0096159

SAF-RC-110
100-H Burial Grounds Remaining Sites – Soil In-Process
FINAL DATA PACKAGE

COMPLETE COPY OF DATA PACKAGE TO:

No Distribution Required

COMMENTS:

SDG J01077 **SAF-RC-110**

Rad only ☑ Chem only Rad & Chem

☑ Complete Partial

Waste Site: 128-H-1 burn pit stockpile

RECEIVED
MAY 11 2011
EDMC

Analytical Data Package Prepared For

Washington Closure Hanford

Analysis Provided By

TestAmerica Richland
2800 George Washington Way
Richland WA, 99354
(509)375-3131
Assigned Laboratory Code: TARL

SDG Number: J01077

Data Package Contains 19 Pages

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

TestAmerica Laboratories, Inc.

Washington Closure Hanford
2620 Fermi Avenue
Richland, WA 99354

May 3, 2011

Attention: Joan Kessner

SAF Number	:	RC-110
Date SDG Closed	:	April 29, 2011
Number of Samples	:	Seven (7)
Sample Type	:	Soil
SDG Number	:	J01077
Data Deliverable	:	Quick Turn Metals / Summary

CASE NARRATIVE

I. Introduction

Between April 13, 2011 and April 20, 2011, seven soil samples were received at TestAmerica for ICP metals 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
J1HH62	MG0M0	SOIL	4/13/11
J1HH63	MG0M3	SOIL	4/13/11
J1HH64	MG0M4	SOIL	4/13/11
J1HHD7	MG9KQ	SOIL	4/19/11
J1HHD8	MG9LA	SOIL	4/19/11
J1HHD9	MG9LD	SOIL	4/19/11
J1HHF0	MG9L7	SOIL	4/19/11

II. Sample Receipt

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

III. Analytical Results/Methodology

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

ICP Metals
ICP Metals by method SW-846 6010A

IV. Quality Control

SDG J01077 includes a minimum of one Laboratory Control Samples (LCS) and one method (reagent) blank. A duplicate sample, matrix spike sample and a matrix spike duplicate sample will be analyzed per 20 samples or per month, whichever is more frequent. Any exceptions have been noted in the "Comments" section.

Blanks and LCS are reported in mg/L units, other QC and sample results are reported in the same units.

V. Comments

ICP Metals

ICP Metals by method SW-846 6010A

Two batches were analyzed in April 2011 for samples with the standard metal request list.

Batch 1103357:

The incorrect data and time was recorded on the data for this batch of samples; the correct date and time is 4/14/11 at 8:30am – 9:00am. Except as noted; the LCS, batch blank, samples, sample duplicate, MS, MSD, ICB, ICV, CCB and CCV results are within contractual limits.

Batch 1111188:

The LCS, batch blank, samples, sample duplicate, MS, MSD, ICB, ICV, CCB and CCV results are within contractual limits.

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

SDG: J01077
SAF: RC-110
BATCH: 1103357
MATRIX: SOIL
ANALYSIS DATE: 4/14/11

Client_id	Matrix	Result_type	Cas_nbr	Parameter	Result	Qualifier	Units	Reporting_Limits_Sample	Reporting_Limits	Uncertainty_1s	Analyzed	Analyzed_sa_unit	Decision_level_lc	LCSRecovery	AddedAmount	Analysis_date_time	Batch_nbr	Test_Method	Lab_sample_id
J1HH62	SOIL		7440-22-4	Ag	-2.34E-02	U	UG/G	1.10E+00	1.10E+00	9.70E-02	0.2496	G	8.00E-02			4/13/2011 21:05	1103357	46DQ	MG0M01A0
J1HH62	SOIL		7440-38-2	As	2.56E+00	U	UG/G	4.33E+00	4.33E+00	6.50E-01	0.2496	G	5.32E-01			4/13/2011 21:05	1103357	46DQ	MG0M01A0
J1HH62	SOIL		7440-39-3	Ba	5.14E+01		UG/G	9.01E-01	9.01E-01	9.10E-01	0.2496	G	7.47E-01			4/13/2011 21:05	1103357	46DQ	MG0M01A0
J1HH62	SOIL		7440-41-7	Be	2.14E-01		UG/G	1.20E-01	1.20E-01	1.30E-02	0.2496	G	1.10E-02			4/13/2011 21:05	1103357	46DQ	MG0M01A0
J1HH62	SOIL		7440-43-9	Cd	6.53E-02	U	UG/G	1.76E+00	1.76E+00	2.60E-02	0.2496	G	2.16E-02			4/13/2011 21:05	1103357	46DQ	MG0M01A0
J1HH62	SOIL		7440-47-3	Cr	9.44E+00		UG/G	1.48E+00	1.48E+00	8.30E-02	0.2496	G	6.83E-02			4/13/2011 21:05	1103357	46DQ	MG0M01A0
J1HH62	SOIL		7439-92-1	Pb	3.18E+00	U	UG/G	3.49E+00	3.49E+00	2.20E-01	0.2496	G	1.78E-01			4/13/2011 21:05	1103357	46DQ	MG0M01A0
J1HH62	SOIL		7782-49-2	Se	3.16E-01	U	UG/G	8.37E+00	8.37E+00	2.40E-01	0.2496	G	1.97E-01			4/13/2011 21:05	1103357	46DQ	MG0M01A0
J1HH63	SOIL		7440-22-4	Ag	-6.71E-02	U	UG/G	1.10E+00	1.10E+00	3.70E-02	0.2501	G	3.00E-02			4/13/2011 21:13	1103357	46DQ	MG0M31AC
J1HH63	SOIL		7440-38-2	As	2.78E+00	U	UG/G	4.32E+00	4.32E+00	3.10E-01	0.2501	G	2.57E-01			4/13/2011 21:13	1103357	46DQ	MG0M31AC
J1HH63	SOIL		7440-39-3	Ba	4.77E+01		UG/G	9.00E-01	9.00E-01	1.40E+00	0.2501	G	1.14E+00			4/13/2011 21:13	1103357	46DQ	MG0M31AC
J1HH63	SOIL		7440-41-7	Be	2.63E-01		UG/G	1.20E-01	1.20E-01	1.90E-01	0.2501	G	1.59E-01			4/13/2011 21:13	1103357	46DQ	MG0M31AC
J1HH63	SOIL		7440-43-9	Cd	6.64E-02	U	UG/G	1.76E+00	1.76E+00	1.40E-02	0.2501	G	1.19E-02			4/13/2011 21:13	1103357	46DQ	MG0M31AC
J1HH63	SOIL		7440-47-3	Cr	1.11E+01		UG/G	1.48E+00	1.48E+00	2.50E-01	0.2501	G	2.05E-01			4/13/2011 21:13	1103357	46DQ	MG0M31AC
J1HH63	SOIL		7439-92-1	Pb	3.36E+00	U	UG/G	3.48E+00	3.48E+00	5.50E-01	0.2501	G	4.50E-01			4/13/2011 21:13	1103357	46DQ	MG0M31AC
J1HH63	SOIL		7782-49-2	Se	2.31E-01	U	UG/G	8.36E+00	8.36E+00	9.00E-02	0.2501	G	7.44E-02			4/13/2011 21:13	1103357	46DQ	MG0M31AC
J1HH64	SOIL		7440-22-4	Ag	-3.81E-02	U	UG/G	1.10E+00	1.10E+00	2.30E-01	0.2498	G	1.92E-01			4/13/2011 21:15	1103357	46DQ	MG0M41AA
J1HH64	SOIL		7440-38-2	As	1.79E+00	U	UG/G	4.32E+00	4.32E+00	7.70E-01	0.2498	G	6.35E-01			4/13/2011 21:15	1103357	46DQ	MG0M41AA
J1HH64	SOIL		7440-39-3	Ba	5.17E+01		UG/G	9.01E-01	9.01E-01	1.20E+00	0.2498	G	9.80E-01			4/13/2011 21:15	1103357	46DQ	MG0M41AA
J1HH64	SOIL		7440-41-7	Be	1.85E-01		UG/G	1.20E-01	1.20E-01	5.10E-03	0.2498	G	4.24E-03			4/13/2011 21:15	1103357	46DQ	MG0M41AA
J1HH64	SOIL		7440-43-9	Cd	4.17E-02	U	UG/G	1.76E+00	1.76E+00	3.70E-02	0.2498	G	3.06E-02			4/13/2011 21:15	1103357	46DQ	MG0M41AA
J1HH64	SOIL		7440-47-3	Cr	1.37E+01		UG/G	1.48E+00	1.48E+00	4.90E-01	0.2498	G	4.02E-01			4/13/2011 21:15	1103357	46DQ	MG0M41AA
J1HH64	SOIL		7439-92-1	Pb	3.28E+00	U	UG/G	3.48E+00	3.48E+00	2.10E-01	0.2498	G	1.70E-01			4/13/2011 21:15	1103357	46DQ	MG0M41AA
J1HH64	SOIL		7782-49-2	Se	2.57E-01	U	UG/G	8.37E+00	8.37E+00	1.00E+00	0.2498	G	8.19E-01			4/13/2011 21:15	1103357	46DQ	MG0M41AA
INTRA-LAE	SOIL	BLK	7440-22-4	Ag	-1.80E-05	U	MG/L	1.08E-03	1.08E-03	1.60E-04	0.2541	L	1.29E-04			4/13/2011 21:00	1103357	46DQ	MG0N31AA
INTRA-LAE	SOIL	BLK	7440-38-2	As	1.43E-04	U	MG/L	4.25E-03	4.25E-03	5.00E-04	0.2541	L	4.11E-04			4/13/2011 21:00	1103357	46DQ	MG0N31AA
INTRA-LAE	SOIL	BLK	7440-39-3	Ba	4.17E-04	U	MG/L	8.85E-04	8.85E-04	3.90E-06	0.2541	L	3.20E-06			4/13/2011 21:00	1103357	46DQ	MG0N31AA
INTRA-LAE	SOIL	BLK	7440-41-7	Be	-3.47E-06	U	MG/L	1.16E-04	1.16E-04	3.90E-06	0.2541	L	3.19E-06			4/13/2011 21:00	1103357	46DQ	MG0N31AA
INTRA-LAE	SOIL	BLK	7440-43-9	Cd	3.30E-05	U	MG/L	1.73E-03	1.73E-03	1.90E-05	0.2541	L	1.54E-05			4/13/2011 21:00	1103357	46DQ	MG0N31AA
INTRA-LAE	SOIL	BLK	7440-47-3	Cr	1.78E-04	U	MG/L	1.46E-03	1.46E-03	8.20E-05	0.2541	L	6.78E-05			4/13/2011 21:00	1103357	46DQ	MG0N31AA
INTRA-LAE	SOIL	BLK	7439-92-1	Pb	4.39E-04	U	MG/L	3.42E-03	3.42E-03	3.70E-05	0.2541	L	3.02E-05			4/13/2011 21:00	1103357	46DQ	MG0N31AA
INTRA-LAE	SOIL	BLK	7782-49-2	Se	5.20E-04	U	MG/L	8.23E-03	8.23E-03	4.60E-04	0.2541	L	3.78E-04			4/13/2011 21:00	1103357	46DQ	MG0N31AA
INTRA-LAE	SOIL	LCS	7440-22-4	Ag	1.82E-01		MG/L	1.11E-03	1.11E-03	9.40E-03	0.2476	L	7.71E-03	0.9	0.2019	4/13/2011 21:03	1103357	46DQ	MG0N31AA
INTRA-LAE	SOIL	LCS	7440-38-2	As	1.90E-01		MG/L	4.36E-03	4.36E-03	2.40E-03	0.2476	L	1.94E-03	0.94	0.2019	4/13/2011 21:03	1103357	46DQ	MG0N31AA
INTRA-LAE	SOIL	LCS	7440-39-3	Ba	1.93E-01		MG/L	9.09E-04	9.09E-04	1.20E-02	0.2476	L	9.85E-03	0.96	0.2019	4/13/2011 21:03	1103357	46DQ	MG0N31AA
INTRA-LAE	SOIL	LCS	7440-41-7	Be	1.95E-01		MG/L	1.21E-04	1.21E-04	1.20E-02	0.2476	L	9.56E-03	0.97	0.2019	4/13/2011 21:03	1103357	46DQ	MG0N31AA
INTRA-LAE	SOIL	LCS	7440-43-9	Cd	1.84E-01		MG/L	1.78E-03	1.78E-03	1.60E-03	0.2476	L	1.36E-03	0.91	0.2019	4/13/2011 21:03	1103357	46DQ	MG0N31AA
INTRA-LAE	SOIL	LCS	7440-47-3	Cr	1.91E-01		MG/L	1.49E-03	1.49E-03	1.00E-02	0.2476	L	8.63E-03	0.95	0.2019	4/13/2011 21:03	1103357	46DQ	MG0N31AA
INTRA-LAE	SOIL	LCS	7439-92-1	Pb	1.95E-01		MG/L	3.51E-03	3.51E-03	1.80E-03	0.2476	L	1.50E-03	0.97	0.2019	4/13/2011 21:03	1103357	46DQ	MG0N31AA
INTRA-LAE	SOIL	LCS	7782-49-2	Se	1.75E-01		MG/L	8.44E-03	8.44E-03	2.50E-03	0.2476	L	2.04E-03	0.87	0.2019	4/13/2011 21:03	1103357	46DQ	MG0N31AA
J1HH62 DL	SOIL	DUP	7440-22-4	Ag	-6.48E-02	U	UG/G	1.10E+00	1.10E+00	7.40E-02	0.2505	G	6.12E-02			4/13/2011 21:11	1103357	46DQ	MG0M01A0
J1HH62 DL	SOIL	DUP	7440-38-2	As	2.53E+00	U	UG/G	4.31E+00	4.31E+00	5.00E-01	0.2505	G	4.11E-01			4/13/2011 21:11	1103357	46DQ	MG0M01A0
J1HH62 DL	SOIL	DUP	7440-39-3	Ba	5.74E+01		UG/G	8.96E-01	8.98E-01	1.30E+00	0.2505	G	1.06E+00			4/13/2011 21:11	1103357	46DQ	MG0M01A0
J1HH62 DL	SOIL	DUP	7440-41-7	Be	2.38E-01		UG/G	1.20E-01	1.20E-01	2.50E-02	0.2505	G	2.03E-02			4/13/2011 21:11	1103357	46DQ	MG0M01A0
J1HH62 DL	SOIL	DUP	7440-43-9	Cd	7.66E-02	U	UG/G	1.76E+00	1.76E+00	4.10E-02	0.2505	G	3.41E-02			4/13/2011 21:11	1103357	46DQ	MG0M01A0
J1HH62 DL	SOIL	DUP	7440-47-3	Cr	1.18E+01		UG/G	1.48E+00	1.48E+00	3.30E-01	0.2505	G	2.75E-01			4/13/2011 21:11	1103357	46DQ	MG0M01A0
J1HH62 DL	SOIL	DUP	7439-92-1	Pb	3.50E+00		UG/G	3.47E+00	3.47E+00	3.70E-01	0.2505	G	3.05E-01			4/13/2011 21:11	1103357	46DQ	MG0M01A0
J1HH62 DL	SOIL	DUP	7782-49-2	Se	2.67E-01	U	UG/G	8.34E+00	8.34E+00	4.90E-01	0.2505	G	4.05E-01			4/13/2011 21:11	1103357	46DQ	MG0M01A0
J1HH62	SOIL	MS	7440-22-4	Ag	1.69E+02		% REC	1.10E+00	1.10E+00	2.50E+00	0.2508	L	2.06E+00	0.85	199.4	4/13/2011 21:07	1103357	46DQ	MG0M01A0
J1HH62	SOIL	MS	7440-38-2	As	1.71E+02		% REC	4.31E+00	4.31E+00	2.30E+00	0.2508	L	1.91E+00	0.87	196.4	4/13/2011 21:07	1103357	46DQ	MG0M01A0
J1HH62	SOIL	MS	7440-39-3	Ba	1.81E+02		% REC	8.97E-01	8.97E-01	2.80E+00	0.2508	L	2.34E+00	1.17	155.5	4/13/2011 21:07	1103357	46DQ	MG0M01A0
J1HH62	SOIL	MS	7440-41-7	Be	1.90E+02		% REC	1.20E-01	1.20E-01	4.90E+00	0.2508	L	4.06E+00	0.95	199.1	4/13/2011 21:07	1103357	46DQ	MG0M01A0
J1HH62	SOIL	MS	7440-43-9	Cd	1.64E+02		% REC	1.75E+00	1.75E+00	2.10E+00	0.2508	L	1.72E+00	0.82	199.3	4/13/2011 21:07	1103357	46DQ	MG0M01A0
J1HH62	SOIL	MS	7440-47-3	Cr	1.79E+02		% REC	1.48E+00	1.48E+00	3.40E+00	0.2508	L	2.76E+00	0.94	189.4	4/13/2011 21:07	1103357	46DQ	MG0M01A0
J1HH62	SOIL	MS	7439-92-1	Pb	1.70E+02		% REC	3.47E+00	3.47E+00	2.40E+00	0.2508	L	1.95E+00	0.87	195.7	4/13/2011 21:07	1103357	46DQ	MG0M01A0
J1HH62	SOIL	MS	7782-49-2	Se	1.57E+02		% REC	8.33E+00	8.33E+00	1.60E+00	0.2508	L	1.28E+00	0.79	199	4/13/2011 21:07	1103357	46DQ	MG0M01A0
J1HH62	SOIL	MSD	7440-22-4	Ag	1.69E+02		% REC	1.10E+00	1.10E+00	5.80E+00	0.2509	L	4.80E+00	0.85	199.3	4/13/2011 21:09	1103357	46DQ	MG0M01A0
J1HH62	SOIL	MSD	7440-38-2	As	1.72E+02		% REC	4.30E+00	4.30E+00	6.70E+00	0.2509	L	5.49E+00	0.88	196.4	4/13/2011 21:09	1103357	46DQ	MG0M01A0
J1HH62	SOIL	MSD	7440-39-3	Ba	1.65E+02		% REC	8.97E-01	8.97E-01	1.50E+01	0.2509	L	1.20E+01	1.09	152.2	4/13/2011 21:09	1103357	46DQ	MG0M01A0
J1HH62	SOIL	MSD	7440-41-7	Be	1.87E+02		% REC	1.20E-01	1.20E-01	1.90E+01	0.2509	L	1.55E+01	0.94	199.1	4/13/2011 21:09	1103357	46DQ	MG0M01A0
J1HH62	SOIL	MSD	7440-43-9	Cd	1.66E+02		% REC	1.75E+00	1.75E+00	5.90E+00	0.2509	L	4.84E+00	0.83	199.2	4/13/2011 21:09	1103357	46DQ	MG0M01A0
J1HH62	SOIL	MSD	7440-47-3	Cr	1.76E+02		% REC	1.47E+00	1.47E+00	6.80E+00	0.2509	L	5.61E+00	0.93	189.2	4/13/2011 21:09	1103357	46DQ	MG0M01A0
J1HH62	SOIL	MSD	7439-92-1	Pb	1.72E+02		% REC	3.47E+00	3.47E+00	5.50E+00	0.2509	L	4.55E+00	0.88	195.7	4/13/2011 21:09	1103357	46DQ	MG0M01A0
J1HH62	SOIL	MSD	7782-49-2	Se	1.59E+02		% REC	8.33E+00	8.33E+00	4.90E+00	0.2509	L	4.00E+00	0.8	198.9	4/13/2011 21:09	1103357	46DQ	MG0M01A0

SDG: J01077
SAF: RC-110
BATCH: 1111188
MATRIX: SOIL
ANALYSIS DATE: 4/21/11

TestAmerica Laboratories, Inc.

Client_id	Matrix	Result_typ	Cas_nbr	Parameter	Result	Qualifier	Units	Reporting_L	Reporting_L	Uncertainty	Analyzed_s	Analyzed_s	Decision_lev	LCS	Recov	Added	Amo	Analysis_date_time	Batch_nbr	Test_Meth	Lab_sample_id
J1HHD7	SOIL	BS	7440-22-4	Ag	1.67E+00		UG/G	1.09E+00	1.09E+00	1.70E-01	0.2515	G	1.42E-01					4/21/2011 10:01	1111188	46DQ	MG9KQ1A0
J1HHD7	SOIL	BS	7440-38-2	As	1.94E+00	U	UG/G	4.29E+00	4.29E+00	7.80E-01	0.2515	G	6.40E-01					4/21/2011 10:01	1111188	46DQ	MG9KQ1A0
J1HHD7	SOIL	BS	7440-39-3	Ba	5.92E+01		UG/G	8.95E-01	8.95E-01	1.50E+00	0.2515	G	1.26E+00					4/21/2011 10:01	1111188	46DQ	MG9KQ1A0
J1HHD7	SOIL	BS	7440-41-7	Beryllium	8.60E-02	U	UG/G	1.19E-01	1.19E-01	5.90E-02	0.2515	G	4.82E-02					4/21/2011 10:01	1111188	46DQ	MG9KQ1A0
J1HHD7	SOIL	BS	7440-43-9	Cadmium	5.44E-02	U	UG/G	1.75E+00	1.75E+00	3.20E-02	0.2515	G	2.61E-02					4/21/2011 10:01	1111188	46DQ	MG9KQ1A0
J1HHD7	SOIL	BS	7440-47-3	Cr	9.96E+00		UG/G	1.47E+00	1.47E+00	1.40E-01	0.2515	G	1.16E-01					4/21/2011 10:01	1111188	46DQ	MG9KQ1A0
J1HHD7	SOIL	BS	7439-92-1	Lead	4.40E+00		UG/G	3.46E+00	3.46E+00	2.70E-01	0.2515	G	2.21E-01					4/21/2011 10:01	1111188	46DQ	MG9KQ1A0
J1HHD7	SOIL	BS	7782-49-2	Se	4.38E-02	U	UG/G	8.31E+00	8.31E+00	3.10E-01	0.2515	G	2.52E-01					4/21/2011 10:01	1111188	46DQ	MG9KQ1A0
J1HHF0	SOIL	BS	7440-22-4	Ag	1.47E+00		UG/G	1.10E+00	1.10E+00	1.60E-01	0.2494	G	1.29E-01					4/21/2011 10:15	1111188	46DQ	MG9L71AA
J1HHF0	SOIL	BS	7440-38-2	As	1.57E+00	U	UG/G	4.33E+00	4.33E+00	4.00E-01	0.2494	G	3.28E-01					4/21/2011 10:15	1111188	46DQ	MG9L71AA
J1HHF0	SOIL	BS	7440-39-3	Ba	5.54E+01		UG/G	9.02E-01	9.02E-01	6.20E-01	0.2494	G	5.07E-01					4/21/2011 10:15	1111188	46DQ	MG9L71AA
J1HHF0	SOIL	BS	7440-41-7	Beryllium	-5.90E-03	U	UG/G	1.20E-01	1.20E-01	3.30E-03	0.2494	G	2.68E-03					4/21/2011 10:15	1111188	46DQ	MG9L71AA
J1HHF0	SOIL	BS	7440-43-9	Cadmium	6.40E-02	U	UG/G	1.76E+00	1.76E+00	3.60E-02	0.2494	G	2.99E-02					4/21/2011 10:15	1111188	46DQ	MG9L71AA
J1HHF0	SOIL	BS	7440-47-3	Cr	8.63E+00		UG/G	1.48E+00	1.48E+00	7.80E-02	0.2494	G	6.38E-02					4/21/2011 10:15	1111188	46DQ	MG9L71AA
J1HHF0	SOIL	BS	7439-92-1	Lead	4.01E+00		UG/G	3.49E+00	3.49E+00	3.00E-02	0.2494	G	2.48E-02					4/21/2011 10:15	1111188	46DQ	MG9L71AA
J1HHF0	SOIL	BS	7782-49-2	Se	9.34E-02	U	UG/G	8.38E+00	8.38E+00	4.20E-01	0.2494	G	3.47E-01					4/21/2011 10:15	1111188	46DQ	MG9L71AA
J1HHD8	SOIL	BS	7440-22-4	Ag	1.57E+00		UG/G	1.10E+00	1.10E+00	8.50E-02	0.2507	G	7.01E-02					4/21/2011 10:11	1111188	46DQ	MG9LA1AA
J1HHD8	SOIL	BS	7440-38-2	As	1.73E+00	U	UG/G	4.31E+00	4.31E+00	5.10E-01	0.2507	G	4.16E-01					4/21/2011 10:11	1111188	46DQ	MG9LA1AA
J1HHD8	SOIL	BS	7440-39-3	Ba	5.05E+01		UG/G	8.97E-01	8.97E-01	3.60E-01	0.2507	G	2.96E-01					4/21/2011 10:11	1111188	46DQ	MG9LA1AA
J1HHD8	SOIL	BS	7440-41-7	Beryllium	2.09E-02	U	UG/G	1.20E-01	1.20E-01	1.20E-02	0.2507	G	9.80E-03					4/21/2011 10:11	1111188	46DQ	MG9LA1AA
J1HHD8	SOIL	BS	7440-43-9	Cadmium	3.48E-02	U	UG/G	1.76E+00	1.76E+00	2.60E-02	0.2507	G	2.16E-02					4/21/2011 10:11	1111188	46DQ	MG9LA1AA
J1HHD8	SOIL	BS	7440-47-3	Cr	8.95E+00		UG/G	1.48E+00	1.48E+00	1.20E-01	0.2507	G	9.46E-02					4/21/2011 10:11	1111188	46DQ	MG9LA1AA
J1HHD8	SOIL	BS	7439-92-1	Lead	4.66E+00		UG/G	3.47E+00	3.47E+00	1.90E-01	0.2507	G	1.54E-01					4/21/2011 10:11	1111188	46DQ	MG9LA1AA
J1HHD8	SOIL	BS	7782-49-2	Se	1.37E-01	U	UG/G	8.34E+00	8.34E+00	3.80E-02	0.2507	G	3.16E-02					4/21/2011 10:11	1111188	46DQ	MG9LA1AA
J1HHD9	SOIL	BS	7440-22-4	Ag	1.41E+00		UG/G	1.10E+00	1.10E+00	1.30E-01	0.2498	G	1.09E-01					4/21/2011 10:13	1111188	46DQ	MG9LD1AA
J1HHD9	SOIL	BS	7440-38-2	As	1.57E+00	U	UG/G	4.32E+00	4.32E+00	1.60E-01	0.2498	G	1.35E-01					4/21/2011 10:13	1111188	46DQ	MG9LD1AA
J1HHD9	SOIL	BS	7440-39-3	Ba	5.71E+01		UG/G	9.01E-01	9.01E-01	5.30E-01	0.2498	G	4.36E-01					4/21/2011 10:13	1111188	46DQ	MG9LD1AA
J1HHD9	SOIL	BS	7440-41-7	Beryllium	6.22E-02	U	UG/G	1.20E-01	1.20E-01	1.30E-02	0.2498	G	1.06E-02					4/21/2011 10:13	1111188	46DQ	MG9LD1AA
J1HHD9	SOIL	BS	7440-43-9	Cadmium	4.94E-02	U	UG/G	1.76E+00	1.76E+00	2.10E-02	0.2498	G	1.73E-02					4/21/2011 10:13	1111188	46DQ	MG9LD1AA
J1HHD9	SOIL	BS	7440-47-3	Cr	7.73E+00		UG/G	1.48E+00	1.48E+00	8.80E-02	0.2498	G	7.23E-02					4/21/2011 10:13	1111188	46DQ	MG9LD1AA
J1HHD9	SOIL	BS	7439-92-1	Lead	4.64E+00		UG/G	3.48E+00	3.48E+00	2.70E-01	0.2498	G	2.24E-01					4/21/2011 10:13	1111188	46DQ	MG9LD1AA
J1HHD9	SOIL	BS	7782-49-2	Se	-1.87E-02	U	UG/G	8.37E+00	8.37E+00	2.70E-01	0.2498	G	2.24E-01					4/21/2011 10:13	1111188	46DQ	MG9LD1AA
INTRA-LAE	SOIL	BLK	7440-22-4	Ag	3.66E-05	U	MG/L	2.75E-04	2.75E-04	4.20E-05	1	L	3.44E-05					4/21/2011 9:57	1111188	46DQ	MHAX61AA
INTRA-LAE	SOIL	BLK	7440-38-2	As	-5.94E-05	U	MG/L	1.08E-03	1.08E-03	6.80E-05	1	L	5.61E-05					4/21/2011 9:57	1111188	46DQ	MHAX61AA
INTRA-LAE	SOIL	BLK	7440-39-3	Ba	5.70E-06	U	MG/L	2.25E-04	2.25E-04	1.70E-06	1	L	1.37E-06					4/21/2011 9:57	1111188	46DQ	MHAX61AA
INTRA-LAE	SOIL	BLK	7440-41-7	Beryllium	1.01E-06	U	MG/L	3.00E-05	3.00E-05	7.40E-07	1	L	6.08E-07					4/21/2011 9:57	1111188	46DQ	MHAX61AA
INTRA-LAE	SOIL	BLK	7440-43-9	Cadmium	1.25E-05	U	MG/L	4.40E-04	4.40E-04	5.80E-06	1	L	4.76E-06					4/21/2011 9:57	1111188	46DQ	MHAX61AA
INTRA-LAE	SOIL	BLK	7440-47-3	Cr	-4.79E-05	U	MG/L	3.70E-04	3.70E-04	1.50E-05	1	L	1.23E-05					4/21/2011 9:57	1111188	46DQ	MHAX61AA
INTRA-LAE	SOIL	BLK	7439-92-1	Lead	3.01E-05	U	MG/L	8.70E-04	8.70E-04	5.00E-05	1	L	4.13E-05					4/21/2011 9:57	1111188	46DQ	MHAX61AA
INTRA-LAE	SOIL	BLK	7782-49-2	Se	2.76E-05	U	MG/L	2.09E-03	2.09E-03	6.30E-05	1	L	5.22E-05					4/21/2011 9:57	1111188	46DQ	MHAX61AA
INTRA-LAE	SOIL	LCS	7440-22-4	Ag	4.75E-02		MG/L	2.75E-04	2.75E-04	2.60E-04	1	L	2.12E-04	0.95	0.05			4/21/2011 9:59	1111188	46DQ	MHAX61AA
INTRA-LAE	SOIL	LCS	7440-38-2	As	4.87E-02		MG/L	1.08E-03	1.08E-03	2.00E-04	1	L	1.64E-04	0.97	0.05			4/21/2011 9:59	1111188	46DQ	MHAX61AA
INTRA-LAE	SOIL	LCS	7440-39-3	Ba	4.94E-02		MG/L	2.25E-04	2.25E-04	1.20E-03	1	L	9.63E-04	0.99	0.05			4/21/2011 9:59	1111188	46DQ	MHAX61AA
INTRA-LAE	SOIL	LCS	7440-41-7	Beryllium	4.79E-02		MG/L	3.00E-05	3.00E-05	1.10E-03	1	L	9.12E-04	0.96	0.05			4/21/2011 9:59	1111188	46DQ	MHAX61AA
INTRA-LAE	SOIL	LCS	7440-43-9	Cadmium	4.87E-02		MG/L	4.40E-04	4.40E-04	2.00E-04	1	L	1.61E-04	0.97	0.05			4/21/2011 9:59	1111188	46DQ	MHAX61AA
INTRA-LAE	SOIL	LCS	7440-47-3	Cr	4.92E-02		MG/L	3.70E-04	3.70E-04	3.40E-04	1	L	2.79E-04	0.98	0.05			4/21/2011 9:59	1111188	46DQ	MHAX61AA
INTRA-LAE	SOIL	LCS	7439-92-1	Lead	4.75E-02		MG/L	8.70E-04	8.70E-04	1.10E-04	1	L	8.73E-05	0.95	0.05			4/21/2011 9:59	1111188	46DQ	MHAX61AA
INTRA-LAE	SOIL	LCS	7782-49-2	Se	4.72E-02		MG/L	2.09E-03	2.09E-03	3.60E-04	1	L	2.94E-04	0.94	0.05			4/21/2011 9:59	1111188	46DQ	MHAX61AA
J1HHD7 D	SOIL	DUP	7440-22-4	Ag	1.56E+00		UG/G	1.10E+00	1.10E+00	1.30E-01	0.2511	G	1.09E-01					4/21/2011 10:08	1111188	46DQ	MG9KQ1A0
J1HHD7 D	SOIL	DUP	7440-38-2	As	1.71E+00	U	UG/G	4.30E+00	4.30E+00	4.90E-01	0.2511	G	4.01E-01					4/21/2011 10:08	1111188	46DQ	MG9KQ1A0
J1HHD7 D	SOIL	DUP	7440-39-3	Ba	5.56E+01		UG/G	8.96E-01	8.96E-01	2.30E-01	0.2511	G	1.90E-01					4/21/2011 10:08	1111188	46DQ	MG9KQ1A0
J1HHD7 D	SOIL	DUP	7440-41-7	Beryllium	3.26E-02	U	UG/G	1.19E-01	1.19E-01	6.10E-03	0.2511	G	5.02E-03					4/21/2011 10:08	1111188	46DQ	MG9KQ1A0
J1HHD7 D	SOIL	DUP	7440-43-9	Cadmium	5.66E-02	U	UG/G	1.75E+00	1.75E+00	5.40E-02	0.2511	G	4.42E-02					4/21/2011 10:08	1111188	46DQ	MG9KQ1A0
J1HHD7 D	SOIL	DUP	7440-47-3	Cr	7.66E+00		UG/G	1.47E+00	1.47E+00	6.60E-02	0.2511	G	5.44E-02					4/21/2011 10:08	1111188	46DQ	MG9KQ1A0
J1HHD7 D	SOIL	DUP	7439-92-1	Lead	4.05E+00		UG/G	3.46E+00	3.46E+00	2.20E-01	0.2511	G	1.83E-01					4/21/2011 10:08	1111188	46DQ	MG9KQ1A0
J1HHD7 D	SOIL	DUP	7782-49-2	Se	-3.89E-02	U	UG/G	8.32E+00	8.32E+00	5.90E-01	0.2511	G	4.87E-01					4/21/2011 10:08	1111188	46DQ	MG9KQ1A0
J1HHD7	SOIL	MSD	7440-22-4	Ag	1.81E+02		% RECC	1.10E+00	1.10E+00	1.40E+00	0.25	L	1.19E+00	0.91	198.2			4/21/2011 10:06	1111188	46DQ	MG9KQ1A0
J1HHD7	SOIL	MSD	7440-38-2	As	1.87E+02		% RECC	4.32E+00	4.32E+00	4.30E-01	0.25	L	3.52E-01	0.94	197.9			4/21/2011 10:06	1111188	46DQ	MG9KQ1A0
J1HHD7	SOIL	MSD	7440-39-3	Ba	1.79E+02		% RECC	9.00E-01	9.00E-01	4.80E+00	0.25	L	3.96E+00	1.19	150.1			4/21/2011 10:06	1111188	46DQ	MG9KQ1A0
J1HHD7	SOIL	MSD	7440-41-7	Beryllium	1.84E+02		% RECC	1.20E-01	1.20E-01	2.10E+00	0.25	L	1.76E+00	0.92	199.9			4/21/2011 10:06	1111188	46DQ	MG9KQ1A0
J1HHD7	SOIL	MSD	7440-43-9	Cadmium	1.85E+02		% RECC	1.76E+00	1.76E+00	5.60E-01	0.25	L	4.63E-01	0.92	199.9			4/21/2011 10:06	1111188	46DQ	MG9KQ1A0
J1HHD7	SOIL	MSD	7440-47-3	Cr	1.87E+02		% RECC	1.48E+00	1.48E+00	1.30E+00	0.25	L	1.06E+00	0.98	189.8			4/21/2011 10:06	1111188	46DQ	MG9KQ1A0
J1HHD7	SOIL	MSD	7439-92-1	Lead	1.75E+02		% RECC	3.48E+00	3.48E+00	5.40E-02	0.25	L	4.43E-02	0.9	195.1			4/21/2011 10:06	1111188	46DQ	MG9KQ1A0
J1HHD7	SOIL	MSD	7782-49-2	Se	1.80E+02		% RECC	8.36E+00	8.36E+00	3.70E-01	0.25	L	3.01E-01	0.9	200			4/21/2011 10:06	1111188	46DQ	MG9KQ1A0
J1HHD7	SOIL	MS	7440-22-4	Ag	1.82E+02		% RECC	1.10E+00	1.10E+00	6.60E-01	0.2499	L	5.42E-01	0.92	198.2			4/21/2011 10:04	1111188	46DQ	MG9KQ1A0
J1HHD7	SOIL	MS	7440-38-2	As	1.88E+02		% RECC	4.32E+00	4.32E+00	3.10E-01	0.2499	L	2.51E-01	0.95	198			4/21/2011 10:04	1111188	46DQ	MG9KQ1A0
J1HHD7	SOIL	MS	7440-39-3	Ba	1.92E+02		% RECC	9.00E-01	9.00E-01	5.90E+00	0.2499	L	4.84E+00	1.26	152.7			4/21/2011 10:04	1111188	46DQ	MG9KQ1A0
J1HHD7	SOIL	MS	7440-41-7	Beryllium	1.86E+02		% RECC	1.20E-01	1.20E-01	8.90E-01	0.2499	L	7.31E-01	0.93	200			4/21/2011 10:04	1111188	46DQ	MG9KQ1A0
J1HHD7	SOIL	MS	7440-43-9	Cadmium	1.86E+02		% RECC	1.76E+00	1.76E+00	3.00E-01	0.2499	L	2.47E-01	0.93	200			4/21/2011 10:04	1111188	46DQ	MG9KQ1A0
J1HHD7	SOIL	MS	7440-47-3	Cr	1.88E+02		% RECC	1.48E+00	1.48E+00	1.10E+00	0.2499	L	9.29E-01	0.99	190			4/21/2011 10:04	1111188	46DQ	MG9KQ1A0
J1HHD7	SOIL	MS	7439-92-1	Lead	1.77E+02		% RECC	3.48E+00	3.48E+00	1.70E+00	0.2499	L	1.40E+00	0.91	195.2			4/21/2011 10:04	1111188	46DQ	MG9KQ1A0
J1HHD7	SOIL	MS	7782-49-2	Se	1.81E+02		% RECC	8.36E+00	8.36E+00	1.30E+00	0.2499	L	1.11E+00	0.91	200			4/21/2011 10:04	1111188	46DQ	MG9KQ1A0

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		RC-110-046	Page 1 of 1
Collector: Holland, N	Company Contact: Joan Kessner	Telephone No.: 509-375-4688	Project Coordinator: KESSNER, JH	Price Code: ~~8L~~ 8B 4/12/11
Project Designation: 100-H Burial Grounds Remaining Sites - Soil In-Process	Sampling Location: 128-H-1 burn pit stain		SAF No.: RC-110	Data Turnaround: ~~21~~ Days 24 hr 4/12/11
Ice Chest No.: NA	Field Logbook No.: EL 1627-04	COA: 0128H12000	Method of Shipment: Gov. Vehicle / Hand Deliver	4/13/11
Shipped To: TestAmerica Incorporated, Richland TRCF AJ 4/12/11 4-13-11	Offsite Property No.: NA		Bill of Lading/Air Bill No.: NA	

POSSIBLE SAMPLE HAZARDS/REMARKS
Possible RAD L DOT Limit
AJ 4-13-11

Special Handling and/or Storage
Cool at 4 deg C

Preservation	Cool 4C	None
Type of Container	G/P	G/P
No. of Container(s)	1	1
Volume	60mL	60g

J1D130552

WCH
J1D130552
SDG JP0162
Q# 88144
TALR
Due - 4/14/11

SAMPLE ANALYSIS

Sample No.	Matrix *	Sample Date	Sample Time	See item (1) in Special Instructions.	RCF GEA Shipping Screen AJ 4-13-11	RCF		
J1HH62	SOIL	4/12/11	1100	X	X	27657	81g	MGOM0
J1HH63	SOIL	4/12/11	1105	X	X	27658	70g	MGOM3
J1HH64	SOIL	4/12/11	1110	X	X	27659	80g	MGOM4

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

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Nicholas Holland Nicholas Holland	Apr. 12, 11 11:15	JV Fullmer JV Fullmer	4/12/11 1115
JV Fullmer JV Fullmer	4/12/11 1555	K Zimmerman 4-12-11	RCF 1555
D. Miller D. Miller RCF	0930 4-13-11	J.E. Bahl	0930 4-13-11
J.E. Bahl WCH	1230 4-13-11	Cameron Kraupa TALR	1230 4.13.11

SPECIAL INSTRUCTIONS
None
*
(1) Metals by ICP - 6010 - Quick Turn {Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver}

*Tranship from RCF to TestAmerica Richland

J01077 4/12/11

~~JP0162~~
PW 4/13/11

REVIEWED BY AJ DATE 4-13-11

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

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

WCH-EE-011

Apex™

Non-Reg

Analysis Report for RCF27657

J1HH62 SAF-RC-110 100H/128-H-1 BURN PIT STAIN

GAMMA SPECTRUM ANALYSIS

Sample Identification	: RCF27657
Sample Description	: J1HH62 SAF-RC-110 100H/128-H-1 BURN PIT STAIN
Sample Type	: 80g pillbox
Sample Size	: 8.100E+01 grams
Facility	: Default
Sample Taken On	: 4/12/2011 11:00:00AM
Acquisition Started	: 4/13/2011 6:47:12AM
Procedure	: 80 Gram Pill Box
Operator	: RCT
Detector Name	: GEA2703
Geometry	: 80 Gram Pill Box
Live Time	: 3600.0 seconds
Real Time	: 3601.1 seconds
Dead Time	: 0.03 %
Peak Locate Threshold	: 3.00
Peak Locate Range (in channels)	: 40 - 4096
Peak Area Range (in channels)	: 40 - 4096
Identification Energy Tolerance	: 1.000 keV
Energy Calibration Used Done On	: 2/2/2011
Efficiency Calibration Used Done On	: 2/23/2011
Efficiency Calibration Description	: GEA2703 80gPB 020311EC SN82752-238
Sample Number	: 13564

INTERFERENCE CORRECTED REPORT

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/grams)	Wt mean Activity Uncertainty	Comments
K-40	0.999	1.43E+01	2.53E+00	

Apex™

Non-Rcg

Analysis Report for RCF27658

J1HH63 SAF-RC-110 100H/128-H-1 BURN PIT STAIN

GAMMA SPECTRUM ANALYSIS

Sample Identification	: RCF27658
Sample Description	: J1HH63 SAF-RC-110 100H/128-H-1 BURN PIT STAIN
Sample Type	: 80g pillbox
Sample Size	: 7.000E+01 grams
Facility	: Default
Sample Taken On	: 4/12/2011 11:05:00AM
Acquisition Started	: 4/13/2011 6:47:40AM
Procedure	: 80 Gram Pill Box
Operator	: RCT
Detector Name	: PGTLYNX
Geometry	: 80 Gram Pill Box
Live Time	: 3600.0 seconds
Real Time	: 3601.4 seconds
Dead Time	: 0.04 %
Peak Locate Threshold	: 3.00
Peak Locate Range (in channels)	: 40 - 4096
Peak Area Range (in channels)	: 40 - 4096
Identification Energy Tolerance	: 1.000 keV
Energy Calibration Used Done On	: 3/3/2011
Efficiency Calibration Used Done On	: 3/11/2011
Efficiency Calibration Description	: PGTL 80gPB 030811EC SN82752-238
Sample Number	: 13565

INTERFERENCE CORRECTED REPORT

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/grams)	Wt mean Activity Uncertainty	Comments
K-40		0.994	1.33E+01	2.50E+00	
PB-212		0.711	7.09E-01	1.27E-01	
RA-226d	@	0.402	4.47E-01	1.23E-01	
TH-232d		0.816	4.65E-01	1.15E-01	
U-235		0.548	8.22E-02	7.10E-02	

MDA <1.09E-01

Apex™

Non-Reg

Analysis Report for RCF27659

J1HH64 SAF-RC-110 100H/128-H-1 BURN PIT STAIN

GAMMA SPECTRUM ANALYSIS

Sample Identification	: RCF27659
Sample Description	: J1HH64 SAF-RC-110 100H/128-H-1 BURN PIT STAIN
Sample Type	: 80g pillbox
Sample Size	: 8.000E+01 grams
Facility	: Default
Sample Taken On	: 4/12/2011 11:10:00AM
Acquisition Started	: 4/13/2011 6:47:47AM
Procedure	: 80 Gram Pill Box
Operator	: RCT
Detector Name	: REGIE2
Geometry	: 80 Gram Pill Box
Live Time	: 3600.0 seconds
Real Time	: 3600.9 seconds
Dead Time	: 0.03 %
Peak Locate Threshold	: 3.00
Peak Locate Range (in channels)	: 40 - 4096
Peak Area Range (in channels)	: 40 - 4096
Identification Energy Tolerance	: 1.000 keV
Energy Calibration Used Done On	: 3/11/2011
Efficiency Calibration Used Done On	: 3/16/2011
Efficiency Calibration Description	: REGIE2 80gPB 031511EC SN82752-238
Sample Number	: 13566

INTERFERENCE CORRECTED REPORT

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/grams)	Wt mean Activity Uncertainty	Comments
K-40		1.000	1.57E+01	2.55E+00	
PB-212		0.709	9.03E-01	1.27E-01	
RA-226d	@	0.407	2.90E-01	1.15E-01	
TH-232d		0.426	5.01E-01	1.20E-01	
U-235		0.548	8.90E-02	8.27E-02	<MDA 1.31E-01

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

J1D130552

Sample Check-in List

Date/Time Received: 4.13.11@1230 GM Screen Result (out) .3 (in) .5 Initials [✓]

Client: WCH SDG #: J1D1072 NA [ ] SAF #: RC-110 NA [ ]

Work Order Number: J1D130552 Chain of Custody # RC-110-046

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

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

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

Item 6 through 10 for samples. Initial appropriate response.

6. Number of samples in shipping container (Each sample may contain multiple bottles): 3
7. Sample holding times exceeded? NA [ ] Yes [ ] No [✓]
8. Samples have:
   - ___ tape
   - ✓ custody seals
   - ___ hazard labels
   - ✓ appropriate sample labels
9. Samples:
   - ✓ are in good condition
   - ___ are broken
   - ___ are leaking
   - ___ have air bubbles (Only for samples requiring no head space)

   Soil
10. Sample pH appropriate for analysis requested Yes [ ] No [ ] N/A [✓] (Note discrepancies in #13)
    (If acidification necessary, then document sample ID, initial pH, amount of HNO_3 added and pH after addition)

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

See other side for additional comments

Sample Custodian: [signature] Date: 4.13.11@1230 TAR

Client Informed on _____ by _____ Person contacted _____

[✓] No action necessary; process as is

Project Manager [signature] Date 4/13/11

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TestAmerica Laboratories, Inc.

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-110-047	Page 1 of 1

Collector ~~K. Lucas~~ J. Kuepfer	Company Contact Joan Kessner	Telephone No. 509-375-4688	Project Coordinator KESSNER, JH
Price Code 8L	Data Turnaround 21 Days 24 hr		
Project Designation 100-H Burial Grounds Remaining Sites - Soil In-Process	Sampling Location 128-H-1 burn pit stockpile		SAF No. RC-110
Ice Chest No. NA	Field Logbook No. EL 1627-84 05	COA 0128H12000	Method of Shipment ~~FedEx~~ Hand-Deliver
Shipped To TestAmerica Incorporated, Richland	Offsite Property No. NA		Bill of Lading/Air Bill No. NA

POSSIBLE SAMPLE HAZARDS/REMARKS
~~None~~ Potential RAD < DOT Limits

Special Handling and/or Storage
~~Cool at 4 deg C~~ NONE

Preservation	~~Cool 4C~~ NONE	None										
Type of Container	G/P	G/P										
No. of Container(s)	1	1										
Volume	60mL	60g										
SAMPLE ANALYSIS	See item (1) in Special Instructions.	RCF GEA Shipping Screen										

J1D200505

Sample No.	Matrix *	Sample Date	Sample Time			RCF						
J1HHD7	SOIL	4/18/11	1435	X	X	27854	68g	MG9KQ				
J1HHD8	SOIL	4/18/11	1439	X	X	27855	83g	MG9LA				
J1HHD9	SOIL	4/18/11	1442	X	X	27856	62g	MG9LD				
J1HHF0	SOIL	4/18/11	1450	X	X	27857	69g	MG9L7				

CHAIN OF POSSESSION — Sign/Print Names

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
J Kuepfer	4/18/11 1530	JV Fullmer	4/18/11 1530
JV Fullmer	4-18-11 1640	J. E. Bechl	4-18-11 1640
J. E. Bechl	4-19-11 0820	A. Freier	4-19-11 0820
A. Freier (WCH)	4-19-11 0925	RCF	4-19-11 0925
RCF	4-19-11 1400	Bingham	4/19/11 1400
Bingham	4/19/11 1420	A. Freier	4-19-11 1420

SPECIAL INSTRUCTIONS
Tranship samples from RCF to TestAmerica Richland.

(1) Metals by ICP - 6010 - Quick Turn {Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver}

J1D200505
SDG # J01077
Due 4.21.11

REVIEWED BY JEB
DATE 4-20-11

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

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

WCH-EE-011

Relinquished By:	Received By:
WCH A. Freier 4-20-11 1105	TALR Angela Garcia 4-20-11 1105
Relinquished By	Received By

Apex™

Analysis Report for RCF27854

J1HHD7 SAF:RC-110 100H/128-H-1 BURN PIT STOCKPILE SOIL SAMPLE

Non-Reg

GAMMA SPECTRUM ANALYSIS

Sample Identification	: RCF27854
Sample Description	: J1HHD7 SAF:RC-110 100H/128-H-1 BURN PIT STOCKPILE SOIL SAMPLE
Sample Type	: 80g pillbox
Sample Size	: 6.900E+01 grams
Facility	: Default
Sample Taken On	: 4/18/2011 2:35:00PM
Acquisition Started	: 4/19/2011 10:16:43AM
Procedure	: 80 Gram Pill Box
Operator	: RCT
Detector Name	: REGIE2
Geometry	: 80 Gram Pill Box
Live Time	: 3600.0 seconds
Real Time	: 3600.6 seconds
Dead Time	: 0.02 %
Peak Locate Threshold	: 3.00
Peak Locate Range (in channels)	: 40 - 4096
Peak Area Range (in channels)	: 40 - 4096
Identification Energy Tolerance	: 1.000 keV
Energy Calibration Used Done On	: 3/11/2011
Efficiency Calibration Used Done On	: 3/16/2011
Efficiency Calibration Description	: REGIE2 80gPB 031511EC SN82752-238
Sample Number	: 13760

INTERFERENCE CORRECTED REPORT

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/grams)	Wt mean Activity Uncertainty	Comments
K-40		1.000	1.33E+01	2.67E+00	
PB-212		0.710	7.90E-01	1.25E-01	
RA-226d	@	0.623	3.78E-01	1.15E-01	
TH-232d		0.854	4.85E-01	1.14E-01	

Apex™

Analysis Report for RCF27855

J1HHD8 SAF:RC-110 100H/128-H-1 BURN PIT STOCKPILE SOIL SAMPLE

Non-Reg

GAMMA SPECTRUM ANALYSIS

Sample Identification	: RCF27855
Sample Description	: J1HHD8 SAF:RC-110 100H/128-H-1 BURN PIT STOCKPILE SOIL SAMPLE
Sample Type	: 80g pillbox
Sample Size	: 8.300E+01 grams
Facility	: Default
Sample Taken On	: 4/18/2011 2:39:00PM
Acquisition Started	: 4/19/2011 11:47:46AM
Procedure	: 80 Gram Pill Box
Operator	: RCT
Detector Name	: GEA2703
Geometry	: 80 Gram Pill Box
Live Time	: 3600.0 seconds
Real Time	: 3601.2 seconds
Dead Time	: 0.03 %
Peak Locate Threshold	: 3.00
Peak Locate Range (in channels)	: 40 - 4096
Peak Area Range (in channels)	: 40 - 4096
Identification Energy Tolerance	: 1.000 keV
Energy Calibration Used Done On	: 2/2/2011
Efficiency Calibration Used Done On	: 2/23/2011
Efficiency Calibration Description	: GEA2703 80gPB 020311EC SN82752-238
Sample Number	: 13765

INTERFERENCE CORRECTED REPORT

Nuclide Name	Nuclide Id Confidence	Wt mean Activity (pCi/grams)	Wt mean Activity Uncertainty	Comments
K-40	0.990	1.48E+01	2.60E+00	

Apex™

Analysis Report for RCF27856

J1HHD9 SAF:RC-110 100H/128-H-1 BURN PIT STOCKPILE SOIL SAMPLE

Non-Reg

GAMMA SPECTRUM ANALYSIS

Sample Identification	: RCF27856
Sample Description	: J1HHD9 SAF:RC-110 100H/128-H-1 BURN PIT STOCKPILE SOIL SAMPLE
Sample Type	: 80g pillbox
Sample Size	: 6.700E+01 grams
Facility	: Default
Sample Taken On	: 4/18/2011 2:42:00PM
Acquisition Started	: 4/19/2011 11:49:32AM
Procedure	: 80 Gram Pill Box
Operator	: RCT
Detector Name	: PGTLYNX
Geometry	: 80 Gram Pill Box
Live Time	: 3600.0 seconds
Real Time	: 3601.6 seconds
Dead Time	: 0.04 %
Peak Locate Threshold	: 3.00
Peak Locate Range (in channels)	: 40 - 4096
Peak Area Range (in channels)	: 40 - 4096
Identification Energy Tolerance	: 1.000 keV
Energy Calibration Used Done On	: 3/3/2011
Efficiency Calibration Used Done On	: 3/11/2011
Efficiency Calibration Description	: PGTL 80gPB 030811EC SN82752-238
Sample Number	: 13768

INTERFERENCE CORRECTED REPORT

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/grams)	Wt mean Activity Uncertainty	Comments
K-40		0.997	1.43E+01	2.65E+00	
PB-212		0.709	7.67E-01	1.44E-01	
RA-226d	@	0.349	3.95E-01	1.24E-01	

Apex™

Analysis Report for RCF27857

J1HHF0 SAF:RC-110 100H/128-H-1 BURN PIT STOCKPILE SOIL SAMPLE

Non-Reg

GAMMA SPECTRUM ANALYSIS

Sample Identification	: RCF27857
Sample Description	: J1HHF0 SAF:RC-110 100H/128-H-1 BURN PIT STOCKPILE SOIL SAMPLE
Sample Type	: 80g pillbox
Sample Size	: 6.900E+01 grams
Facility	: Default
Sample Taken On	: 4/18/2011 2:50:00PM
Acquisition Started	: 4/19/2011 11:48:01AM
Procedure	: 80 Gram Pill Box
Operator	: RCT
Detector Name	: REGIE2
Geometry	: 80 Gram Pill Box
Live Time	: 3600.0 seconds
Real Time	: 3600.6 seconds
Dead Time	: 0.02 %
Peak Locate Threshold	: 3.00
Peak Locate Range (in channels)	: 40 - 4096
Peak Area Range (in channels)	: 40 - 4096
Identification Energy Tolerance	: 1.000 keV
Energy Calibration Used Done On	: 3/11/2011
Efficiency Calibration Used Done On	: 3/16/2011
Efficiency Calibration Description	: REGIE2 80gPB 031511EC SN82752-238
Sample Number	: 13767

INTERFERENCE CORRECTED REPORT

Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/grams)	Wt mean Activity Uncertainty	Comments
K-40		0.997	1.58E+01	2.79E+00	
PB-212		0.708	6.63E-01	1.23E-01	
RA-226d	@	0.623	3.51E-01	1.23E-01	
TH-232d		0.681	5.69E-01	1.21E-01	

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: TACR 4.20.11@1105 GM Screen Result (out) .3 (in) .5 Initials [✓]

Client: WCH SDG #: J01077 NA [ ] SAF #: RC-110 NA [ ]

Work Order Number: J1D200505 Chain of Custody # RC-110-047

Shipping Container ID Hand Deliver NA [✓] Air Bill # _____ NA [✓]

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

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

Item 6 through 10 for samples. Initial appropriate response.

6. Number of samples in shipping container (Each sample may contain multiple bottles): 4 @ 1 Container Jar.
7. Sample holding times exceeded? NA [ ] Yes [ ] No [✓]
8. Samples have:
   - ___ tape
   - [✓] custody seals
   - ___ hazard labels
   - [✓] appropriate sample labels

   J1D200505
9. Samples:
   - ___ are in good condition (Soil)
   - ___ are broken (6010 Quick Turn)
   - ___ are leaking
   - ___ have air bubbles (Only for samples requiring no head space)
10. Sample pH appropriate for analysis requested Yes [ ] No [ ] N/A [✓] (Note discrepancies in #13)
    (If acidification necessary, then document sample ID, initial pH, amount of HNO_3 added and pH after addition)

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

See other side for additional comments

Sample Custodian: [signature] Date: 4.20.11@1105 TACR

Client Informed on _____ by _____ Person contacted _____

[✓] No action necessary; process as is

Project Manager [signature] Date 4/20/11

LS-023, Rev. 12, 10/10

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist

CHEMISTRY, First/Second Level Review

4/14/2011 10:44:48 AM

Lot No., Due Date: J1D130552; 04/14/2011
Client, Site: 127642; S00N063A00 HANFORD
QC Batch No., Method Test: 1103357; M6010_S 6010A
SDG, Matrix: J01077; SOIL

	Yes	No	N/A	2nd
1.0 Initial Calibration				
1.1 Performed at required frequency with required number of levels?	✓			✓
1.2 Correlation coefficient within QC limits?	✓			✓
1.3 Initial calibration verification (ICV) analyzed immediately after calibration and results within QC limits?	✓			✓
1.4 Initial calibration blank (ICB) analyzed immediately after ICV and concentrations of all parameters <= reporting limit?	✓			✓
2.0 Continuing Calibration				
2.1 CCV analyzed at required frequency and all parameters within QC limits?	✓			✓
2.2 CCB analyzed at required frequency and all results <= reporting limit?	✓			✓
3.0 Sample Analysis				
3.1 Were any samples with concentration above the linear range for any parameter diluted and reanalyzed?		✓		✓
3.2 Were all sample holding times met?	✓			✓
4.0 QC Samples				
4.1 All results for the preparation blank below limits?	✓			✓
4.2 MS or MS/MSD recoveries within QC limits and %RPD for MSD acceptable?	✓			✓
4.3 LCS precent recovery within QC limits and %RPD for LCSD acceptable?	✓			✓
4.4 Analytical spikes within QC limits where applicable?	✓			✓
4.5 ICP only: One serial dilution performed per SDG?	✓			✓
4.6 ICP only: CRDL standard (CRI or CRA) analyzed at required frequency?			✓	✓
4.7 ICP only: Interference check samples (ICSA,ICSAB) and HICAL analyzed at the required frequencies and within QC limits	✓			✓
5.0 Other				
5.1 Are all nonconformances included and noted?	✓			✓
5.2 Is the correct date and time of analysis shown?		✓		✓
5.3 Did the analyst sign and date the front page of the analytical run?			✓	✓
5.4 Correct methodology used?	✓			✓
5.5 Transcriptions checked?	✓			✓
5.6 Calculations checked at minimum frequency?	✓			✓
5.7 Units checked?	✓			✓

First Level [signature] Date 4-14-11 Second [signature] Date 4/14/11

Clouseau
Nonconformance Memo

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

NCM #: **10-18080**
NCM Initiated By: Britnie Clark
Date Opened: 04/14/2011
Date Closed:

Classification: **Anomaly**
Status: **PMREVIEW**
Production Area: Reporting
Tests: 6010A
Lot #'s (Sample #'s): J1D130000 (357), J1D130552 (1,2,3),
QC Batches: 1103357,

Nonconformance: Other (describe in detail)
Subcategory: Other (explanation required)

Problem Description / Root Cause

Name	Date	Description
Britnie Clark	04/14/2011	Instrument three (ICAP6500 #3) does not have the correct date and time, off by one day and 12 hours, data was good, just not correct date and time. The correct date is 4-14-11 at approximately 8:30AM-9:30AM.

Corrective Action

Name	Date	Corrective Action
Britnie Clark	04/14/2011	N/A

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note	Response	Response Note

Quality Assurance Verification

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

Approval History

Date Approved	Approved By	Position

Date Printed: 4/14/2011

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist
CHEMISTRY, First/Second Level Review

4/21/2011 11:22:24 AM

Lot No., Due Date:	J1D200505; 04/21/2011
Client, Site:	127642; S00N063A00 HANFORD
QC Batch No., Method Test:	1111188; M6010_S 6010A
SDG, Matrix:	J01077; SOIL

	Yes	No	N/A	2nd
1.0 Initial Calibration				
1.1 Performed at required frequency with required number of levels?	✓			
1.2 Correlation coefficient within QC limits?	✓			
1.3 Initial calibration verification (ICV) analyzed immediately after calibration and results within QC limits?	✓			
1.4 Initial calibration blank (ICB) analyzed immediately after ICV and concentrations of all parameters <= reporting limit?	✓			
2.0 Continuing Calibration				
2.1 CCV analyzed at required frequency and all parameters within QC limits?	✓			
2.2 CCB analyzed at required frequency and all results <= reporting limit?	✓			
3.0 Sample Analysis				
3.1 Were any samples with concentration above the linear range for any parameter diluted and reanalyzed?			✓	
3.2 Were all sample holding times met?			✓	
4.0 QC Samples				
4.1 All results for the preparation blank below limits?	✓			
4.2 MS or MS/MSD recoveries within QC limits and %RPD for MSD acceptable?			✓	
4.3 LCS precent recovery within QC limits and %RPD for LCSD acceptable?	✓			
4.4 Analytical spikes within QC limits where applicable?	✓			
4.5 ICP only: One serial dilution performed per SDG?	✓			
4.6 ICP only: CRDL standard (CRI or CRA) analyzed at required frequency?			✓	
4.7 ICP only: Interference check samples (ICSA,ICSAB) and HICAL analyzed at the required frequencies and within QC limits?	✓			
5.0 Other				
5.1 Are all nonconformances included and noted?	✓			
5.2 Is the correct date and time of analysis shown?	✓			
5.3 Did the analyst sign and date the front page of the analytical run?			✓	
5.4 Correct methodology used?	✓			
5.5 Transcriptions checked?	✓			
5.6 Calculations checked at minimum frequency?	✓			
5.7 Units checked?	✓			

First Level [signature] Date 4/21/11 Second [signature] Date 4/21/11

TestAmerica Richland
QAS_RADCALCv4.8.54