SAF-RC-207
Remedial Action of the 100-C-7 & 100-C-7:1 Waste Sites – In-Process
FINAL DATA PACKAGE

COMPLETE COPY OF DATA PACKAGE TO:

Kathy Wendt H4-21 KW 12/3/12
INITIAL/DATE

COMMENTS:

SDG J01627 SAF-RC-207

Rad only ☑ Chem only Rad & Chem

☑ Complete Partial

Sample Location: 100-C-7:1 (ACL)

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: J01627

Data Package Contains 11 Pages

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Certificate of Analysis

TestAmerica Laboratories, Inc.

Washington Closure Hanford
2620 Fermi Avenue
Richland, WA 99354

November 30, 2012

Attention: Joan Kessner

SAF Number	:	RC-207
Date SDG Closed	:	November 28, 2012
Number of Samples	:	Five (5)
Sample Type	:	Soil
SDG Number	:	J01627
Data Deliverable	:	3-Day / Summary

CASE NARRATIVE

I. Introduction

On November 28, 2012, five soil samples were received at TestAmerica for 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
J1R5R9-A	MXFQA	SOIL	11/28/12
J1R5T0-A	MXFQC	SOIL	11/28/12
J1R5T1-A	MXFQG	SOIL	11/28/12
J1R5T2-A	MXFQH	SOIL	11/28/12
J1R5T3-A	MXFQK	SOIL	11/28/12

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
Metals by ICP (TCLP) method SW-846 6010A

IV. Quality Control

SDG J01627 includes a minimum of one Laboratory Control Samples (LCS) and one method (reagent) blank. Any exceptions have been noted in the "Comments" section.

QC and sample results are reported in the same units.

V. Comments

ICP Metals
Metals by ICP (TCLP) method SW-846 6010A

Batch 2334030:
The temperature during leaching was below the range specified by the procedure but the temperature variation requirement was met. The Lead recovery is below the acceptance limits on the LCS, MS and MSD. This is consistent with the matrix interference tests for the TCLP Fluid #1. The Lead is most likely lost due to the formation of Lead Acitate as a precipitate. The batch blank was above the MDL for Barium. All other QC acceptance requirements are within limits. Except as noted; the LCS, batch blank, samples, 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: J01627
SAF: RC-207
BATCH: 2334030
MATRIX:SOIL
ANALYSIS DATE: 11/30/12

Client_id	Matrix	Result_	Cas_nbr	Parameter	Result	Qualifier	Units	Reporting_Limits_(	Reporting_Limits	Uncertainty_1s	Analyzed_Analyz	Decision_level_lc	LCSRec	Adde	Analysis_date_time	Batch_nbr	Test_Met	Lab_sample_id
J1R5R9-A	**SOLID**	**CS**	**7440-22-4**	**Ag**	**-1.19E-04**	**U**	**MG/L**	5.43E-02	5.43E-02	8.80E-04	100.0101 G	7.26E-04			11/30/2012 12:22	2334030	JYDQ	MXFQA1A0
J1R5R9-A	**SOLID**	**CS**	**7440-38-2**	**As**	**9.66E-03**	**U**	**MG/L**	2.72E-01	2.72E-01	3.50E-03	100.0101 G	2.84E-03			11/30/2012 12:22	2334030	JYDQ	MXFQA1A0
J1R5R9-A	**SOLID**	**CS**	**7440-39-3**	**Ba**	**5.07E-01**		**MG/L**	2.72E-01	2.72E-01	6.60E-03	100.0101 G	5.43E-03			11/30/2012 12:22	2334030	JYDQ	MXFQA1A0
J1R5R9-A	**SOLID**	**CS**	**7440-43-9**	**Cadmium**	**5.44E-04**	**U**	**MG/L**	2.72E-02	2.72E-02	2.30E-04	100.0101 G	1.90E-04			11/30/2012 12:22	2334030	JYDQ	MXFQA1A0
J1R5R9-A	**SOLID**	**CS**	**7440-47-3**	**Chromium**	**1.75E-01**		**MG/L**	5.43E-02	5.43E-02	1.90E-03	100.0101 G	1.54E-03			11/30/2012 12:22	2334030	JYDQ	MXFQA1A0
J1R5R9-A	**SOLID**	**CS**	**7439-92-1**	**Lead**	**-3.71E-03**	**U**	**MG/L**	2.72E-01	2.72E-01	2.10E-03	100.0101 G	1.74E-03			11/30/2012 12:22	2334030	JYDQ	MXFQA1A0
J1R5R9-A	**SOLID**	**CS**	**7782-49-2**	**Se**	**1.12E-02**	**U**	**MG/L**	2.72E-01	2.72E-01	3.00E-03	100.0101 G	2.46E-03			11/30/2012 12:22	2334030	JYDQ	MXFQA1A0
J1R5T0-A	**SOLID**	**CS**	**7440-22-4**	**Ag**	**-5.01E-05**	**U**	**MG/L**	5.25E-02	5.25E-02	5.80E-04	100.0072 G	4.79E-04			11/30/2012 12:40	2334030	JYDQ	MXFQC1AA
J1R5T0-A	**SOLID**	**CS**	**7440-38-2**	**As**	**8.35E-03**	**U**	**MG/L**	2.63E-01	2.63E-01	3.10E-03	100.0072 G	2.59E-03			11/30/2012 12:40	2334030	JYDQ	MXFQC1AA
J1R5T0-A	**SOLID**	**CS**	**7440-39-3**	**Ba**	**2.66E-01**		**MG/L**	2.63E-01	2.63E-01	2.90E-03	100.0072 G	2.38E-03			11/30/2012 12:40	2334030	JYDQ	MXFQC1AA
J1R5T0-A	**SOLID**	**CS**	**7440-43-9**	**Cadmium**	**2.37E-04**	**U**	**MG/L**	2.63E-02	2.63E-02	4.20E-04	100.0072 G	3.47E-04			11/30/2012 12:40	2334030	JYDQ	MXFQC1AA
J1R5T0-A	**SOLID**	**CS**	**7440-47-3**	**Chromium**	**1.85E-03**	**U**	**MG/L**	5.25E-02	5.25E-02	9.10E-04	100.0072 G	7.47E-04			11/30/2012 12:40	2334030	JYDQ	MXFQC1AA
J1R5T0-A	**SOLID**	**CS**	**7439-92-1**	**Lead**	**-2.19E-03**	**U**	**MG/L**	2.63E-01	2.63E-01	6.90E-04	100.0072 G	5.65E-04			11/30/2012 12:40	2334030	JYDQ	MXFQC1AA
J1R5T0-A	**SOLID**	**CS**	**7782-49-2**	**Se**	**1.16E-02**	**U**	**MG/L**	2.63E-01	2.63E-01	4.10E-03	100.0072 G	3.33E-03			11/30/2012 12:40	2334030	JYDQ	MXFQC1AA
J1R5T1-A	**SOLID**	**CS**	**7440-22-4**	**Ag**	**-2.62E-04**	**U**	**MG/L**	5.36E-02	5.36E-02	1.70E-04	100.0097 G	1.42E-04			11/30/2012 12:43	2334030	JYDQ	MXFQG1AA
J1R5T1-A	**SOLID**	**CS**	**7440-38-2**	**As**	**1.05E-02**	**U**	**MG/L**	2.68E-01	2.68E-01	3.20E-03	100.0097 G	2.61E-03			11/30/2012 12:43	2334030	JYDQ	MXFQG1AA
J1R5T1-A	**SOLID**	**CS**	**7440-39-3**	**Ba**	**4.78E-01**		**MG/L**	2.68E-01	2.68E-01	2.90E-03	100.0097 G	2.37E-03			11/30/2012 12:43	2334030	JYDQ	MXFQG1AA
J1R5T1-A	**SOLID**	**CS**	**7440-43-9**	**Cadmium**	**5.97E-04**	**U**	**MG/L**	2.68E-02	2.68E-02	1.60E-04	100.0097 G	1.32E-04			11/30/2012 12:43	2334030	JYDQ	MXFQG1AA
J1R5T1-A	**SOLID**	**CS**	**7440-47-3**	**Chromium**	**1.78E-03**	**U**	**MG/L**	5.36E-02	5.36E-02	3.40E-04	100.0097 G	2.78E-04			11/30/2012 12:43	2334030	JYDQ	MXFQG1AA
J1R5T1-A	**SOLID**	**CS**	**7439-92-1**	**Lead**	**-2.94E-03**	**U**	**MG/L**	2.68E-01	2.68E-01	4.30E-03	100.0097 G	3.51E-03			11/30/2012 12:43	2334030	JYDQ	MXFQG1AA
J1R5T1-A	**SOLID**	**CS**	**7782-49-2**	**Se**	**1.30E-02**	**U**	**MG/L**	2.68E-01	2.68E-01	2.00E-03	100.0097 G	1.65E-03			11/30/2012 12:43	2334030	JYDQ	MXFQG1AA
J1R5T2-A	**SOLID**	**CS**	**7440-22-4**	**Ag**	**-4.02E-04**	**U**	**MG/L**	5.24E-02	5.24E-02	1.20E-03	100.0061 G	9.70E-04			11/30/2012 12:47	2334030	JYDQ	MXFQH1AA
J1R5T2-A	**SOLID**	**CS**	**7440-38-2**	**As**	**8.49E-03**	**U**	**MG/L**	2.62E-01	2.62E-01	4.60E-03	100.0061 G	3.80E-03			11/30/2012 12:47	2334030	JYDQ	MXFQH1AA
J1R5T2-A	**SOLID**	**CS**	**7440-39-3**	**Ba**	**3.49E-01**		**MG/L**	2.62E-01	2.62E-01	3.40E-03	100.0061 G	2.82E-03			11/30/2012 12:47	2334030	JYDQ	MXFQH1AA
J1R5T2-A	**SOLID**	**CS**	**7440-43-9**	**Cadmium**	**1.22E-04**	**U**	**MG/L**	2.62E-02	2.62E-02	4.40E-04	100.0061 G	3.64E-04			11/30/2012 12:47	2334030	JYDQ	MXFQH1AA
J1R5T2-A	**SOLID**	**CS**	**7440-47-3**	**Chromium**	**2.13E-03**	**U**	**MG/L**	5.24E-02	5.24E-02	5.80E-04	100.0061 G	4.81E-04			11/30/2012 12:47	2334030	JYDQ	MXFQH1AA
J1R5T2-A	**SOLID**	**CS**	**7439-92-1**	**Lead**	**-1.77E-03**	**U**	**MG/L**	2.62E-01	2.62E-01	3.00E-03	100.0061 G	2.49E-03			11/30/2012 12:47	2334030	JYDQ	MXFQH1AA
J1R5T2-A	**SOLID**	**CS**	**7782-49-2**	**Se**	**9.38E-03**	**U**	**MG/L**	2.62E-01	2.62E-01	4.10E-03	100.0061 G	3.41E-03			11/30/2012 12:47	2334030	JYDQ	MXFQH1AA
J1R5T3-A	**SOLID**	**CS**	**7440-22-4**	**Ag**	**2.60E-04**	**U**	**MG/L**	5.06E-02	5.06E-02	6.50E-04	100.0048 G	5.35E-04			11/30/2012 13:01	2334030	JYDQ	MXFQK1AA
J1R5T3-A	**SOLID**	**CS**	**7440-38-2**	**As**	**-6.97E-03**	**U**	**MG/L**	2.53E-01	2.53E-01	1.10E-02	100.0048 G	8.86E-03			11/30/2012 13:01	2334030	JYDQ	MXFQK1AA
J1R5T3-A	**SOLID**	**CS**	**7440-39-3**	**Ba**	**3.50E-01**		**MG/L**	2.53E-01	2.53E-01	3.20E-03	100.0048 G	2.64E-03			11/30/2012 13:01	2334030	JYDQ	MXFQK1AA
J1R5T3-A	**SOLID**	**CS**	**7440-43-9**	**Cadmium**	**6.06E-04**	**U**	**MG/L**	2.53E-02	2.53E-02	2.30E-04	100.0048 G	1.92E-04			11/30/2012 13:01	2334030	JYDQ	MXFQK1AA
J1R5T3-A	**SOLID**	**CS**	**7440-47-3**	**Chromium**	**2.52E+00**		**MG/L**	5.06E-02	5.06E-02	3.10E-02	100.0048 G	2.52E-02			11/30/2012 13:01	2334030	JYDQ	MXFQK1AA
J1R5T3-A	**SOLID**	**CS**	**7439-92-1**	**Lead**	**-1.66E-03**	**U**	**MG/L**	2.53E-01	2.53E-01	2.30E-03	100.0048 G	1.90E-03			11/30/2012 13:01	2334030	JYDQ	MXFQK1AA
J1R5T3-A	**SOLID**	**CS**	**7782-49-2**	**Se**	**8.82E-03**	**U**	**MG/L**	2.53E-01	2.53E-01	6.60E-03	100.0048 G	5.43E-03			11/30/2012 13:01	2334030	JYDQ	MXFQK1AA
INTRA-LAB BLANK	SOLID	BLK	7440-22-4	Ag	1.40E-04	U	MG/L	5.00E-02	5.00E-02	4.40E-04	100.0129 L	3.66E-04			11/30/2012 12:11	2334030	JYDQ	MXFW11AA
INTRA-LAB BLANK	SOLID	BLK	7440-38-2	As	8.08E-03	U	MG/L	2.50E-01	2.50E-01	3.10E-03	100.0129 L	2.57E-03			11/30/2012 12:11	2334030	JYDQ	MXFW11AA
INTRA-LAB BLANK	SOLID	BLK	7440-39-3	Ba	6.42E-02	U	MG/L	2.50E-01	2.50E-01	2.60E-04	100.0129 L	2.11E-04			11/30/2012 12:11	2334030	JYDQ	MXFW11AA
INTRA-LAB BLANK	SOLID	BLK	7440-43-9	Cadmium	3.19E-05	U	MG/L	2.50E-02	2.50E-02	2.20E-04	100.0129 L	1.80E-04			11/30/2012 12:11	2334030	JYDQ	MXFW11AA
INTRA-LAB BLANK	SOLID	BLK	7440-47-3	Chromium	1.52E-03	U	MG/L	5.00E-02	5.00E-02	1.10E-03	100.0129 L	8.78E-04			11/30/2012 12:11	2334030	JYDQ	MXFW11AA
INTRA-LAB BLANK	SOLID	BLK	7439-92-1	Lead	-2.13E-03	U	MG/L	2.50E-01	2.50E-01	2.20E-03	100.0129 L	1.79E-03			11/30/2012 12:11	2334030	JYDQ	MXFW11AA
INTRA-LAB BLANK	SOLID	BLK	7782-49-2	Se	7.60E-03	U	MG/L	2.50E-01	2.50E-01	4.50E-03	100.0129 L	3.69E-03			11/30/2012 12:11	2334030	JYDQ	MXFW11AA
INTRA-LAB CHECK	SOLID	LCS	7440-22-4	Ag	9.80E-01		MG/L	5.00E-02	5.00E-02	4.00E-02	100.0129 L	3.28E-02	0.98	1	11/30/2012 12:14	2334030	JYDQ	MXFW11AA
INTRA-LAB CHECK	SOLID	LCS	7440-38-2	As	1.05E+00		MG/L	2.50E-01	2.50E-01	1.70E-02	100.0129 L	1.37E-02	1.05	1	11/30/2012 12:14	2334030	JYDQ	MXFW11AA
INTRA-LAB CHECK	SOLID	LCS	7440-39-3	Ba	1.02E+00		MG/L	2.50E-01	2.50E-01	4.80E-02	100.0129 L	3.98E-02	1.02	1	11/30/2012 12:14	2334030	JYDQ	MXFW11AA
INTRA-LAB CHECK	SOLID	LCS	7440-43-9	Cadmium	9.56E-01		MG/L	2.50E-02	2.50E-02	2.50E-03	100.0129 L	2.04E-03	0.96	1	11/30/2012 12:14	2334030	JYDQ	MXFW11AA
INTRA-LAB CHECK	SOLID	LCS	7440-47-3	Chromium	9.29E-01		MG/L	5.00E-02	5.00E-02	3.70E-02	100.0129 L	3.04E-02	0.93	1	11/30/2012 12:14	2334030	JYDQ	MXFW11AA
INTRA-LAB CHECK	SOLID	LCS	7439-92-1	Lead	7.76E-01		MG/L	2.50E-01	2.50E-01	2.80E-02	100.0129 L	2.32E-02	0.78	1	11/30/2012 12:14	2334030	JYDQ	MXFW11AA
INTRA-LAB CHECK	SOLID	LCS	7782-49-2	Se	1.03E+00		MG/L	2.50E-01	2.50E-01	1.80E-02	100.0129 L	1.51E-02	1.03	1	11/30/2012 12:14	2334030	JYDQ	MXFW11AA
J1R5R9-A DUP	SOLID	DUP	7440-22-4	Ag	-2.39E-04	U	MG/L	5.43E-02	5.43E-02	1.70E-03	100.0101 G	1.41E-03			11/30/2012 12:37	2334030	JYDQ	MXFQA1A0
J1R5R9-A DUP	SOLID	DUP	7440-38-2	As	9.70E-03	U	MG/L	2.72E-01	2.72E-01	5.30E-04	100.0101 G	4.39E-04			11/30/2012 12:37	2334030	JYDQ	MXFQA1A0
J1R5R9-A DUP	SOLID	DUP	7440-39-3	Ba	5.05E-01		MG/L	2.72E-01	2.72E-01	1.10E-02	100.0101 G	8.74E-03			11/30/2012 12:37	2334030	JYDQ	MXFQA1A0
J1R5R9-A DUP	SOLID	DUP	7440-43-9	Cadmium	6.45E-04	U	MG/L	2.72E-02	2.72E-02	3.90E-04	100.0101 G	3.20E-04			11/30/2012 12:37	2334030	JYDQ	MXFQA1A0
J1R5R9-A DUP	SOLID	DUP	7440-47-3	Chromium	1.75E-01		MG/L	5.43E-02	5.43E-02	2.60E-03	100.0101 G	2.11E-03			11/30/2012 12:37	2334030	JYDQ	MXFQA1A0
J1R5R9-A DUP	SOLID	DUP	7439-92-1	Lead	-2.77E-03	U	MG/L	2.72E-01	2.72E-01	3.10E-03	100.0101 G	2.59E-03			11/30/2012 12:37	2334030	JYDQ	MXFQA1A0
J1R5R9-A DUP	SOLID	DUP	7782-49-2	Se	1.23E-02	U	MG/L	2.72E-01	2.72E-01	7.60E-03	100.0101 G	6.24E-03			11/30/2012 12:37	2334030	JYDQ	MXFQA1A0
J1R5R9-A	SOLID	MS	7440-22-4	Ag	1.08E+00		% RECO	5.43E-02	5.43E-02	1.20E-02	100.0101 L	9.93E-03	0.99	1.1	11/30/2012 12:26	2334030	JYDQ	MXFQA1A0
J1R5R9-A	SOLID	MS	7440-38-2	As	1.14E+00		% RECO	2.72E-01	2.72E-01	1.40E-02	100.0101 L	1.13E-02	1.05	1.1	11/30/2012 12:26	2334030	JYDQ	MXFQA1A0
J1R5R9-A	SOLID	MS	7440-39-3	Ba	1.02E+00		% RECO	2.72E-01	2.72E-01	2.40E-02	100.0101 L	1.99E-02	0.94	1.1	11/30/2012 12:26	2334030	JYDQ	MXFQA1A0
J1R5R9-A	SOLID	MS	7440-43-9	Cadmium	1.05E+00		% RECO	2.72E-02	2.72E-02	2.50E-03	100.0101 L	2.07E-03	0.97	1.1	11/30/2012 12:26	2334030	JYDQ	MXFQA1A0
J1R5R9-A	SOLID	MS	7440-47-3	Chromium	9.83E-01		% RECO	5.43E-02	5.43E-02	1.70E-02	100.0101 L	1.37E-02	0.9	1.1	11/30/2012 12:26	2334030	JYDQ	MXFQA1A0
J1R5R9-A	SOLID	MS	7439-92-1	Lead	7.98E-01		% RECO	2.72E-01	2.72E-01	4.30E-02	100.0101 L	3.50E-02	0.73	1.1	11/30/2012 12:26	2334030	JYDQ	MXFQA1A0
J1R5R9-A	SOLID	MS	7782-49-2	Se	1.13E+00		% RECO	2.72E-01	2.72E-01	1.00E-02	100.0101 L	8.20E-03	1.04	1.1	11/30/2012 12:26	2334030	JYDQ	MXFQA1A0
J1R5R9-A	SOLID	MSD	7440-22-4	Ag	1.06E+00		% RECO	5.43E-02	5.43E-02	3.00E-03	100.0101 L	2.49E-03	0.98	1.1	11/30/2012 12:31	2334030	JYDQ	MXFQA1A0
J1R5R9-A	SOLID	MSD	7440-38-2	As	1.14E+00		% RECO	2.72E-01	2.72E-01	7.00E-03	100.0101 L	5.76E-03	1.05	1.1	11/30/2012 12:31	2334030	JYDQ	MXFQA1A0
J1R5R9-A	SOLID	MSD	7440-39-3	Ba	1.01E+00		% RECO	2.72E-01	2.72E-01	1.50E-02	100.0101 L	1.25E-02	0.93	1.1	11/30/2012 12:31	2334030	JYDQ	MXFQA1A0
J1R5R9-A	SOLID	MSD	7440-43-9	Cadmium	1.04E+00		% RECO	2.72E-02	2.72E-02	1.10E-02	100.0101 L	9.16E-03	0.96	1.1	11/30/2012 12:31	2334030	JYDQ	MXFQA1A0
J1R5R9-A	SOLID	MSD	7440-47-3	Chromium	9.58E-01		% RECO	5.43E-02	5.43E-02	8.60E-03	100.0101 L	7.07E-03	0.88	1.1	11/30/2012 12:31	2334030	JYDQ	MXFQA1A0

Client_id	Matrix	Result_	Cas_nbr	Parameter	Result	Qualifier	Units	Reporting_Limits_(	Reporting_Limits	Uncertainty_1s	Analyzed_Analyz	Decision_level_lc	LCSRec	Adde	Analysis_date_time	Batch_nbr	Test_Met	Lab_sample_id
J1R5R9-A	SOLID	MSD	7439-92-1	Lead	7.98E-01		% RECO	2.72E-01	2.72E-01	3.10E-02	100.0101 L	2.52E-02	0.73	1.1	11/30/2012 12:31	2334030	JYDQ	MXFQA1A0
J1R5R9-A	SOLID	MSD	7782-49-2	Se	1.14E+00		% RECO	2.72E-01	2.72E-01	4.10E-03	100.0101 L	3.40E-03	1.05	1.1	11/30/2012 12:31	2334030	JYDQ	MXFQA1A0

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Data Review/Verification Checklist

CHEMISTRY, First/Second Level Review

11/30/2012 4:05:08 PM

Lot No., Due Date: J2K280439; 12/03/2012
Client, Site: 127642; S00X235B00 HANFORD
QC Batch No., Method Test: 2334030; M6010_S 6010A
SDG, Matrix: J01627; 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 calibr. and results within QC limits of +/- 10% at 0.75 ppm?	✓			✓
1.4 ICB analyzed immediately after ICV and concentration of all parameters +/- report limit from zero? RL per RadCalc.	✓			✓
2.0 Continuing Calibration				
2.1 CCV analyzed at required frequency and all parameters within QC limits or +/- 10% at 0.7500 ppm?	✓			✓
2.2 CCB analyzed at required frequency and all results +/- reporting limit from zero?	✓			✓
3.0 Sample Analysis				
3.1 Were any samples with concentration above the linear range diluted and reanalyzed?			✓	✓
3.2 Were all sample holding times met?	✓			✓
4.0 QC Samples				
4.1 All results for the preparation blank < reporting limits?		✓		✓
4.2 MS or MS/MSD recoveries within 20% at 1 ppm and within 20% RPD (for MSD)?		✓		✓
4.3 LCS precent recovery within 20% at 1 ppm and 20% RPD (for LCSD)?		✓		✓
4.4 Analytical spikes within QC limits where applicable?	✓			✓
4.5 ICP only: One serial dilution performed and within 10% of parent per SDG?	✓			✓
4.6 ICP only: RLV run per batch and within 20% of current values?	✓			✓
4.7 ICP only: ICSA,ICSAB analyzed at the required frequencies and within 20% of values per dilution record?	✓			✓
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 digestion log for the analytical run?	✓			✓
5.4 Correct methodology used?	✓			✓
5.5 Transcriptions checked?	✓			✓
5.6 Calculations checked at minimum frequency?	✓			✓
5.7 Units checked?	✓			✓
5.8 Verified that appropriate data transferred to ReportDB?	✓			✓

6.0 Comments on any 'No' response:

First Level [signature] **Date** 11/30/12 **Second** [signature] **Date** 11/30/12

TestAmerica Richland
QAS_RADCALCv4.8.58

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Clouseau
Nonconformance Memo

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

NCM #: **10-22364**
NCM Initiated By: Traci KROUPA
Date Opened: 11/30/2012
Date Closed:

Classification: **Deficiency**
Status: **PMREVIEW**
Production Area: Classical Chemistry
Tests: 6010A
Lot #'s (Sample #'s): J2K280439 (1,2,3,4,5), J2K290000 (30),
QC Batches: 2334030,

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

Problem Description / Root Cause

Name	Date	Description
Traci KROUPA	11/30/2012	The room temperatures at the beginning and end of sample rotation was below 23 +/-2 C.

Corrective Action

Name	Date	Corrective Action
Traci KROUPA	11/30/2012	Reported Data for PM review.

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

TK 11/30/12

Date Printed: 11/30/2012

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Clouseau
Nonconformance Memo

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

NCM #: **10-22363**
NCM Initiated By: Traci KROUPA
Date Opened: 11/30/2012
Date Closed:

Classification: **Deficiency**
Status: **PMREVIEW**
Production Area: Classical Chemistry
Tests: 6010A
Lot #'s (Sample #'s): J2K280439 (1,2,3,4,5), J2K290000 (30),
QC Batches: 2334030,

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

Problem Description / Root Cause

Name	Date	Description
Traci KROUPA	11/30/2012	The Method Blank was above the MDL for Ba. Filters were not acid washed prior to filtration. Pb recovered below the acceptable range in the LCS, MS, and MSD.

Corrective Action

Name	Date	Corrective Action
Traci KROUPA	11/30/2012	Pre-Acid washed, certified trace metal, filters have been ordered. Data reported to PM for review.

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

TK 11/30/12

Date Printed: 11/30/2012

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	RC-207-109	Page 1 of 1 2 of 2 11-28-12 CMB
Collector: R. Brackett	Company Contact: Joan Kessner; Telephone No.: 509-375-4688	Project Coordinator: KESSNER, JH	Price Code: ~~8S~~ 8L 11-28-12; Data Turnaround: 3 DAY ~~21 Days~~ ~~QUICK TURN~~ 11-28-12 CMB
Project Designation: Remedial Action of the 100-C-7 & 100-C-7:1 Waste Sites - I	Sampling Location: 100-C-7:1(ACL)	SAF No.: RC-207	
Ice Chest No.: N/A	Field Logbook No.: EL-1655-06; COA: R00C712600	Method of Shipment: Hand deliver	
Shipped To: TestAmerica Incorporated, Richland	Offsite Property No.: N/A	Bill of Lading/Air Bill No.: N/A	

POSSIBLE SAMPLE HAZARDS/REMARKS

None

Special Handling and/or Storage

Cool 4 degrees centigrade

J2K280439 11-28-12

J011624
Due 11-29-12

J2K280439

Preservation	Cool 4C	None	Cool 4C
Type of Container	G/P	G/P	G/P
No. of Container(s)	1	1	1
Volume	125mL	125mL	125mL
	See item (1) in Special Instructions. 11-28-12 CMB	See item (2) in Special Instructions.	Chromium Hex - 7196 - Quick Turn 11-28-12 CMB

Sample No.	Matrix *	Sample Date	Sample Time			
J1R5R9 MXFQA	SOIL	11-28-12	1100	X	X	X
J1R5T0 MXFQC	SOIL	11-28-12	1110	X	X	X
J1R5T1 MXFQG	SOIL	11-28-12	1115	X	X	X
J1R5T2 MXFQH	SOIL	11-28-12	1120	X	X	X
J1R5T3 MXFQK	SOIL	11-28-12	1150	X	X	X

CHAIN OF POSSESSION

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
R. Brackett	11-28-12 1200	B. Fahlberg	11-28-12 1200
B. Fahlberg	11-28-12 1205	Bingham	11-28-12 1205
Bingham WCH	11-28-12 1340	Julie Bock	11-28-12 1340

SPECIAL INSTRUCTIONS 11-28-12 CMB

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

(2) QTL TCLP ICP Metals - 1311/6010 {Arsenic, Barium, Cadmium, Chromium, Lead, Selenium, Silver}

J2K280439
J011627
Due 12-3-12

REVIEWED BY AJ
DATE 11-28-12

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

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Sample Check-in List

Date/Time Received: 11-28-12 | 1340 Container GM Screen Result: (Airlock) .06 Initials [ ]
Sample GM Screen Result (Sample Receiving) .04 Initials [ ]

Client: WCH SDG #: 501627 NA [ ] SAF #: ~~RC-001~~ 11-28-12 NA [ ]
RC-207

Lot Number: J2K280439

Chain of Custody # RC-207-109

Shipping Container ID: hand delivery NA [ ] Air Bill Number: NA [ ]

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

1. Custody Seals on shipping container intact? Yes [ ] No [ ] No Custody Seal [ ]
2. Custody Seals dated and signed? Yes [ ] No [ ] No Custody Seal [ ]
3. Cooler temperature: 5.7 °C ON ICE NA [ ]
4. Vermiculite/packing materials is NA [ ] Wet [ ] Dry [ ]

Item 5 through 16 for samples. Initial appropriate response.

5. Chain of Custody record present? Yes [ ] No [ ]
6. Number of samples received (Each sample may contain multiple bottles): 5
7. Containers received: 5x 125mLP
8. Sample holding times exceeded? NA [ ] Yes [ ] No [ ]
9. Samples have:
   ___ tape
   ___ custody seals
   ___ hazard labels
   ___ appropriate sample labels
10. Matrix:
    ___ A (FLT, Wipe, Solid, Soil)
    ___ S (Air, Niosh 7400)
    ___ I (Water)
    ___ T (Biological, Ni-63)
11. Samples:
    ___ are in good condition
    ___ are broken
    ___ are leaking
    ___ have air bubbles (Only for samples requiring no head space)
    ___ Other
12. Sample pH appropriate for analysis requested Yes [ ] No [ ] NA [ ]
    (If acidification is necessary, then document sample ID, initial pH, amount of HNO_3 added and pH after addition on table overleaf)

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

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

16. Additional Information: _____

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

Sample Custodian: Juan Bach Date: 11-28-12

Client Informed on _____ by _____ Person contacted _____

[X] No action necessary; process as is

Project Manager [signature] Date 11/28/12

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

Bach 11-28-12

Bach 11-28-12

J2K280439 PW 11/28/12

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See over for additional information.