SAF-RC-148
300 Area D4 Waste Sites –
Soil Full Protocol
FINAL DATA PACKAGE

COMPLETE COPY OF DATA PACKAGE TO:

Kathy Wendt H4-21 KW 5/6/15
INITIAL/DATE

COMMENTS:

SDG JP0949 SAF-RC-148

Rad only ☑ Chem only Rad & Chem

☑ Complete Partial

Sample Location: 309 Excavation Ver VOA trip blank

ANALYTICAL REPORT

Job Number: 280-68445-1

SDG Number: JP0949

Job Description: SAF# RC-148

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

Attention: Joan H Kessner

Approved for release.
Kae E Yoder
Senior Project Manager
5/5/2015 2:53 PM

Kae E Yoder, Senior Project Manager
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05/05/2015

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: 280-68445-1

SDG #: JP0949
SAF#: RC-148

Date SDG Closed: April 28, 2015
Data Deliverable: 7 Day / Summary

CLIENT ID	LAB ID	ANALYSES REQUESTED	ANALYSES PERFORMED
J1V696	280-68445-1	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.

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

RECEIPT
The sample was received on 4/28/2015 9:10 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.0º C.

The Chain of Custody indicates "VOA samples frozen upon collection", and it can be noted that the 5035/8260B VOA sample was placed in the freezer upon receipt at the laboratory. The client was notified on 4/29/2015.

GC/MS VOLATILES - SW846 8260B
Due to insufficient sample volume submitted by the client, a Percent Moisture analysis could not be performed for sample J1V696, as such, the associated GC/MS Volatiles 8260B results are reported on a wet weight (as received) basis. The client was notified on 4/29/2015.

The MSD aliquot of the MS/MSD performed on sample J1V696 exhibited spike compound recoveries outside the control limits, and the associated sample results have been flagged "T". The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary.

No other anomalies were encountered.

DATA REPORTING QUALIFIERS

Client: Washington Closure Hanford

Job Number: 280-68445-1
Sdg Number: JP0949

Lab Section	Qualifier	Description
GC/MS VOA		
	U	Analyzed for but not detected.
	J	Indicates an Estimated Value for TICs
	T	MS, MSD: Recovery exceeds upper or lower control limits.
	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.

SAMPLE SUMMARY

Client: Washington Closure Hanford

Job Number: 280-68445-1
Sdg Number: JP0949

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
280-68445-1	J1V696	Solid	04/23/2015 0750	04/28/2015 0910

METHOD SUMMARY

Client: Washington Closure Hanford

Job Number: 280-68445-1
Sdg Number: JP0949

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

Lab References:

TAL DEN = TestAmerica Denver

Method References:

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: 280-68445-1
Sdg Number: JP0949

Method	Analyst	Analyst ID
SW846 8260B	Dukes, Aaron D	ADD

SAMPLE RESULTS

Client: Washington Closure Hanford

Job Number: 280-68445-1
Sdg Number: JP0949

Client Sample ID: **J1V696**

Lab Sample ID: 280-68445-1
Client Matrix: Solid

Date Sampled: 04/23/2015 0750
Date Received: 04/28/2015 0910

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-275391	Instrument ID:	VMS_G
Prep Method:	5035	Prep Batch:	280-275419	Lab File ID:	G3413.D
Dilution:	1.0			Initial Weight/Volume:	3.833 g
Analysis Date:	04/30/2015 1807			Final Weight/Volume:	5 mL
Prep Date:	04/23/2015 0500				

Analyte	DryWt Corrected: N	Result (ug/Kg)	Qualifier	MDL	RL
Acetone		7.0	U	7.0	26
Benzene		0.61	U	0.61	6.5
Bromodichloromethane		0.29	U	0.29	6.5
Bromoform		0.30	U	0.30	6.5
Bromomethane		0.65	U	0.65	13
2-Butanone (MEK)		2.4	U	2.4	13
Carbon disulfide		0.55	U	0.55	6.5
Carbon tetrachloride		0.82	U	0.82	6.5
Chlorobenzene		0.70	U T	0.70	6.5
Dibromochloromethane		0.74	U	0.74	6.5
Chloroethane		1.2	U	1.2	13
Chloroform		0.38	U	0.38	6.5
Chloromethane		1.0	U	1.0	13
1,1-Dichloroethane		0.27	U	0.27	6.5
1,2-Dichloroethane		0.91	U	0.91	6.5
1,1-Dichloroethene		0.77	U T	0.77	6.5
1,2-Dichloroethene, Total		0.51	U T	0.51	6.5
1,2-Dichloropropane		0.72	U	0.72	6.5
cis-1,3-Dichloropropene		1.7	U	1.7	6.5
trans-1,3-Dichloropropene		0.87	U	0.87	6.5
Ethylbenzene		0.87	U	0.87	6.5
2-Hexanone		6.4	U	6.4	26
Methylene Chloride		2.1	U T	2.1	6.5
4-Methyl-2-pentanone (MIBK)		5.7	U	5.7	13
Styrene		0.82	U T	0.82	6.5
1,1,2,2-Tetrachloroethane		0.80	U	0.80	6.5
Tetrachloroethene		0.77	U T	0.77	6.5
Toluene		0.90	U	0.90	6.5
1,1,1-Trichloroethane		0.68	U	0.68	6.5
1,1,2-Trichloroethane		1.1	U	1.1	6.5
Trichloroethene		0.30	U	0.30	6.5
Vinyl chloride		1.7	U	1.7	6.5
Xylenes, Total		0.80	U	0.80	6.5

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	104		58 - 140
Toluene-d8 (Surr)	106		80 - 126
4-Bromofluorobenzene (Surr)	112		76 - 127
Dibromofluoromethane (Surr)	105		75 - 121

Client: Washington Closure Hanford

Job Number: 280-68445-1
Sdg Number: JP0949

Client Sample ID: **J1V696**

Lab Sample ID: 280-68445-1
Client Matrix: Solid

Date Sampled: 04/23/2015 0750
Date Received: 04/28/2015 0910

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	280-275391	Instrument ID:	VMS_G
Prep Method:	5035	Prep Batch:	280-275419	Lab File ID:	G3413.D
Dilution:	1.0			Initial Weight/Volume:	3.833 g
Analysis Date:	04/30/2015 1807			Final Weight/Volume:	5 mL
Prep Date:	04/23/2015 0500				

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

Cas Number	Analyte	RT	Est. Result (ug/Kg)	Qualifier
	Unknown	4.94	350	J N
74-88-4	Iodomethane	5.55	1.8	J N
	Unknown	6.68	1100	J N
99-87-6	4-Isopropyltoluene	12.34	2.2	J N

QUALITY CONTROL RESULTS

Client: Washington Closure Hanford

Job Number: 280-68445-1
Sdg Number: JP0949

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
280-68445-1	J1V696	104	106	112	105
MB 280-275419/1-A		103	97	105	102
LCS 280-275419/2-A		103	100	109	103
280-68445-1 MS	J1V696 MS	107	104	109	107
280-68445-1 MSD	J1V696 MSD	101	103	111	102

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: 280-68445-1
Sdg Number: JP0949

Method Blank - Batch: 280-275419

Method: 8260B
Preparation: 5035

Lab Sample ID:	MB 280-275419/1-A	Analysis Batch:	280-275391	Instrument ID:	VMS_G
Client Matrix:	Solid	Prep Batch:	280-275419	Lab File ID:	G3409.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 g
Analysis Date:	04/30/2015 1637	Units:	ug/Kg	Final Weight/Volume:	5 mL
Prep Date:	04/30/2015 1500				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acetone	5.4	U	5.4	20
Benzene	0.47	U	0.47	5.0
Bromodichloromethane	0.22	U	0.22	5.0
Bromoform	0.23	U	0.23	5.0
Bromomethane	0.50	U	0.50	10
2-Butanone (MEK)	1.8	U	1.8	10
Carbon disulfide	0.42	U	0.42	5.0
Carbon tetrachloride	0.63	U	0.63	5.0
Chlorobenzene	0.54	U	0.54	5.0
Dibromochloromethane	0.57	U	0.57	5.0
Chloroethane	0.89	U	0.89	10
Chloroform	0.29	U	0.29	5.0
Chloromethane	0.77	U	0.77	10
1,1-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)	103	58 - 140
Toluene-d8 (Surr)	97	80 - 126
4-Bromofluorobenzene (Surr)	105	76 - 127
Dibromofluoromethane (Surr)	102	75 - 121

Client: Washington Closure Hanford

Job Number: 280-68445-1
Sdg Number: JP0949

Method Blank TICs- Batch: 280-275419

Cas Number	Analyte	RT	Est. Result (ug/K	Qual
29427-58-5	o-Methylisourea hydrogen sulfate	4.14	202	N J
75-07-0	Acetaldehyde	4.37	226	N J
992-94-9	Silane, methyl-	4.98	154	N J
60-34-4	Hydrazine, methyl-	6.67	797	N J
1735-17-7	Cyclohexane-d12	8.26	5.08	N J
66-25-1	Hexanal	9.73	5.63	N J
31502-14-4	2-Nonen-1-ol, (E)-	13.30	5.93	N J
103-09-3	Acetic acid, 2-ethylhexyl ester	13.58	8.28	N J
112-40-3	Dodecane	13.82	6.77	N J

Client: Washington Closure Hanford

Job Number: 280-68445-1
Sdg Number: JP0949

Lab Control Sample - Batch: 280-275419

Method: 8260B
Preparation: 5035

Lab Sample ID:	LCS 280-275419/2-A	Analysis Batch:	280-275391	Instrument ID:	VMS_G
Client Matrix:	Solid	Prep Batch:	280-275419	Lab File ID:	G3410.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 g
Analysis Date:	04/30/2015 1700	Units:	ug/Kg	Final Weight/Volume:	5 mL
Prep Date:	04/30/2015 1500				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acetone	200	221	110	65 - 150	
Benzene	50.0	50.1	100	75 - 135	
Bromodichloromethane	50.0	54.8	110	73 - 135	
Bromoform	50.0	56.4	113	77 - 135	
Bromomethane	50.0	44.1	88	52 - 135	
2-Butanone (MEK)	200	201	100	45 - 177	
Carbon disulfide	50.0	46.6	93	45 - 150	
Carbon tetrachloride	50.0	56.1	112	69 - 138	
Chlorobenzene	50.0	47.1	94	78 - 135	
Dibromochloromethane	50.0	53.1	106	77 - 135	
Chloroethane	50.0	45.3	91	51 - 145	
Chloroform	50.0	50.9	102	73 - 123	
Chloromethane	50.0	41.8	84	41 - 138	
1,1-Dichloroethane	50.0	48.9	98	70 - 135	
1,2-Dichloroethane	50.0	54.7	109	69 - 135	
1,1-Dichloroethene	50.0	46.3	93	79 - 135	
1,2-Dichloroethene, Total	100	99.0	99	78 - 135	
1,2-Dichloropropane	50.0	48.2	96	72 - 121	
cis-1,3-Dichloropropene	50.0	45.3	91	71 - 135	
trans-1,3-Dichloropropene	50.0	61.3	123	71 - 135	
Ethylbenzene	50.0	50.1	100	73 - 125	
2-Hexanone	200	193	97	67 - 150	
Methylene Chloride	50.0	46.4	93	76 - 136	
4-Methyl-2-pentanone (MIBK)	200	215	108	69 - 150	
Styrene	50.0	45.9	92	76 - 135	
1,1,2,2-Tetrachloroethane	50.0	48.8	98	65 - 135	
Tetrachloroethene	50.0	47.7	95	76 - 135	
Toluene	50.0	54.9	110	77 - 122	
1,1,1-Trichloroethane	50.0	50.9	102	70 - 135	
1,1,2-Trichloroethane	50.0	56.6	113	78 - 135	
Trichloroethene	50.0	53.1	106	77 - 135	
Vinyl chloride	50.0	45.7	91	43 - 145	
Xylenes, Total	100	98.4	98	76 - 135	

Surrogate	% Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	103	58 - 140
Toluene-d8 (Surr)	100	80 - 126
4-Bromofluorobenzene (Surr)	109	76 - 127
Dibromofluoromethane (Surr)	103	75 - 121

Client: Washington Closure Hanford

Job Number: 280-68445-1
Sdg Number: JP0949

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-275419

Method: 8260B
Preparation: 5035

MS Lab Sample ID:	280-68445-1	Analysis Batch:	280-275391	Instrument ID:	VMS_G
Client Matrix:	Solid	Prep Batch:	280-275419	Lab File ID:	G3423.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	3.564 g
Analysis Date:	04/30/2015 2148			Final Weight/Volume:	5 mL
Prep Date:	04/23/2015 0750				5 mL
Leach Date:	N/A				

MSD Lab Sample ID:	280-68445-1	Analysis Batch:	280-275391	Instrument ID:	VMS_G
Client Matrix:	Solid	Prep Batch:	280-275419	Lab File ID:	G3415.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	3.204 g
Analysis Date:	04/30/2015 1851			Final Weight/Volume:	5 mL
Prep Date:	04/23/2015 0750				5 mL
Leach Date:	N/A				

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acetone	100	104	65 - 150	15	28		
Benzene	90	79	75 - 135	3	20		
Bromodichloromethane	109	92	73 - 135	7	20		
Bromoform	109	92	77 - 135	7	20		
Bromomethane	87	97	52 - 135	21	22		
2-Butanone (MEK)	97	94	45 - 177	8	32		
Carbon disulfide	60	68	45 - 150	24	24		
Carbon tetrachloride	95	81	69 - 138	5	20		
Chlorobenzene	89	76	78 - 135	5	20		T
Dibromochloromethane	105	90	77 - 135	5	20		
Chloroethane	95	103	51 - 145	19	22		
Chloroform	99	83	73 - 123	7	20		
Chloromethane	86	92	41 - 138	17	25		
1,1-Dichloroethane	88	79	70 - 135	0	20		
1,2-Dichloroethane	108	92	69 - 135	6	20		
1,1-Dichloroethene	81	70	79 - 135	5	20		T
1,2-Dichloroethene, Total	90	77	78 - 135	4	20		T
1,2-Dichloropropane	91	81	72 - 121	1	20		
cis-1,3-Dichloropropene	86	75	71 - 135	2	20		
trans-1,3-Dichloropropene	117	99	71 - 135	6	20		
Ethylbenzene	89	77	73 - 125	4	20		
2-Hexanone	102	101	67 - 150	10	29		
Methylene Chloride	88	74	76 - 136	8	21		T
4-Methyl-2-pentanone (MIBK)	111	108	69 - 150	7	25		
Styrene	86	73	76 - 135	5	20		T
1,1,2,2-Tetrachloroethane	93	87	65 - 135	3	21		
Tetrachloroethene	81	69	76 - 135	6	20		T
Toluene	97	86	77 - 122	2	20		
1,1,1-Trichloroethane	90	75	70 - 135	7	20		
1,1,2-Trichloroethane	112	97	78 - 135	3	20		
Trichloroethene	91	80	77 - 135	3	20		
Vinyl chloride	90	99	43 - 145	20	24		
Xylenes, Total	90	77	76 - 135	5	20		

Client: Washington Closure Hanford

Job Number: 280-68445-1
Sdg Number: JP0949

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	107	101	58 - 140
Toluene-d8 (Surr)	104	103	80 - 126
4-Bromofluorobenzene (Surr)	109	111	76 - 127
Dibromofluoromethane (Surr)	107	102	75 - 121

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 280-275419

Method: 8260B
Preparation: 5035

MS Lab Sample ID:	280-68445-1	Units:	ug/Kg	MSD Lab Sample ID:	280-68445-1
Client Matrix:	Solid			Client Matrix:	Solid
Dilution:	1.0			Dilution:	1.0
Analysis Date:	04/30/2015 2148			Analysis Date:	04/30/2015 1851
Prep Date:	04/23/2015 0750			Prep Date:	04/23/2015 0750
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	7.0	U	281	312	280	326	
Benzene	0.61	U	70.1	78.0	63.4	61.6	
Bromodichloromethane	0.29	U	70.1	78.0	76.6	71.7	
Bromoform	0.30	U	70.1	78.0	76.7	71.7	
Bromomethane	0.65	U	70.1	78.0	61.4	75.4	
2-Butanone (MEK)	2.4	U	281	312	271	295	
Carbon disulfide	0.55	U	70.1	78.0	41.8	53.4	
Carbon tetrachloride	0.82	U	70.1	78.0	66.9	63.3	
Chlorobenzene	0.70	U	70.1	78.0	62.6	59.3	T
Dibromochloromethane	0.74	U	70.1	78.0	73.3	70.0	
Chloroethane	1.2	U	70.1	78.0	66.5	80.7	
Chloroform	0.38	U	70.1	78.0	69.4	64.7	
Chloromethane	1.0	U	70.1	78.0	60.4	71.6	
1,1-Dichloroethane	0.27	U	70.1	78.0	62.0	61.8	
1,2-Dichloroethane	0.91	U	70.1	78.0	76.1	71.7	
1,1-Dichloroethene	0.77	U	70.1	78.0	56.9	54.4	T
1,2-Dichloroethene, Total	0.51	U	140	156	126	121	T
1,2-Dichloropropane	0.72	U	70.1	78.0	63.8	63.2	
cis-1,3-Dichloropropene	1.7	U	70.1	78.0	60.3	58.9	
trans-1,3-Dichloropropene	0.87	U	70.1	78.0	82.4	77.2	
Ethylbenzene	0.87	U	70.1	78.0	62.6	60.1	
2-Hexanone	6.4	U	281	312	286	314	
Methylene Chloride	2.1	U	70.1	78.0	62.1	57.5	T
4-Methyl-2-pentanone (MIBK)	5.7	U	281	312	312	336	
Styrene	0.82	U	70.1	78.0	60.2	57.2	T
1,1,2,2-Tetrachloroethane	0.80	U	70.1	78.0	65.5	67.5	
Tetrachloroethene	0.77	U	70.1	78.0	56.9	53.5	T
Toluene	0.90	U	70.1	78.0	68.3	67.0	
1,1,1-Trichloroethane	0.68	U	70.1	78.0	63.0	58.4	
1,1,2-Trichloroethane	1.1	U	70.1	78.0	78.6	76.0	
Trichloroethene	0.30	U	70.1	78.0	63.8	62.2	
Vinyl chloride	1.7	U	70.1	78.0	63.4	77.4	
Xylenes, Total	0.80	U	140	156	126	120	

Client: Washington Closure Hanford

Job Number: 280-68445-1
Sdg Number: JP0949

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:280-275391					
LCS 280-275419/2-A	Lab Control Sample	T	Solid	8260B	280-275419
MB 280-275419/1-A	Method Blank	T	Solid	8260B	280-275419
280-68445-1	J1V696	T	Solid	8260B	280-275419
280-68445-1MS	Matrix Spike	T	Solid	8260B	280-275419
280-68445-1MSD	Matrix Spike Duplicate	T	Solid	8260B	280-275419
Prep Batch: 280-275419					
LCS 280-275419/2-A	Lab Control Sample	T	Solid	5035	
MB 280-275419/1-A	Method Blank	T	Solid	5035	
280-68445-1	J1V696	T	Solid	5035	
280-68445-1MS	Matrix Spike	T	Solid	5035	
280-68445-1MSD	Matrix Spike Duplicate	T	Solid	5035	

Report Basis
T = Total

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-148-198

Collector: T. Etherington	Company Contact: Joan Kessner	Telephone No.: 375-4688	Project Coordinator: KESSNER, JH
Project Designation: 300 Area D4 Waste Sites	Sampling Location: 309 Excavation_Ver_VOA trip blanks		SAF No.: RC-148
Ice Chest No.: WCH-08-030	Field Logbook No.: EL-1663-08	COA: R302552000	Method of Shipment: Commercial Carrier
Shipped To: TestAmerica Denver	Offsite Property No.: A131405		Bill of Lading/Air Bill No.: SEE OSPC

Price Code: 8B

Data Turnaround: 7 Day

Other Labs Shipped To: NA

RCF 38307

280-68445 Chain of Custody

POSSIBLE SAMPLE HAZARDS/REMARKS

~~Potentially radioactive~~ TRE 4-23-15

NA

Special Handling and/or Storage

freeze upon collection

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										
J1V696	SOIL	4/23/15	0750	✓									
J1V697	SOIL												
J1V698	SOIL	4-23-15 CMB											
J1V699	SOIL												
J1V6C0	SOIL												

REVIEWED K. Weatherwood DATE 4-27-15

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

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
T. Etherington [signature]	4-23-15 1345	WCH DWSHEA DWSHEA	4/23/15 1345
DWSHEA DWSHEA	4/23/15 1540	C. Bingham [signature]	4-23-15 1540
C. Bingham [signature]	4-23-15 1640	1060 Battelle ~~fridge~~ ~~#2B~~ freezer	4-23-15 CMB 4-23-15 1640
1060 Battelle ~~fridge~~ ~~#~~ freezer	4-27-15 CMB 0730 4-27-15	C. Bingham [signature]	4-27-15 0730
C. Bingham [signature] WCH	4-27-15 0830	fed Ex	4-27-15
		[signature]	4-28-15 9:10

SPECIAL INSTRUCTIONS

* freeze upon receipt. 4-23-15 CMB

** VOA samples frozen upon collection

JP0949

1.8 IRS-10.2 [signature] 4/28/15

FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

WCH-EE-011

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

90 w/Permission

Project 28002142

Report Due: 5/5/2015 D.b. 4-29-15

TALs TAT: Rush 5 day TAT

Sample Check-in List

Date/Time Received: 4/28/15 9:10 GM Screen Result 12 microR/hr

Client: Washington Closure Hanford SDG #: SP 0949 NA[ ] SAF #: RC-148 NA [ ]

Job Number: 68445 Chain of Custody # RC-148-198

Shipping Container ID: WCH-08-041 Air Bill # 7734 6532 0448

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: 1.8 IR5 4012 per 4/28/15 NA [ ] 5. Vermiculite/packing materials is NA [ ] Wet [ ] Dry [✓]
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA [ ] Yes [ ] No [✓]
8. Samples have:
   - ✓ Tape
   - ✓ Custody Seals
   - ✓ Hazard 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? * Yes
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [✓] No [ ]
13. Description of anomalies (include sample numbers): No % Moisture volume received for JIV699 - Logged as received

Sample Custodian: [signature] Date: 4/28/15

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on 4-29-15 by D.b. Person Contacted Joan Keessner

[ ] No action necessary; process as is.

Project Manager Darlene Bromley Date 4-29-15

LS-023, Rev. 7, 1/08

From: (509) 376-7492
1162 Shipping
US DOE c/o WCH
2355 Stevens Dr

Richland, WA 99354

Origin ID: PSCA

FedEx Express

J15121502230 3uv

SHIP TO: (303) 736-0190
Kae Yoder
TestAmerica
4955 Yarrow St.
A131405
ARVADA, CO 80002

BILL THIRD PARTY

Ship Date: 27APR15
ActWgt: 57.0 LB
CAD: 105266502/INET3610

Delivery Address Bar Code

Ref # R302552000
Invoice #
PO #
Dept #

Temp 1.8 IR# 5
CF +0.2 Initals m5
Date: 04/28/15

WCH-08-041

4 of 4

MPS# 7734 6532 0460
0263
Mstr# 7734 6532 0448 0201

TUE - 28 APR 10:30A
PRIORITY OVERNIGHT

XH WHHA

80002
CO-US
DEN

537J1/25E2/EE4B

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