Total		0.44	U	0.44	5.7
1,2-Dichloropropane		0.63	U	0.63	5.7
cis-1,3-Dichloropropene		1.5	U	1.5	5.7
trans-1,3-Dichloropropene		0.76	U	0.76	5.7
Ethylbenzene		0.76	U	0.76	5.7
2-Hexanone		5.6	U	5.6	23
Methylene Chloride		1.8	U	1.8	5.7
4-Methyl-2-pentanone (MIBK)		5.0	U	5.0	11
Styrene		0.72	U	0.72	5.7
1,1,2,2-Tetrachloroethane		0.70	U	0.70	5.7
Tetrachloroethene		0.67	U	0.67	5.7
Toluene		0.79	U	0.79	5.7
1,1,1-Trichloroethane		0.59	U	0.59	5.7
1,1,2-Trichloroethane		1.0	U	1.0	5.7
Trichloroethene		0.26	U	0.26	5.7
Vinyl chloride		1.5	U	1.5	5.7
Xylenes, Total		0.70	U	0.70	5.7

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	109		58 - 140
Toluene-d8 (Surr)	102		80 - 126
4-Bromofluorobenzene (Surr)	98		76 - 127
Dibromofluoromethane (Surr)	112		75 - 121

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: J1V712

Lab Sample ID: 280-68747-10
Client Matrix: Solid
% Moisture: 1.5

Date Sampled: 04/30/2015 0933
Date Received: 05/05/2015 1005

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276597	Instrument ID:	VMS_J
Prep Method:	5035	Prep Batch:	280-276647	Lab File ID:	J6613.D
Dilution:	1.0			Initial Weight/Volume:	4.453 g
Analysis Date:	05/08/2015 1526			Final Weight/Volume:	5 mL
Prep Date:	04/30/2015 0933				

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
60-29-7	Ethyl ether	5.22	2.7	J N
	Unknown	6.74	25	J N
110-82-7	Cyclohexane	7.35	0.52	J N B

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: J1V713

Lab Sample ID: 280-68747-11
Client Matrix: Solid
% Moisture: 1.3

Date Sampled: 04/30/2015 0925
Date Received: 05/05/2015 1005

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276597	Instrument ID:	VMS_J
Prep Method:	5035	Prep Batch:	280-276647	Lab File ID:	J6614.D
Dilution:	1.0			Initial Weight/Volume:	4.549 g
Analysis Date:	05/08/2015 1546			Final Weight/Volume:	5 mL
Prep Date:	04/30/2015 0925				

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		0.25	U	0.25	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		0.75	U	0.75	5.6
Ethylbenzene		0.75	U	0.75	5.6
2-Hexanone		5.4	U	5.4	22
Methylene Chloride		1.8	U	1.8	5.6
4-Methyl-2-pentanone (MIBK)		4.9	U	4.9	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)	107		58 - 140
Toluene-d8 (Surr)	101		80 - 126
4-Bromofluorobenzene (Surr)	94		76 - 127
Dibromofluoromethane (Surr)	113		75 - 121

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V713**

Lab Sample ID: 280-68747-11
Client Matrix: Solid
% Moisture: 1.3

Date Sampled: 04/30/2015 0925
Date Received: 05/05/2015 1005

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276597	Instrument ID:	VMS_J
Prep Method:	5035	Prep Batch:	280-276647	Lab File ID:	J6614.D
Dilution:	1.0			Initial Weight/Volume:	4.549 g
Analysis Date:	05/08/2015 1546			Final Weight/Volume:	5 mL
Prep Date:	04/30/2015 0925				

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	4.68	11	N J
60-29-7	Ethyl ether	5.22	2.7	J N J
55496-55-4	4-(2)(Methylamino)ethyl)pyridine	5.34	12	N J
	Unknown	6.74	26	N J
110-82-7	Cyclohexane	7.35	0.51	J N J B

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: J1V714

Lab Sample ID: 280-68747-12
Client Matrix: Solid
% Moisture: 1.3

Date Sampled: 04/30/2015 0913
Date Received: 05/05/2015 1005

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276597	Instrument ID:	VMS_J
Prep Method:	5035	Prep Batch:	280-276647	Lab File ID:	J6615.D
Dilution:	1.0			Initial Weight/Volume:	2.994 g
Analysis Date:	05/08/2015 1606			Final Weight/Volume:	5 mL
Prep Date:	04/30/2015 0913				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		9.1	U	9.1	34
Benzene		0.80	U	0.80	8.5
Bromodichloromethane		0.37	U	0.37	8.5
Bromoform		0.39	U	0.39	8.5
Bromomethane		0.85	U	0.85	17
2-Butanone (MEK)		3.1	U	3.1	17
Carbon disulfide		0.71	U	0.71	8.5
Carbon tetrachloride		1.1	U	1.1	8.5
Chlorobenzene		0.91	U	0.91	8.5
Dibromochloromethane		0.96	U	0.96	8.5
Chloroethane		1.5	U	1.5	17
Chloroform		0.49	U	0.49	8.5
Chloromethane		1.3	U	1.3	17
1,1-Dichloroethane		0.36	U	0.36	8.5
1,2-Dichloroethane		1.2	U	1.2	8.5
1,1-Dichloroethene		1.0	U	1.0	8.5
1,2-Dichloroethene, Total		0.66	U	0.66	8.5
1,2-Dichloropropane		0.93	U	0.93	8.5
cis-1,3-Dichloropropene		2.2	U	2.2	8.5
trans-1,3-Dichloropropene		1.1	U	1.1	8.5
Ethylbenzene		1.1	U	1.1	8.5
2-Hexanone		8.3	U	8.3	34
Methylene Chloride		2.7	U	2.7	8.5
4-Methyl-2-pentanone (MIBK)		7.4	U	7.4	17
Styrene		1.1	U	1.1	8.5
1,1,2,2-Tetrachloroethane		1.0	U	1.0	8.5
Tetrachloroethene		1.0	U	1.0	8.5
Toluene		1.2	U	1.2	8.5
1,1,1-Trichloroethane		0.88	U	0.88	8.5
1,1,2-Trichloroethane		1.5	U	1.5	8.5
Trichloroethene		0.39	U	0.39	8.5
Vinyl chloride		2.3	U	2.3	8.5
Xylenes, Total		1.0	U	1.0	8.5

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	107		58 - 140
Toluene-d8 (Surr)	104		80 - 126
4-Bromofluorobenzene (Surr)	98		76 - 127
Dibromofluoromethane (Surr)	111		75 - 121

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: J1V714

Lab Sample ID: 280-68747-12
Client Matrix: Solid
% Moisture: 1.3

Date Sampled: 04/30/2015 0913
Date Received: 05/05/2015 1005

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276597	Instrument ID:	VMS_J
Prep Method:	5035	Prep Batch:	280-276647	Lab File ID:	J6615.D
Dilution:	1.0			Initial Weight/Volume:	2.994 g
Analysis Date:	05/08/2015 1606			Final Weight/Volume:	5 mL
Prep Date:	04/30/2015 0913				

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	4.39	8.8	N J
513-49-5	2-Butanamine, (S)-	5.30	24	N J
	Unknown	6.74	33	N J
110-82-7	Cyclohexane	7.33	0.89	J N J B

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V715**

Lab Sample ID: 280-68747-13
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 04/30/2015 0913
Date Received: 05/05/2015 1005

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276597	Instrument ID:	VMS_J
Prep Method:	5035	Prep Batch:	280-276647	Lab File ID:	J6616.D
Dilution:	1.0			Initial Weight/Volume:	4.493 g
Analysis Date:	05/08/2015 1626			Final Weight/Volume:	5 mL
Prep Date:	04/30/2015 0913				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		6.0	U	6.0	22
Benzene		0.53	U	0.53	5.6
Bromodichloromethane		0.25	U	0.25	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		0.71	U	0.71	5.6
Chlorobenzene		0.60	U	0.60	5.6
Dibromochloromethane		0.64	U	0.64	5.6
Chloroethane		1.0	U	1.0	11
Chloroform		0.32	U	0.32	5.6
Chloromethane		0.86	U	0.86	11
1,1-Dichloroethane		0.24	U	0.24	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		0.44	U	0.44	5.6
1,2-Dichloropropane		0.62	U	0.62	5.6
cis-1,3-Dichloropropene		1.4	U	1.4	5.6
trans-1,3-Dichloropropene		0.75	U	0.75	5.6
Ethylbenzene		0.75	U	0.75	5.6
2-Hexanone		5.5	U	5.5	22
Methylene Chloride		3.0	J	1.8	5.6
4-Methyl-2-pentanone (MIBK)		4.9	U	4.9	11
Styrene		0.71	U	0.71	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		0.99	U	0.99	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)	108		58 - 140
Toluene-d8 (Surr)	105		80 - 126
4-Bromofluorobenzene (Surr)	104		76 - 127
Dibromofluoromethane (Surr)	114		75 - 121

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V715**

Lab Sample ID: 280-68747-13
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 04/30/2015 0913
Date Received: 05/05/2015 1005

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276597	Instrument ID:	VMS_J
Prep Method:	5035	Prep Batch:	280-276647	Lab File ID:	J6616.D
Dilution:	1.0			Initial Weight/Volume:	4.493 g
Analysis Date:	05/08/2015 1626			Final Weight/Volume:	5 mL
Prep Date:	04/30/2015 0913				

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
60-29-7	Ethyl ether	5.23	2.7	J N
	Unknown	6.74	21	J N
110-82-7	Cyclohexane	7.35	1.4	J N B

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: J1V716

Lab Sample ID: 280-68747-14
Client Matrix: Solid
% Moisture: 0.0

Date Sampled: 04/30/2015 0904
Date Received: 05/05/2015 1005

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276597	Instrument ID:	VMS_J
Prep Method:	5035	Prep Batch:	280-276647	Lab File ID:	J6617.D
Dilution:	1.0			Initial Weight/Volume:	4.109 g
Analysis Date:	05/08/2015 1646			Final Weight/Volume:	5 mL
Prep Date:	04/30/2015 0904				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		17	J B	6.5	24
Benzene		0.57	U	0.57	6.1
Bromodichloromethane		0.27	U	0.27	6.1
Bromoform		0.28	U	0.28	6.1
Bromomethane		0.61	U	0.61	12
2-Butanone (MEK)		5.0	J	2.2	12
Carbon disulfide		0.51	U	0.51	6.1
Carbon tetrachloride		0.77	U	0.77	6.1
Chlorobenzene		0.66	U	0.66	6.1
Dibromochloromethane		0.69	U	0.69	6.1
Chloroethane		1.1	U	1.1	12
Chloroform		0.35	U	0.35	6.1
Chloromethane		0.94	U	0.94	12
1,1-Dichloroethane		0.26	U	0.26	6.1
1,2-Dichloroethane		0.85	U	0.85	6.1
1,1-Dichloroethene		0.72	U	0.72	6.1
1,2-Dichloroethene, Total		0.47	U	0.47	6.1
1,2-Dichloropropane		0.67	U	0.67	6.1
cis-1,3-Dichloropropene		1.6	U	1.6	6.1
trans-1,3-Dichloropropene		0.82	U	0.82	6.1
Ethylbenzene		0.82	U	0.82	6.1
2-Hexanone		6.0	U	6.0	24
Methylene Chloride		1.9	U	1.9	6.1
4-Methyl-2-pentanone (MIBK)		5.3	U	5.3	12
Styrene		0.77	U	0.77	6.1
1,1,2,2-Tetrachloroethane		0.74	U	0.74	6.1
Tetrachloroethene		0.72	U	0.72	6.1
Toluene		0.84	U	0.84	6.1
1,1,1-Trichloroethane		0.63	U	0.63	6.1
1,1,2-Trichloroethane		1.1	U	1.1	6.1
Trichloroethene		0.28	U	0.28	6.1
Vinyl chloride		1.6	U	1.6	6.1
Xylenes, Total		0.74	U	0.74	6.1

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	110		58 - 140
Toluene-d8 (Surr)	102		80 - 126
4-Bromofluorobenzene (Surr)	94		76 - 127
Dibromofluoromethane (Surr)	113		75 - 121

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V716**

Lab Sample ID: 280-68747-14
Client Matrix: Solid
% Moisture: 0.0

Date Sampled: 04/30/2015 0904
Date Received: 05/05/2015 1005

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276597	Instrument ID:	VMS_J
Prep Method:	5035	Prep Batch:	280-276647	Lab File ID:	J6617.D
Dilution:	1.0			Initial Weight/Volume:	4.109 g
Analysis Date:	05/08/2015 1646			Final Weight/Volume:	5 mL
Prep Date:	04/30/2015 0904				

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
17784-12-2	Sulfacytine	4.63	14	N J
79-92-5	Camphene	11.02	6.5	N J
470-67-7	7-Oxabicyclo[2.2.1]heptane, 1-methyl-4-(	11.63	8.3	N J
124-19-6	Nonanal	12.68	6.3	N J
112-31-2	Decanal	13.88	6.2	N J

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: J1V717

Lab Sample ID: 280-68747-15
Client Matrix: Solid
% Moisture: 0.0

Date Sampled: 04/30/2015 0908
Date Received: 05/05/2015 1005

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276597	Instrument ID:	VMS_J
Prep Method:	5035	Prep Batch:	280-276647	Lab File ID:	J6618.D
Dilution:	1.0			Initial Weight/Volume:	3.042 g
Analysis Date:	05/08/2015 1707			Final Weight/Volume:	5 mL
Prep Date:	04/30/2015 0908				

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		8.8	U	8.8	33
Benzene		0.77	U	0.77	8.2
Bromodichloromethane		0.36	U	0.36	8.2
Bromoform		0.38	U	0.38	8.2
Bromomethane		0.82	U	0.82	16
2-Butanone (MEK)		6.2	J	3.0	16
Carbon disulfide		0.69	U	0.69	8.2
Carbon tetrachloride		1.0	U	1.0	8.2
Chlorobenzene		0.89	U	0.89	8.2
Dibromochloromethane		0.94	U	0.94	8.2
Chloroethane		1.5	U	1.5	16
Chloroform		0.48	U	0.48	8.2
Chloromethane		1.3	U	1.3	16
1,1-Dichloroethane		0.35	U	0.35	8.2
1,2-Dichloroethane		1.2	U	1.2	8.2
1,1-Dichloroethene		0.97	U	0.97	8.2
1,2-Dichloroethene, Total		0.64	U	0.64	8.2
1,2-Dichloropropane		0.90	U	0.90	8.2
cis-1,3-Dichloropropene		2.1	U	2.1	8.2
trans-1,3-Dichloropropene		1.1	U	1.1	8.2
Ethylbenzene		1.1	U	1.1	8.2
2-Hexanone		8.0	U	8.0	33
Methylene Chloride		2.6	U	2.6	8.2
4-Methyl-2-pentanone (MIBK)		7.2	U	7.2	16
Styrene		1.0	U	1.0	8.2
1,1,2,2-Tetrachloroethane		1.0	U	1.0	8.2
Tetrachloroethene		0.97	U	0.97	8.2
Toluene		1.1	U	1.1	8.2
1,1,1-Trichloroethane		0.85	U	0.85	8.2
1,1,2-Trichloroethane		1.4	U	1.4	8.2
Trichloroethene		0.38	U	0.38	8.2
Vinyl chloride		2.2	U	2.2	8.2
Xylenes, Total		1.0	U	1.0	8.2

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	108		58 - 140
Toluene-d8 (Surr)	100		80 - 126
4-Bromofluorobenzene (Surr)	95		76 - 127
Dibromofluoromethane (Surr)	110		75 - 121

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V717**

Lab Sample ID: 280-68747-15
Client Matrix: Solid
% Moisture: 0.0

Date Sampled: 04/30/2015 0908
Date Received: 05/05/2015 1005

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-276597	Instrument ID:	VMS_J
Prep Method:	5035	Prep Batch:	280-276647	Lab File ID:	J6618.D
Dilution:	1.0			Initial Weight/Volume:	3.042 g
Analysis Date:	05/08/2015 1707			Final Weight/Volume:	5 mL
Prep Date:	04/30/2015 0908				

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
1000222-73-9	4-Cyclopropylnorcarane	4.51	17	N J
60-29-7	Ethyl ether	5.23	3.9	J N J
32210-23-4	4-tert-Butylcyclohexyl acetate	8.43	9.8	N J

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V703**

Lab Sample ID: 280-68747-1
Client Matrix: Solid
% Moisture: 0.7

Date Sampled: 04/30/2015 1148
Date Received: 05/05/2015 1005

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-276754	Instrument ID:	SGC_W
Prep Method:	3550C	Prep Batch:	280-276182	Initial Weight/Volume:	30.6 g
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	05/09/2015 1840			Injection Volume:	1 uL
Prep Date:	05/06/2015 1330			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		2.7	U	2.7	9.9
Aroclor 1221		7.9	U	7.9	16
Aroclor 1232		2.0	U	2.0	9.9
Aroclor 1242		4.6	U	4.6	9.9
Aroclor 1248		4.6	U	4.6	9.9
Aroclor 1254		2.6	U	2.6	9.9
Aroclor 1260		2.6	U	2.6	9.9

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	81		59 - 130
Tetrachloro-m-xylene	74		53 - 128

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V704**

Lab Sample ID: 280-68747-2
Client Matrix: Solid
% Moisture: 0.4

Date Sampled: 04/30/2015 1142
Date Received: 05/05/2015 1005

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-276754	Instrument ID:	SGC_W
Prep Method:	3550C	Prep Batch:	280-276182	Initial Weight/Volume:	30.5 g
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	05/09/2015 1903			Injection Volume:	1 uL
Prep Date:	05/06/2015 1330			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		2.7	U	2.7	9.9
Aroclor 1221		7.9	U	7.9	16
Aroclor 1232		2.0	U	2.0	9.9
Aroclor 1242		4.6	U	4.6	9.9
Aroclor 1248		4.6	U	4.6	9.9
Aroclor 1254		2.6	U	2.6	9.9
Aroclor 1260		2.6	U	2.6	9.9

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	81		59 - 130
Tetrachloro-m-xylene	74		53 - 128

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V705**

Lab Sample ID: 280-68747-3
Client Matrix: Solid
% Moisture: 0.7

Date Sampled: 04/30/2015 1136
Date Received: 05/05/2015 1005

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-276754	Instrument ID:	SGC_W
Prep Method:	3550C	Prep Batch:	280-276182	Initial Weight/Volume:	30.8 g
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	05/09/2015 1926			Injection Volume:	1 uL
Prep Date:	05/06/2015 1330			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		2.7	U	2.7	9.8
Aroclor 1221		7.9	U	7.9	16
Aroclor 1232		2.0	U	2.0	9.8
Aroclor 1242		4.6	U	4.6	9.8
Aroclor 1248		4.6	U	4.6	9.8
Aroclor 1254		2.5	U	2.5	9.8
Aroclor 1260		2.5	U	2.5	9.8

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	89		59 - 130
Tetrachloro-m-xylene	78		53 - 128

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V706**

Lab Sample ID: 280-68747-4
Client Matrix: Solid
% Moisture: 0.9

Date Sampled: 04/30/2015 1130
Date Received: 05/05/2015 1005

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-276754	Instrument ID:	SGC_W
Prep Method:	3550C	Prep Batch:	280-276182	Initial Weight/Volume:	31.0 g
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	05/09/2015 1950			Injection Volume:	1 uL
Prep Date:	05/06/2015 1330			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		2.7	U	2.7	9.8
Aroclor 1221		7.8	U	7.8	16
Aroclor 1232		2.0	U	2.0	9.8
Aroclor 1242		4.6	U	4.6	9.8
Aroclor 1248		4.6	U	4.6	9.8
Aroclor 1254		2.5	U	2.5	9.8
Aroclor 1260		2.5	U	2.5	9.8

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	84		59 - 130
Tetrachloro-m-xylene	74		53 - 128

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V707**

Lab Sample ID: 280-68747-5
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 04/30/2015 1008
Date Received: 05/05/2015 1005

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-276754	Instrument ID:	SGC_W
Prep Method:	3550C	Prep Batch:	280-276182	Initial Weight/Volume:	30.9 g
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	05/09/2015 2013			Injection Volume:	1 uL
Prep Date:	05/06/2015 1330			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		2.7	U	2.7	9.8
Aroclor 1221		7.8	U	7.8	16
Aroclor 1232		2.0	U	2.0	9.8
Aroclor 1242		4.6	U	4.6	9.8
Aroclor 1248		4.6	U	4.6	9.8
Aroclor 1254		2.5	U	2.5	9.8
Aroclor 1260		2.5	U	2.5	9.8

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	83		59 - 130
Tetrachloro-m-xylene	74		53 - 128

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V708**

Lab Sample ID: 280-68747-6
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 04/30/2015 1000
Date Received: 05/05/2015 1005

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-276754	Instrument ID:	SGC_W
Prep Method:	3550C	Prep Batch:	280-276182	Initial Weight/Volume:	32.1 g
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	05/09/2015 2036			Injection Volume:	1 uL
Prep Date:	05/06/2015 1330			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		2.6	U	2.6	9.4
Aroclor 1221		7.5	U	7.5	16
Aroclor 1232		1.9	U	1.9	9.4
Aroclor 1242		4.4	U	4.4	9.4
Aroclor 1248		4.4	U	4.4	9.4
Aroclor 1254		2.4	U	2.4	9.4
Aroclor 1260		2.4	U	2.4	9.4

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	82		59 - 130
Tetrachloro-m-xylene	76		53 - 128

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V709**

Lab Sample ID: 280-68747-7
Client Matrix: Solid
% Moisture: 1.5

Date Sampled: 04/30/2015 0939
Date Received: 05/05/2015 1005

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-276754	Instrument ID:	SGC_W
Prep Method:	3550C	Prep Batch:	280-276182	Initial Weight/Volume:	31.3 g
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	05/09/2015 2059			Injection Volume:	1 uL
Prep Date:	05/06/2015 1330			Result Type:	PRIMARY

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

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	81		59 - 130
Tetrachloro-m-xylene	73		53 - 128

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V710**

Lab Sample ID: 280-68747-8
Client Matrix: Solid
% Moisture: 3.9

Date Sampled: 04/30/2015 0954
Date Received: 05/05/2015 1005

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-276754	Instrument ID:	SGC_W
Prep Method:	3550C	Prep Batch:	280-276182	Initial Weight/Volume:	31.0 g
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	05/09/2015 2122			Injection Volume:	1 uL
Prep Date:	05/06/2015 1330			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	79		59 - 130
Tetrachloro-m-xylene	74		53 - 128

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V711**

Lab Sample ID: 280-68747-9
Client Matrix: Solid
% Moisture: 0.9

Date Sampled: 04/30/2015 0948
Date Received: 05/05/2015 1005

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-276754	Instrument ID:	SGC_W
Prep Method:	3550C	Prep Batch:	280-276182	Initial Weight/Volume:	30.1 g
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	05/09/2015 2232			Injection Volume:	1 uL
Prep Date:	05/06/2015 1330			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	77		59 - 130
Tetrachloro-m-xylene	71		53 - 128

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V712**

Lab Sample ID: 280-68747-10
Client Matrix: Solid
% Moisture: 1.5

Date Sampled: 04/30/2015 0933
Date Received: 05/05/2015 1005

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-276754	Instrument ID:	SGC_W
Prep Method:	3550C	Prep Batch:	280-276182	Initial Weight/Volume:	30.9 g
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	05/09/2015 2255			Injection Volume:	1 uL
Prep Date:	05/06/2015 1330			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		2.7	U	2.7	9.9
Aroclor 1221		7.9	U	7.9	16
Aroclor 1232		2.0	U	2.0	9.9
Aroclor 1242		4.6	U	4.6	9.9
Aroclor 1248		4.6	U	4.6	9.9
Aroclor 1254		2.6	U	2.6	9.9
Aroclor 1260		2.6	U	2.6	9.9

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	79		59 - 130
Tetrachloro-m-xylene	73		53 - 128

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V713**

Lab Sample ID: 280-68747-11
Client Matrix: Solid
% Moisture: 1.3

Date Sampled: 04/30/2015 0925
Date Received: 05/05/2015 1005

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-276754	Instrument ID:	SGC_W
Prep Method:	3550C	Prep Batch:	280-276182	Initial Weight/Volume:	31.5 g
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	05/09/2015 2318			Injection Volume:	1 uL
Prep Date:	05/06/2015 1330			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		2.7	U	2.7	9.6
Aroclor 1221		7.7	U	7.7	16
Aroclor 1232		1.9	U	1.9	9.6
Aroclor 1242		4.5	U	4.5	9.6
Aroclor 1248		4.5	U	4.5	9.6
Aroclor 1254		2.5	U	2.5	9.6
Aroclor 1260		2.5	U	2.5	9.6

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	80		59 - 130
Tetrachloro-m-xylene	72		53 - 128

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V714**

Lab Sample ID: 280-68747-12
Client Matrix: Solid
% Moisture: 1.3

Date Sampled: 04/30/2015 0913
Date Received: 05/05/2015 1005

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-276754	Instrument ID:	SGC_W
Prep Method:	3550C	Prep Batch:	280-276182	Initial Weight/Volume:	33.0 g
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	05/09/2015 2341			Injection Volume:	1 uL
Prep Date:	05/06/2015 1330			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Aroclor 1016		2.6	U	2.6	9.2
Aroclor 1221		7.4	U	7.4	15
Aroclor 1232		1.8	U	1.8	9.2
Aroclor 1242		4.3	U	4.3	9.2
Aroclor 1248		4.3	U	4.3	9.2
Aroclor 1254		2.4	U	2.4	9.2
Aroclor 1260		2.4	U	2.4	9.2

Surrogate	%Rec	Qualifier	Acceptance Limits
Decachlorobiphenyl	77		59 - 130
Tetrachloro-m-xylene	70		53 - 128

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V715**

Lab Sample ID: 280-68747-13
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 04/30/2015 0913
Date Received: 05/05/2015 1005

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analysis Method:	8082	Analysis Batch:	280-276754	Instrument ID:	SGC_W
Prep Method:	3550C	Prep Batch:	280-276182	Initial Weight/Volume:	30.7 g
Dilution:	1.0			Final Weight/Volume:	5 mL
Analysis Date:	05/10/2015 0005			Injection Volume:	1 uL
Prep Date:	05/06/2015 1330			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	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	Qualifier	Acceptance Limits
Decachlorobiphenyl	79		59 - 130
Tetrachloro-m-xylene	74		53 - 128

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V703**

Lab Sample ID: 280-68747-1
Client Matrix: Solid
% Moisture: 0.7

Date Sampled: 04/30/2015 1148
Date Received: 05/05/2015 1005

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-276559	Instrument ID:	SGC_U
Prep Method:	3550C	Prep Batch:	280-276160	Lab File ID:	05080008.D
Dilution:	1.0			Initial Weight/Volume:	31.1 g
Analysis Date:	05/08/2015 1131			Final Weight/Volume:	1 mL
Prep Date:	05/06/2015 1600			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		2200	J	970	3900
C10-C28		1900	J	660	3900

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

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V704**

Lab Sample ID: 280-68747-2
Client Matrix: Solid
% Moisture: 0.4

Date Sampled: 04/30/2015 1142
Date Received: 05/05/2015 1005

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-276559	Instrument ID:	SGC_U
Prep Method:	3550C	Prep Batch:	280-276160	Lab File ID:	05080009.D
Dilution:	1.0			Initial Weight/Volume:	30.4 g
Analysis Date:	05/08/2015 1159			Final Weight/Volume:	1 mL
Prep Date:	05/06/2015 1600			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		2800	J	990	4000
C10-C28		1700	J	670	4000

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

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V705**

Lab Sample ID: 280-68747-3
Client Matrix: Solid
% Moisture: 0.7

Date Sampled: 04/30/2015 1136
Date Received: 05/05/2015 1005

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-276559	Instrument ID:	SGC_U
Prep Method:	3550C	Prep Batch:	280-276160	Lab File ID:	05080010.D
Dilution:	1.0			Initial Weight/Volume:	30.8 g
Analysis Date:	05/08/2015 1227			Final Weight/Volume:	1 mL
Prep Date:	05/06/2015 1600			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		980	U	980	3900
C10-C28		1100	J	660	3900

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	83		49 - 115

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V706**

Lab Sample ID: 280-68747-4
Client Matrix: Solid
% Moisture: 0.9

Date Sampled: 04/30/2015 1130
Date Received: 05/05/2015 1005

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-276559	Instrument ID:	SGC_U
Prep Method:	3550C	Prep Batch:	280-276160	Lab File ID:	05080011.D
Dilution:	1.0			Initial Weight/Volume:	32.7 g
Analysis Date:	05/08/2015 1256			Final Weight/Volume:	1 mL
Prep Date:	05/06/2015 1600			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		2500	J	920	3700
C10-C28		1700	J	630	3700

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	84		49 - 115

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V707**

Lab Sample ID: 280-68747-5
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 04/30/2015 1008
Date Received: 05/05/2015 1005

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-276559	Instrument ID:	SGC_U
Prep Method:	3550C	Prep Batch:	280-276160	Lab File ID:	05080012.D
Dilution:	1.0			Initial Weight/Volume:	31.3 g
Analysis Date:	05/08/2015 1324			Final Weight/Volume:	1 mL
Prep Date:	05/06/2015 1600			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		2900	J	960	3900
C10-C28		1500	J	650	3900

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

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V708**

Lab Sample ID: 280-68747-6
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 04/30/2015 1000
Date Received: 05/05/2015 1005

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-276559	Instrument ID:	SGC_U
Prep Method:	3550C	Prep Batch:	280-276160	Lab File ID:	05080013.D
Dilution:	1.0			Initial Weight/Volume:	32. g
Analysis Date:	05/08/2015 1352			Final Weight/Volume:	1 mL
Prep Date:	05/06/2015 1600			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		3400	J	940	3800
C10-C28		1700	J	640	3800

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	81		49 - 115

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: J1V709

Lab Sample ID: 280-68747-7
Client Matrix: Solid
% Moisture: 1.5

Date Sampled: 04/30/2015 0939
Date Received: 05/05/2015 1005

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-276559	Instrument ID:	SGC_U
Prep Method:	3550C	Prep Batch:	280-276160	Lab File ID:	05080015.D
Dilution:	1.0			Initial Weight/Volume:	30.5 g
Analysis Date:	05/08/2015 1449			Final Weight/Volume:	1 mL
Prep Date:	05/06/2015 1600			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		5400		1000	4000
C10-C28		3100	J	680	4000

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	84		49 - 115

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V710**

Lab Sample ID: 280-68747-8
Client Matrix: Solid
% Moisture: 3.9

Date Sampled: 04/30/2015 0954
Date Received: 05/05/2015 1005

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-276559	Instrument ID:	SGC_U
Prep Method:	3550C	Prep Batch:	280-276160	Lab File ID:	05080016.D
Dilution:	1.0			Initial Weight/Volume:	30.1 g
Analysis Date:	05/08/2015 1518			Final Weight/Volume:	1 mL
Prep Date:	05/06/2015 1600			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		4500		1000	4100
C10-C28		1900	J	700	4100

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

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V711**

Lab Sample ID: 280-68747-9
Client Matrix: Solid
% Moisture: 0.9

Date Sampled: 04/30/2015 0948
Date Received: 05/05/2015 1005

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-276559	Instrument ID:	SGC_U
Prep Method:	3550C	Prep Batch:	280-276160	Lab File ID:	05080017.D
Dilution:	1.0			Initial Weight/Volume:	30.4 g
Analysis Date:	05/08/2015 1546			Final Weight/Volume:	1 mL
Prep Date:	05/06/2015 1600			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		4100		990	4000
C10-C28		1900	J	680	4000

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

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V712**

Lab Sample ID: 280-68747-10
Client Matrix: Solid
% Moisture: 1.5

Date Sampled: 04/30/2015 0933
Date Received: 05/05/2015 1005

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-276559	Instrument ID:	SGC_U
Prep Method:	3550C	Prep Batch:	280-276160	Lab File ID:	05080018.D
Dilution:	1.0			Initial Weight/Volume:	30.2 g
Analysis Date:	05/08/2015 1614			Final Weight/Volume:	1 mL
Prep Date:	05/06/2015 1600			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		3400	J	1000	4000
C10-C28		1600	J	680	4000

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	83		49 - 115

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V713**

Lab Sample ID: 280-68747-11
Client Matrix: Solid
% Moisture: 1.3

Date Sampled: 04/30/2015 0925
Date Received: 05/05/2015 1005

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-276559	Instrument ID:	SGC_U
Prep Method:	3550C	Prep Batch:	280-276160	Lab File ID:	05080021.D
Dilution:	1.0			Initial Weight/Volume:	30. g
Analysis Date:	05/08/2015 1739			Final Weight/Volume:	1 mL
Prep Date:	05/06/2015 1600			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		1000	U	1000	4100
C10-C28		690	U	690	4100

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	85		49 - 115

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V714**

Lab Sample ID: 280-68747-12
Client Matrix: Solid
% Moisture: 1.3

Date Sampled: 04/30/2015 0913
Date Received: 05/05/2015 1005

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-276559	Instrument ID:	SGC_U
Prep Method:	3550C	Prep Batch:	280-276160	Lab File ID:	05080022.D
Dilution:	1.0			Initial Weight/Volume:	30. g
Analysis Date:	05/08/2015 1807			Final Weight/Volume:	1 mL
Prep Date:	05/06/2015 1600			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		3000	J	1000	4100
C10-C28		1400	J	690	4100

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	88		49 - 115

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: J1V715

Lab Sample ID: 280-68747-13
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 04/30/2015 0913
Date Received: 05/05/2015 1005

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

Analysis Method:	NWTPH-Dx	Analysis Batch:	280-276559	Instrument ID:	SGC_U
Prep Method:	3550C	Prep Batch:	280-276160	Lab File ID:	05080023.D
Dilution:	1.0			Initial Weight/Volume:	30.1 g
Analysis Date:	05/08/2015 1836			Final Weight/Volume:	1 mL
Prep Date:	05/06/2015 1600			Injection Volume:	1 uL

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
C10-C36		2700	J	1000	4000
C10-C28		1300	J	680	4000

Surrogate	%Rec	Qualifier	Acceptance Limits
o-Terphenyl	78		49 - 115

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V703**

Lab Sample ID: 280-68747-1
Client Matrix: Solid
% Moisture: 0.7

Date Sampled: 04/30/2015 1148
Date Received: 05/05/2015 1005

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-276338	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-276149	Initial Weight/Volume:	30.6 g
Dilution:	1.0			Final Weight/Volume:	4 mL
Analysis Date:	05/07/2015 1359			Injection Volume:	20 uL
Prep Date:	05/06/2015 1040			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	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	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	94		72 - 115

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V704**

Lab Sample ID: 280-68747-2
Client Matrix: Solid
% Moisture: 0.4

Date Sampled: 04/30/2015 1142
Date Received: 05/05/2015 1005

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-276338	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-276149	Initial Weight/Volume:	31.5 g
Dilution:	1.0			Final Weight/Volume:	4 mL
Analysis Date:	05/07/2015 1430			Injection Volume:	20 uL
Prep Date:	05/06/2015 1040			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		9.6	U	9.6	96
Acenaphthylene		8.6	U	8.6	96
Anthracene		2.9	U	2.9	19
Benzo[a]anthracene		3.1	U	3.1	14
Benzo[a]pyrene		6.1	U	6.1	14
Benzo[b]fluoranthene		4.0	U	4.0	14
Benzo[g,h,i]perylene		6.9	U	6.9	29
Benzo[k]fluoranthene		3.8	U	3.8	14
Chrysene		4.6	U	4.6	38
Dibenzo(a,h)anthracene		11	U	11	29
Fluoranthene		12	U	12	38
Fluorene		5.1	U	5.1	29
Indeno[1,2,3-cd]pyrene		11	U	11	29
Naphthalene		11	U	11	96
Phenanthrene		11	U	11	38
Pyrene		11	U	11	38

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	86		72 - 115

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V705**

Lab Sample ID: 280-68747-3
Client Matrix: Solid
% Moisture: 0.7

Date Sampled: 04/30/2015 1136
Date Received: 05/05/2015 1005

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-276338	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-276149	Initial Weight/Volume:	31.8 g
Dilution:	1.0			Final Weight/Volume:	4 mL
Analysis Date:	05/07/2015 1501			Injection Volume:	20 uL
Prep Date:	05/06/2015 1040			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		9.5	U	9.5	95
Acenaphthylene		8.5	U	8.5	95
Anthracene		2.9	U	2.9	19
Benzo[a]anthracene		3.0	U	3.0	14
Benzo[a]pyrene		6.1	U	6.1	14
Benzo[b]fluoranthene		4.0	U	4.0	14
Benzo[g,h,i]perylene		6.8	U	6.8	28
Benzo[k]fluoranthene		3.7	U	3.7	14
Chrysene		4.6	U	4.6	38
Dibenzo(a,h)anthracene		10	U	10	28
Fluoranthene		12	U	12	38
Fluorene		5.0	U	5.0	28
Indeno[1,2,3-cd]pyrene		11	U	11	28
Naphthalene		11	U	11	95
Phenanthrene		11	U	11	38
Pyrene		11	U	11	38

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	91		72 - 115

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V706**

Lab Sample ID: 280-68747-4
Client Matrix: Solid
% Moisture: 0.9

Date Sampled: 04/30/2015 1130
Date Received: 05/05/2015 1005

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-276338	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-276149	Initial Weight/Volume:	30. g
Dilution:	1.0			Final Weight/Volume:	4 mL
Analysis Date:	05/07/2015 1531			Injection Volume:	20 uL
Prep Date:	05/06/2015 1040			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		10	U	10	100
Acenaphthylene		9.1	U	9.1	100
Anthracene		3.1	U	3.1	20
Benzo[a]anthracene		3.2	U	3.2	15
Benzo[a]pyrene		6.5	U	6.5	15
Benzo[b]fluoranthene		4.2	U	4.2	15
Benzo[g,h,i]perylene		7.3	U	7.3	30
Benzo[k]fluoranthene		4.0	U	4.0	15
Chrysene		4.9	U	4.9	40
Dibenzo(a,h)anthracene		11	U	11	30
Fluoranthene		13	U	13	40
Fluorene		5.3	U	5.3	30
Indeno[1,2,3-cd]pyrene		12	U	12	30
Naphthalene		12	U	12	100
Phenanthrene		12	U	12	40
Pyrene		12	U	12	40

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

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V707**

Lab Sample ID: 280-68747-5
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 04/30/2015 1008
Date Received: 05/05/2015 1005

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-276338	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-276149	Initial Weight/Volume:	32. g
Dilution:	1.0			Final Weight/Volume:	4 mL
Analysis Date:	05/07/2015 1602			Injection Volume:	20 uL
Prep Date:	05/06/2015 1040			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		9.4	U	9.4	94
Acenaphthylene		8.5	U	8.5	94
Anthracene		2.9	U	2.9	19
Benzo[a]anthracene		3.0	U	3.0	14
Benzo[a]pyrene		6.0	U	6.0	14
Benzo[b]fluoranthene		4.0	U	4.0	14
Benzo[g,h,i]perylene		6.8	U	6.8	28
Benzo[k]fluoranthene		3.7	U	3.7	14
Chrysene		4.6	U	4.6	38
Dibenzo(a,h)anthracene		10	U	10	28
Fluoranthene		12	U	12	38
Fluorene		5.0	U	5.0	28
Indeno[1,2,3-cd]pyrene		11	U	11	28
Naphthalene		11	U	11	94
Phenanthrene		11	U	11	38
Pyrene		11	U	11	38

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	89		72 - 115

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: J1V708

Lab Sample ID: 280-68747-6
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 04/30/2015 1000
Date Received: 05/05/2015 1005

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-276338	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-276149	Initial Weight/Volume:	32. g
Dilution:	1.0			Final Weight/Volume:	4 mL
Analysis Date:	05/07/2015 1733			Injection Volume:	20 uL
Prep Date:	05/06/2015 1040			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		9.4	U	9.4	94
Acenaphthylene		8.5	U	8.5	94
Anthracene		2.9	U	2.9	19
Benzo[a]anthracene		3.0	U	3.0	14
Benzo[a]pyrene		6.0	U	6.0	14
Benzo[b]fluoranthene		4.0	U	4.0	14
Benzo[g,h,i]perylene		6.8	U	6.8	28
Benzo[k]fluoranthene		3.7	U	3.7	14
Chrysene		4.6	U	4.6	38
Dibenzo(a,h)anthracene		10	U	10	28
Fluoranthene		12	U	12	38
Fluorene		5.0	U	5.0	28
Indeno[1,2,3-cd]pyrene		11	U	11	28
Naphthalene		11	U	11	94
Phenanthrene		11	U	11	38
Pyrene		11	U	11	38

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

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V709**

Lab Sample ID: 280-68747-7
Client Matrix: Solid
% Moisture: 1.5

Date Sampled: 04/30/2015 0939
Date Received: 05/05/2015 1005

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-276338	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-276149	Initial Weight/Volume:	30.9 g
Dilution:	1.0			Final Weight/Volume:	4 mL
Analysis Date:	05/07/2015 1834			Injection Volume:	20 uL
Prep Date:	05/06/2015 1040			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	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	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	91		72 - 115

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V710**

Lab Sample ID: 280-68747-8
Client Matrix: Solid
% Moisture: 3.9

Date Sampled: 04/30/2015 0954
Date Received: 05/05/2015 1005

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-276338	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-276149	Initial Weight/Volume:	30.3 g
Dilution:	1.0			Final Weight/Volume:	4 mL
Analysis Date:	05/07/2015 1905			Injection Volume:	20 uL
Prep Date:	05/06/2015 1040			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		3.1	U	3.1	21
Benzo[a]anthracene		3.3	U	3.3	15
Benzo[a]pyrene		6.6	U	6.6	15
Benzo[b]fluoranthene		4.3	U	4.3	15
Benzo[g,h,i]perylene		7.4	U	7.4	31
Benzo[k]fluoranthene		4.1	U	4.1	15
Chrysene		5.0	U	5.0	41
Dibenzo(a,h)anthracene		11	U	11	31
Fluoranthene		13	U	13	41
Fluorene		5.4	U	5.4	31
Indeno[1,2,3-cd]pyrene		12	U	12	31
Naphthalene		12	U	12	100
Phenanthrene		12	U	12	41
Pyrene		12	U	12	41

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

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V711**

Lab Sample ID: 280-68747-9
Client Matrix: Solid
% Moisture: 0.9

Date Sampled: 04/30/2015 0948
Date Received: 05/05/2015 1005

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-276338	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-276149	Initial Weight/Volume:	30.4 g
Dilution:	1.0			Final Weight/Volume:	4 mL
Analysis Date:	05/07/2015 1935			Injection Volume:	20 uL
Prep Date:	05/06/2015 1040			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		3.0	U	3.0	20
Benzo[a]anthracene		3.2	U	3.2	15
Benzo[a]pyrene		6.4	U	6.4	15
Benzo[b]fluoranthene		4.2	U	4.2	15
Benzo[g,h,i]perylene		7.2	U	7.2	30
Benzo[k]fluoranthene		3.9	U	3.9	15
Chrysene		4.8	U	4.8	40
Dibenzo(a,h)anthracene		11	U	11	30
Fluoranthene		13	U	13	40
Fluorene		5.3	U	5.3	30
Indeno[1,2,3-cd]pyrene		12	U	12	30
Naphthalene		12	U	12	100
Phenanthrene		12	U	12	40
Pyrene		12	U	12	40

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

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V712**

Lab Sample ID: 280-68747-10
Client Matrix: Solid
% Moisture: 1.5

Date Sampled: 04/30/2015 0933
Date Received: 05/05/2015 1005

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-276338	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-276149	Initial Weight/Volume:	30. g
Dilution:	1.0			Final Weight/Volume:	4 mL
Analysis Date:	05/07/2015 2006			Injection Volume:	20 uL
Prep Date:	05/06/2015 1040			Result Type:	PRIMARY

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

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	107		72 - 115

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V713**

Lab Sample ID: 280-68747-11
Client Matrix: Solid
% Moisture: 1.3

Date Sampled: 04/30/2015 0925
Date Received: 05/05/2015 1005

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-276338	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-276149	Initial Weight/Volume:	30.9 g
Dilution:	1.0			Final Weight/Volume:	4 mL
Analysis Date:	05/07/2015 2036			Injection Volume:	20 uL
Prep Date:	05/06/2015 1040			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		9.8	U	9.8	98
Acenaphthylene		8.9	U	8.9	98
Anthracene		3.0	U	3.0	20
Benzo[a]anthracene		3.1	U	3.1	15
Benzo[a]pyrene		6.3	U	6.3	15
Benzo[b]fluoranthene		4.1	U	4.1	15
Benzo[g,h,i]perylene		7.1	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	98
Phenanthrene		12	U	12	39
Pyrene		12	U	12	39

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	83		72 - 115

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V714**

Lab Sample ID: 280-68747-12
Client Matrix: Solid
% Moisture: 1.3

Date Sampled: 04/30/2015 0913
Date Received: 05/05/2015 1005

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-276338	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-276149	Initial Weight/Volume:	31. g
Dilution:	1.0			Final Weight/Volume:	4 mL
Analysis Date:	05/07/2015 2107			Injection Volume:	20 uL
Prep Date:	05/06/2015 1040			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		9.8	U	9.8	98
Acenaphthylene		8.8	U	8.8	98
Anthracene		3.0	U	3.0	20
Benzo[a]anthracene		3.1	U	3.1	15
Benzo[a]pyrene		6.3	U	6.3	15
Benzo[b]fluoranthene		4.1	U	4.1	15
Benzo[g,h,i]perylene		7.1	U	7.1	29
Benzo[k]fluoranthene		3.9	U	3.9	15
Chrysene		4.7	U	4.7	39
Dibenzo(a,h)anthracene		11	U	11	29
Fluoranthene		13	U	13	39
Fluorene		5.2	U	5.2	29
Indeno[1,2,3-cd]pyrene		12	U	12	29
Naphthalene		12	U	12	98
Phenanthrene		12	U	12	39
Pyrene		12	U	12	39

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	91		72 - 115

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V715**

Lab Sample ID: 280-68747-13
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 04/30/2015 0913
Date Received: 05/05/2015 1005

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-277064	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-276956	Initial Weight/Volume:	32.0 g
Dilution:	1.0			Final Weight/Volume:	4 mL
Analysis Date:	05/12/2015 1336			Injection Volume:	20 uL
Prep Date:	05/11/2015 1616			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		9.4	U	9.4	94
Acenaphthylene		8.5	U	8.5	94
Anthracene		2.9	U	2.9	19
Benzo[a]anthracene		3.0	U	3.0	14
Benzo[a]pyrene		6.0	U	6.0	14
Benzo[b]fluoranthene		4.0	U	4.0	14
Benzo[g,h,i]perylene		6.8	U	6.8	28
Benzo[k]fluoranthene		3.7	U	3.7	14
Chrysene		4.6	U	4.6	38
Dibenzo(a,h)anthracene		10	U	10	28
Fluoranthene		12	U	12	38
Fluorene		5.0	U	5.0	28
Indeno[1,2,3-cd]pyrene		11	U	11	28
Naphthalene		11	U	11	94
Phenanthrene		11	U	11	38
Pyrene		11	U	11	38

Surrogate	%Rec	Qualifier	Acceptance Limits
Terphenyl-d14 (SUR)	82		72 - 115

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V716**

Lab Sample ID: 280-68747-14
Client Matrix: Solid
% Moisture: 0.0

Date Sampled: 04/30/2015 0904
Date Received: 05/05/2015 1005

8310 PAHs (HPLC)

Analysis Method:	8310	Analysis Batch:	280-276338	Instrument ID:	CHHPLC_G
Prep Method:	3550C	Prep Batch:	280-276149	Initial Weight/Volume:	31.2 g
Dilution:	1.0			Final Weight/Volume:	4 mL
Analysis Date:	05/07/2015 2208			Injection Volume:	20 uL
Prep Date:	05/06/2015 1040			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (ug/Kg)	Qualifier	MDL	RL
Acenaphthene		9.6	U	9.6	96
Acenaphthylene		8.7	U	8.7	96
Anthracene		2.9	U	2.9	19
Benzo[a]anthracene		3.1	U	3.1	14
Benzo[a]pyrene		6.2	U	6.2	14
Benzo[b]fluoranthene		4.0	U	4.0	14
Benzo[g,h,i]perylene		6.9	U	6.9	29
Benzo[k]fluoranthene		3.8	U	3.8	14
Chrysene		4.7	U	4.7	38
Dibenzo(a,h)anthracene		11	U	11	29
Fluoranthene		13	U	13	38
Fluorene		5.1	U	5.1	29
Indeno[1,2,3-cd]pyrene		12	U	12	29
Naphthalene		12	U	12	96
Phenanthrene		12	U	12	38
Pyrene		12	U	12	38

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

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V703**

Lab Sample ID: 280-68747-1
Client Matrix: Solid
% Moisture: 0.7

Date Sampled: 04/30/2015 1148
Date Received: 05/05/2015 1005

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-276805	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-276082	Lab File ID:	25A050815.asc
Dilution:	1.0			Initial Weight/Volume:	1.17 g
Analysis Date:	05/08/2015 1101			Final Weight/Volume:	100 mL
Prep Date:	05/06/2015 0830				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		10000		1.3	4.3
Antimony		0.33	U	0.33	0.52
Arsenic		2.9		0.57	0.86
Barium		82.6		0.065	0.43
Beryllium		0.32		0.028	0.17
Boron		1.7		0.84	1.7
Cadmium		0.13	B	0.035	0.17
Calcium		3460		12.1	43.0
Chromium		12.2		0.050	0.17
Cobalt		8.0	X	0.086	0.86
Copper		13.0		0.19	0.86
Iron		19300		3.3	4.3
Lead		4.8		0.23	0.43
Magnesium		4160		3.2	17.2
Manganese		358		0.086	0.86
Molybdenum		0.22	U	0.22	1.7
Nickel		10.9		0.11	3.4
Potassium		2100		35.3	258
Selenium		0.80	B	0.74	0.86
Silicon		184	N	4.9	8.6
Silver		0.14	U	0.14	0.17
Sodium		237		50.8	103
Vanadium		38.1		0.081	1.7
Zinc		40.9		0.34	0.86

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-276397	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-276197	Lab File ID:	150506af.TXT
Dilution:	1.0			Initial Weight/Volume:	0.53 g
Analysis Date:	05/06/2015 2229			Final Weight/Volume:	50 mL
Prep Date:	05/06/2015 1300				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0063	U N	0.0063	0.019

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V704**

Lab Sample ID: 280-68747-2
Client Matrix: Solid
% Moisture: 0.4

Date Sampled: 04/30/2015 1142
Date Received: 05/05/2015 1005

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-276805	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-276082	Lab File ID:	25A050815.asc
Dilution:	1.0			Initial Weight/Volume:	1.09 g
Analysis Date:	05/08/2015 1111			Final Weight/Volume:	100 mL
Prep Date:	05/06/2015 0830				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		9520		1.4	4.6
Antimony		0.35	U	0.35	0.55
Arsenic		3.2		0.61	0.92
Barium		85.2		0.070	0.46
Beryllium		0.29		0.030	0.18
Boron		2.1		0.90	1.8
Cadmium		0.13	B	0.038	0.18
Calcium		3370		13.0	46.1
Chromium		11.4		0.053	0.18
Cobalt		7.6	X	0.092	0.92
Copper		12.5		0.20	0.92
Iron		18300		3.5	4.6
Lead		4.8		0.25	0.46
Magnesium		3990		3.4	18.4
Manganese		336		0.092	0.92
Molybdenum		0.24	U	0.24	1.8
Nickel		10.7		0.11	3.7
Potassium		2120		37.8	276
Selenium		0.79	U	0.79	0.92
Silicon		212		5.2	9.2
Silver		0.15	U	0.15	0.18
Sodium		195		54.4	111
Vanadium		37.1		0.087	1.8
Zinc		40.9		0.37	0.92

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-276397	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-276197	Lab File ID:	150506af.TXT
Dilution:	1.0			Initial Weight/Volume:	0.57 g
Analysis Date:	05/06/2015 2241			Final Weight/Volume:	50 mL
Prep Date:	05/06/2015 1300				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0061	B	0.0058	0.018

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V705**

Lab Sample ID: 280-68747-3
Client Matrix: Solid
% Moisture: 0.7

Date Sampled: 04/30/2015 1136
Date Received: 05/05/2015 1005

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-276805	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-276082	Lab File ID:	25A050815.asc
Dilution:	1.0			Initial Weight/Volume:	1.15 g
Analysis Date:	05/08/2015 1114			Final Weight/Volume:	100 mL
Prep Date:	05/06/2015 0830				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8720		1.4	4.4
Antimony		0.33	U	0.33	0.53
Arsenic		3.2		0.58	0.88
Barium		80.2		0.067	0.44
Beryllium		0.27		0.029	0.18
Boron		1.7	B	0.86	1.8
Cadmium		0.13	B	0.036	0.18
Calcium		4390		12.3	43.8
Chromium		11.2		0.051	0.18
Cobalt		7.7	X	0.088	0.88
Copper		14.1		0.19	0.88
Iron		18600		3.3	4.4
Lead		3.9		0.24	0.44
Magnesium		4450		3.2	17.5
Manganese		326		0.088	0.88
Molybdenum		0.23	U	0.23	1.8
Nickel		11.5		0.11	3.5
Potassium		1990		35.9	263
Selenium		0.75	U	0.75	0.88
Silicon		204		5.0	8.8
Silver		0.14	U	0.14	0.18
Sodium		198		51.6	105
Vanadium		36.4		0.082	1.8
Zinc		38.0		0.35	0.88

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-276397	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-276197	Lab File ID:	150506af.TXT
Dilution:	1.0			Initial Weight/Volume:	0.50 g
Analysis Date:	05/06/2015 2243			Final Weight/Volume:	50 mL
Prep Date:	05/06/2015 1300				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0067	U	0.0067	0.021

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V706**

Lab Sample ID: 280-68747-4
Client Matrix: Solid
% Moisture: 0.9

Date Sampled: 04/30/2015 1130
Date Received: 05/05/2015 1005

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-276805	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-276082	Lab File ID:	25A050815.asc
Dilution:	1.0			Initial Weight/Volume:	1.14 g
Analysis Date:	05/08/2015 1116			Final Weight/Volume:	100 mL
Prep Date:	05/06/2015 0830				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		9760		1.4	4.4
Antimony		0.34	U	0.34	0.53
Arsenic		3.2		0.58	0.89
Barium		87.9		0.067	0.44
Beryllium		0.30		0.029	0.18
Boron		1.5	B	0.87	1.8
Cadmium		0.16	B	0.036	0.18
Calcium		3710		12.5	44.3
Chromium		12.2		0.051	0.18
Cobalt		7.9	X	0.089	0.89
Copper		15.9		0.19	0.89
Iron		19600		3.4	4.4
Lead		8.8		0.24	0.44
Magnesium		4120		3.3	17.7
Manganese		351		0.089	0.89
Molybdenum		0.23	U	0.23	1.8
Nickel		11.1		0.11	3.5
Potassium		2160		36.3	266
Selenium		0.76	U	0.76	0.89
Silicon		190		5.0	8.9
Silver		0.14	U	0.14	0.18
Sodium		185		52.2	106
Vanadium		38.8		0.083	1.8
Zinc		48.7		0.35	0.89

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-276397	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-276197	Lab File ID:	150506af.TXT
Dilution:	1.0			Initial Weight/Volume:	0.51 g
Analysis Date:	05/06/2015 2245			Final Weight/Volume:	50 mL
Prep Date:	05/06/2015 1300				

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

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V707**

Lab Sample ID: 280-68747-5
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 04/30/2015 1008
Date Received: 05/05/2015 1005

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-276805	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-276082	Lab File ID:	25A050815.asc
Dilution:	1.0			Initial Weight/Volume:	1.01 g
Analysis Date:	05/08/2015 1128			Final Weight/Volume:	100 mL
Prep Date:	05/06/2015 0830				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8470		1.5	5.0
Antimony		0.38	U	0.38	0.60
Arsenic		2.9		0.66	1.0
Barium		76.1		0.076	0.50
Beryllium		0.28		0.033	0.20
Boron		1.8	B	0.98	2.0
Cadmium		0.14	B	0.041	0.20
Calcium		3160		14.0	49.8
Chromium		10.4		0.058	0.20
Cobalt		6.8	X	0.10	1.0
Copper		11.9		0.22	1.0
Iron		16600		3.8	5.0
Lead		5.3		0.27	0.50
Magnesium		3700		3.7	19.9
Manganese		295		0.10	1.0
Molybdenum		0.26	U	0.26	2.0
Nickel		9.8		0.12	4.0
Potassium		1990		40.8	299
Selenium		0.87	B	0.86	1.0
Silicon		142		5.6	10
Silver		0.16	U	0.16	0.20
Sodium		188		58.8	120
Vanadium		32.7		0.094	2.0
Zinc		38.5		0.40	1.0

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-276397	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-276197	Lab File ID:	150506af.TXT
Dilution:	1.0			Initial Weight/Volume:	0.52 g
Analysis Date:	05/06/2015 2248			Final Weight/Volume:	50 mL
Prep Date:	05/06/2015 1300				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0064	U	0.0064	0.020

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V708**

Lab Sample ID: 280-68747-6
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 04/30/2015 1000
Date Received: 05/05/2015 1005

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-276805	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-276082	Lab File ID:	25A050815.asc
Dilution:	1.0			Initial Weight/Volume:	1.01 g
Analysis Date:	05/08/2015 1131			Final Weight/Volume:	100 mL
Prep Date:	05/06/2015 0830				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		9360		1.5	5.0
Antimony		0.38	U	0.38	0.60
Arsenic		3.2		0.66	1.0
Barium		79.4		0.076	0.50
Beryllium		0.28		0.033	0.20
Boron		1.8	B	0.98	2.0
Cadmium		0.15	B	0.041	0.20
Calcium		3600		14.0	49.8
Chromium		11.7		0.058	0.20
Cobalt		7.3	X	0.10	1.0
Copper		13.9		0.22	1.0
Iron		18400		3.8	5.0
Lead		4.8		0.27	0.50
Magnesium		4100		3.7	19.9
Manganese		306		0.10	1.0
Molybdenum		0.26	U	0.26	2.0
Nickel		10.7		0.12	4.0
Potassium		2000		40.8	299
Selenium		0.86	U	0.86	1.0
Silicon		185		5.6	10
Silver		0.16	U	0.16	0.20
Sodium		211		58.7	119
Vanadium		36.8		0.094	2.0
Zinc		37.6		0.40	1.0

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-276397	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-276197	Lab File ID:	150506af.TXT
Dilution:	1.0			Initial Weight/Volume:	0.51 g
Analysis Date:	05/06/2015 2250			Final Weight/Volume:	50 mL
Prep Date:	05/06/2015 1300				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0065	U	0.0065	0.020

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V709**

Lab Sample ID: 280-68747-7
Client Matrix: Solid
% Moisture: 1.5

Date Sampled: 04/30/2015 0939
Date Received: 05/05/2015 1005

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-276805	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-276082	Lab File ID:	25A050815.asc
Dilution:	1.0			Initial Weight/Volume:	1.13 g
Analysis Date:	05/08/2015 1133			Final Weight/Volume:	100 mL
Prep Date:	05/06/2015 0830				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		8460		1.4	4.5
Antimony		0.34	U	0.34	0.54
Arsenic		2.9		0.59	0.90
Barium		65.6		0.068	0.45
Beryllium		0.32		0.030	0.18
Boron		0.89	B	0.88	1.8
Cadmium		0.15	B	0.037	0.18
Calcium		4850		12.7	44.9
Chromium		8.6		0.052	0.18
Cobalt		9.4	X	0.090	0.90
Copper		20.6		0.19	0.90
Iron		22800		3.4	4.5
Lead		4.8		0.24	0.45
Magnesium		4770		3.3	18.0
Manganese		315		0.090	0.90
Molybdenum		0.23	U	0.23	1.8
Nickel		10.4		0.11	3.6
Potassium		1390		36.8	269
Selenium		0.77	U	0.77	0.90
Silicon		204		5.1	9.0
Silver		0.14	U	0.14	0.18
Sodium		260		53.0	108
Vanadium		47.2		0.084	1.8
Zinc		41.3		0.36	0.90

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-276397	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-276197	Lab File ID:	150506af.TXT
Dilution:	1.0			Initial Weight/Volume:	0.50 g
Analysis Date:	05/06/2015 2252			Final Weight/Volume:	50 mL
Prep Date:	05/06/2015 1300				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0081	B	0.0067	0.021

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V710**

Lab Sample ID: 280-68747-8
Client Matrix: Solid
% Moisture: 3.9

Date Sampled: 04/30/2015 0954
Date Received: 05/05/2015 1005

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-276805	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-276082	Lab File ID:	25A050815.asc
Dilution:	1.0			Initial Weight/Volume:	1.16 g
Analysis Date:	05/08/2015 1136			Final Weight/Volume:	100 mL
Prep Date:	05/06/2015 0830				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		9520		1.4	4.5
Antimony		0.34	U	0.34	0.54
Arsenic		3.1		0.59	0.90
Barium		79.7		0.068	0.45
Beryllium		0.28		0.030	0.18
Boron		1.6	B	0.88	1.8
Cadmium		0.19		0.037	0.18
Calcium		4100		12.6	44.8
Chromium		11.8		0.052	0.18
Cobalt		7.8	X	0.090	0.90
Copper		39.1		0.19	0.90
Iron		19400		3.4	4.5
Lead		8.8		0.24	0.45
Magnesium		4280		3.3	17.9
Manganese		342		0.090	0.90
Molybdenum		0.23	U	0.23	1.8
Nickel		11.0		0.11	3.6
Potassium		2000		36.8	269
Selenium		0.86	B	0.77	0.90
Silicon		206		5.1	9.0
Silver		0.14	U	0.14	0.18
Sodium		247		52.9	108
Vanadium		39.1		0.084	1.8
Zinc		48.4		0.36	0.90

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-276397	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-276197	Lab File ID:	150506af.TXT
Dilution:	1.0			Initial Weight/Volume:	0.54 g
Analysis Date:	05/06/2015 2254			Final Weight/Volume:	50 mL
Prep Date:	05/06/2015 1300				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0080	B	0.0064	0.020

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V711**

Lab Sample ID: 280-68747-9
Client Matrix: Solid
% Moisture: 0.9

Date Sampled: 04/30/2015 0948
Date Received: 05/05/2015 1005

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-276805	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-276082	Lab File ID:	25A050815.asc
Dilution:	1.0			Initial Weight/Volume:	1.01 g
Analysis Date:	05/08/2015 1138			Final Weight/Volume:	100 mL
Prep Date:	05/06/2015 0830				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		10100		1.5	5.0
Antimony		0.38	U	0.38	0.60
Arsenic		2.8		0.66	1.0
Barium		91.1		0.076	0.50
Beryllium		0.31		0.033	0.20
Boron		1.4	B	0.98	2.0
Cadmium		0.15	B	0.041	0.20
Calcium		3900		14.1	49.9
Chromium		11.1		0.058	0.20
Cobalt		8.0	X	0.10	1.0
Copper		13.5		0.22	1.0
Iron		20700		3.8	5.0
Lead		5.1		0.27	0.50
Magnesium		4150		3.7	20.0
Manganese		344		0.10	1.0
Molybdenum		0.26	U	0.26	2.0
Nickel		10.8		0.12	4.0
Potassium		2160		41.0	300
Selenium		0.86	U	0.86	1.0
Silicon		233		5.7	10
Silver		0.16	U	0.16	0.20
Sodium		207		58.9	120
Vanadium		40.2		0.094	2.0
Zinc		41.2		0.40	1.0

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-276397	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-276197	Lab File ID:	150506af.TXT
Dilution:	1.0			Initial Weight/Volume:	0.50 g
Analysis Date:	05/06/2015 2257			Final Weight/Volume:	50 mL
Prep Date:	05/06/2015 1300				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0067	U	0.0067	0.021

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V712**

Lab Sample ID: 280-68747-10
Client Matrix: Solid
% Moisture: 1.5

Date Sampled: 04/30/2015 0933
Date Received: 05/05/2015 1005

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-276805	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-276082	Lab File ID:	25A050815.asc
Dilution:	1.0			Initial Weight/Volume:	1.09 g
Analysis Date:	05/08/2015 1140			Final Weight/Volume:	100 mL
Prep Date:	05/06/2015 0830				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		9760		1.4	4.7
Antimony		0.35	U	0.35	0.56
Arsenic		2.6		0.61	0.93
Barium		84.9		0.071	0.47
Beryllium		0.31		0.031	0.19
Boron		1.3	B	0.91	1.9
Cadmium		0.16	B	0.038	0.19
Calcium		3320		13.1	46.6
Chromium		11.7		0.054	0.19
Cobalt		7.7	X	0.093	0.93
Copper		12.5		0.20	0.93
Iron		19000		3.5	4.7
Lead		5.3		0.25	0.47
Magnesium		4000		3.4	18.6
Manganese		342		0.093	0.93
Molybdenum		0.24	U	0.24	1.9
Nickel		10.8		0.11	3.7
Potassium		2020		38.2	279
Selenium		0.80	U	0.80	0.93
Silicon		155		5.3	9.3
Silver		0.15	U	0.15	0.19
Sodium		180		54.9	112
Vanadium		39.6		0.088	1.9
Zinc		41.8		0.37	0.93

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-276397	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-276197	Lab File ID:	150506af.TXT
Dilution:	1.0			Initial Weight/Volume:	0.58 g
Analysis Date:	05/06/2015 2259			Final Weight/Volume:	50 mL
Prep Date:	05/06/2015 1300				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0063	B	0.0058	0.018

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V713**

Lab Sample ID: 280-68747-11
Client Matrix: Solid
% Moisture: 1.3

Date Sampled: 04/30/2015 0925
Date Received: 05/05/2015 1005

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-276805	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-276082	Lab File ID:	25A050815.asc
Dilution:	1.0			Initial Weight/Volume:	1.02 g
Analysis Date:	05/08/2015 1143			Final Weight/Volume:	100 mL
Prep Date:	05/06/2015 0830				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		9820		1.5	5.0
Antimony		0.38	U	0.38	0.60
Arsenic		3.3		0.66	0.99
Barium		84.9		0.075	0.50
Beryllium		0.29		0.033	0.20
Boron		1.5	B	0.97	2.0
Cadmium		0.13	B	0.041	0.20
Calcium		3540		14.0	49.7
Chromium		11.8		0.058	0.20
Cobalt		7.9	X	0.099	0.99
Copper		13.4		0.22	0.99
Iron		18700		3.8	5.0
Lead		4.6		0.27	0.50
Magnesium		4280		3.7	19.9
Manganese		338		0.099	0.99
Molybdenum		0.26	U	0.26	2.0
Nickel		11.3		0.12	4.0
Potassium		2040		40.7	298
Selenium		0.85	U	0.85	0.99
Silicon		200		5.6	9.9
Silver		0.16	U	0.16	0.20
Sodium		217		58.6	119
Vanadium		37.2		0.093	2.0
Zinc		39.6		0.40	0.99

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-276397	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-276197	Lab File ID:	150506af.TXT
Dilution:	1.0			Initial Weight/Volume:	0.52 g
Analysis Date:	05/06/2015 2306			Final Weight/Volume:	50 mL
Prep Date:	05/06/2015 1300				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0065	U	0.0065	0.020

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V714**

Lab Sample ID: 280-68747-12
Client Matrix: Solid
% Moisture: 1.3

Date Sampled: 04/30/2015 0913
Date Received: 05/05/2015 1005

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-276805	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-276082	Lab File ID:	25A050815.asc
Dilution:	1.0			Initial Weight/Volume:	1.08 g
Analysis Date:	05/08/2015 1145			Final Weight/Volume:	100 mL
Prep Date:	05/06/2015 0830				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		9590		1.5	4.7
Antimony		0.36	U	0.36	0.56
Arsenic		3.2		0.62	0.94
Barium		82.8		0.071	0.47
Beryllium		0.30		0.031	0.19
Boron		1.4	B	0.92	1.9
Cadmium		0.18	B	0.038	0.19
Calcium		3210		13.2	46.9
Chromium		12.0		0.054	0.19
Cobalt		7.5	X	0.094	0.94
Copper		12.5		0.20	0.94
Iron		18000		3.6	4.7
Lead		6.0		0.25	0.47
Magnesium		4050		3.5	18.8
Manganese		330		0.094	0.94
Molybdenum		0.24	U	0.24	1.9
Nickel		11.2		0.12	3.8
Potassium		2010		38.5	281
Selenium		0.81	U	0.81	0.94
Silicon		162		5.3	9.4
Silver		0.15	U	0.15	0.19
Sodium		170		55.3	113
Vanadium		36.9		0.088	1.9
Zinc		42.4		0.37	0.94

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-276397	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-276197	Lab File ID:	150506af.TXT
Dilution:	1.0			Initial Weight/Volume:	0.55 g
Analysis Date:	05/06/2015 2308			Final Weight/Volume:	50 mL
Prep Date:	05/06/2015 1300				

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

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V715**

Lab Sample ID: 280-68747-13
Client Matrix: Solid
% Moisture: 0.6

Date Sampled: 04/30/2015 0913
Date Received: 05/05/2015 1005

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-276805	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-276082	Lab File ID:	25A050815.asc
Dilution:	1.0			Initial Weight/Volume:	1.08 g
Analysis Date:	05/08/2015 1148			Final Weight/Volume:	100 mL
Prep Date:	05/06/2015 0830				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		9370		1.4	4.7
Antimony		0.35	U	0.35	0.56
Arsenic		3.2		0.62	0.93
Barium		84.4		0.071	0.47
Beryllium		0.30		0.031	0.19
Boron		1.3	B	0.91	1.9
Cadmium		0.17	B	0.038	0.19
Calcium		3400		13.1	46.6
Chromium		11.4		0.054	0.19
Cobalt		7.7	X	0.093	0.93
Copper		12.8		0.20	0.93
Iron		18400		3.5	4.7
Lead		5.0		0.25	0.47
Magnesium		4030		3.4	18.6
Manganese		336		0.093	0.93
Molybdenum		0.24	U	0.24	1.9
Nickel		10.8		0.11	3.7
Potassium		1970		38.2	280
Selenium		0.92	B	0.80	0.93
Silicon		163		5.3	9.3
Silver		0.15	U	0.15	0.19
Sodium		184		55.0	112
Vanadium		36.0		0.088	1.9
Zinc		40.1		0.37	0.93

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-276397	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-276197	Lab File ID:	150506af.TXT
Dilution:	1.0			Initial Weight/Volume:	0.53 g
Analysis Date:	05/06/2015 2311			Final Weight/Volume:	50 mL
Prep Date:	05/06/2015 1300				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0063	U	0.0063	0.019

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Client Sample ID: **J1V716**

Lab Sample ID: 280-68747-14
Client Matrix: Solid
% Moisture: 0.0

Date Sampled: 04/30/2015 0904
Date Received: 05/05/2015 1005

6010B Metals (ICP)

Analysis Method:	6010B	Analysis Batch:	280-276805	Instrument ID:	MT_025
Prep Method:	3050B	Prep Batch:	280-276082	Lab File ID:	25A050815.asc
Dilution:	1.0			Initial Weight/Volume:	1.07 g
Analysis Date:	05/08/2015 1150			Final Weight/Volume:	100 mL
Prep Date:	05/06/2015 0830				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Aluminum		87.4		1.4	4.7
Antimony		0.36	U	0.36	0.56
Arsenic		0.62	U	0.62	0.93
Barium		1.2		0.071	0.47
Beryllium		0.031	U	0.031	0.19
Boron		0.92	U	0.92	1.9
Cadmium		0.038	U	0.038	0.19
Calcium		36.0	B C	13.2	46.7
Chromium		0.087	B	0.054	0.19
Cobalt		0.097	B X	0.093	0.93
Copper		0.34	B	0.20	0.93
Iron		129		3.6	4.7
Lead		0.25	U	0.25	0.47
Magnesium		16.6	B C	3.5	18.7
Manganese		2.8		0.093	0.93
Molybdenum		0.24	U	0.24	1.9
Nickel		0.11	U	0.11	3.7
Potassium		38.3	U	38.3	280
Selenium		0.80	U	0.80	0.93
Silicon		76.7		5.3	9.3
Silver		0.15	U	0.15	0.19
Sodium		55.1	U	55.1	112
Vanadium		0.22	B	0.088	1.9
Zinc		0.80	B	0.37	0.93

7471A Mercury (CVAA)

Analysis Method:	7471A	Analysis Batch:	280-276397	Instrument ID:	MT_033
Prep Method:	7471A	Prep Batch:	280-276197	Lab File ID:	150506af.TXT
Dilution:	1.0			Initial Weight/Volume:	0.53 g
Analysis Date:	05/06/2015 2313			Final Weight/Volume:	50 mL
Prep Date:	05/06/2015 1300				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	MDL	RL
Mercury		0.0063	U	0.0063	0.019

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

General Chemistry

Client Sample ID: **J1V703**

Lab Sample ID: 280-68747-1
Client Matrix: Solid

Date Sampled: 04/30/2015 1148
Date Received: 05/05/2015 1005

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	0.67		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-276456 Analysis Date: 05/07/2015 1138 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

General Chemistry

Client Sample ID: **J1V704**

Lab Sample ID: 280-68747-2
Client Matrix: Solid

Date Sampled: 04/30/2015 1142
Date Received: 05/05/2015 1005

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	0.43		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-276456 Analysis Date: 05/07/2015 1138 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

General Chemistry

Client Sample ID: **J1V705**

Lab Sample ID: 280-68747-3
Client Matrix: Solid

Date Sampled: 04/30/2015 1136
Date Received: 05/05/2015 1005

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	0.66		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-276456 Analysis Date: 05/07/2015 1138 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

General Chemistry

Client Sample ID: **J1V706**

Lab Sample ID: 280-68747-4
Client Matrix: Solid

Date Sampled: 04/30/2015 1130
Date Received: 05/05/2015 1005

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	0.93		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-276456 Analysis Date: 05/07/2015 1138 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

General Chemistry

Client Sample ID: **J1V707**

Lab Sample ID: 280-68747-5
Client Matrix: Solid

Date Sampled: 04/30/2015 1008
Date Received: 05/05/2015 1005

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	0.58		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-276456 Analysis Date: 05/07/2015 1138 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

General Chemistry

Client Sample ID: **J1V708**

Lab Sample ID: 280-68747-6
Client Matrix: Solid

Date Sampled: 04/30/2015 1000
Date Received: 05/05/2015 1005

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	0.57		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-276456 Analysis Date: 05/07/2015 1138 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

General Chemistry

Client Sample ID: **J1V709**

Lab Sample ID: 280-68747-7
Client Matrix: Solid

Date Sampled: 04/30/2015 0939
Date Received: 05/05/2015 1005

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	1.5		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-276456 Analysis Date: 05/07/2015 1138 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

General Chemistry

Client Sample ID: **J1V710**

Lab Sample ID: 280-68747-8
Client Matrix: Solid

Date Sampled: 04/30/2015 0954
Date Received: 05/05/2015 1005

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	3.9		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-276456 Analysis Date: 05/07/2015 1138 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

General Chemistry

Client Sample ID: **J1V711**

Lab Sample ID: 280-68747-9
Client Matrix: Solid

Date Sampled: 04/30/2015 0948
Date Received: 05/05/2015 1005

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	0.88		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-276456 Analysis Date: 05/07/2015 1138 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

General Chemistry

Client Sample ID: **J1V712**

Lab Sample ID: 280-68747-10
Client Matrix: Solid

Date Sampled: 04/30/2015 0933
Date Received: 05/05/2015 1005

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	1.5		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-276456 Analysis Date: 05/07/2015 1138 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

General Chemistry

Client Sample ID: **J1V713**

Lab Sample ID: 280-68747-11
Client Matrix: Solid

Date Sampled: 04/30/2015 0925
Date Received: 05/05/2015 1005

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	1.3		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-276456 Analysis Date: 05/07/2015 1138 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

General Chemistry

Client Sample ID: **J1V714**

Lab Sample ID: 280-68747-12
Client Matrix: Solid

Date Sampled: 04/30/2015 0913
Date Received: 05/05/2015 1005

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	1.3		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-276456 Analysis Date: 05/07/2015 1138 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

General Chemistry

Client Sample ID: **J1V715**

Lab Sample ID: 280-68747-13
Client Matrix: Solid

Date Sampled: 04/30/2015 0913
Date Received: 05/05/2015 1005

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Percent Moisture	0.65		%	0.10	0.10	1.0	D-2216

Analysis Batch: 280-276456 Analysis Date: 05/07/2015 1138 DryWt Corrected: N

General Chemistry

Client Sample ID: **J1V716**

Lab Sample ID: 280-68747-14
Client Matrix: Solid

Date Sampled: 04/30/2015 0904
Date Received: 05/05/2015 1005

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

Analysis Batch: 280-276456 Analysis Date: 05/07/2015 1138 DryWt Corrected: N

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

General Chemistry

Client Sample ID: **J1V717**

Lab Sample ID: 280-68747-15
Client Matrix: Solid

Date Sampled: 04/30/2015 0908
Date Received: 05/05/2015 1005

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

Analysis Batch: 280-276456 Analysis Date: 05/07/2015 1138 DryWt Corrected: N

QUALITY CONTROL RESULTS

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Surrogate Recovery Report

8260B Volatile Organic Compounds (GC/MS)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	DCA %Rec	TOL %Rec	BFB %Rec	DBFM %Rec
280-68747-1	J1V703	107	103	95	112
280-68747-2	J1V704	104	100	97	108
280-68747-3	J1V705	106	101	95	112
280-68747-4	J1V706	109	101	95	111
280-68747-5	J1V707	108	101	98	111
280-68747-6	J1V708	104	96	95	106
280-68747-7	J1V709	106	101	94	109
280-68747-8	J1V710	106	98	97	109
280-68747-9	J1V711	105	102	102	109
280-68747-10	J1V712	109	102	98	112
280-68747-11	J1V713	107	101	94	113
280-68747-12	J1V714	107	104	98	111
280-68747-13	J1V715	108	105	104	114
280-68747-14	J1V716	110	102	94	113
280-68747-15	J1V717	108	100	95	110
MB 280-276647/1-A		99	98	87	105
LCS 280-276647/2-A		104	97	94	109
280-68747-1 MS	J1V703 MS	105	99	97	109
280-68747-1 MSD	J1V703 MSD	108	102	96	111

Surrogate	Acceptance Limits
DCA = 1,2-Dichloroethane-d4 (Surr)	58-140
TOL = Toluene-d8 (Surr)	80-126
BFB = 4-Bromofluorobenzene (Surr)	76-127
DBFM = Dibromofluoromethane (Surr)	75-121

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Surrogate Recovery Report

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Matrix: Solid

Lab Sample ID	Client Sample ID	DCB1 %Rec	TCX1 %Rec
280-68747-1	J1V703	81	74
280-68747-2	J1V704	81	74
280-68747-3	J1V705	89	78
280-68747-4	J1V706	84	74
280-68747-5	J1V707	83	74
280-68747-6	J1V708	82	76
280-68747-7	J1V709	81	73
280-68747-8	J1V710	79	74
280-68747-9	J1V711	77	71
280-68747-10	J1V712	79	73
280-68747-11	J1V713	80	72
280-68747-12	J1V714	77	70
280-68747-13	J1V715	79	74
MB 280-276182/1-A		87	78
LCS 280-276182/2-A		84	78
280-68747-8 MS	J1V710 MS	85	81
280-68747-8 MSD	J1V710 MSD	80	73

Surrogate	Acceptance Limits
DCB = Decachlorobiphenyl	59-130
TCX = Tetrachloro-m-xylene	53-128

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Surrogate Recovery Report

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

Client Matrix: Solid

Lab Sample ID	Client Sample ID	OTPH %Rec
280-68747-1	J1V703	82
280-68747-2	J1V704	77
280-68747-3	J1V705	83
280-68747-4	J1V706	84
280-68747-5	J1V707	82
280-68747-6	J1V708	81
280-68747-7	J1V709	84
280-68747-8	J1V710	87
280-68747-9	J1V711	87
280-68747-10	J1V712	83
280-68747-11	J1V713	85
280-68747-12	J1V714	88
280-68747-13	J1V715	78
MB 280-276160/1-A		88
LCS 280-276160/2-A		87
LCSD 280-276160/19-A		88
280-68747-10 MS	J1V712 MS	87
280-68747-10 MSD	J1V712 MSD	82

Surrogate	Acceptance Limits
OTPH = o-Terphenyl	49-115

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Surrogate Recovery Report

8310 PAHs (HPLC)

Client Matrix: Solid

Lab Sample ID	Client Sample ID	TPH1 %Rec
280-68747-1	J1V703	94
280-68747-2	J1V704	86
280-68747-3	J1V705	91
280-68747-4	J1V706	94
280-68747-5	J1V707	89
280-68747-6	J1V708	90
280-68747-7	J1V709	91
280-68747-8	J1V710	96
280-68747-9	J1V711	98
280-68747-10	J1V712	107
280-68747-11	J1V713	83
280-68747-12	J1V714	91
280-68747-13	J1V715	82
280-68747-14	J1V716	99
MB 280-276149/1-A		86
MB 280-276956/1-A		98
LCS 280-276149/2-A		87
LCS 280-276956/2-A		97
280-68747-5 MS	J1V707 MS	92
280-68747-13 MS	J1V715 MS	92
280-68747-5 MSD	J1V707 MSD	85
280-68747-13 MSD	J1V715 MSD	94

Surrogate	Acceptance Limits
TPH = Terphenyl-d14 (SUR)	72-115

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Method Blank - Batch: 280-276647

Method: 8260B
Preparation: 5035

Lab Sample ID:	MB 280-276647/1-A	Analysis Batch:	280-276597	Instrument ID:	VMS_J
Client Matrix:	Solid	Prep Batch:	280-276647	Lab File ID:	J6601.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 g
Analysis Date:	05/08/2015 1116	Units:	ug/Kg	Final Weight/Volume:	5 mL
Prep Date:	05/08/2015 1127				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acetone	6.57	J	5.4	20
Benzene	0.47	U	0.47	5.0
Bromodichloromethane	0.22	U	0.22	5.0
Bromoform	0.23	U	0.23	5.0
Bromomethane	0.50	U	0.50	10
2-Butanone (MEK)	1.8	U	1.8	10
Carbon disulfide	0.42	U	0.42	5.0
Carbon tetrachloride	0.63	U	0.63	5.0
Chlorobenzene	0.54	U	0.54	5.0
Dibromochloromethane	0.57	U	0.57	5.0
Chloroethane	0.89	U	0.89	10
Chloroform	0.29	U	0.29	5.0
Chloromethane	0.77	U	0.77	10
1,1-Dichloroethane	0.21	U	0.21	5.0
1,2-Dichloroethane	0.70	U	0.70	5.0
1,1-Dichloroethene	0.59	U	0.59	5.0
1,2-Dichloroethene, Total	0.39	U	0.39	5.0
1,2-Dichloropropane	0.55	U	0.55	5.0
cis-1,3-Dichloropropene	1.3	U	1.3	5.0
trans-1,3-Dichloropropene	0.67	U	0.67	5.0
Ethylbenzene	0.67	U	0.67	5.0
2-Hexanone	4.9	U	4.9	20
Methylene Chloride	1.6	U	1.6	5.0
4-Methyl-2-pentanone (MIBK)	4.4	U	4.4	10
Styrene	0.63	U	0.63	5.0
1,1,2,2-Tetrachloroethane	0.61	U	0.61	5.0
Tetrachloroethene	0.59	U	0.59	5.0
Toluene	0.69	U	0.69	5.0
1,1,1-Trichloroethane	0.52	U	0.52	5.0
1,1,2-Trichloroethane	0.88	U	0.88	5.0
Trichloroethene	0.23	U	0.23	5.0
Vinyl chloride	1.3	U	1.3	5.0
Xylenes, Total	0.61	U	0.61	5.0

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	99	58 - 140
Toluene-d8 (Surr)	98	80 - 126
4-Bromofluorobenzene (Surr)	87	76 - 127
Dibromofluoromethane (Surr)	105	75 - 121

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Method Blank TICs- Batch: 280-276647

Cas Number	Analyte	RT	Est. Result (ug/	Qual
110-82-7	Cyclohexane	7.33	0.550	J N J
	Unknown	4.50	8.97	N J
	Unknown	6.74	19.2	N J
18294-04-7	Ethanedioic acid, bis(trimethylsilyl) es	9.49	8.50	N J
	Unknown	12.68	5.70	N J
112-40-3	Dodecane	13.13	11.7	N J

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Lab Control Sample - Batch: 280-276647

Method: 8260B
Preparation: 5035

Lab Sample ID:	LCS 280-276647/2-A	Analysis Batch:	280-276597	Instrument ID:	VMS_J
Client Matrix:	Solid	Prep Batch:	280-276647	Lab File ID:	J6600.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 g
Analysis Date:	05/08/2015 1056	Units:	ug/Kg	Final Weight/Volume:	5 mL
Prep Date:	05/08/2015 1127				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	200	198	99	65 - 150	
Benzene	50.0	46.5	93	75 - 135	
Bromodichloromethane	50.0	50.6	101	73 - 135	
Bromoform	50.0	52.3	105	77 - 135	
Bromomethane	50.0	46.7	93	52 - 135	
2-Butanone (MEK)	200	187	94	45 - 177	
Carbon disulfide	50.0	46.6	93	45 - 150	
Carbon tetrachloride	50.0	57.6	115	69 - 138	
Chlorobenzene	50.0	47.0	94	78 - 135	
Dibromochloromethane	50.0	49.5	99	77 - 135	
Chloroethane	50.0	44.5	89	51 - 145	
Chloroform	50.0	50.0	100	73 - 123	
Chloromethane	50.0	44.6	89	41 - 138	
1,1-Dichloroethane	50.0	47.1	94	70 - 135	
1,2-Dichloroethane	50.0	50.7	101	69 - 135	
1,1-Dichloroethene	50.0	49.9	100	79 - 135	
1,2-Dichloroethene, Total	100	96.5	97	78 - 135	
1,2-Dichloropropane	50.0	44.0	88	72 - 121	
cis-1,3-Dichloropropene	50.0	44.3	89	71 - 135	
trans-1,3-Dichloropropene	50.0	51.7	103	71 - 135	
Ethylbenzene	50.0	46.2	92	73 - 125	
2-Hexanone	200	191	95	67 - 150	
Methylene Chloride	50.0	47.7	95	76 - 136	
4-Methyl-2-pentanone (MIBK)	200	201	101	69 - 150	
Styrene	50.0	45.1	90	76 - 135	
1,1,2,2-Tetrachloroethane	50.0	42.3	85	65 - 135	
Tetrachloroethene	50.0	50.7	101	76 - 135	
Toluene	50.0	48.5	97	77 - 122	
1,1,1-Trichloroethane	50.0	53.8	108	70 - 135	
1,1,2-Trichloroethane	50.0	48.0	96	78 - 135	
Trichloroethene	50.0	51.7	103	77 - 135	
Vinyl chloride	50.0	43.7	87	43 - 145	
Xylenes, Total	100	92.2	92	76 - 135	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	104	58 - 140
Toluene-d8 (Surr)	97	80 - 126
4-Bromofluorobenzene (Surr)	94	76 - 127
Dibromofluoromethane (Surr)	109	75 - 121

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-276647

Method: 8260B
Preparation: 5035

MS Lab Sample ID:	280-68747-1	Analysis Batch:	280-276597	Instrument ID:	VMS_J
Client Matrix:	Solid	Prep Batch:	280-276647	Lab File ID:	J6603.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	4.634 g
Analysis Date:	05/08/2015 1204			Final Weight/Volume:	5 mL
Prep Date:	04/30/2015 1148				5 mL
Leach Date:	N/A				

MSD Lab Sample ID:	280-68747-1	Analysis Batch:	280-276597	Instrument ID:	VMS_J
Client Matrix:	Solid	Prep Batch:	280-276647	Lab File ID:	J6604.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	4.618 g
Analysis Date:	05/08/2015 1224			Final Weight/Volume:	5 mL
Prep Date:	04/30/2015 1148				5 mL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acetone	85	97	65 - 150	13	28		
Benzene	82	86	75 - 135	4	20		
Bromodichloromethane	93	99	73 - 135	7	20		
Bromoform	103	113	77 - 135	9	20		
Bromomethane	80	84	52 - 135	4	22		
2-Butanone (MEK)	111	132	45 - 177	17	32		
Carbon disulfide	77	80	45 - 150	4	24		
Carbon tetrachloride	96	100	69 - 138	4	20		
Chlorobenzene	86	92	78 - 135	7	20		
Dibromochloromethane	98	104	77 - 135	7	20		
Chloroethane	76	77	51 - 145	2	22		
Chloroform	89	93	73 - 123	4	20		
Chloromethane	72	76	41 - 138	5	25		
1,1-Dichloroethane	84	87	70 - 135	4	20		
1,2-Dichloroethane	97	102	69 - 135	5	20		
1,1-Dichloroethene	84	88	79 - 135	5	20		
1,2-Dichloroethene, Total	85	89	78 - 135	4	20		
1,2-Dichloropropane	82	84	72 - 121	3	20		
cis-1,3-Dichloropropene	84	90	71 - 135	7	20		
trans-1,3-Dichloropropene	97	102	71 - 135	5	20		
Ethylbenzene	81	86	73 - 125	6	20		
2-Hexanone	85	97	67 - 150	13	29		
Methylene Chloride	88	93	76 - 136	6	21		
4-Methyl-2-pentanone (MIBK)	92	102	69 - 150	11	25		
Styrene	83	88	76 - 135	6	20		
1,1,2,2-Tetrachloroethane	88	93	65 - 135	5	21		
Tetrachloroethene	87	91	76 - 135	5	20		
Toluene	85	89	77 - 122	5	20		
1,1,1-Trichloroethane	88	93	70 - 135	5	20		
1,1,2-Trichloroethane	93	99	78 - 135	6	20		
Trichloroethene	89	92	77 - 135	3	20		
Vinyl chloride	72	73	43 - 145	2	24		
Xylenes, Total	82	87	76 - 135	7	20		

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	105	108	58 - 140
Toluene-d8 (Surr)	99	102	80 - 126
4-Bromofluorobenzene (Surr)	97	96	76 - 127
Dibromofluoromethane (Surr)	109	111	75 - 121

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-276647

Method: 8260B
Preparation: 5035

MS Lab Sample ID:	280-68747-1	Units:	ug/Kg	MSD Lab Sample ID:	280-68747-1
Client Matrix:	Solid			Client Matrix:	Solid
Dilution:	1.0			Dilution:	1.0
Analysis Date:	05/08/2015 1204			Analysis Date:	05/08/2015 1224
Prep Date:	04/30/2015 1148			Prep Date:	04/30/2015 1148
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Acetone	8.3	J	217	218	193	220
Benzene	0.60	U	54.3	54.5	44.7	46.6
Bromodichloromethane	0.28	U	54.3	54.5	50.4	53.9
Bromoform	0.29	U	54.3	54.5	56.1	61.7
Bromomethane	0.64	U	54.3	54.5	43.6	45.6
2-Butanone (MEK)	2.3	U	217	218	241	287
Carbon disulfide	0.54	U	54.3	54.5	41.8	43.6
Carbon tetrachloride	0.81	U	54.3	54.5	52.2	54.2
Chlorobenzene	0.69	U	54.3	54.5	46.9	50.1
Dibromochloromethane	0.73	U	54.3	54.5	53.0	56.8
Chloroethane	1.1	U	54.3	54.5	41.5	42.2
Chloroform	0.37	U	54.3	54.5	48.5	50.5
Chloromethane	0.98	U	54.3	54.5	39.3	41.2
1,1-Dichloroethane	0.27	U	54.3	54.5	45.5	47.4
1,2-Dichloroethane	0.89	U	54.3	54.5	52.9	55.8
1,1-Dichloroethene	0.75	U	54.3	54.5	45.7	48.2
1,2-Dichloroethene, Total	0.50	U	109	109	92.4	96.5
1,2-Dichloropropane	0.70	U	54.3	54.5	44.5	46.0
cis-1,3-Dichloropropene	1.6	U	54.3	54.5	45.5	48.8
trans-1,3-Dichloropropene	0.86	U	54.3	54.5	52.8	55.7
Ethylbenzene	0.86	U	54.3	54.5	44.2	47.1
2-Hexanone	6.2	U	217	218	184	210
Methylene Chloride	2.0	U	54.3	54.5	47.6	50.6
4-Methyl-2-pentanone (MIBK)	5.6	U	217	218	200	223
Styrene	0.81	U	54.3	54.5	45.3	48.0
1,1,2,2-Tetrachloroethane	0.78	U	54.3	54.5	48.0	50.7
Tetrachloroethene	0.75	U	54.3	54.5	47.2	49.6
Toluene	0.88	U	54.3	54.5	46.0	48.4
1,1,1-Trichloroethane	0.66	U	54.3	54.5	48.0	50.4
1,1,2-Trichloroethane	1.1	U	54.3	54.5	50.8	53.8
Trichloroethene	0.29	U	54.3	54.5	48.4	50.1
Vinyl chloride	1.7	U	54.3	54.5	39.0	39.6
Xylenes, Total	0.78	U	109	109	88.9	95.3

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Method Blank - Batch: 280-276182

Method: 8082
Preparation: 3550C

Lab Sample ID:	MB 280-276182/1-A	Analysis Batch:	280-276754	Instrument ID:	SGC_W
Client Matrix:	Solid	Prep Batch:	280-276182	Lab File ID:	05091522.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 g
Analysis Date:	05/09/2015 1753	Units:	ug/Kg	Final Weight/Volume:	5 mL
Prep Date:	05/06/2015 1330			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Aroclor 1016	2.8	U	2.8	10
Aroclor 1221	8.0	U	8.0	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	Acceptance Limits
Decachlorobiphenyl	87	59 - 130
Tetrachloro-m-xylene	78	53 - 128

Lab Control Sample - Batch: 280-276182

Method: 8082
Preparation: 3550C

Lab Sample ID:	LCS 280-276182/2-A	Analysis Batch:	280-276754	Instrument ID:	SGC_W
Client Matrix:	Solid	Prep Batch:	280-276182	Lab File ID:	05091523.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 g
Analysis Date:	05/09/2015 1816	Units:	ug/Kg	Final Weight/Volume:	5 mL
Prep Date:	05/06/2015 1330			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aroclor 1016	33.3	29.1	87	54 - 132	
Aroclor 1260	33.3	30.5	91	62 - 129	

Surrogate	% Rec	Acceptance Limits
Decachlorobiphenyl	84	59 - 130
Tetrachloro-m-xylene	78	53 - 128

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-276182

Method: 8082
Preparation: 3550C

MS Lab Sample ID:	280-68747-8	Analysis Batch:	280-276754	Instrument ID:	SGC_W
Client Matrix:	Solid	Prep Batch:	280-276182	Lab File ID:	05091532.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	31.8 g
Analysis Date:	05/09/2015 2145			Final Weight/Volume:	5 mL
Prep Date:	05/06/2015 1330			Injection Volume:	1 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-68747-8	Analysis Batch:	280-276754	Instrument ID:	SGC_W
Client Matrix:	Solid	Prep Batch:	280-276182	Lab File ID:	05091533.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.2 g
Analysis Date:	05/09/2015 2208			Final Weight/Volume:	5 mL
Prep Date:	05/06/2015 1330			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	96	92	54 - 132	1	26		
Aroclor 1260	85	80	62 - 129	1	26		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Decachlorobiphenyl	85	80	59 - 130
Tetrachloro-m-xylene	81	73	53 - 128

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-276182

Method: 8082
Preparation: 3550C

MS Lab Sample ID:	280-68747-8	Units:	ug/Kg	MSD Lab Sample ID:	280-68747-8
Client Matrix:	Solid			Client Matrix:	Solid
Dilution:	1.0			Dilution:	1.0
Analysis Date:	05/09/2015 2145			Analysis Date:	05/09/2015 2208
Prep Date:	05/06/2015 1330			Prep Date:	05/06/2015 1330
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Aroclor 1016	2.8	U	32.7	34.4	31.6	31.8
Aroclor 1260	2.6	U	32.7	34.4	27.8	27.6

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Method Blank - Batch: 280-276160

Method: NWTPH-Dx
Preparation: 3550C

Lab Sample ID:	MB 280-276160/1-A	Analysis Batch:	280-276559	Instrument ID:	SGC_U
Client Matrix:	Solid	Prep Batch:	280-276160	Lab File ID:	05080005.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 g
Analysis Date:	05/08/2015 1006	Units:	ug/Kg	Final Weight/Volume:	1 mL
Prep Date:	05/06/2015 1600			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
C10-C36	1000	U	1000	4000
C10-C28	680	U	680	4000

Surrogate	% Rec	Acceptance Limits
o-Terphenyl	88	49 - 115

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch: 280-276160

Method: NWTPH-Dx
Preparation: 3550C

LCS Lab Sample ID:	LCS 280-276160/2-A	Analysis Batch:	280-276559	Instrument ID:	SGC_U
Client Matrix:	Solid	Prep Batch:	280-276160	Lab File ID:	05080006.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 g
Analysis Date:	05/08/2015 1034	Units:	ug/Kg	Final Weight/Volume:	1 mL
Prep Date:	05/06/2015 1600			Injection Volume:	1 uL
Leach Date:	N/A				

LCSD Lab Sample ID:	LCSD 280-276160/19-A	Analysis Batch:	280-276559	Instrument ID:	SGC_U
Client Matrix:	Solid	Prep Batch:	280-276160	Lab File ID:	05080007.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 g
Analysis Date:	05/08/2015 1102	Units:	ug/Kg	Final Weight/Volume:	1 mL
Prep Date:	05/06/2015 1600			Injection Volume:	1 uL
Leach Date:	N/A				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
C10-C36	89	90	57 - 115	2	23		
C10-C28	86	88	53 - 115	2	23		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
o-Terphenyl	87	88	49 - 115

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Laboratory Control/
Laboratory Duplicate Data Report - Batch: 280-276160

Method: NWTPH-Dx
Preparation: 3550C

LCS Lab Sample ID:	LCS 280-276160/2-A	Units: ug/Kg		LCSD Lab Sample ID:	LCSD 280-276160/19-A
Client Matrix:	Solid			Client Matrix:	Solid
Dilution:	1.0			Dilution:	1.0
Analysis Date:	05/08/2015 1034			Analysis Date:	05/08/2015 1102
Prep Date:	05/06/2015 1600			Prep Date:	05/06/2015 1600
Leach Date:	N/A			Leach Date:	N/A

Analyte	LCS Spike Amount	LCSD Spike Amount	LCS Result/Qual	LCSD Result/Qual
C10-C36	66700	66700	59000	60000
C10-C28	66700	66700	57500	58400

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-276160

Method: NWTPH-Dx
Preparation: 3550C

MS Lab Sample ID:	280-68747-10	Analysis Batch:	280-276559	Instrument ID:	SGC_U
Client Matrix:	Solid	Prep Batch:	280-276160	Lab File ID:	05080019.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.6 g
Analysis Date:	05/08/2015 1642			Final Weight/Volume:	1 mL
Prep Date:	05/06/2015 1600			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	280-68747-10	Analysis Batch:	280-276559	Instrument ID:	SGC_U
Client Matrix:	Solid	Prep Batch:	280-276160	Lab File ID:	05080020.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.2 g
Analysis Date:	05/08/2015 1710			Final Weight/Volume:	1 mL
Prep Date:	05/06/2015 1600			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
C10-C36	89	83	57 - 115	5	23		
C10-C28	85	80	56 - 115	5	23		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
o-Terphenyl	87	82	49 - 115

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-276160

Method: NWTPH-Dx
Preparation: 3550C

MS Lab Sample ID:	280-68747-10	Units: ug/Kg	
Client Matrix:	Solid		
Dilution:	1.0		
Analysis Date:	05/08/2015 1642		
Prep Date:	05/06/2015 1600		
Leach Date:	N/A		

MSD Lab Sample ID:	280-68747-10
Client Matrix:	Solid
Dilution:	1.0
Analysis Date:	05/08/2015 1710
Prep Date:	05/06/2015 1600
Leach Date:	N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
C10-C36	3400	J	66300	67200	62300	59200
C10-C28	1600	J	66300	67200	58100	55100

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Method Blank - Batch: 280-276149

Method: 8310
Preparation: 3550C

Lab Sample ID:	MB 280-276149/1-A	Analysis Batch:	280-276338	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-276149	Lab File ID:	G0507006.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 g
Analysis Date:	05/07/2015 1258	Units:	ug/Kg	Final Weight/Volume:	4 mL
Prep Date:	05/06/2015 1040			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Acenaphthene	10	U	10	100
Acenaphthylene	9.0	U	9.0	100
Anthracene	3.1	U	3.1	20
Benzo[a]anthracene	3.2	U	3.2	15
Benzo[a]pyrene	6.4	U	6.4	15
Benzo[b]fluoranthene	4.2	U	4.2	15
Benzo[g,h,i]perylene	7.2	U	7.2	30
Benzo[k]fluoranthene	3.9	U	3.9	15
Chrysene	4.8	U	4.8	40
Dibenzo(a,h)anthracene	11	U	11	30
Fluoranthene	13	U	13	40
Fluorene	5.3	U	5.3	30
Indeno[1,2,3-cd]pyrene	12	U	12	30
Naphthalene	12	U	12	100
Phenanthrene	12	U	12	40
Pyrene	12	U	12	40

Surrogate	% Rec	Acceptance Limits
Terphenyl-d14 (SUR)	86	72 - 115

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Lab Control Sample - Batch: 280-276149

Method: 8310
Preparation: 3550C

Lab Sample ID:	LCS 280-276149/2-A	Analysis Batch:	280-276338	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-276149	Lab File ID:	G0507007.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 g
Analysis Date:	05/07/2015 1329	Units:	ug/Kg	Final Weight/Volume:	4 mL
Prep Date:	05/06/2015 1040			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acenaphthene	2000	1680	84	75 - 116	
Acenaphthylene	2000	1650	83	66 - 115	
Anthracene	2000	1640	82	71 - 115	
Benzo[a]anthracene	2000	1790	89	77 - 120	
Benzo[a]pyrene	2000	1790	89	69 - 115	
Benzo[b]fluoranthene	2000	1740	87	56 - 115	
Benzo[g,h,i]perylene	2000	1970	98	72 - 120	
Benzo[k]fluoranthene	2000	1810	90	76 - 115	
Chrysene	2000	1750	88	79 - 115	
Dibenzo(a,h)anthracene	2000	1750	87	72 - 115	
Fluoranthene	2000	1760	88	77 - 115	
Fluorene	2000	1830	91	77 - 115	
Indeno[1,2,3-cd]pyrene	2000	1780	89	78 - 115	
Naphthalene	2000	1700	85	68 - 120	
Phenanthrene	2000	1690	85	75 - 115	
Pyrene	2000	1850	93	72 - 115	

Surrogate	% Rec	Acceptance Limits
Terphenyl-d14 (SUR)	87	72 - 115

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-276149

Method: 8310
Preparation: 3550C

MS Lab Sample ID:	280-68747-5	Analysis Batch:	280-276338	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-276149	Lab File ID:	G0507013.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.5 g
Analysis Date:	05/07/2015 1632			Final Weight/Volume:	4 mL
Prep Date:	05/06/2015 1040			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-68747-5	Analysis Batch:	280-276338	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-276149	Lab File ID:	G0507014.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.4 g
Analysis Date:	05/07/2015 1703			Final Weight/Volume:	4 mL
Prep Date:	05/06/2015 1040			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acenaphthene	89	81	75 - 116	9	20		
Acenaphthylene	86	78	66 - 115	9	20		
Anthracene	86	79	71 - 115	8	20		
Benzo[a]anthracene	94	88	77 - 120	6	20		
Benzo[a]pyrene	94	88	69 - 115	6	20		
Benzo[b]fluoranthene	92	86	56 - 115	6	20		
Benzo[g,h,i]perylene	103	97	72 - 120	6	20		
Benzo[k]fluoranthene	95	89	76 - 115	6	20		
Chrysene	92	86	79 - 115	6	20		
Dibenzo(a,h)anthracene	92	86	72 - 115	6	20		
Fluoranthene	91	86	77 - 115	6	20		
Fluorene	95	87	77 - 115	8	20		
Indeno[1,2,3-cd]pyrene	94	89	78 - 115	6	20		
Naphthalene	89	81	68 - 120	9	20		
Phenanthrene	89	82	75 - 115	8	20		
Pyrene	94	88	72 - 115	6	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Terphenyl-d14 (SUR)	92	85	72 - 115

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-276149

Method: 8310
Preparation: 3550C

MS Lab Sample ID:	280-68747-5	Units:	ug/Kg	MSD Lab Sample ID:	280-68747-5
Client Matrix:	Solid			Client Matrix:	Solid
Dilution:	1.0			Dilution:	1.0
Analysis Date:	05/07/2015 1632			Analysis Date:	05/07/2015 1703
Prep Date:	05/06/2015 1040			Prep Date:	05/06/2015 1040
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Acenaphthene	9.4	U	1980	1990	1770	1610
Acenaphthylene	8.5	U	1980	1990	1700	1550
Anthracene	2.9	U	1980	1990	1700	1570
Benzo[a]anthracene	3.0	U	1980	1990	1860	1740
Benzo[a]pyrene	6.0	U	1980	1990	1870	1760
Benzo[b]fluoranthene	4.0	U	1980	1990	1810	1700
Benzo[g,h,i]perylene	6.8	U	1980	1990	2040	1920
Benzo[k]fluoranthene	3.7	U	1980	1990	1880	1760
Chrysene	4.6	U	1980	1990	1820	1710
Dibenzo(a,h)anthracene	10	U	1980	1990	1820	1720
Fluoranthene	12	U	1980	1990	1810	1700
Fluorene	5.0	U	1980	1990	1880	1730
Indeno[1,2,3-cd]pyrene	11	U	1980	1990	1860	1760
Naphthalene	11	U	1980	1990	1760	1610
Phenanthrene	11	U	1980	1990	1770	1640
Pyrene	11	U	1980	1990	1860	1750

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Method Blank - Batch: 280-276956

Method: 8310
Preparation: 3550C

Lab Sample ID:	MB 280-276956/1-A	Analysis Batch:	280-277064	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-276956	Lab File ID:	G0512006.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.7 g
Analysis Date:	05/12/2015 1235	Units:	ug/Kg	Final Weight/Volume:	4 mL
Prep Date:	05/11/2015 1616			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Result	Qual	MDL	RL
Acenaphthene	9.8	U	9.8	98
Acenaphthylene	8.8	U	8.8	98
Anthracene	3.0	U	3.0	20
Benzo[a]anthracene	3.1	U	3.1	15
Benzo[a]pyrene	6.3	U	6.3	15
Benzo[b]fluoranthene	4.1	U	4.1	15
Benzo[g,h,i]perylene	7.0	U	7.0	29
Benzo[k]fluoranthene	3.9	U	3.9	15
Chrysene	4.7	U	4.7	39
Dibenzo(a,h)anthracene	11	U	11	29
Fluoranthene	13	U	13	39
Fluorene	5.2	U	5.2	29
Indeno[1,2,3-cd]pyrene	12	U	12	29
Naphthalene	12	U	12	98
Phenanthrene	12	U	12	39
Pyrene	12	U	12	39

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

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Lab Control Sample - Batch: 280-276956

Method: 8310
Preparation: 3550C

Lab Sample ID:	LCS 280-276956/2-A	Analysis Batch:	280-277064	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-276956	Lab File ID:	G0512007.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.0 g
Analysis Date:	05/12/2015 1306	Units:	ug/Kg	Final Weight/Volume:	4 mL
Prep Date:	05/11/2015 1616			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acenaphthene	2000	1890	95	75 - 116	
Acenaphthylene	2000	1860	93	66 - 115	
Anthracene	2000	1870	93	71 - 115	
Benzo[a]anthracene	2000	2000	100	77 - 120	
Benzo[a]pyrene	2000	2010	100	69 - 115	
Benzo[b]fluoranthene	2000	1940	97	56 - 115	
Benzo[g,h,i]perylene	2000	2200	110	72 - 120	
Benzo[k]fluoranthene	2000	2010	101	76 - 115	
Chrysene	2000	1950	97	79 - 115	
Dibenzo(a,h)anthracene	2000	1950	97	72 - 115	
Fluoranthene	2000	1970	98	77 - 115	
Fluorene	2000	2030	101	77 - 115	
Indeno[1,2,3-cd]pyrene	2000	1980	99	78 - 115	
Naphthalene	2000	1880	94	68 - 120	
Phenanthrene	2000	1910	95	75 - 115	
Pyrene	2000	2070	104	72 - 115	

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

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-276956

Method: 8310
Preparation: 3550C

MS Lab Sample ID:	280-68747-13	Analysis Batch:	280-277064	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-276956	Lab File ID:	G0512009.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.7 g
Analysis Date:	05/12/2015 1407			Final Weight/Volume:	4 mL
Prep Date:	05/11/2015 1616			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

MSD Lab Sample ID:	280-68747-13	Analysis Batch:	280-277064	Instrument ID:	CHHPLC_G
Client Matrix:	Solid	Prep Batch:	280-276956	Lab File ID:	G0512010.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30.8 g
Analysis Date:	05/12/2015 1437			Final Weight/Volume:	4 mL
Prep Date:	05/11/2015 1616			Injection Volume:	20 uL
Leach Date:	N/A			Column ID:	PRIMARY

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acenaphthene	92	93	75 - 116	1	20		
Acenaphthylene	90	90	66 - 115	0	20		
Anthracene	89	90	71 - 115	1	20		
Benzo[a]anthracene	95	98	77 - 120	2	20		
Benzo[a]pyrene	97	102	69 - 115	5	20		
Benzo[b]fluoranthene	93	100	56 - 115	7	20		
Benzo[g,h,i]perylene	105	109	72 - 120	3	20		
Benzo[k]fluoranthene	96	101	76 - 115	4	20		
Chrysene	93	97	79 - 115	4	20		
Dibenzo(a,h)anthracene	93	97	72 - 115	3	20		
Fluoranthene	94	96	77 - 115	2	20		
Fluorene	98	100	77 - 115	2	20		
Indeno[1,2,3-cd]pyrene	95	98	78 - 115	4	20		
Naphthalene	90	89	68 - 120	2	20		
Phenanthrene	92	94	75 - 115	2	20		
Pyrene	97	100	72 - 115	2	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Terphenyl-d14 (SUR)	92	94	72 - 115

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-276956

Method: 8310
Preparation: 3550C

MS Lab Sample ID:	280-68747-13	Units: ug/Kg	
Client Matrix:	Solid		
Dilution:	1.0		
Analysis Date:	05/12/2015 1407		
Prep Date:	05/11/2015 1616		
Leach Date:	N/A		

MSD Lab Sample ID:	280-68747-13
Client Matrix:	Solid
Dilution:	1.0
Analysis Date:	05/12/2015 1437
Prep Date:	05/11/2015 1616
Leach Date:	N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Acenaphthene	9.4	U	1970	1960	1800	1820
Acenaphthylene	8.5	U	1970	1960	1760	1770
Anthracene	2.9	U	1970	1960	1750	1770
Benzo[a]anthracene	3.0	U	1970	1960	1880	1920
Benzo[a]pyrene	6.0	U	1970	1960	1900	2010
Benzo[b]fluoranthene	4.0	U	1970	1960	1830	1950
Benzo[g,h,i]perylene	6.8	U	1970	1960	2070	2140
Benzo[k]fluoranthene	3.7	U	1970	1960	1890	1970
Chrysene	4.6	U	1970	1960	1830	1910
Dibenzo(a,h)anthracene	10	U	1970	1960	1830	1900
Fluoranthene	12	U	1970	1960	1850	1890
Fluorene	5.0	U	1970	1960	1920	1960
Indeno[1,2,3-cd]pyrene	11	U	1970	1960	1860	1930
Naphthalene	11	U	1970	1960	1780	1740
Phenanthrene	11	U	1970	1960	1800	1840
Pyrene	11	U	1970	1960	1910	1960

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Method Blank - Batch: 280-276082

Method: 6010B
Preparation: 3050B

Lab Sample ID:	MB 280-276082/1-A	Analysis Batch:	280-276805	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-276082	Lab File ID:	25A050815.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.00 g
Analysis Date:	05/08/2015 1057	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	05/06/2015 0830				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Aluminum	1.6	U	1.6	5.0
Antimony	0.38	U	0.38	0.60
Arsenic	0.66	U	0.66	1.0
Barium	0.149	B	0.076	0.50
Beryllium	0.033	U	0.033	0.20
Boron	0.98	U	0.98	2.0
Cadmium	0.041	U	0.041	0.20
Calcium	20.29	B	14.1	50.0
Chromium	0.058	U	0.058	0.20
Cobalt	0.10	U	0.10	1.0
Copper	0.22	U	0.22	1.0
Iron	3.8	U	3.8	5.0
Lead	0.27	U	0.27	0.50
Magnesium	5.86	B	3.7	20.0
Manganese	0.10	U	0.10	1.0
Molybdenum	0.26	U	0.26	2.0
Nickel	0.12	U	0.12	4.0
Potassium	41.0	U	41.0	300
Selenium	0.86	U	0.86	1.0
Silicon	5.7	U	5.7	10.0
Silver	0.16	U	0.16	0.20
Sodium	59.0	U	59.0	120
Vanadium	0.094	U	0.094	2.0
Zinc	0.40	U	0.40	1.0

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Lab Control Sample - Batch: 280-276082

Method: 6010B
Preparation: 3050B

Lab Sample ID:	LCS 280-276082/2-A	Analysis Batch:	280-276805	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-276082	Lab File ID:	25A050815.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.00 g
Analysis Date:	05/08/2015 1059	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	05/06/2015 0830				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	200	185.0	92	82 - 116	
Antimony	50.0	47.06	94	82 - 110	
Arsenic	100	92.28	92	85 - 110	
Barium	200	189.4	95	87 - 112	
Beryllium	5.00	4.62	92	84 - 114	
Boron	100	93.41	93	80 - 120	
Cadmium	10.0	9.40	94	87 - 110	
Calcium	5000	4677	94	82 - 114	
Chromium	20.0	18.23	91	84 - 114	
Cobalt	50.0	46.91	94	87 - 110	
Copper	25.0	24.36	97	88 - 110	
Iron	100	97.11	97	87 - 120	
Lead	50.0	48.70	97	86 - 110	
Magnesium	5000	4607	92	90 - 110	
Manganese	50.0	46.41	93	88 - 110	
Molybdenum	100	97.38	97	86 - 110	
Nickel	50.0	46.46	93	87 - 110	
Potassium	5000	4744	95	89 - 110	
Selenium	200	189.0	95	83 - 110	
Silicon	1000	104.7	10	10 - 70	
Silver	5.00	4.58	92	87 - 114	
Sodium	5000	4852	97	90 - 112	
Vanadium	50.0	46.72	93	88 - 110	
Zinc	50.0	45.48	91	76 - 114	

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Matrix Spike - Batch: 280-276082

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-68747-1	Analysis Batch:	280-276805	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-276082	Lab File ID:	25A050815.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.17 g
Analysis Date:	05/08/2015 1109	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	05/06/2015 0830				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	10000		172	13310	1927	50 - 200	4
Antimony	0.33	U	43.0	13.15	31	20 - 200	
Arsenic	2.9		86.0	74.64	83	76 - 111	
Barium	82.6		172	237.1	90	52 - 159	
Beryllium	0.32		4.30	3.94	84	72 - 105	
Boron	1.7		86.0	71.88	82	80 - 120	
Cadmium	0.13	B	8.60	7.57	86	40 - 130	
Calcium	3460		4300	7812	101	43 - 165	
Chromium	12.2		17.2	29.03	98	70 - 200	
Cobalt	8.0		43.0	43.89	83	72 - 106	
Copper	13.0		21.5	33.53	96	37 - 187	
Iron	19300		86.0	19620	320	70 - 200	4
Lead	4.8		43.0	41.82	86	70 - 200	
Magnesium	4160		4300	8240	95	64 - 145	
Manganese	358		43.0	393.0	81	40 - 200	4
Molybdenum	0.22	U	86.0	72.00	84	75 - 103	
Nickel	10.9		43.0	47.40	85	61 - 126	
Potassium	2100		4300	6119	93	56 - 172	
Selenium	0.80	B	172	146.9	85	76 - 104	
Silicon	184		860	305.2	14	20 - 200	N
Silver	0.14	U	4.30	3.72	86	75 - 141	
Sodium	237		4300	4308	95	78 - 111	
Vanadium	38.1		43.0	78.03	93	50 - 169	
Zinc	40.9		43.0	76.06	82	70 - 200	

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Duplicate - Batch: 280-276082

Method: 6010B
Preparation: 3050B

Lab Sample ID:	280-68747-1	Analysis Batch:	280-276805	Instrument ID:	MT_025
Client Matrix:	Solid	Prep Batch:	280-276082	Lab File ID:	25A050815.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.04 g
Analysis Date:	05/08/2015 1106	Units:	mg/Kg	Final Weight/Volume:	100 mL
Prep Date:	05/06/2015 0830				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Aluminum	10000		10580	6	40	
Antimony	0.33	U	0.37	NC	40	U
Arsenic	2.9		3.03	4	30	
Barium	82.6		84.81	3	30	
Beryllium	0.32		0.324	2	30	
Boron	1.7		1.80	7	30	B
Cadmium	0.13	B	0.160	19	30	B
Calcium	3460		3407	2	30	
Chromium	12.2		12.79	5	40	
Cobalt	8.0		7.96	1	30	
Copper	13.0		13.28	2	30	
Iron	19300		19350	0	40	
Lead	4.8		5.15	8	40	
Magnesium	4160		4262	2	30	
Manganese	358		354.7	1	40	
Molybdenum	0.22	U	0.25	NC	30	U
Nickel	10.9		11.45	5	30	
Potassium	2100		2228	6	40	
Selenium	0.80	B	0.83	NC	30	U
Silicon	184		197.8	7	40	
Silver	0.14	U	0.15	NC	30	U
Sodium	237		227.7	4	30	
Vanadium	38.1		38.50	0.9	30	
Zinc	40.9		41.90	2	40	

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Method Blank - Batch: 280-276197

Method: 7471A
Preparation: 7471A

Lab Sample ID:	MB 280-276197/1-A	Analysis Batch:	280-276397	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-276197	Lab File ID:	150506af.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	.6 g
Analysis Date:	05/06/2015 2224	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	05/06/2015 1300				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	0.0055	U	0.0055	0.017

Lab Control Sample - Batch: 280-276197

Method: 7471A
Preparation: 7471A

Lab Sample ID:	LCS 280-276197/2-A	Analysis Batch:	280-276397	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-276197	Lab File ID:	150506af.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	.6 g
Analysis Date:	05/06/2015 2227	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	05/06/2015 1300				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.417	0.425	102	87 - 111	

Matrix Spike - Batch: 280-276197

Method: 7471A
Preparation: 7471A

Lab Sample ID:	280-68747-1	Analysis Batch:	280-276397	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-276197	Lab File ID:	150506af.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.55 g
Analysis Date:	05/06/2015 2238	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	05/06/2015 1300				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.0063	U	0.458	0.363	79	87 - 111	N

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Duplicate - Batch: 280-276197

Method: 7471A
Preparation: 7471A

Lab Sample ID:	280-68747-1	Analysis Batch:	280-276397	Instrument ID:	MT_033
Client Matrix:	Solid	Prep Batch:	280-276197	Lab File ID:	150506af.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	0.54 g
Analysis Date:	05/06/2015 2236	Units:	mg/Kg	Final Weight/Volume:	50 mL
Prep Date:	05/06/2015 1300				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	RPD	Limit	Qual
Mercury	0.0063	U	0.0062	NC	20	U

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

Duplicate - Batch: 280-276456

Method: D-2216
Preparation: N/A

Lab Sample ID:	280-68747-1	Analysis Batch:	280-276456	Instrument ID:	WC_SHI2
Client Matrix:	Solid	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	05/07/2015 1138	Units:	%	Final Weight/Volume:	
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Percent Moisture	0.67	0.73	8	20	

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:280-276597					
LCS 280-276647/2-A	Lab Control Sample	T	Solid	8260B	280-276647
MB 280-276647/1-A	Method Blank	T	Solid	8260B	280-276647
280-68747-1	J1V703	T	Solid	8260B	280-276647
280-68747-1MS	Matrix Spike	T	Solid	8260B	280-276647
280-68747-1MSD	Matrix Spike Duplicate	T	Solid	8260B	280-276647
280-68747-2	J1V704	T	Solid	8260B	280-276647
280-68747-3	J1V705	T	Solid	8260B	280-276647
280-68747-4	J1V706	T	Solid	8260B	280-276647
280-68747-5	J1V707	T	Solid	8260B	280-276647
280-68747-6	J1V708	T	Solid	8260B	280-276647
280-68747-7	J1V709	T	Solid	8260B	280-276647
280-68747-8	J1V710	T	Solid	8260B	280-276647
280-68747-9	J1V711	T	Solid	8260B	280-276647
280-68747-10	J1V712	T	Solid	8260B	280-276647
280-68747-11	J1V713	T	Solid	8260B	280-276647
280-68747-12	J1V714	T	Solid	8260B	280-276647
280-68747-13	J1V715	T	Solid	8260B	280-276647
280-68747-14	J1V716	T	Solid	8260B	280-276647
280-68747-15	J1V717	T	Solid	8260B	280-276647
Prep Batch: 280-276647					
LCS 280-276647/2-A	Lab Control Sample	T	Solid	5035	
MB 280-276647/1-A	Method Blank	T	Solid	5035	
280-68747-1	J1V703	T	Solid	5035	
280-68747-1MS	Matrix Spike	T	Solid	5035	
280-68747-1MSD	Matrix Spike Duplicate	T	Solid	5035	
280-68747-2	J1V704	T	Solid	5035	
280-68747-3	J1V705	T	Solid	5035	
280-68747-4	J1V706	T	Solid	5035	
280-68747-5	J1V707	T	Solid	5035	
280-68747-6	J1V708	T	Solid	5035	
280-68747-7	J1V709	T	Solid	5035	
280-68747-8	J1V710	T	Solid	5035	
280-68747-9	J1V711	T	Solid	5035	
280-68747-10	J1V712	T	Solid	5035	
280-68747-11	J1V713	T	Solid	5035	
280-68747-12	J1V714	T	Solid	5035	
280-68747-13	J1V715	T	Solid	5035	
280-68747-14	J1V716	T	Solid	5035	
280-68747-15	J1V717	T	Solid	5035	

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Prep Batch: 280-276160					
LCS 280-276160/2-A	Lab Control Sample	T	Solid	3550C	
LCSD 280-276160/19-A	Lab Control Sample Duplicate	T	Solid	3550C	
MB 280-276160/1-A	Method Blank	T	Solid	3550C	
280-68747-1	J1V703	T	Solid	3550C	
280-68747-2	J1V704	T	Solid	3550C	
280-68747-3	J1V705	T	Solid	3550C	
280-68747-4	J1V706	T	Solid	3550C	
280-68747-5	J1V707	T	Solid	3550C	
280-68747-6	J1V708	T	Solid	3550C	
280-68747-7	J1V709	T	Solid	3550C	
280-68747-8	J1V710	T	Solid	3550C	
280-68747-9	J1V711	T	Solid	3550C	
280-68747-10	J1V712	T	Solid	3550C	
280-68747-10MS	Matrix Spike	T	Solid	3550C	
280-68747-10MSD	Matrix Spike Duplicate	T	Solid	3550C	
280-68747-11	J1V713	T	Solid	3550C	
280-68747-12	J1V714	T	Solid	3550C	
280-68747-13	J1V715	T	Solid	3550C	
Prep Batch: 280-276182					
LCS 280-276182/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-276182/1-A	Method Blank	T	Solid	3550C	
280-68747-1	J1V703	T	Solid	3550C	
280-68747-2	J1V704	T	Solid	3550C	
280-68747-3	J1V705	T	Solid	3550C	
280-68747-4	J1V706	T	Solid	3550C	
280-68747-5	J1V707	T	Solid	3550C	
280-68747-6	J1V708	T	Solid	3550C	
280-68747-7	J1V709	T	Solid	3550C	
280-68747-8	J1V710	T	Solid	3550C	
280-68747-8MS	Matrix Spike	T	Solid	3550C	
280-68747-8MSD	Matrix Spike Duplicate	T	Solid	3550C	
280-68747-9	J1V711	T	Solid	3550C	
280-68747-10	J1V712	T	Solid	3550C	
280-68747-11	J1V713	T	Solid	3550C	
280-68747-12	J1V714	T	Solid	3550C	
280-68747-13	J1V715	T	Solid	3550C	

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC Semi VOA					
Analysis Batch:280-276559					
LCS 280-276160/2-A	Lab Control Sample	T	Solid	NWTPH-Dx	280-276160
LCSD 280-276160/19-A	Lab Control Sample Duplicate	T	Solid	NWTPH-Dx	280-276160
MB 280-276160/1-A	Method Blank	T	Solid	NWTPH-Dx	280-276160
280-68747-1	J1V703	T	Solid	NWTPH-Dx	280-276160
280-68747-2	J1V704	T	Solid	NWTPH-Dx	280-276160
280-68747-3	J1V705	T	Solid	NWTPH-Dx	280-276160
280-68747-4	J1V706	T	Solid	NWTPH-Dx	280-276160
280-68747-5	J1V707	T	Solid	NWTPH-Dx	280-276160
280-68747-6	J1V708	T	Solid	NWTPH-Dx	280-276160
280-68747-7	J1V709	T	Solid	NWTPH-Dx	280-276160
280-68747-8	J1V710	T	Solid	NWTPH-Dx	280-276160
280-68747-9	J1V711	T	Solid	NWTPH-Dx	280-276160
280-68747-10	J1V712	T	Solid	NWTPH-Dx	280-276160
280-68747-10MS	Matrix Spike	T	Solid	NWTPH-Dx	280-276160
280-68747-10MSD	Matrix Spike Duplicate	T	Solid	NWTPH-Dx	280-276160
280-68747-11	J1V713	T	Solid	NWTPH-Dx	280-276160
280-68747-12	J1V714	T	Solid	NWTPH-Dx	280-276160
280-68747-13	J1V715	T	Solid	NWTPH-Dx	280-276160
Analysis Batch:280-276754					
LCS 280-276182/2-A	Lab Control Sample	T	Solid	8082	280-276182
MB 280-276182/1-A	Method Blank	T	Solid	8082	280-276182
280-68747-1	J1V703	T	Solid	8082	280-276182
280-68747-2	J1V704	T	Solid	8082	280-276182
280-68747-3	J1V705	T	Solid	8082	280-276182
280-68747-4	J1V706	T	Solid	8082	280-276182
280-68747-5	J1V707	T	Solid	8082	280-276182
280-68747-6	J1V708	T	Solid	8082	280-276182
280-68747-7	J1V709	T	Solid	8082	280-276182
280-68747-8	J1V710	T	Solid	8082	280-276182
280-68747-8MS	Matrix Spike	T	Solid	8082	280-276182
280-68747-8MSD	Matrix Spike Duplicate	T	Solid	8082	280-276182
280-68747-9	J1V711	T	Solid	8082	280-276182
280-68747-10	J1V712	T	Solid	8082	280-276182
280-68747-11	J1V713	T	Solid	8082	280-276182
280-68747-12	J1V714	T	Solid	8082	280-276182
280-68747-13	J1V715	T	Solid	8082	280-276182

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 280-276082					
LCS 280-276082/2-A	Lab Control Sample	T	Solid	3050B	
MB 280-276082/1-A	Method Blank	T	Solid	3050B	
280-68747-1	J1V703	T	Solid	3050B	
280-68747-1DU	Duplicate	T	Solid	3050B	
280-68747-1MS	Matrix Spike	T	Solid	3050B	
280-68747-2	J1V704	T	Solid	3050B	
280-68747-3	J1V705	T	Solid	3050B	
280-68747-4	J1V706	T	Solid	3050B	
280-68747-5	J1V707	T	Solid	3050B	
280-68747-6	J1V708	T	Solid	3050B	
280-68747-7	J1V709	T	Solid	3050B	
280-68747-8	J1V710	T	Solid	3050B	
280-68747-9	J1V711	T	Solid	3050B	
280-68747-10	J1V712	T	Solid	3050B	
280-68747-11	J1V713	T	Solid	3050B	
280-68747-12	J1V714	T	Solid	3050B	
280-68747-13	J1V715	T	Solid	3050B	
280-68747-14	J1V716	T	Solid	3050B	
Prep Batch: 280-276197					
LCS 280-276197/2-A	Lab Control Sample	T	Solid	7471A	
MB 280-276197/1-A	Method Blank	T	Solid	7471A	
280-68747-1	J1V703	T	Solid	7471A	
280-68747-1DU	Duplicate	T	Solid	7471A	
280-68747-1MS	Matrix Spike	T	Solid	7471A	
280-68747-2	J1V704	T	Solid	7471A	
280-68747-3	J1V705	T	Solid	7471A	
280-68747-4	J1V706	T	Solid	7471A	
280-68747-5	J1V707	T	Solid	7471A	
280-68747-6	J1V708	T	Solid	7471A	
280-68747-7	J1V709	T	Solid	7471A	
280-68747-8	J1V710	T	Solid	7471A	
280-68747-9	J1V711	T	Solid	7471A	
280-68747-10	J1V712	T	Solid	7471A	
280-68747-11	J1V713	T	Solid	7471A	
280-68747-12	J1V714	T	Solid	7471A	
280-68747-13	J1V715	T	Solid	7471A	
280-68747-14	J1V716	T	Solid	7471A	

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:280-276397					
LCS 280-276197/2-A	Lab Control Sample	T	Solid	7471A	280-276197
MB 280-276197/1-A	Method Blank	T	Solid	7471A	280-276197
280-68747-1	J1V703	T	Solid	7471A	280-276197
280-68747-1DU	Duplicate	T	Solid	7471A	280-276197
280-68747-1MS	Matrix Spike	T	Solid	7471A	280-276197
280-68747-2	J1V704	T	Solid	7471A	280-276197
280-68747-3	J1V705	T	Solid	7471A	280-276197
280-68747-4	J1V706	T	Solid	7471A	280-276197
280-68747-5	J1V707	T	Solid	7471A	280-276197
280-68747-6	J1V708	T	Solid	7471A	280-276197
280-68747-7	J1V709	T	Solid	7471A	280-276197
280-68747-8	J1V710	T	Solid	7471A	280-276197
280-68747-9	J1V711	T	Solid	7471A	280-276197
280-68747-10	J1V712	T	Solid	7471A	280-276197
280-68747-11	J1V713	T	Solid	7471A	280-276197
280-68747-12	J1V714	T	Solid	7471A	280-276197
280-68747-13	J1V715	T	Solid	7471A	280-276197
280-68747-14	J1V716	T	Solid	7471A	280-276197
Analysis Batch:280-276805					
LCS 280-276082/2-A	Lab Control Sample	T	Solid	6010B	280-276082
MB 280-276082/1-A	Method Blank	T	Solid	6010B	280-276082
280-68747-1	J1V703	T	Solid	6010B	280-276082
280-68747-1DU	Duplicate	T	Solid	6010B	280-276082
280-68747-1MS	Matrix Spike	T	Solid	6010B	280-276082
280-68747-2	J1V704	T	Solid	6010B	280-276082
280-68747-3	J1V705	T	Solid	6010B	280-276082
280-68747-4	J1V706	T	Solid	6010B	280-276082
280-68747-5	J1V707	T	Solid	6010B	280-276082
280-68747-6	J1V708	T	Solid	6010B	280-276082
280-68747-7	J1V709	T	Solid	6010B	280-276082
280-68747-8	J1V710	T	Solid	6010B	280-276082
280-68747-9	J1V711	T	Solid	6010B	280-276082
280-68747-10	J1V712	T	Solid	6010B	280-276082
280-68747-11	J1V713	T	Solid	6010B	280-276082
280-68747-12	J1V714	T	Solid	6010B	280-276082
280-68747-13	J1V715	T	Solid	6010B	280-276082
280-68747-14	J1V716	T	Solid	6010B	280-276082

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:280-276456					
280-68747-1	J1V703	T	Solid	D-2216	
280-68747-1DU	Duplicate	T	Solid	D-2216	
280-68747-2	J1V704	T	Solid	D-2216	
280-68747-3	J1V705	T	Solid	D-2216	
280-68747-4	J1V706	T	Solid	D-2216	
280-68747-5	J1V707	T	Solid	D-2216	
280-68747-6	J1V708	T	Solid	D-2216	
280-68747-7	J1V709	T	Solid	D-2216	
280-68747-8	J1V710	T	Solid	D-2216	
280-68747-9	J1V711	T	Solid	D-2216	
280-68747-10	J1V712	T	Solid	D-2216	
280-68747-11	J1V713	T	Solid	D-2216	
280-68747-12	J1V714	T	Solid	D-2216	
280-68747-13	J1V715	T	Solid	D-2216	
280-68747-14	J1V716	T	Solid	D-2216	
280-68747-15	J1V717	T	Solid	D-2216	

Report Basis
T = Total

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
HPLC/IC					
Prep Batch: 280-276149					
LCS 280-276149/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-276149/1-A	Method Blank	T	Solid	3550C	
280-68747-1	J1V703	T	Solid	3550C	
280-68747-2	J1V704	T	Solid	3550C	
280-68747-3	J1V705	T	Solid	3550C	
280-68747-4	J1V706	T	Solid	3550C	
280-68747-5	J1V707	T	Solid	3550C	
280-68747-5MS	Matrix Spike	T	Solid	3550C	
280-68747-5MSD	Matrix Spike Duplicate	T	Solid	3550C	
280-68747-6	J1V708	T	Solid	3550C	
280-68747-7	J1V709	T	Solid	3550C	
280-68747-8	J1V710	T	Solid	3550C	
280-68747-9	J1V711	T	Solid	3550C	
280-68747-10	J1V712	T	Solid	3550C	
280-68747-11	J1V713	T	Solid	3550C	
280-68747-12	J1V714	T	Solid	3550C	
280-68747-14	J1V716	T	Solid	3550C	
Analysis Batch:280-276338					
LCS 280-276149/2-A	Lab Control Sample	T	Solid	8310	280-276149
MB 280-276149/1-A	Method Blank	T	Solid	8310	280-276149
280-68747-1	J1V703	T	Solid	8310	280-276149
280-68747-2	J1V704	T	Solid	8310	280-276149
280-68747-3	J1V705	T	Solid	8310	280-276149
280-68747-4	J1V706	T	Solid	8310	280-276149
280-68747-5	J1V707	T	Solid	8310	280-276149
280-68747-5MS	Matrix Spike	T	Solid	8310	280-276149
280-68747-5MSD	Matrix Spike Duplicate	T	Solid	8310	280-276149
280-68747-6	J1V708	T	Solid	8310	280-276149
280-68747-7	J1V709	T	Solid	8310	280-276149
280-68747-8	J1V710	T	Solid	8310	280-276149
280-68747-9	J1V711	T	Solid	8310	280-276149
280-68747-10	J1V712	T	Solid	8310	280-276149
280-68747-11	J1V713	T	Solid	8310	280-276149
280-68747-12	J1V714	T	Solid	8310	280-276149
280-68747-14	J1V716	T	Solid	8310	280-276149
Prep Batch: 280-276956					
LCS 280-276956/2-A	Lab Control Sample	T	Solid	3550C	
MB 280-276956/1-A	Method Blank	T	Solid	3550C	
280-68747-13	J1V715	T	Solid	3550C	
280-68747-13MS	Matrix Spike	T	Solid	3550C	
280-68747-13MSD	Matrix Spike Duplicate	T	Solid	3550C	

Client: Washington Closure Hanford

Job Number: 280-68747-1
Sdg Number: JP0962

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
HPLC/IC					
Analysis Batch:280-277064					
LCS 280-276956/2-A	Lab Control Sample	T	Solid	8310	280-276956
MB 280-276956/1-A	Method Blank	T	Solid	8310	280-276956
280-68747-13	J1V715	T	Solid	8310	280-276956
280-68747-13MS	Matrix Spike	T	Solid	8310	280-276956
280-68747-13MSD	Matrix Spike Duplicate	T	Solid	8310	280-276956

Report Basis
T = Total

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-189-312

Collector STOWE, QG	**Company Contact** Joan Kessner	**Telephone No.** 375-4688	**Project Coordinator** KESSNER, JH
Price Code	**Data Turnaround** 7 days		
Project Designation 100N Field Remediation	**Sampling Location** 100-N-96 (SPA, verification)		**SAF No.** RC-189
Ice Chest No. WCH-08-032	**Field Logbook No.** EL-1652-12	**COA** 000N962000	**Method of Shipment** Commercial Carrier / Fed Ex
Shipped To TestAmerica Denver	**Offsite Property No.** A131409		**Bill of Lading/Air Bill No.** See 0595

Other Labs Shipped To
TestAmerica Richland

280-68747 Chain of Custody

POSSIBLE SAMPLE HAZARDS/REMARKS
N/A

Special Handling and/or Storage
cooling as required

Preservation	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Freeze						
Type of Container	G/P	aG	aG	G	Gs*						
No. of Container(s)	1	1	1	1	5						
Volume	250mL	~~250mL~~ 500 mL	~~250mL~~ 500 mL 4/30/15 CMB	125mL	40mL						
Sample Analysis	See item (1) in Special Instructions	PCBs - 8082	PAHs - 8310	TPH-Diesel Range - WTPH-D +	*** VOA - 5035/8260 (TCL)						

Sample No.	Matrix	Sample Date	Sample Time										
J1V703	SOIL	4/30/15	1148	X	X	X	X	X					
J1V704	SOIL	4/30/15	1142	X	X	X	X	X					
J1V705	SOIL	4/30/15	1136	X	X	X	X	X					
J1V706	SOIL	4/30/15	1130	X	X	X	X	X					
J1V707	SOIL	4/30/15	1008	X	X	X	X	X					

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CHAIN OF POSSESSION

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Quincy Stowe	1222 4-30-15	C. Martinez/C. Martinez	1222 4/30/15
C. Martinez/C. Martinez	4/30/15 1540	C. Bingham	1540 4-30-15
C. Bingham	4-30-15 1615	1060 Battelle fridge #3C	1615 4-30-15
1060 Battelle fridge #3C	0730 5-4-15	C. Bingham	0730 5-4-15
C. Bingham WCH	0740 5-4-15	fed Ex	5-4-15
			5-5-15 10:05

Sign/Print Names

FINAL SAMPLE DISPOSITION — Disposal Method — Disposed By — 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 K. Wood Vigeman DATE 5-4-15

freeze upon receipt. 4/30/15 CMB

*** VOA samples frozen upon collection

JP0962

4.1, 5.6, 4.1, 2.1 I 2510.2
Transferred By MT

WCH-EE-011

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-189-312

Collector STOWE, QG	**Company Contact** Joan Kessner	**Telephone No.** 375-4688	**Project Coordinator** KESSNER, JH
Price Code 8B	**Data Turnaround** 7 days		
Project Designation 100N Field Remediation	**Sampling Location** 100-N-96 (SPA, verification)		**SAF No.** RC-189
Ice Chest No. WCH-08-032	**Field Logbook No.** EL-1652-12	**COA** 000N962000	**Method of Shipment** Commercial Carrier Fed EX
Shipped To TestAmerica Denver	**Offsite Property No.** A131409		**Bill of Lading/Air Bill No.** See OSPC

Other Labs Shipped To
TestAmerica Richland

POSSIBLE SAMPLE HAZARDS/REMARKS
N/A

Special Handling and/or Storage
cooling as required

Preservation	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Freeze						
Type of Container	G/P	aG	aG	G	Gs*						
No. of Container(s)	1	1	1	1	5						
Volume	250mL	~~250mL~~ 500mL	4/30/15 LMB ~~250mL~~ 500mL	125mL	40mL						
Sample Analysis	See item (1) in Special Instructions	PCBs - 8082	PAHs - 8310	TPH-Diesel Range - WTPH-D +	** VOA - 5035/8260 (TCL)						

Sample No.	Matrix	Sample Date	Sample Time										
J1V708	SOIL	4/30/15	1000	X	X	X	X	X					
J1V709	SOIL	4/30/15	0939	X	X	X	X	X					
J1V710	SOIL	4/30/15	0954	X	X	X	X	X					
J1V711	SOIL	4/30/15	0948	X	X	X	X	X					
J1V712	SOIL	4/30/15	0933	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	4-30-15 1222	C. Martinez/C. Martinez	4/30/15 1222
C. Martinez/C. Martinez	4/30/15 1540	C. Bingham	4-30-15 1540
C. Bingham	4-30-15 1615	1060 Battelle, Fridge #3C	4-30-15 1615
1060 Battelle, Fridge #3C	5-4-15 0730	C. Bingham	5-4-15 0730
C. Bingham WCH	5-4-15 0740	Fed EX	5-4-15
			5-5-15 10:05

FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	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 K. Wood/Lacmo DATE 5-4-15

* freeze upon receipt. 4/30/15 LMB

** VOA samples frozen upon collection

JP0962

WCH-EE-011

Page 148 of 155

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-189-312

Collector STOWE, QG	**Company Contact** Joan Kessner	**Telephone No.** 375-4688	**Project Coordinator** KESSNER, JH
Price Code 8B	**Data Turnaround** 7 days		
Project Designation 100N Field Remediation	**Sampling Location** 100-N-96 (SPA, verification)		**SAF No.** RC-189
Ice Chest No. WCH-08-032	**Field Logbook No.** EL-1652-12	**COA** 000N962000	**Method of Shipment** Commercial Carrier \ Fed Ex
Shipped To TestAmerica Denver	**Offsite Property No.** A131409		**Bill of Lading/Air Bill No.** See OSPC

Other Labs Shipped To
TestAmerica Richland

POSSIBLE SAMPLE HAZARDS/REMARKS
N/A

Special Handling and/or Storage
cooling as required

Preservation	Cool 4C	Cool 4C	Cool 4C	Cool 4C	Freeze							
Type of Container	G/P	aG	aG	G	Gs*							
No. of Container(s)	1	1	1	1	5							
Volume	250mL	~~250mL~~ 500mL	4/30/15 SMB ~~250mL~~ 500mL	125mL	40mL							
Sample Analysis	See item (1) in Special Instructions	PCBs - 8082	PAHs - 8310	TPH-Diesel Range - WTPH-D +	* ** VOA - 5035/8260 (TCL)							

Sample No.	Matrix	Sample Date	Sample Time										
J1V713	SOIL	4/30/15	0925	X	X	X	X	X					
J1V714	SOIL	4/30/15	0913	X	X	X	X	X					
J1V715	SOIL	4/30/15	0913	X	X	X	X	X					
J1V716	SOIL	4/30/15	0904	X	n/A	X	n/A	X					

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

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Quincy Stowe	4-30-15 1222	C.Martinez/C.Martinez	4/30/15 1222
C.Martinez/C.Martinez	4/30/15 1540	C.Bingham	4-30-15 1540
C.Bingham	4-30-15 1615	1000 Battelle, Fridge #3C	4-30-15 1615
1000 Battelle, Fridge #3C	5-4-15 0730	C.Bingham	5-4-15 0730
C.Bingham	5-4-15 0740	Fed Ex	5-4-15
			5-5-15 10:05

FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	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 K. Woodworth DATE 5-4-15

* Freeze upon receipt. 4/30/15 SMB
** VOA samples frozen upon collection

JP0962

WCH-EE-011

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-189-313

Collector STOWE, QG	**Company Contact** Joan Kessner	**Telephone No.** 375-4688	**Project Coordinator** KESSNER, JH
Price Code 8B	**Data Turnaround** 7 days		
Project Designation 100N Field Remediation	**Sampling Location** 100-N-96 (trip blank)		**SAF No.** RC-189
Ice Chest No.	**Field Logbook No.** EL-1652-12	**COA** 000N962000	**Method of Shipment** Commercial Carrier \ Fed Ex
Shipped To TestAmerica Denver	**Offsite Property No.** A131409		**Bill of Lading/Air Bill No.** See OSIC

Other Labs Shipped To

N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

N/A

Special Handling and/or Storage

cooling as required

Preservation	Freeze											
Type of Container	Gs*											
No. of Container(s)	5											
Volume	40mL											
Sample Analysis	** VOA - 5035/8260 (TCL)											

Sample No.	Matrix	Sample Date	Sample Time										
J1W017	SOIL	4/30/15	0908	X									

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

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Quirey Stowe	1222 4-30-15	C. Martinez / C. Martinez	1222 4/30/15
C. Martinez / C. Martinez	1540 4/30/15	C. Bingham	4-30-15 1540
C. Bingham	4-30-15 1615	1060 Battelle, freezer	1615 4-30-15
1060 Battelle, freezer	0730 5-4-15	C. Bingham	0730 5-4-15
C. Bingham WCH	0740 5-4-15	fed EX	5-4-15
			5-5-15 10:05

FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

SPECIAL INSTRUCTIONS

REVIEWED BY K. Woodward DATE 5-4-15

* freeze upon receipt. 4/30/15 CMB

** VOA samples frozen upon collection

JP09632 5-4-15 CMB

WCH-EE-011

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

90w/Permission

Project 28002142

Report Due: 5/12/2015 O.K. 5-6-15

TALs TAT: Rush 5 day TAT

Sample Check-in List

Date/Time Received: 5/5/15 10:05 GM Screen Result 12 microR/hr

Client: Washington Closure Hanford SDG #: 5P0962 NA[ ] SAF #: RC-189 NA [ ]

Job Number: 68747 Chain of Custody # RC-189-312, 313

Shipping Container ID: WCH-08-055 RCC-07-011 WCH-11-035 WCH-08-032 Air Bill # 7735 2051 0005

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? NA [ ] Yes [✓] No [ ]
4. Cooler Temperature °C: 4.1, 5.6, 4.1, 2.1 NA [ ] 5. Vermiculite/packing materials is NA [ ] Wet [✓] Dry [ ]
6. Number of samples in shipping container: 15
7. Sample holding times exceeded? NA [ ] Yes [ ] No [✓]
8. Samples have:
   - ✓ Tape
   - ✓ Custody Seals
   - ✓ Hazard Labels
   - ✓ Appropriate Sample Labels
9. Samples are:
   - ✓ In Good Condition
   - ____ 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: 5/5/15

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on ____ by ____ Person Contacted ____

[ ] No action necessary; process as is.

Project Manager Darlene Bandy Date 5-6-15

LS-023, Rev. 7, 1/08

From: (509) 376-7492
1162 Shipping
US DOE co WCH
2355 STEVENS DR

RICHLAND, WA 99354

Origin ID: PSCA

FedEx Express

J15121602303uv

SHIP TO: (303) 736-0190
Kae Yoder
TestAmerica
4955 Yarrow St.

ARVADA, CO 80002

BILL THIRD PARTY

Ship Date: 04MAY15
ActWgt: 81.0 LB
CAD: 105266502/INET3610

Delivery Address Bar Code

Ref # 000N962000/0603672000
Invoice #
PO #
Dept #

RCC-07-011

2 of 9

TUE - 05 MAY 10:30A
PRIORITY OVERNIGHT

MPS# 7735 2051 1229
0263
Mstr# 7735 2051 0005
0201

XH WHHA

8000
co-
DEN

Temp 2.1 IR# 5
CF +0.2 Initals MS
Date: 05/05/15

537J/25E2/EE4D

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WCH-08-032

From: (509) 376-7492
1162 Shipping
US DOE co WCH
2355 STEVENS DR

RICHLAND, WA 99354

Origin ID: PSCA

FedEx Express

J15121602230/JJ

SHIP TO: (303) 736-0190
BILL THIRD PARTY

Kae Yoder
TestAmerica
4955 Yarrow St.

ARVADA, CO 80002

Ship Date: 04MAY15
ActWgt: 75.0 LB
CAD: 105266502/INET3810

Delivery Address Bar Code

Ref # 000N992000/0603672000
Invoice #
PO #
Dept #

Temp 4.1 IR# 5
CF +0.2 Initals MS
Date: 05/05/15

1 of 9

TRK# 7735 2051 0005
0201

TUE - 05 MAY 10:30A
PRIORITY OVERNIGHT

MASTER
XH WHHA

80002
CO-US
DEN

037J1/25E2/EE4B

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From: (509) 376-7492
1162 Shipping
US DOE co WCH
2355 STEVENS DR

RICHLAND, WA 99354

Origin ID: PSCA

FedEx Express

J151215022303nv

Ship Date: 04MAY15
ActWgt: 45.0 LB
CAD: 105266502/INET3610

Delivery Address Bar Code

Ref # D00N962000/0603672000
Invoice #
PO #
Dept #

Temp 4.1 IR# 5
CF +0.2 Initals MS
Date: 05/05/15

WCH-11-055

SHIP TO: (303) 736-0190
BILL THIRD PARTY

Kae Yoder
TestAmerica
4955 Yarrow St.

ARVADA, CO 80002

5 of 9

TUE - 05 MAY 10:30A
PRIORITY OVERNIGHT

MPS# 7735 2051 0792
0263
Mstr# 7735 2051 0005
0201

XH WHHA

80002
CO-US
DEN

537J125E2EE4B

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From: (509) 376-7492
1162 Shipping
US DOE ce WCH
2355 STEVENS DR

RICHLAND, WA 99354

Origin ID: PSCA

FedEx Express

J15121502230 3uv

SHIP TO: (303) 736-0190
BILL THIRD PARTY

Kae Yoder
TestAmerica
4955 Yarrow St.

ARVADA, CO 80002

Ship Date: 04MAY15
ActWgt: 55.0 LB
CAD: 105266502/NET3610

Delivery Address Bar Code

Ref # 000N962000/0503672000
Invoice #
PO #
Dept #

Temp 5.6 IR# 5
CF +0.2 Initals ms
Date: 05/05/15

6 of 9

TUE - 05 MAY 10:30A
PRIORITY OVERNIGHT

MPS# 7736 2051 1192
0263
Mstr# 7735 2051 0005 0201

XH WHHA

80002
CO-US
DEN

WCH-05-055

537J1/25E2/EE48

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