SAF-RC-225
100K Remaining Waste Sites – Soil In-Process
FINAL DATA PACKAGE

COMPLETE COPY OF DATA PACKAGE TO:

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

COMMENTS:

SDG J01625 SAF-RC-225

Rad only ☑ Chem only Rad & Chem

☑ Complete Partial

Sample Location: 100-K-84

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: J01625

Data Package Contains 9 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-225
Date SDG Closed	:	November 30, 2012
Number of Samples	:	Three (3)
Sample Type	:	Soil
SDG Number	:	J01625
Data Deliverable	:	Quick Turn Metals / Summary

CASE NARRATIVE

I. Introduction

On November 27, 2012, three 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
J1R609	MXE9N	SOIL	11/27/12
J1R610	MXE9P	SOIL	11/27/12
J1R611	MXE9Q	SOIL	11/27/12

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
ICP Metals by method SW-846 6010A

IV. Quality Control

SDG J01625 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

One batch was analyzed for the samples with the standard metal request list.

Batch 2332046:

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: J01625
SAF: RC-225
BATCH: 2332046
MATRIX: SOIL
ANALYSIS DATE: 11/27/12

Client_id	Matrix	Result_	Cas_nbr	Parameter	Result	Qualifier	Units	Reporting_Limits_S	Reporting_Limits	Uncertainty_1s	Analyzed_Analyze	Decision_level_lc	LCSRecc	Added/	Analysis_date_time	Batch_nbr	Test_Meth	Lab_sample_id
J1R609	SOIL	CS	7440-22-4	Ag	8.74E-03	U	UG/G	1.01E+01	1.01E+01	1.10E-01	0.2487 G	9.23E-02			11/27/2012 19:42	2332046	46DQ	MXE9N1A0
J1R609	SOIL	CS	7440-38-2	As	3.26E+00	U	UG/G	1.01E+01	1.01E+01	1.40E+00	0.2487 G	1.11E+00			11/27/2012 19:42	2332046	46DQ	MXE9N1A0
J1R609	SOIL	CS	7440-39-3	Ba	5.62E+01		UG/G	2.01E+00	2.01E+00	7.60E-01	0.2487 G	6.29E-01			11/27/2012 19:42	2332046	46DQ	MXE9N1A0
J1R609	SOIL	CS	7440-41-7	Beryllium	2.85E-01		UG/G	1.01E-01	1.01E-01	7.60E-03	0.2487 G	6.29E-03			11/27/2012 19:42	2332046	46DQ	MXE9N1A0
J1R609	SOIL	CS	7440-43-9	Cadmium	1.19E-01	U	UG/G	2.01E+00	2.01E+00	6.70E-02	0.2487 G	5.51E-02			11/27/2012 19:42	2332046	46DQ	MXE9N1A0
J1R609	SOIL	CS	7440-47-3	Chromium	8.38E+00	U	UG/G	1.01E+01	1.01E+01	4.20E-02	0.2487 G	3.44E-02			11/27/2012 19:42	2332046	46DQ	MXE9N1A0
J1R609	SOIL	CS	7439-92-1	Lead	4.97E+00	U	UG/G	1.01E+01	1.01E+01	3.20E-01	0.2487 G	2.63E-01			11/27/2012 19:42	2332046	46DQ	MXE9N1A0
J1R609	SOIL	CS	7782-49-2	Se	1.28E-01	U	UG/G	1.01E+01	1.01E+01	1.20E+00	0.2487 G	9.66E-01			11/27/2012 19:42	2332046	46DQ	MXE9N1A0
J1R610	SOIL	CS	7440-22-4	Ag	-4.44E-03	U	UG/G	9.89E+00	9.89E+00	2.50E-01	0.2528 G	2.08E-01			11/27/2012 20:00	2332046	46DQ	MXE9P1AA
J1R610	SOIL	CS	7440-38-2	As	4.64E+00	U	UG/G	9.89E+00	9.89E+00	3.00E-01	0.2528 G	2.50E-01			11/27/2012 20:00	2332046	46DQ	MXE9P1AA
J1R610	SOIL	CS	7440-39-3	Ba	5.83E+01		UG/G	1.98E+00	1.98E+00	7.10E-01	0.2528 G	5.84E-01			11/27/2012 20:00	2332046	46DQ	MXE9P1AA
J1R610	SOIL	CS	7440-41-7	Beryllium	2.77E-01		UG/G	9.89E-02	9.89E-02	1.00E-02	0.2528 G	8.50E-03			11/27/2012 20:00	2332046	46DQ	MXE9P1AA
J1R610	SOIL	CS	7440-43-9	Cadmium	9.68E-02	U	UG/G	1.98E+00	1.98E+00	1.30E-01	0.2528 G	1.05E-01			11/27/2012 20:00	2332046	46DQ	MXE9P1AA
J1R610	SOIL	CS	7440-47-3	Chromium	3.01E+01		UG/G	9.89E+00	9.89E+00	3.10E-01	0.2528 G	2.55E-01			11/27/2012 20:00	2332046	46DQ	MXE9P1AA
J1R610	SOIL	CS	7439-92-1	Lead	4.59E+00	U	UG/G	9.89E+00	9.89E+00	4.20E-01	0.2528 G	3.49E-01			11/27/2012 20:00	2332046	46DQ	MXE9P1AA
J1R610	SOIL	CS	7782-49-2	Se	5.30E-01	U	UG/G	9.89E+00	9.89E+00	1.00E+00	0.2528 G	8.32E-01			11/27/2012 20:00	2332046	46DQ	MXE9P1AA
J1R611	SOIL	CS	7440-22-4	Ag	1.50E-02	U	UG/G	9.82E+00	9.82E+00	1.90E-01	0.2546 G	1.53E-01			11/27/2012 20:04	2332046	46DQ	MXE9Q1AA
J1R611	SOIL	CS	7440-38-2	As	1.70E+01		UG/G	9.82E+00	9.82E+00	2.90E-01	0.2546 G	2.39E-01			11/27/2012 20:04	2332046	46DQ	MXE9Q1AA
J1R611	SOIL	CS	7440-39-3	Ba	9.90E+01		UG/G	1.96E+00	1.96E+00	2.90E+00	0.2546 G	2.35E+00			11/27/2012 20:04	2332046	46DQ	MXE9Q1AA
J1R611	SOIL	CS	7440-41-7	Beryllium	3.52E-01		UG/G	9.82E-02	9.82E-02	1.30E-02	0.2546 G	1.04E-02			11/27/2012 20:04	2332046	46DQ	MXE9Q1AA
J1R611	SOIL	CS	7440-43-9	Cadmium	2.24E-01	U	UG/G	1.96E+00	1.96E+00	4.90E-02	0.2546 G	3.99E-02			11/27/2012 20:04	2332046	46DQ	MXE9Q1AA
J1R611	SOIL	CS	7440-47-3	Chromium	8.25E+00	U	UG/G	9.82E+00	9.82E+00	1.50E-01	0.2546 G	1.26E-01			11/27/2012 20:04	2332046	46DQ	MXE9Q1AA
J1R611	SOIL	CS	7439-92-1	Lead	2.07E+01		UG/G	9.82E+00	9.82E+00	7.00E-01	0.2546 G	5.77E-01			11/27/2012 20:04	2332046	46DQ	MXE9Q1AA
J1R611	SOIL	CS	7782-49-2	Se	2.62E-01	U	UG/G	9.82E+00	9.82E+00	7.00E-01	0.2546 G	5.76E-01			11/27/2012 20:04	2332046	46DQ	MXE9Q1AA
INTRA-LAB BLANK	SOIL	BLK	7440-22-4	Ag	6.34E-04	U	MG/L	5.00E-02	5.00E-02	8.30E-04	0.2492 L	6.79E-04			11/27/2012 19:30	2332046	46DQ	MXE9X1AA
INTRA-LAB BLANK	SOIL	BLK	7440-38-2	As	-5.15E-04	U	MG/L	5.00E-02	5.00E-02	9.40E-04	0.2492 L	7.73E-04			11/27/2012 19:30	2332046	46DQ	MXE9X1AA
INTRA-LAB BLANK	SOIL	BLK	7440-39-3	Ba	1.61E-04	U	MG/L	1.00E-02	1.00E-02	1.50E-04	0.2492 L	1.21E-04			11/27/2012 19:30	2332046	46DQ	MXE9X1AA
INTRA-LAB BLANK	SOIL	BLK	7440-41-7	Beryllium	4.57E-05	U	MG/L	5.00E-04	5.00E-04	1.90E-05	0.2492 L	1.57E-05			11/27/2012 19:30	2332046	46DQ	MXE9X1AA
INTRA-LAB BLANK	SOIL	BLK	7440-43-9	Cadmium	9.16E-05	U	MG/L	1.00E-02	1.00E-02	2.60E-04	0.2492 L	2.17E-04			11/27/2012 19:30	2332046	46DQ	MXE9X1AA
INTRA-LAB BLANK	SOIL	BLK	7440-47-3	Chromium	7.26E-04	U	MG/L	5.00E-02	5.00E-02	1.30E-03	0.2492 L	1.03E-03			11/27/2012 19:30	2332046	46DQ	MXE9X1AA
INTRA-LAB BLANK	SOIL	BLK	7439-92-1	Lead	1.72E-03	U	MG/L	5.00E-02	5.00E-02	3.00E-03	0.2492 L	2.50E-03			11/27/2012 19:30	2332046	46DQ	MXE9X1AA
INTRA-LAB BLANK	SOIL	BLK	7782-49-2	Se	2.22E-03	U	MG/L	5.00E-02	5.00E-02	1.40E-03	0.2492 L	1.17E-03			11/27/2012 19:30	2332046	46DQ	MXE9X1AA
INTRA-LAB CHECK	SOIL	LCS	7440-22-4	Ag	8.89E-01		MG/L	5.00E-02	5.00E-02	4.80E-03	0.2512 L	3.91E-03	0.89	1	11/27/2012 19:33	2332046	46DQ	MXE9X1AA
INTRA-LAB CHECK	SOIL	LCS	7440-38-2	As	8.94E-01		MG/L	5.00E-02	5.00E-02	1.10E-02	0.2512 L	9.40E-03	0.89	1	11/27/2012 19:33	2332046	46DQ	MXE9X1AA
INTRA-LAB CHECK	SOIL	LCS	7440-39-3	Ba	9.88E-01		MG/L	1.00E-02	1.00E-02	1.00E-02	0.2512 L	8.36E-03	0.99	1	11/27/2012 19:33	2332046	46DQ	MXE9X1AA
INTRA-LAB CHECK	SOIL	LCS	7440-41-7	Beryllium	9.02E-01		MG/L	5.00E-04	5.00E-04	5.30E-03	0.2512 L	4.39E-03	0.9	1	11/27/2012 19:33	2332046	46DQ	MXE9X1AA
INTRA-LAB CHECK	SOIL	LCS	7440-43-9	Cadmium	8.84E-01		MG/L	1.00E-02	1.00E-02	7.90E-03	0.2512 L	6.47E-03	0.88	1	11/27/2012 19:33	2332046	46DQ	MXE9X1AA
INTRA-LAB CHECK	SOIL	LCS	7440-47-3	Chromium	9.19E-01		MG/L	5.00E-02	5.00E-02	3.10E-03	0.2512 L	2.56E-03	0.92	1	11/27/2012 19:33	2332046	46DQ	MXE9X1AA
INTRA-LAB CHECK	SOIL	LCS	7439-92-1	Lead	9.21E-01		MG/L	5.00E-02	5.00E-02	9.40E-03	0.2512 L	7.74E-03	0.92	1	11/27/2012 19:33	2332046	46DQ	MXE9X1AA
INTRA-LAB CHECK	SOIL	LCS	7782-49-2	Se	8.28E-01		MG/L	5.00E-02	5.00E-02	9.60E-03	0.2512 L	7.89E-03	0.83	1	11/27/2012 19:33	2332046	46DQ	MXE9X1AA
J1R609 DUP	SOIL	DUP	7440-22-4	Ag	1.54E-02	U	UG/G	9.93E+00	9.93E+00	2.60E-01	0.2517 G	2.11E-01			11/27/2012 19:56	2332046	46DQ	MXE9N1A0
J1R609 DUP	SOIL	DUP	7440-38-2	As	2.77E+00	U	UG/G	9.93E+00	9.93E+00	7.30E-01	0.2517 G	6.03E-01			11/27/2012 19:56	2332046	46DQ	MXE9N1A0
J1R609 DUP	SOIL	DUP	7440-39-3	Ba	6.89E+01		UG/G	1.99E+00	1.99E+00	8.40E-01	0.2517 G	6.91E-01			11/27/2012 19:56	2332046	46DQ	MXE9N1A0
J1R609 DUP	SOIL	DUP	7440-41-7	Beryllium	3.19E-01		UG/G	9.93E-02	9.93E-02	9.20E-03	0.2517 G	7.55E-03			11/27/2012 19:56	2332046	46DQ	MXE9N1A0
J1R609 DUP	SOIL	DUP	7440-43-9	Cadmium	1.06E-01	U	UG/G	1.99E+00	1.99E+00	1.90E-02	0.2517 G	1.60E-02			11/27/2012 19:56	2332046	46DQ	MXE9N1A0
J1R609 DUP	SOIL	DUP	7440-47-3	Chromium	9.70E+00	U	UG/G	9.93E+00	9.93E+00	1.90E-01	0.2517 G	1.57E-01			11/27/2012 19:56	2332046	46DQ	MXE9N1A0
J1R609 DUP	SOIL	DUP	7439-92-1	Lead	4.84E+00	U	UG/G	9.93E+00	9.93E+00	3.20E-01	0.2517 G	2.63E-01			11/27/2012 19:56	2332046	46DQ	MXE9N1A0
J1R609 DUP	SOIL	DUP	7782-49-2	Se	6.21E-01	U	UG/G	9.93E+00	9.93E+00	4.60E-01	0.2517 G	3.77E-01			11/27/2012 19:56	2332046	46DQ	MXE9N1A0
J1R609	SOIL	MS	7440-22-4	Ag	1.73E+02		% REC	9.96E+00	9.96E+00	3.30E+00	0.251 L	2.70E+00	0.87	199.2	11/27/2012 19:46	2332046	46DQ	MXE9N1A0
J1R609	SOIL	MS	7440-38-2	As	1.78E+02		% REC	9.96E+00	9.96E+00	3.10E+00	0.251 L	2.54E+00	0.89	199.2	11/27/2012 19:46	2332046	46DQ	MXE9N1A0
J1R609	SOIL	MS	7440-39-3	Ba	2.01E+02		% REC	1.99E+00	1.99E+00	3.30E+00	0.251 L	2.70E+00	1.01	199.2	11/27/2012 19:46	2332046	46DQ	MXE9N1A0
J1R609	SOIL	MS	7440-41-7	Beryllium	1.81E+02		% REC	9.96E-02	9.96E-02	4.20E+00	0.251 L	3.44E+00	0.91	199.2	11/27/2012 19:46	2332046	46DQ	MXE9N1A0
J1R609	SOIL	MS	7440-43-9	Cadmium	1.75E+02		% REC	1.99E+00	1.99E+00	1.40E+00	0.251 L	1.16E+00	0.88	199.2	11/27/2012 19:46	2332046	46DQ	MXE9N1A0
J1R609	SOIL	MS	7440-47-3	Chromium	1.81E+02		% REC	9.96E+00	9.96E+00	4.60E+00	0.251 L	3.76E+00	0.91	199.2	11/27/2012 19:46	2332046	46DQ	MXE9N1A0
J1R609	SOIL	MS	7439-92-1	Lead	1.77E+02		% REC	9.96E+00	9.96E+00	2.80E+00	0.251 L	2.30E+00	0.89	199.2	11/27/2012 19:46	2332046	46DQ	MXE9N1A0
J1R609	SOIL	MS	7782-49-2	Se	1.67E+02		% REC	9.96E+00	9.96E+00	4.10E+00	0.251 L	3.39E+00	0.84	199.2	11/27/2012 19:46	2332046	46DQ	MXE9N1A0
J1R609	SOIL	MSD	7440-22-4	Ag	1.71E+02		% REC	9.99E+00	9.99E+00	3.90E+00	0.2503 L	3.22E+00	0.86	199.8	11/27/2012 19:51	2332046	46DQ	MXE9N1A0
J1R609	SOIL	MSD	7440-38-2	As	1.76E+02		% REC	9.99E+00	9.99E+00	3.30E+00	0.2503 L	2.75E+00	0.88	199.8	11/27/2012 19:51	2332046	46DQ	MXE9N1A0
J1R609	SOIL	MSD	7440-39-3	Ba	1.86E+02		% REC	2.00E+00	2.00E+00	1.20E+01	0.2503 L	9.79E+00	0.93	199.8	11/27/2012 19:51	2332046	46DQ	MXE9N1A0
J1R609	SOIL	MSD	7440-41-7	Beryllium	1.77E+02		% REC	9.99E-02	9.99E-02	5.50E+00	0.2503 L	4.55E+00	0.88	199.8	11/27/2012 19:51	2332046	46DQ	MXE9N1A0
J1R609	SOIL	MSD	7440-43-9	Cadmium	1.74E+02		% REC	2.00E+00	2.00E+00	1.80E+00	0.2503 L	1.50E+00	0.87	199.8	11/27/2012 19:51	2332046	46DQ	MXE9N1A0
J1R609	SOIL	MSD	7440-47-3	Chromium	1.75E+02		% REC	9.99E+00	9.99E+00	3.40E+00	0.2503 L	2.78E+00	0.87	199.8	11/27/2012 19:51	2332046	46DQ	MXE9N1A0
J1R609	SOIL	MSD	7439-92-1	Lead	1.75E+02		% REC	9.99E+00	9.99E+00	2.20E+00	0.2503 L	1.78E+00	0.87	199.8	11/27/2012 19:51	2332046	46DQ	MXE9N1A0
J1R609	SOIL	MSD	7782-49-2	Se	1.65E+02		% REC	9.99E+00	9.99E+00	1.40E+00	0.2503 L	1.17E+00	0.82	199.8	11/27/2012 19:51	2332046	46DQ	MXE9N1A0

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		RC-225-077	Page 1 of 1
Collector ~~Brackett, R~~ DUNNUM, A	Company Contact Joan Kessner	Telephone No. (509) 375-4688	Project Coordinator KESSNER, JH	Price Code 8B — Data Turnaround ~~7 Days~~ 24 hr AJ 11-26-12
Project Designation 100K Remaining Waste Sites - Soil In-Process	Sampling Location 100-K-84		SAF No. RC-225	
Ice Chest No. NA	Field Logbook No. EL-1666	COA 010K842600	Method of Shipment ~~FedEx~~ 11-27-12 CMB Hand deliver	
Shipped To TestAmerica Incorporated, Richland	Offsite Property No. NA		Bill of Lading/Air Bill No. ~~See OSPC~~ 11-27-12 CMB NA	

POSSIBLE SAMPLE HAZARDS/REMARKS

None

Special Handling and/or Storage

Cool 4C

J2K270419

J01625

Due 11-28-12

J2K270419

Preservation	Cool 4C	None										
Type of Container	G/P	G/P										
No. of Container(s)	1	1										
Volume	125mL	60g										
	See item (1) in Special Instructions.	RCF GEA Shipping Screen										

Sample No.	Matrix *	Sample Date	Sample Time			RCF						
J1R609 MXE9N	SOIL	11/26/12	1235	X								
J1R610 MXE9P	SOIL	11/26/12	1240	X								
J1R611 MXE9Q	SOIL	11/26/12	1250	X *		35020						

CHAIN OF POSSESSION	Sign/Print Names		
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
[signature]	11-26-12 1300	BHudson BHudson	11/26/12 1300
Relinquished By/Removed From	Date/Time	Received By/Stored In 1060#1	Date/Time
BHUDSON BHudson	11/26/12 1415	A. Freier A. Freier	11-26-12 1415
Relinquished By/Removed From WCH	Date/Time 1040	Received By/Stored In	Date/Time 1040
A. Freier A. Freier	11-27-12 1060#1	J. Beck J. Beck TALK	11-27-12
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time

SPECIAL INSTRUCTIONS

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

* cooling not maintained. AJ 11-27-12

REVIEWED BY CMB DATE 11-27-12

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

Apex™

Analysis Report for RCF35020

J1R611 SAF:RC-225 100K/100-K-84 soil 125ml poly

GAMMA SPECTRUM ANALYSIS

Sample Identification	: RCF35020
Sample Description	: J1R611 SAF:RC-225 100K/100-K-84 soil 125ml poly
Sample Type	: 125 ml Poly Bottle
Sample Size	: 1.670E+02 grams
Facility	: Default
Sample Taken On	: 11/26/2012 12:50:00PM
Acquisition Started	: 11/26/2012 2:52:15PM
Procedure	: 125ml Poly Bottle
Operator	: RCT
Detector Name	: REGIE2
Geometry	: 125 ml Poly Bottle
Live Time	: 7200.0 seconds
Real Time	: 7202.0 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	: 7/9/2012
Efficiency Calibration Used Done On	: 3/11/2012
Efficiency Calibration Description	: REGIE2 125ml PBot EC031012 SN85270-238
Sample Number	: 29396

QUALITATIVE ONLY

INTERFERENCE CORRECTED REPORT

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/grams)	Wt mean Activity Uncertainty	Comments
	K-40		0.992	9.50E+00	1.42E+00	
X	EU-155		0.360			
	PB-212		0.999	7.84E-01	8.43E-02	
	RA-226d	@	0.999	9.29E-01	8.33E-02	
	TH-232d		0.999	5.24E-01	6.58E-02	

Analysis Report for RCF35020

J1R611 SAF:RC-225 100K/100-K-84 soil 125ml poly

	Nuclide Name		Nuclide Id Confidence	Wt mean Activity (pCi/grams)	Wt mean Activity Uncertainty	Comments
X	U-235		0.539			
	U-238d	@	0.997	7.88E-01	5.15E-01	

? = nuclide is part of an undetermined solution
X = nuclide rejected by the interference analysis
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 2.000 sigma

UNIDENTIFIED PEAKS

Peak Locate Performed on : 11/27/2012 7:07:09AM
Peak Locate From Channel : 40
Peak Locate To Channel : 4096

	Peak No.	Energy (keV)	Peak Size (CPS)	Peak CPS (%) Uncertainty	Peak Type	Tolerance Nuclide
m	5	89.84	1.08177E-02	18.79	Tol	Th-232d (Ac-228)

M = First peak in a multiplet region
m = Other peak in a multiplet region
F = Fitted singlet
Errors quoted at 2.000 sigma

NUCLIDE MDA REPORT

Nuclide Library Used : \\WC98582\ApexRoot\Default\Library\RCF UNKNOWN.NLB

	Nuclide Name	Energy (keV)		Yield(%)	Activity (pCi/grams)	Nuclide MDA (pCi/grams)	Line MDA (pCi/grams)
+	K-40	1460.83	*	10.67	9.50E+00	1.31E+00	1.31E+00
	CO-60	1173.24		99.90	9.92E-02	9.18E-02	1.21E-01
		1332.50		99.98	-3.04E-02		9.18E-02
	NB-94	702.63		99.81	-4.35E-03	8.45E-02	8.45E-02
		871.10		99.89	2.08E-02		9.04E-02
	AG-108m	433.94		90.50	-3.74E-02	6.97E-02	6.97E-02
		614.28		89.80	-2.51E-01		1.46E-01
		722.94		90.80	2.63E-02		1.04E-01
	CS-137	661.66		85.21	2.92E-02	1.08E-01	1.08E-01
	EU-152	40.12		38.40	-2.49E-02	9.17E-02	9.17E-02
		45.38		11.10	3.25E-01		3.24E-01
		121.78		28.40	9.11E-02		1.57E-01

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Sample Check-in List

Date/Time Received: 11-27-12 | 1040 Container GM Screen Result: (Airlock) .06 Initials [ ]
Sample GM Screen Result (Sample Receiving) .04 Initials [ ]

Client: WCH SDG #: J01625 NA [ ] SAF #: RC-225-077 NA [ ]
11-27-12

Lot Number: J2K270419

Chain of Custody # RC-225-077

Shipping Container ID: hand deliv. 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: 23 °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): 3
7. Containers received: 3 x 125 mLp
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 [X] No [ ]
*For documentation only. No corrective action needed.

16. Additional Information:

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

Sample Custodian: Jim Bock Date: 11-27-12

Client Informed on _____ by _____ Person contacted _____

[X] No action necessary; process as is

Project Manager [signature] Date 11/27/12

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

[signature] 11-27-12 [signature] 11-27-12

J2K270419 [signature] 11/27/12

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See over for additional information.