

December 19, 2007

Greg Miller
Cabrera Services, Inc.
5301 Montano Plaza Drive NW
Albuquerque, NM 87120

Dear Mr. Miller:

On October 1, 2007, 52 soil samples were received for analysis at the Sanford Cohen and Associates (SC&A) Southeastern Environmental Laboratory. The samples were assigned Laboratory Report Identification Code 7950_7953. Enclosed is the Sample Data Package.

If you have any questions please do not hesitate to call.

Sincerely,



Cynthia White
Laboratory Director

cc: Tony Mason, Cabrera Services

COVER PAGE

Sanford Cohen & Associates
Southeastern Environmental Laboratory
1000 Monticello Court
Montgomery, Alabama 36117

NELAC Certification ID: NLC070001 (AL001)

Laboratory Report Identification Code: 7950_7953

Site Sample Number	Laboratory Sample Number
SB-CZ-SS-2270-ST	OH207-7950-01
SB-CZ-SS-2271-ST	OH207-7950-02
SB-CZ-SS-2272-ST	OH207-7950-03
SB-CZ-SS-2273-ST	OH207-7950-04
SB-CZ-SS-2274-ST	OH207-7950-05
SB-CZ-SS-2275-ST	OH207-7950-06
SB-CZ-SS-2276-ST	OH207-7950-07
SB-CZ-SS-2277-ST	OH207-7950-08
SB-CZ-SS-2278-ST	OH207-7950-09
SB-CZ-SS-2279-ST	OH207-7950-10
SB-CZ-SS-2280-ST	OH207-7950-11
SB-CZ-SS-2281-ST	OH207-7950-12
SB-CZ-SS-2282-ST	OH207-7950-13
SB-CZ-SS-2283-ST	OH207-7950-14
Preparation Blank (PB)	SCAQC-7950-PB1
Laboratory Control (LC)	SCAQC-7950-LC1
Laboratory Duplicate (LD)	SCAQC-7950-LD1

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Southeastern Environmental Laboratory
1000 Monticello Court
Montgomery, Alabama 36117

NELAC Certification ID: NLC070001 (AL001)

Laboratory Report Identification Code: 7950_7953

Site Sample Number	Laboratory Sample Number
SB-CZ-SS-2270-SD	OH207-7951-01
SB-CZ-SS-2271-SD	OH207-7951-02
SB-CZ-SS-2272-SD	OH207-7951-03
SB-CZ-SS-2273-SD	OH207-7951-04
SB-CZ-SS-2274-SD	OH207-7951-05
SB-CZ-SS-2275-SD	OH207-7951-06
SB-CZ-SS-2276-SD	OH207-7951-07
SB-CZ-SS-2277-SD	OH207-7951-08
SB-CZ-SS-2278-SD	OH207-7951-09
SB-CZ-SS-2279-SD	OH207-7951-10
SB-CZ-SS-2280-SD	OH207-7951-11
SB-CZ-SS-2281-SD	OH207-7951-12
SB-CZ-SS-2282-SD	OH207-7951-13
SB-CZ-SS-2283-SD	OH207-7951-14
Preparation Blank (PB)	SCAQC-7951-PB1
Laboratory Control (LC)	SCAQC-7951-LC1
Laboratory Duplicate (LD)	SCAQC-7951-LD1

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Southeastern Environmental Laboratory
1000 Monticello Court
Montgomery, Alabama 36117

NELAC Certification ID: NLC070001 (AL001)

Laboratory Report Identification Code: 7950_7953

Site Sample Number	Laboratory Sample Number
SB-CZ-SS-2284-ST	OH207-7952-01
SB-CZ-SS-2285-ST	OH207-7952-02
SB-CZ-SS-2286-ST	OH207-7952-03
SB-CZ-SS-2287-ST	OH207-7952-04
SB-CZ-SS-2288-ST	OH207-7952-05
SB-CZ-SS-2289-ST	OH207-7952-06
SB-CZ-SS-2290-ST	OH207-7952-07
SB-CZ-SS-2291-ST	OH207-7952-08
SB-CZ-SS-2292-ST	OH207-7952-09
SB-CZ-SS-2293-ST	OH207-7952-10
SB-CZ-SS-2294-ST	OH207-7952-11
SB-CZ-SS-2295-ST	OH207-7952-12
Preparation Blank (PB)	SCAQC-7952-PB1
Laboratory Control (LC)	SCAQC-7952-LC1
Laboratory Duplicate (LD)	SCAQC-7952-LD1

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Sanford Cohen & Associates
Southeastern Environmental Laboratory
1000 Monticello Court
Montgomery, Alabama 36117

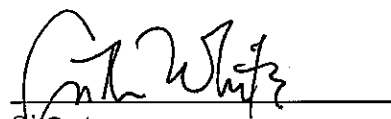
NELAC Certification ID: NLC070001 (AL001)

Laboratory Report Identification Code: 7950_7953

Site Sample Number	Laboratory Sample Number
SB-CZ-SS-2284-SD	OH207-7953-01
SB-CZ-SS-2285-SD	OH207-7953-02
SB-CZ-SS-2286-SD	OH207-7953-03
SB-CZ-SS-2287-SD	OH207-7953-04
SB-CZ-SS-2288-SD	OH207-7953-05
SB-CZ-SS-2289-SD	OH207-7953-06
SB-CZ-SS-2290-SD	OH207-7953-07
SB-CZ-SS-2291-SD	OH207-7953-08
SB-CZ-SS-2292-SD	OH207-7953-09
SB-CZ-SS-2293-SD	OH207-7953-10
SB-CZ-SS-2294-SD	OH207-7953-11
SB-CZ-SS-2295-SD	OH207-7953-12
Preparation Blank (PB)	SCAQC-7953-PB1
Laboratory Control (LC)	SCAQC-7953-LC1
Laboratory Duplicate (LD)	SCAQC-7953-LD1

Comments: There were no problems encountered during sample receiving.

"I certify that this sample data package is in compliance with contract requirements, both technically and for completeness. Release of the data contained in this hard-copy sample data package has been authorized by the Laboratory Director or the Laboratory Director designee, as verified by the following signature."


Signature

Cynthia White
Name

Laboratory Director
Title

12/19/2007
Date

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CHAIN OF CUSTODY RECORD		PROJECT NAME: Schofield CZ		ANALYSIS REQUESTED		FOR LABORATORY USE	
WORK ASSIGNMENT # 07-3080.04		Client Name: JMC		Gamm # of C O N T A I N E R S		Laboratory Prefix	
Project Manager: Greg Miller							
Requested Comp. Date							
Notify Upon Receipt?							
COC# 31							
Item No.	Date	Time	Matrix	Sample I.D.			
1	9/27/2007		Soil	SB-CZ-SS-2270-ST	1	X	
2	9/27/2007		Soil	SB-CZ-SS-2271-ST	1	X	
3	9/27/2007		Soil	SB-CZ-SS-2272-ST	1	X	
4	9/27/2007		Soil	SB-CZ-SS-2273-ST	1	X	
5	9/27/2007		Soil	SB-CZ-SS-2274-ST	1	X	
6	9/27/2007		Soil	SB-CZ-SS-2275-ST	1	X	
7	9/27/2007		Soil	SB-CZ-SS-2276-ST	1	X	
8	9/27/2007		Soil	SB-CZ-SS-2277-ST	1	X	
9	9/27/2007		Soil	SB-CZ-SS-2278-ST	1	X	
10	9/27/2007		Soil	SB-CZ-SS-2279-ST	1	X	
11	9/27/2007		Soil	SB-CZ-SS-2280-ST	1	X	
12	9/27/2007		Soil	SB-CZ-SS-2281-ST	1	X	
13	9/27/2007		Soil	SB-CZ-SS-2282-ST	1	X	
14	9/27/2007		Soil	SB-CZ-SS-2283-ST	1	X	
Relinquished by: Alfred Crata FSP				Date/Time	9-27-07		
Relinquished by:				Date/Time			
Relinquished by:				Date/Time			
Remarks:				Sample shipped via			
Received by: C. Quana				Date/Time	9/15		
Received by: C. Quana				Date/Time	11/01		
Remarks:				LUPS FED-EX HAND OTHER			

SC & A 1000 MONTICELLO COURT MONTGOMERY, AL 36117		(334) 272-2234 (334) 213-0407 FAX		FOR LABORATORY USE	
WORK ASSIGNMENT # 07-3080.04		PROJECT NAME: Schofield CZ		ANALYSIS REQUESTED	
Client Name: JMC		# of CONTAINERS		Laboratory Prefix	
Project Manager: Greg Miller		Notify Upon Receipt?		Study I.D. Pg 2 of 4	
Requested Comp. Date		Sample I.D.		Laboratory	
COC# 31		M951		Comments	
Item No.	Date	Time	Matrix	Canim a Spec & Lead	Comments
1	9/27/2007		Soil	X	
2	9/27/2007		Soil	X	
3	9/27/2007		Soil	X	
4	9/27/2007		Soil	X	
5	9/27/2007		Soil	X	
6	9/27/2007		Soil	X	
7	9/27/2007		Soil	X	
8	9/27/2007		Soil	X	
9	9/27/2007		Soil	X	
10	9/27/2007		Soil	X	
11	9/27/2007		Soil	X	
12	9/27/2007		Soil	X	
13	9/27/2007		Soil	X	
14	9/27/2007		Soil	X	
Sampled by and Title: Alfred Crata FSP		Date/Time		OC Level 1 2 3	
Received by: C. Quane, Sr.		Date/Time		COC ICF	
Relinquished by: 19/07/07		Date/Time		ANA TEMP	
Relinquished by: 19/07/07		Date/Time		REQ	
Remarks:		Sample shipped via		Cust Seal pH	
		UPS FED-EX HAND OTHER		Sample	

SC & A 1000 MONTICELLO COURT CHAIN OF CUSTODY RECORD		MONTGOMERY, AL 36117 PROJECT NAME: Schofield CZ		(334) 272-2234 (334) 213-0407 FAX ANALYSIS REQUESTED		FOR LABORATORY USE	
Client Name: JMC		PROJECT NAME: Schofield CZ		Gamm & Spec & Lead		Laboratory Prefix	
Project Manager: Greg Miller		Notify Upon Receipt?		# of C O N T A I N E R S		Study I.D. Pg 3 of 4	
Requested Comp. Date		Sample I.D.		Laboratory		Comments	
COC# 31							
Item No.	Date	Time	Matrix				
1	9/27/2007		Soil	SB-CZ-SS-2284-ST	1	X	
2	9/27/2007		Soil	SB-CZ-SS-2285-ST	1	X	
3	9/27/2007		Soil	SB-CZ-SS-2286-ST	1	X	
4	9/27/2007		Soil	SB-CZ-SS-2287-ST	1	X	
5	9/27/2007		Soil	SB-CZ-SS-2288-ST	1	X	
6	9/27/2007		Soil	SB-CZ-SS-2289-ST	1	X	
7	9/27/2007		Soil	SB-CZ-SS-2290-ST	1	X	
8	9/27/2007		Soil	SB-CZ-SS-2291-ST	1	X	
9	9/27/2007		Soil	SB-CZ-SS-2292-ST	1	X	
10	9/27/2007		Soil	SB-CZ-SS-2293-ST	1	X	
11	9/27/2007		Soil	SB-CZ-SS-2294-ST	1	X	
12	9/27/2007		Soil	SB-CZ-SS-2295-ST	1	X	
13							
14							
Sampled by and Title: Alfred Crain FSP		Date/Time: 9-27-07		Relinquished by: Alfred Crain FSP		Date/Time: 9-27-07	
Received by: J. Quail, Sr. A		Date/Time: 10/01/07		Relinquished by:		Date/Time:	
Remarks:		Sample shipped via		Air Bill #		Cust Seal pH	
		UPS FED-EX HAND OTHER				Sample	

SC & A 1000 MONTICELLO COURT
 CHAIN OF CUSTODY RECORD MONTGOMERY, AL 36117 (334) 272-2234 (334)213-0407 FAX
 WORK ASSIGNMENT # PROJECT NAME: ANALYSIS REQUESTED
 07-3080.04 Schofield CZ

FOR LABORATORY USE			
Laboratory Prefix		Study I.D.	
Laboratory		Comments	
7953		Pg 4 of 4	
# of CONTAINERS	Garment & Spec & Lead	Date/Time	OC Level 1 2 3
1	X	9/27/2007	COC ICE
2	X	9/27/2007	ANA TEMP
3	X	9/27/2007	REQ
4	X	9/27/2007	Cust. Seal
5	X	9/27/2007	pH
6	X	9/27/2007	Sample
7	X	9/27/2007	
8	X	9/27/2007	
9	X	9/27/2007	
10	X	9/27/2007	
11	X	9/27/2007	
12	X	9/27/2007	
13	X	9/27/2007	
14	X	9/27/2007	
Relinquished by: Alfred Crata FSP		Date/Time	
Relinquished by:		Date/Time	
Relinquished by:		Date/Time	
Sample shipped via		Air Bill #	
UPS FED-EX HAND OTHER			

Project Manager: Greg Miller
 Requested Comp. Date

Notify Upon Receipt?

Item No.	Date	Time	Matrix	Sample I.D.
1	9/27/2007		Soil	SB-CZ-SS-2284-SD
2	9/27/2007		Soil	SB-CZ-SS-2285-SD
3	9/27/2007		Soil	SB-CZ-SS-2286-SD
4	9/27/2007		Soil	SB-CZ-SS-2287-SD
5	9/27/2007		Soil	SB-CZ-SS-2288-SD
6	9/27/2007		Soil	SB-CZ-SS-2289-SD
7	9/27/2007		Soil	SB-CZ-SS-2290-SD
8	9/27/2007		Soil	SB-CZ-SS-2291-SD
9	9/27/2007		Soil	SB-CZ-SS-2292-SD
10	9/27/2007		Soil	SB-CZ-SS-2293-SD
11	9/27/2007		Soil	SB-CZ-SS-2294-SD
12	9/27/2007		Soil	SB-CZ-SS-2295-SD

Sampled by and Title: Alfred Crata FSP

Received by: *C. Crata*

Received by: *Alfred Crata*

Remarks:

7946 7948 7950 7952 7954 7956
7947 7949 7951 7953 7955 7957 Sol

SAMPLE RECEIPT CHECKLIST

Receipt Date/Time: 10/11/07 9:15 # of Boxes in Shipment: 3

Client: 04201

Visible Inspection:

Container Intact: ☒ Yes ☐ No
Any Leakage: ☐ Yes ☒ No
Airbill Present: ☒ Yes ☐ No
Tamper Proof Custody Seals: ☒ Yes ☐ No
Custody Seal No.'s: 7913 9913 4031
7987 7407 1013
0022 9952 0027

External Survey: Gamma ☒
Alpha ☒
Beta/Gamma ☒
Contamination: ☐ Yes ☒ No
Contamination: ☐ Yes ☒ No
Contamination: ☐ Yes ☒ No

External Smear: ☐ Yes ☒ No Contamination: ☐ Yes ☒ No

Internal Survey: Gamma ☒
Alpha ☒
Beta/Gamma ☒
Contamination: ☐ Yes ☒ No
Contamination: ☐ Yes ☒ No
Contamination: ☐ Yes ☒ No

Internal Smear: ☐ Yes ☒ No Contamination: ☐ Yes ☒ No

If Contamination, Date/Time RSO contacted: _____

Chain-of-Custody: ☒ Yes ☐ No Packing List: ☐ Yes ☒ No

Tamper Proof Custody Seals: ☐ Yes ☒ No Intact: ☐ Yes ☒ No

Custody Seal No.'s: _____

Water Samples Received Filtered: ☐ Yes ☐ No ☒ N/A ☐ Not Specified

Water Samples Received Preserved: ☐ Yes ☐ No ☒ N/A
Water Samples Preserved in Laboratory: ☐ Yes ☐ No ☒ N/A Date: _____ Time: _____

Is the Chain-of-Custody in Agreement with the Samples Received? ☐ Yes ☒ No

If any discrepancies, Date/Time Client Contacted: Sample containers didn't have collection dates and times
Sample 2248 was received on Chain of Custody number
29 + 30
Therefore sample will remain in Chain of Custody #29

Assigned SC&A Sample Numbers: ☐ Prepared Bench Sheets: ☒

Recorded Lab Sample No.'s on COC: ☒ Sample Acknowledgment: ☒

Signature: C. Owens

SC&A - Southeastern Environmental Laboratory
SCA-Form 301-2 Rev. 1

CASE NARRATIVE

Laboratory Report Identification Number: 7950_7953

NELAC Certification ID: NLC070001 (AL001)

December 19, 2007

I. Introduction

On October 1, 2007, 52 soil samples were received for analysis at the Sanford Cohen and Associates (SC&A) Southeastern Environmental Laboratory located in Montgomery, Alabama. The samples were analyzed in accordance with the Sanford Cohen and Associates, Southeastern Environmental Laboratory, Laboratory Quality Assurance Plan.

II. Analytical Methodology

The radioanalytical results reported for the samples include the site and laboratory sample identification numbers, collection date, method of analysis, and the quality control samples that were analyzed concurrently. The samples were analyzed by the following method.

Radionuclide	Method Number	Method Name	Counting Method
Gamma Spec	DOE 4.5.2.3	Gamma Emitting Radionuclides	Gamma Spectrometry
Lead*	SW846 6010C	Elemental Lead	ICP-AES

*Analyzed by GPL Laboratories in Frederick, MD.

III. Analytical Results

Discussion

These samples were received at SC&A under USDA Soil Permit No. S-76792 and dried and handled in accordance with this permit. After drying and homogenizing each sample, approximately 10 grams were removed, packaged, and shipped to GPL Laboratories in Frederick, MD under their USDA Soil Permit No. S-73685.

Approximately 400 grams-dry was prepared in SC&A's 400 mL sand gamma geometry and counted for three hours in order to meet the RDL of 0.5 pCi/g for Th-234.

III. Analytical Results (continued)

Deficiencies

There were no deficiencies to report.

Matrix Interferences

There were no indications of matrix interference.

Detection Limits

The required detection limit (RDL) of 0.5 grams-dry for Th-234 was met for most samples, and the RDL of 2 ppm for the lead analysis performed by GPL Laboratories was also met for all samples.

Re-analysis

There were no re-analyses.

Deviations from Protocols

There were no deviations from the written protocols and analytical methods.

Contact with the Technical Representative

There was no contact with the Technical Representative regarding these samples.

IV. Quality Control

SC&A QC Information - *Gamma*

Site Sample Number	Laboratory Sample Number	Quality Control Type
Laboratory Type II Water	SCAQC-7950-PB1	Preparation Blank
Mixed Gamma Std (S142)	SCAQC-7950-LC1	Laboratory Control
SB-CS-SS-2270-ST	SCAQC-7950-LD1	Laboratory Duplicate

SC&A QC Information - *Gamma*

Site Sample Number	Laboratory Sample Number	Quality Control Type
Laboratory Type II Water	SCAQC-7951-PB1	Preparation Blank
Mixed Gamma Std (S142)	SCAQC-7951-LC1	Laboratory Control
SB-CZ-SS-2270-SD	SCAQC-7951-LD1	Laboratory Duplicate

IV. Quality Control (continued)

SC&A QC Information - *Gamma*

Site Sample Number	Laboratory Sample Number	Quality Control Type
Laboratory Type II Water	SCAQC-7952-PB1	Preparation Blank
Mixed Gamma Std (S142)	SCAQC-7952-LC1	Laboratory Control
SB-CZ-SS-2284-ST	SCAQC-7952-LD1	Laboratory Duplicate

SC&A QC Information - *Gamma*

Site Sample Number	Laboratory Sample Number	Quality Control Type
Laboratory Type II Water	SCAQC-7953-PB1	Preparation Blank
Mixed Gamma Std (S142)	SCAQC-7953-LC1	Laboratory Control
SB-CZ-SS-2284-SD	SCAQC-7953-LD1	Laboratory Duplicate

GPL QC Information - *Lead*

Site Sample Number	Laboratory Sample Number	Quality Control Type
NA	BLK101635	Preparation Blank
NA	BKS101635	Laboratory Control
SB-CZ-SS-2270-ST	SP710156-001-001-1/1	MS/MSD

GPL QC Information - *Lead*

Site Sample Number	Laboratory Sample Number	Quality Control Type
NA	BLK101637	Preparation Blank
NA	BKS101637	Laboratory Control
SB-CZ-SS-2276-SD	SP710156-021-021-1/1	MS/MSD

GPL QC Information - *Lead*

Site Sample Number	Laboratory Sample Number	Quality Control Type
NA	BLK101636	Preparation Blank
NA	BKS101636	Laboratory Control
SB-CZ-SS-2284-ST	SP710156-041-041-1/1	MS/MSD

The analytical results of all quality control samples met the acceptance criteria specified in the SC&A's and GPL's QA Plans and any client supplied requirements.

Sincerely,



Cynthia White
Laboratory Director

12/19/2007
Date

SAMPLE AND QC RESULTS SUMMARY

SC&A, Inc.
Southeastern Environmental Laboratory

Sanford Cohen & Associates
Southeastern Environmental Laboratory

Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2270-ST</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7950</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7950-01	12/04/07 14:46	6.88	0.748	1.02	0.246
DOE 4.5.2.3	CO-60	OH207-7950-01	12/04/07 14:46	0.013	0.018	0.018	0.030
DOE 4.5.2.3	RH-101	OH207-7950-01	12/04/07 14:46	0.008	0.019	0.019	0.032
DOE 4.5.2.3	SB-125	OH207-7950-01	12/04/07 14:46	0.020	0.050	0.050	0.088
DOE 4.5.2.3	CS-137	OH207-7950-01	12/04/07 14:46	0.367	0.056	0.067	0.036
DOE 4.5.2.3	EU-155	OH207-7950-01	12/04/07 14:46	0.063	0.069	0.069	0.119
DOE 4.5.2.3	TL-208	OH207-7950-01	12/04/07 14:46	0.364	0.054	0.065	0.031
DOE 4.5.2.3	PO-209	OH207-7950-01	12/04/07 14:46	-1.75	3.43	3.43	5.75
DOE 4.5.2.3	BI-211	OH207-7950-01	12/04/07 14:46	-0.416	0.517	0.519	0.854
DOE 4.5.2.3	BI-212	OH207-7950-01	12/04/07 14:46	0.640	0.239	0.247	0.241
DOE 4.5.2.3	PB-212	OH207-7950-01	12/04/07 14:46	1.14	0.105	0.155	0.049
DOE 4.5.2.3	BI-214	OH207-7950-01	12/04/07 14:46	0.989	0.137	0.169	0.056
DOE 4.5.2.3	PB-214	OH207-7950-01	12/04/07 14:46	1.06	0.126	0.165	0.060
DOE 4.5.2.3	RA-223	OH207-7950-01	12/04/07 14:46	0.091	0.110	0.111	0.150
DOE 4.5.2.3	AC-228	OH207-7950-01	12/04/07 14:46	1.38	0.186	0.231	0.111
DOE 4.5.2.3	PA-233	OH207-7950-01	12/04/07 14:46	-0.006	0.032	0.032	0.055
DOE 4.5.2.3	PA-234M	OH207-7950-01	12/04/07 14:46	0.307	2.04	2.04	3.62
DOE 4.5.2.3	TH-234	OH207-7950-01	12/04/07 14:46	1.66	0.411	0.443	0.690
DOE 4.5.2.3	U-235	OH207-7950-01	12/04/07 14:46	-0.022	0.114	0.114	0.188
DOE 4.5.2.3	NP-236	OH207-7950-01	12/04/07 14:46	-0.001	0.041	0.041	0.067
DOE 4.5.2.3	NP-237	OH207-7950-01	12/04/07 14:46	0.477	0.196	0.202	0.240
DOE 4.5.2.3	NP-239	OH207-7950-01	12/04/07 14:46	-0.037	0.123	0.123	0.198
DOE 4.5.2.3	AM-241	OH207-7950-01	12/04/07 14:46	-0.005	0.110	0.110	0.190
DOE 4.5.2.3	AM-243	OH207-7950-01	12/04/07 14:46	0.261	0.073	0.078	0.062
DOE 4.5.2.3	CM-243	OH207-7950-01	12/04/07 14:46	-0.021	0.062	0.062	0.103
DOE 4.5.2.3	AM-246	OH207-7950-01	12/04/07 14:46	0.015	0.061	0.061	0.108
DOE 4.5.2.3	CF-249	OH207-7950-01	12/04/07 14:46	0.020	0.022	0.022	0.039

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7950-LC1	SCAQC-7950-LD1		SCAQC-7950-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2271-ST</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7950</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7950-02	12/04/07 11:39	4.61	0.574	0.736	0.320
DOE 4.5.2.3	CO-60	OH207-7950-02	12/04/07 11:39	-0.005	0.021	0.021	0.036
DOE 4.5.2.3	RH-101	OH207-7950-02	12/04/07 11:39	-0.020	0.020	0.020	0.032
DOE 4.5.2.3	SB-125	OH207-7950-02	12/04/07 11:39	0.007	0.054	0.054	0.095
DOE 4.5.2.3	CS-137	OH207-7950-02	12/04/07 11:39	0.254	0.046	0.053	0.038
DOE 4.5.2.3	EU-155	OH207-7950-02	12/04/07 11:39	0.064	0.058	0.059	0.103
DOE 4.5.2.3	TL-208	OH207-7950-02	12/04/07 11:39	0.315	0.053	0.062	0.078
DOE 4.5.2.3	PO-209	OH207-7950-02	12/04/07 11:39	-1.32	4.08	4.09	7.10
DOE 4.5.2.3	BI-211	OH207-7950-02	12/04/07 11:39	-0.290	0.599	0.600	0.988
DOE 4.5.2.3	BI-212	OH207-7950-02	12/04/07 11:39	0.703	0.304	0.312	0.269
DOE 4.5.2.3	PB-212	OH207-7950-02	12/04/07 11:39	0.806	0.098	0.127	0.074
DOE 4.5.2.3	BI-214	OH207-7950-02	12/04/07 11:39	0.637	0.102	0.120	0.070
DOE 4.5.2.3	PB-214	OH207-7950-02	12/04/07 11:39	0.645	0.097	0.116	0.067
DOE 4.5.2.3	RA-223	OH207-7950-02	12/04/07 11:39	0.287	0.174	0.176	0.177
DOE 4.5.2.3	AC-228	OH207-7950-02	12/04/07 11:39	0.899	0.162	0.185	0.128
DOE 4.5.2.3	PA-233	OH207-7950-02	12/04/07 11:39	0.017	0.037	0.037	0.064
DOE 4.5.2.3	PA-234M	OH207-7950-02	12/04/07 11:39	1.22	2.42	2.42	4.44
DOE 4.5.2.3	TH-234	OH207-7950-02	12/04/07 11:39	1.02	0.405	0.417	0.557
DOE 4.5.2.3	U-235	OH207-7950-02	12/04/07 11:39	0.202	0.123	0.124	0.217
DOE 4.5.2.3	NP-236	OH207-7950-02	12/04/07 11:39	0.031	0.038	0.038	0.056
DOE 4.5.2.3	NP-237	OH207-7950-02	12/04/07 11:39	0.426	0.171	0.176	0.171
DOE 4.5.2.3	NP-239	OH207-7950-02	12/04/07 11:39	-0.034	0.132	0.132	0.221
DOE 4.5.2.3	AM-241	OH207-7950-02	12/04/07 11:39	-0.112	0.042	0.043	0.062
DOE 4.5.2.3	AM-243	OH207-7950-02	12/04/07 11:39	0.194	0.054	0.057	0.033
DOE 4.5.2.3	CM-243	OH207-7950-02	12/04/07 11:39	0.014	0.052	0.052	0.091
DOE 4.5.2.3	AM-246	OH207-7950-02	12/04/07 11:39	0.008	0.068	0.068	0.123
DOE 4.5.2.3	CF-249	OH207-7950-02	12/04/07 11:39	0.016	0.024	0.024	0.042

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7950-LC1	SCAQC-7950-LD1		SCAQC-7950-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2272-ST</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7950</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7950-03	12/04/07 14:47	9.41	0.860	1.28	0.249
DOE 4.5.2.3	CO-60	OH207-7950-03	12/04/07 14:47	-0.013	0.018	0.018	0.028
DOE 4.5.2.3	RH-101	OH207-7950-03	12/04/07 14:47	-0.009	0.019	0.019	0.031
DOE 4.5.2.3	SB-125	OH207-7950-03	12/04/07 14:47	0.015	0.049	0.049	0.084
DOE 4.5.2.3	CS-137	OH207-7950-03	12/04/07 14:47	0.387	0.057	0.068	0.031
DOE 4.5.2.3	EU-155	OH207-7950-03	12/04/07 14:47	0.051	0.067	0.067	0.114
DOE 4.5.2.3	TL-208	OH207-7950-03	12/04/07 14:47	0.401	0.061	0.073	0.029
DOE 4.5.2.3	PO-209	OH207-7950-03	12/04/07 14:47	-2.52	3.39	3.40	5.49
DOE 4.5.2.3	BI-211	OH207-7950-03	12/04/07 14:47	-0.434	0.514	0.516	0.840
DOE 4.5.2.3	BI-212	OH207-7950-03	12/04/07 14:47	0.904	0.266	0.281	0.234
DOE 4.5.2.3	PB-212	OH207-7950-03	12/04/07 14:47	1.19	0.108	0.160	0.049
DOE 4.5.2.3	BI-214	OH207-7950-03	12/04/07 14:47	1.23	0.156	0.199	0.057
DOE 4.5.2.3	PB-214	OH207-7950-03	12/04/07 14:47	1.20	0.128	0.175	0.060
DOE 4.5.2.3	RA-223	OH207-7950-03	12/04/07 14:47	0.430	0.163	0.168	0.157
DOE 4.5.2.3	AC-228	OH207-7950-03	12/04/07 14:47	1.28	0.180	0.221	0.112
DOE 4.5.2.3	PA-233	OH207-7950-03	12/04/07 14:47	0.021	0.032	0.032	0.056
DOE 4.5.2.3	PA-234M	OH207-7950-03	12/04/07 14:47	0.961	2.14	2.14	3.83
DOE 4.5.2.3	TH-234	OH207-7950-03	12/04/07 14:47	1.21	0.428	0.444	0.639
DOE 4.5.2.3	U-235	OH207-7950-03	12/04/07 14:47	0.123	0.122	0.123	0.204
DOE 4.5.2.3	NP-236	OH207-7950-03	12/04/07 14:47	0.005	0.041	0.041	0.065
DOE 4.5.2.3	NP-237	OH207-7950-03	12/04/07 14:47	0.880	0.236	0.252	0.226
DOE 4.5.2.3	NP-239	OH207-7950-03	12/04/07 14:47	0.014	0.116	0.116	0.200
DOE 4.5.2.3	AM-241	OH207-7950-03	12/04/07 14:47	-0.003	0.100	0.100	0.170
DOE 4.5.2.3	AM-243	OH207-7950-03	12/04/07 14:47	0.237	0.065	0.069	0.059
DOE 4.5.2.3	CM-243	OH207-7950-03	12/04/07 14:47	-0.013	0.060	0.060	0.100
DOE 4.5.2.3	AM-246	OH207-7950-03	12/04/07 14:47	-0.013	0.061	0.061	0.103
DOE 4.5.2.3	CF-249	OH207-7950-03	12/04/07 14:47	9.8e-04	0.022	0.022	0.037

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7950-LC1	SCAQC-7950-LD1		SCAQC-7950-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2273-ST</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7950</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7950-04	12/04/07 14:47	8.75	0.804	1.19	0.292
DOE 4.5.2.3	CO-60	OH207-7950-04	12/04/07 14:47	0.007	0.021	0.021	0.032
DOE 4.5.2.3	RH-101	OH207-7950-04	12/04/07 14:47	-0.009	0.021	0.021	0.034
DOE 4.5.2.3	SB-125	OH207-7950-04	12/04/07 14:47	-0.002	0.053	0.053	0.092
DOE 4.5.2.3	CS-137	OH207-7950-04	12/04/07 14:47	0.199	0.041	0.045	0.040
DOE 4.5.2.3	EU-155	OH207-7950-04	12/04/07 14:47	0.064	0.061	0.061	0.106
DOE 4.5.2.3	TL-208	OH207-7950-04	12/04/07 14:47	0.427	0.057	0.071	0.033
DOE 4.5.2.3	PO-209	OH207-7950-04	12/04/07 14:47	-1.58	4.09	4.10	7.01
DOE 4.5.2.3	BI-211	OH207-7950-04	12/04/07 14:47	-0.458	0.638	0.639	1.03
DOE 4.5.2.3	BI-212	OH207-7950-04	12/04/07 14:47	0.629	0.267	0.274	0.277
DOE 4.5.2.3	PB-212	OH207-7950-04	12/04/07 14:47	1.32	0.118	0.177	0.057
DOE 4.5.2.3	BI-214	OH207-7950-04	12/04/07 14:47	1.20	0.129	0.176	0.062
DOE 4.5.2.3	PB-214	OH207-7950-04	12/04/07 14:47	1.34	0.137	0.192	0.067
DOE 4.5.2.3	RA-223	OH207-7950-04	12/04/07 14:47	0.434	0.201	0.206	0.175
DOE 4.5.2.3	AC-228	OH207-7950-04	12/04/07 14:47	1.45	0.218	0.262	0.123
DOE 4.5.2.3	PA-233	OH207-7950-04	12/04/07 14:47	0.009	0.037	0.037	0.062
DOE 4.5.2.3	PA-234M	OH207-7950-04	12/04/07 14:47	0.342	2.37	2.37	4.16
DOE 4.5.2.3	TH-234	OH207-7950-04	12/04/07 14:47	1.58	0.412	0.441	0.388
DOE 4.5.2.3	U-235	OH207-7950-04	12/04/07 14:47	0.103	0.124	0.125	0.214
DOE 4.5.2.3	NP-236	OH207-7950-04	12/04/07 14:47	-0.032	0.039	0.040	0.057
DOE 4.5.2.3	NP-237	OH207-7950-04	12/04/07 14:47	0.777	0.176	0.192	0.169
DOE 4.5.2.3	NP-239	OH207-7950-04	12/04/07 14:47	-0.049	0.137	0.137	0.228
DOE 4.5.2.3	AM-241	OH207-7950-04	12/04/07 14:47	0.030	0.040	0.041	0.060
DOE 4.5.2.3	AM-243	OH207-7950-04	12/04/07 14:47	0.211	0.051	0.056	0.035
DOE 4.5.2.3	CM-243	OH207-7950-04	12/04/07 14:47	-0.003	0.054	0.054	0.092
DOE 4.5.2.3	AM-246	OH207-7950-04	12/04/07 14:47	0.045	0.073	0.073	0.133
DOE 4.5.2.3	CF-249	OH207-7950-04	12/04/07 14:47	0.019	0.023	0.023	0.041

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7950-LC1	SCAQC-7950-LD1		SCAQC-7950-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2274-ST</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7950</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7950-05	12/04/07 17:47	3.00	0.421	0.517	0.206
DOE 4.5.2.3	CO-60	OH207-7950-05	12/04/07 17:47	0.006	0.015	0.015	0.022
DOE 4.5.2.3	RH-101	OH207-7950-05	12/04/07 17:47	0.007	0.017	0.017	0.028
DOE 4.5.2.3	SB-125	OH207-7950-05	12/04/07 17:47	0.035	0.044	0.044	0.079
DOE 4.5.2.3	CS-137	OH207-7950-05	12/04/07 17:47	0.206	0.042	0.047	0.031
DOE 4.5.2.3	EU-155	OH207-7950-05	12/04/07 17:47	0.057	0.060	0.060	0.104
DOE 4.5.2.3	TL-208	OH207-7950-05	12/04/07 17:47	0.298	0.047	0.056	0.028
DOE 4.5.2.3	PO-209	OH207-7950-05	12/04/07 17:47	-2.57	2.99	3.00	4.82
DOE 4.5.2.3	BI-211	OH207-7950-05	12/04/07 17:47	-0.344	0.442	0.443	0.732
DOE 4.5.2.3	BI-212	OH207-7950-05	12/04/07 17:47	0.510	0.219	0.224	0.199
DOE 4.5.2.3	PB-212	OH207-7950-05	12/04/07 17:47	0.907	0.087	0.126	0.043
DOE 4.5.2.3	BI-214	OH207-7950-05	12/04/07 17:47	0.963	0.131	0.163	0.054
DOE 4.5.2.3	PB-214	OH207-7950-05	12/04/07 17:47	0.924	0.108	0.142	0.056
DOE 4.5.2.3	RA-223	OH207-7950-05	12/04/07 17:47	0.305	0.158	0.161	0.140
DOE 4.5.2.3	AC-228	OH207-7950-05	12/04/07 17:47	0.898	0.144	0.170	0.093
DOE 4.5.2.3	PA-233	OH207-7950-05	12/04/07 17:47	0.019	0.029	0.029	0.052
DOE 4.5.2.3	PA-234M	OH207-7950-05	12/04/07 17:47	1.66	1.74	1.75	3.32
DOE 4.5.2.3	TH-234	OH207-7950-05	12/04/07 17:47	1.17	0.442	0.457	0.452
DOE 4.5.2.3	U-235	OH207-7950-05	12/04/07 17:47	-0.010	0.106	0.106	0.174
DOE 4.5.2.3	NP-236	OH207-7950-05	12/04/07 17:47	-0.023	0.036	0.036	0.056
DOE 4.5.2.3	NP-237	OH207-7950-05	12/04/07 17:47	0.654	0.216	0.226	0.216
DOE 4.5.2.3	NP-239	OH207-7950-05	12/04/07 17:47	-0.023	0.110	0.110	0.178
DOE 4.5.2.3	AM-241	OH207-7950-05	12/04/07 17:47	0.002	0.105	0.105	0.164
DOE 4.5.2.3	AM-243	OH207-7950-05	12/04/07 17:47	0.224	0.066	0.070	0.052
DOE 4.5.2.3	CM-243	OH207-7950-05	12/04/07 17:47	-0.054	0.055	0.055	0.089
DOE 4.5.2.3	AM-246	OH207-7950-05	12/04/07 17:47	0.020	0.046	0.046	0.085
DOE 4.5.2.3	CF-249	OH207-7950-05	12/04/07 17:47	0.012	0.019	0.019	0.033

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7950-LC1	SCAQC-7950-LD1		SCAQC-7950-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2275-ST</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7950</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7950-06	12/04/07 17:49	2.04	0.400	0.450	0.214
DOE 4.5.2.3	CO-60	OH207-7950-06	12/04/07 17:49	-6.5e-04	0.014	0.014	0.022
DOE 4.5.2.3	RH-101	OH207-7950-06	12/04/07 17:49	-7.1e-04	0.016	0.016	0.026
DOE 4.5.2.3	SB-125	OH207-7950-06	12/04/07 17:49	-0.027	0.043	0.043	0.071
DOE 4.5.2.3	CS-137	OH207-7950-06	12/04/07 17:49	0.207	0.042	0.047	0.026
DOE 4.5.2.3	EU-155	OH207-7950-06	12/04/07 17:49	0.039	0.058	0.058	0.099
DOE 4.5.2.3	TL-208	OH207-7950-06	12/04/07 17:49	0.283	0.045	0.053	0.026
DOE 4.5.2.3	PO-209	OH207-7950-06	12/04/07 17:49	2.27	2.74	2.75	5.07
DOE 4.5.2.3	BI-211	OH207-7950-06	12/04/07 17:49	-0.116	0.434	0.435	0.743
DOE 4.5.2.3	BI-212	OH207-7950-06	12/04/07 17:49	0.468	0.226	0.230	0.196
DOE 4.5.2.3	PB-212	OH207-7950-06	12/04/07 17:49	0.772	0.087	0.116	0.049
DOE 4.5.2.3	BI-214	OH207-7950-06	12/04/07 17:49	0.829	0.116	0.142	0.049
DOE 4.5.2.3	PB-214	OH207-7950-06	12/04/07 17:49	0.856	0.093	0.126	0.051
DOE 4.5.2.3	RA-223	OH207-7950-06	12/04/07 17:49	0.260	0.138	0.140	0.132
DOE 4.5.2.3	AC-228	OH207-7950-06	12/04/07 17:49	0.920	0.137	0.165	0.085
DOE 4.5.2.3	PA-233	OH207-7950-06	12/04/07 17:49	0.007	0.027	0.027	0.047
DOE 4.5.2.3	PA-234M	OH207-7950-06	12/04/07 17:49	0.327	1.76	1.76	3.14
DOE 4.5.2.3	TH-234	OH207-7950-06	12/04/07 17:49	0.949	0.393	0.405	0.528
DOE 4.5.2.3	U-235	OH207-7950-06	12/04/07 17:49	0.018	0.102	0.102	0.167
DOE 4.5.2.3	NP-236	OH207-7950-06	12/04/07 17:49	0.034	0.033	0.033	0.055
DOE 4.5.2.3	NP-237	OH207-7950-06	12/04/07 17:49	0.496	0.173	0.180	0.229
DOE 4.5.2.3	NP-239	OH207-7950-06	12/04/07 17:49	0.016	0.101	0.101	0.176
DOE 4.5.2.3	AM-241	OH207-7950-06	12/04/07 17:49	0.045	0.079	0.079	0.138
DOE 4.5.2.3	AM-243	OH207-7950-06	12/04/07 17:49	0.180	0.053	0.056	0.047
DOE 4.5.2.3	CM-243	OH207-7950-06	12/04/07 17:49	0.027	0.052	0.052	0.087
DOE 4.5.2.3	AM-246	OH207-7950-06	12/04/07 17:49	0.031	0.049	0.049	0.089
DOE 4.5.2.3	CF-249	OH207-7950-06	12/04/07 17:49	0.029	0.019	0.019	0.033

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7950-LC1	SCAQC-7950-LD1		SCAQC-7950-PB1

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Southeastern Environmental Laboratory

Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2276-ST</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7950</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7950-07	12/04/07 17:49	4.08	0.484	0.633	0.174
DOE 4.5.2.3	CO-60	OH207-7950-07	12/04/07 17:49	0.005	0.017	0.017	0.027
DOE 4.5.2.3	RH-101	OH207-7950-07	12/04/07 17:49	-0.007	0.018	0.018	0.029
DOE 4.5.2.3	SB-125	OH207-7950-07	12/04/07 17:49	0.017	0.046	0.046	0.082
DOE 4.5.2.3	CS-137	OH207-7950-07	12/04/07 17:49	0.347	0.058	0.068	0.033
DOE 4.5.2.3	EU-155	OH207-7950-07	12/04/07 17:49	0.031	0.048	0.048	0.085
DOE 4.5.2.3	TL-208	OH207-7950-07	12/04/07 17:49	0.248	0.038	0.045	0.027
DOE 4.5.2.3	PO-209	OH207-7950-07	12/04/07 17:49	-1.09	3.47	3.47	6.03
DOE 4.5.2.3	BI-211	OH207-7950-07	12/04/07 17:49	-0.007	0.503	0.503	0.863
DOE 4.5.2.3	BI-212	OH207-7950-07	12/04/07 17:49	0.287	0.165	0.168	0.306
DOE 4.5.2.3	PB-212	OH207-7950-07	12/04/07 17:49	0.686	0.073	0.100	0.048
DOE 4.5.2.3	BI-214	OH207-7950-07	12/04/07 17:49	0.553	0.093	0.108	0.059
DOE 4.5.2.3	PB-214	OH207-7950-07	12/04/07 17:49	0.624	0.093	0.112	0.057
DOE 4.5.2.3	RA-223	OH207-7950-07	12/04/07 17:49	0.222	0.150	0.151	0.146
DOE 4.5.2.3	AC-228	OH207-7950-07	12/04/07 17:49	0.689	0.156	0.170	0.115
DOE 4.5.2.3	PA-233	OH207-7950-07	12/04/07 17:49	-0.019	0.032	0.032	0.052
DOE 4.5.2.3	PA-234M	OH207-7950-07	12/04/07 17:49	0.424	1.85	1.85	3.34
DOE 4.5.2.3	TH-234	OH207-7950-07	12/04/07 17:49	1.02	0.329	0.345	0.361
DOE 4.5.2.3	U-235	OH207-7950-07	12/04/07 17:49	0.026	0.107	0.107	0.183
DOE 4.5.2.3	NP-236	OH207-7950-07	12/04/07 17:49	0.028	0.031	0.031	0.045
DOE 4.5.2.3	NP-237	OH207-7950-07	12/04/07 17:49	0.408	0.119	0.126	0.174
DOE 4.5.2.3	NP-239	OH207-7950-07	12/04/07 17:49	-0.045	0.114	0.114	0.190
DOE 4.5.2.3	AM-241	OH207-7950-07	12/04/07 17:49	0.039	0.035	0.036	0.054
DOE 4.5.2.3	AM-243	OH207-7950-07	12/04/07 17:49	0.141	0.037	0.040	0.028
DOE 4.5.2.3	CM-243	OH207-7950-07	12/04/07 17:49	0.026	0.043	0.043	0.076
DOE 4.5.2.3	AM-246	OH207-7950-07	12/04/07 17:49	0.014	0.059	0.059	0.108
DOE 4.5.2.3	CF-249	OH207-7950-07	12/04/07 17:49	-0.004	0.020	0.020	0.035

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7950-LC1	SCAQC-7950-LD1		SCAQC-7950-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2277-ST</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7950</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7950-08	12/04/07 21:22	3.93	0.493	0.630	0.183
DOE 4.5.2.3	CO-60	OH207-7950-08	12/04/07 21:22	0.003	0.014	0.014	0.023
DOE 4.5.2.3	RH-101	OH207-7950-08	12/04/07 21:22	-0.015	0.016	0.017	0.026
DOE 4.5.2.3	SB-125	OH207-7950-08	12/04/07 21:22	-0.010	0.041	0.041	0.069
DOE 4.5.2.3	CS-137	OH207-7950-08	12/04/07 21:22	0.342	0.053	0.063	0.026
DOE 4.5.2.3	EU-155	OH207-7950-08	12/04/07 21:22	0.049	0.054	0.054	0.095
DOE 4.5.2.3	TL-208	OH207-7950-08	12/04/07 21:22	0.186	0.037	0.042	0.025
DOE 4.5.2.3	PO-209	OH207-7950-08	12/04/07 21:22	-0.867	2.74	2.74	4.71
DOE 4.5.2.3	BI-211	OH207-7950-08	12/04/07 21:22	-0.092	0.379	0.380	0.571
DOE 4.5.2.3	BI-212	OH207-7950-08	12/04/07 21:22	0.532	0.159	0.168	0.173
DOE 4.5.2.3	PB-212	OH207-7950-08	12/04/07 21:22	0.654	0.068	0.094	0.041
DOE 4.5.2.3	BI-214	OH207-7950-08	12/04/07 21:22	0.620	0.096	0.114	0.047
DOE 4.5.2.3	PB-214	OH207-7950-08	12/04/07 21:22	0.556	0.079	0.097	0.049
DOE 4.5.2.3	RA-223	OH207-7950-08	12/04/07 21:22	0.156	0.105	0.107	0.127
DOE 4.5.2.3	AC-228	OH207-7950-08	12/04/07 21:22	0.622	0.117	0.132	0.087
DOE 4.5.2.3	PA-233	OH207-7950-08	12/04/07 21:22	0.021	0.026	0.026	0.048
DOE 4.5.2.3	PA-234M	OH207-7950-08	12/04/07 21:22	-0.858	1.58	1.58	2.68
DOE 4.5.2.3	TH-234	OH207-7950-08	12/04/07 21:22	1.09	0.415	0.429	0.558
DOE 4.5.2.3	U-235	OH207-7950-08	12/04/07 21:22	0.062	0.096	0.096	0.163
DOE 4.5.2.3	NP-236	OH207-7950-08	12/04/07 21:22	-0.004	0.032	0.032	0.051
DOE 4.5.2.3	NP-237	OH207-7950-08	12/04/07 21:22	0.404	0.146	0.152	0.206
DOE 4.5.2.3	NP-239	OH207-7950-08	12/04/07 21:22	-0.106	0.103	0.104	0.159
DOE 4.5.2.3	AM-241	OH207-7950-08	12/04/07 21:22	-0.019	0.087	0.087	0.151
DOE 4.5.2.3	AM-243	OH207-7950-08	12/04/07 21:22	0.118	0.043	0.044	0.051
DOE 4.5.2.3	CM-243	OH207-7950-08	12/04/07 21:22	0.003	0.048	0.049	0.083
DOE 4.5.2.3	AM-246	OH207-7950-08	12/04/07 21:22	-3.8e-04	0.052	0.052	0.090
DOE 4.5.2.3	CF-249	OH207-7950-08	12/04/07 21:22	0.011	0.018	0.018	0.032

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7950-LC1	SCAQC-7950-LD1		SCAQC-7950-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2278-ST</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7950</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7950-09	12/04/07 21:23	3.42	0.439	0.557	0.185
DOE 4.5.2.3	CO-60	OH207-7950-09	12/04/07 21:23	0.005	0.013	0.013	0.024
DOE 4.5.2.3	RH-101	OH207-7950-09	12/04/07 21:23	-0.010	0.015	0.015	0.024
DOE 4.5.2.3	SB-125	OH207-7950-09	12/04/07 21:23	0.025	0.041	0.041	0.072
DOE 4.5.2.3	CS-137	OH207-7950-09	12/04/07 21:23	0.224	0.038	0.044	0.027
DOE 4.5.2.3	EU-155	OH207-7950-09	12/04/07 21:23	0.058	0.052	0.052	0.089
DOE 4.5.2.3	TL-208	OH207-7950-09	12/04/07 21:23	0.189	0.036	0.040	0.025
DOE 4.5.2.3	PO-209	OH207-7950-09	12/04/07 21:23	-0.502	2.99	2.99	5.14
DOE 4.5.2.3	BI-211	OH207-7950-09	12/04/07 21:23	-0.528	0.404	0.408	0.627
DOE 4.5.2.3	BI-212	OH207-7950-09	12/04/07 21:23	0.361	0.193	0.196	0.193
DOE 4.5.2.3	PB-212	OH207-7950-09	12/04/07 21:23	0.624	0.064	0.090	0.039
DOE 4.5.2.3	BI-214	OH207-7950-09	12/04/07 21:23	0.599	0.089	0.107	0.053
DOE 4.5.2.3	PB-214	OH207-7950-09	12/04/07 21:23	0.662	0.085	0.108	0.043
DOE 4.5.2.3	RA-223	OH207-7950-09	12/04/07 21:23	0.186	0.108	0.109	0.125
DOE 4.5.2.3	AC-228	OH207-7950-09	12/04/07 21:23	0.627	0.115	0.131	0.088
DOE 4.5.2.3	PA-233	OH207-7950-09	12/04/07 21:23	-0.010	0.026	0.026	0.044
DOE 4.5.2.3	PA-234M	OH207-7950-09	12/04/07 21:23	-0.260	1.49	1.49	2.64
DOE 4.5.2.3	TH-234	OH207-7950-09	12/04/07 21:23	0.678	0.377	0.383	0.523
DOE 4.5.2.3	U-235	OH207-7950-09	12/04/07 21:23	-3.7e-04	0.093	0.093	0.153
DOE 4.5.2.3	NP-236	OH207-7950-09	12/04/07 21:23	0.011	0.030	0.030	0.051
DOE 4.5.2.3	NP-237	OH207-7950-09	12/04/07 21:23	0.396	0.158	0.163	0.210
DOE 4.5.2.3	NP-239	OH207-7950-09	12/04/07 21:23	-0.104	0.093	0.094	0.154
DOE 4.5.2.3	AM-241	OH207-7950-09	12/04/07 21:23	-0.029	0.078	0.078	0.132
DOE 4.5.2.3	AM-243	OH207-7950-09	12/04/07 21:23	0.165	0.048	0.051	0.045
DOE 4.5.2.3	CM-243	OH207-7950-09	12/04/07 21:23	-0.009	0.047	0.047	0.079
DOE 4.5.2.3	AM-246	OH207-7950-09	12/04/07 21:23	0.033	0.049	0.049	0.090
DOE 4.5.2.3	CF-249	OH207-7950-09	12/04/07 21:23	-0.004	0.017	0.017	0.029

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7950-LC1	SCAQC-7950-LD1		SCAQC-7950-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2279-ST</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7950</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7950-10	12/04/07 21:24	4.23	0.580	0.717	0.301
DOE 4.5.2.3	CO-60	OH207-7950-10	12/04/07 21:24	0.004	0.018	0.018	0.032
DOE 4.5.2.3	RH-101	OH207-7950-10	12/04/07 21:24	-0.012	0.019	0.019	0.031
DOE 4.5.2.3	SB-125	OH207-7950-10	12/04/07 21:24	0.017	0.049	0.049	0.087
DOE 4.5.2.3	CS-137	OH207-7950-10	12/04/07 21:24	0.189	0.048	0.051	0.033
DOE 4.5.2.3	EU-155	OH207-7950-10	12/04/07 21:24	0.103	0.059	0.060	0.089
DOE 4.5.2.3	TL-208	OH207-7950-10	12/04/07 21:24	0.290	0.046	0.054	0.031
DOE 4.5.2.3	PO-209	OH207-7950-10	12/04/07 21:24	1.78	3.69	3.70	6.80
DOE 4.5.2.3	BI-211	OH207-7950-10	12/04/07 21:24	-0.132	0.548	0.548	0.923
DOE 4.5.2.3	BI-212	OH207-7950-10	12/04/07 21:24	0.688	0.274	0.283	0.233
DOE 4.5.2.3	PB-212	OH207-7950-10	12/04/07 21:24	0.813	0.084	0.117	0.050
DOE 4.5.2.3	BI-214	OH207-7950-10	12/04/07 21:24	0.688	0.101	0.122	0.063
DOE 4.5.2.3	PB-214	OH207-7950-10	12/04/07 21:24	0.694	0.106	0.126	0.064
DOE 4.5.2.3	RA-223	OH207-7950-10	12/04/07 21:24	0.264	0.185	0.187	0.163
DOE 4.5.2.3	AC-228	OH207-7950-10	12/04/07 21:24	0.814	0.152	0.173	0.117
DOE 4.5.2.3	PA-233	OH207-7950-10	12/04/07 21:24	-0.030	0.034	0.034	0.055
DOE 4.5.2.3	PA-234M	OH207-7950-10	12/04/07 21:24	-0.512	2.24	2.24	3.88
DOE 4.5.2.3	TH-234	OH207-7950-10	12/04/07 21:24	1.23	0.389	0.408	0.353
DOE 4.5.2.3	U-235	OH207-7950-10	12/04/07 21:24	0.071	0.111	0.111	0.192
DOE 4.5.2.3	NP-236	OH207-7950-10	12/04/07 21:24	0.047	0.035	0.035	0.052
DOE 4.5.2.3	NP-237	OH207-7950-10	12/04/07 21:24	0.538	0.164	0.172	0.154
DOE 4.5.2.3	NP-239	OH207-7950-10	12/04/07 21:24	0.004	0.118	0.118	0.200
DOE 4.5.2.3	AM-241	OH207-7950-10	12/04/07 21:24	0.020	0.039	0.039	0.058
DOE 4.5.2.3	AM-243	OH207-7950-10	12/04/07 21:24	0.182	0.051	0.055	0.031
DOE 4.5.2.3	CM-243	OH207-7950-10	12/04/07 21:24	-0.003	0.055	0.055	0.083
DOE 4.5.2.3	AM-246	OH207-7950-10	12/04/07 21:24	0.087	0.069	0.069	0.133
DOE 4.5.2.3	CF-249	OH207-7950-10	12/04/07 21:24	-0.007	0.021	0.021	0.037

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7950-LC1	SCAQC-7950-LD1		SCAQC-7950-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2280-ST</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7950</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7950-11	12/05/07 00:47	6.88	0.706	0.986	0.243
DOE 4.5.2.3	CO-60	OH207-7950-11	12/05/07 00:47	0.003	0.017	0.017	0.026
DOE 4.5.2.3	RH-101	OH207-7950-11	12/05/07 00:47	0.005	0.019	0.019	0.031
DOE 4.5.2.3	SB-125	OH207-7950-11	12/05/07 00:47	0.018	0.049	0.049	0.085
DOE 4.5.2.3	CS-137	OH207-7950-11	12/05/07 00:47	0.383	0.060	0.071	0.029
DOE 4.5.2.3	EU-155	OH207-7950-11	12/05/07 00:47	0.041	0.065	0.066	0.113
DOE 4.5.2.3	TL-208	OH207-7950-11	12/05/07 00:47	0.359	0.058	0.068	0.030
DOE 4.5.2.3	PO-209	OH207-7950-11	12/05/07 00:47	-0.175	3.16	3.16	5.53
DOE 4.5.2.3	BI-211	OH207-7950-11	12/05/07 00:47	-0.693	0.491	0.496	0.770
DOE 4.5.2.3	BI-212	OH207-7950-11	12/05/07 00:47	0.796	0.204	0.219	0.203
DOE 4.5.2.3	PB-212	OH207-7950-11	12/05/07 00:47	1.01	0.096	0.139	0.047
DOE 4.5.2.3	BI-214	OH207-7950-11	12/05/07 00:47	0.947	0.125	0.157	0.054
DOE 4.5.2.3	PB-214	OH207-7950-11	12/05/07 00:47	0.930	0.105	0.141	0.059
DOE 4.5.2.3	RA-223	OH207-7950-11	12/05/07 00:47	0.460	0.170	0.176	0.147
DOE 4.5.2.3	AC-228	OH207-7950-11	12/05/07 00:47	1.09	0.147	0.183	0.100
DOE 4.5.2.3	PA-233	OH207-7950-11	12/05/07 00:47	-0.020	0.031	0.031	0.052
DOE 4.5.2.3	PA-234M	OH207-7950-11	12/05/07 00:47	2.21	1.96	1.98	3.73
DOE 4.5.2.3	TH-234	OH207-7950-11	12/05/07 00:47	1.23	0.489	0.505	0.645
DOE 4.5.2.3	U-235	OH207-7950-11	12/05/07 00:47	0.118	0.114	0.115	0.194
DOE 4.5.2.3	NP-236	OH207-7950-11	12/05/07 00:47	-0.016	0.038	0.038	0.063
DOE 4.5.2.3	NP-237	OH207-7950-11	12/05/07 00:47	0.604	0.222	0.230	0.239
DOE 4.5.2.3	NP-239	OH207-7950-11	12/05/07 00:47	0.074	0.112	0.112	0.188
DOE 4.5.2.3	AM-241	OH207-7950-11	12/05/07 00:47	0.003	0.104	0.104	0.181
DOE 4.5.2.3	AM-243	OH207-7950-11	12/05/07 00:47	0.275	0.074	0.078	0.056
DOE 4.5.2.3	CM-243	OH207-7950-11	12/05/07 00:47	-0.046	0.058	0.059	0.096
DOE 4.5.2.3	AM-246	OH207-7950-11	12/05/07 00:47	-0.011	0.060	0.060	0.102
DOE 4.5.2.3	CF-249	OH207-7950-11	12/05/07 00:47	0.015	0.020	0.020	0.035

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7950-LC1	SCAQC-7950-LD1		SCAQC-7950-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2281-ST</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7950</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7950-12	12/05/07 00:48	8.00	0.814	1.14	0.266
DOE 4.5.2.3	CO-60	OH207-7950-12	12/05/07 00:48	0.005	0.020	0.020	0.032
DOE 4.5.2.3	RH-101	OH207-7950-12	12/05/07 00:48	-0.011	0.020	0.021	0.032
DOE 4.5.2.3	SB-125	OH207-7950-12	12/05/07 00:48	0.071	0.052	0.052	0.094
DOE 4.5.2.3	CS-137	OH207-7950-12	12/05/07 00:48	0.046	0.030	0.031	0.036
DOE 4.5.2.3	EU-155	OH207-7950-12	12/05/07 00:48	0.057	0.072	0.072	0.122
DOE 4.5.2.3	TL-208	OH207-7950-12	12/05/07 00:48	0.404	0.059	0.071	0.036
DOE 4.5.2.3	PO-209	OH207-7950-12	12/05/07 00:48	-0.898	3.83	3.83	6.53
DOE 4.5.2.3	BI-211	OH207-7950-12	12/05/07 00:48	-0.379	0.569	0.571	0.942
DOE 4.5.2.3	BI-212	OH207-7950-12	12/05/07 00:48	1.04	0.311	0.328	0.231
DOE 4.5.2.3	PB-212	OH207-7950-12	12/05/07 00:48	1.22	0.113	0.166	0.052
DOE 4.5.2.3	BI-214	OH207-7950-12	12/05/07 00:48	1.21	0.162	0.202	0.062
DOE 4.5.2.3	PB-214	OH207-7950-12	12/05/07 00:48	1.14	0.129	0.172	0.061
DOE 4.5.2.3	RA-223	OH207-7950-12	12/05/07 00:48	0.463	0.164	0.171	0.165
DOE 4.5.2.3	AC-228	OH207-7950-12	12/05/07 00:48	1.37	0.199	0.242	0.108
DOE 4.5.2.3	PA-233	OH207-7950-12	12/05/07 00:48	0.004	0.034	0.034	0.058
DOE 4.5.2.3	PA-234M	OH207-7950-12	12/05/07 00:48	0.840	2.25	2.25	4.05
DOE 4.5.2.3	TH-234	OH207-7950-12	12/05/07 00:48	2.22	0.570	0.611	0.526
DOE 4.5.2.3	U-235	OH207-7950-12	12/05/07 00:48	-0.047	0.130	0.130	0.210
DOE 4.5.2.3	NP-236	OH207-7950-12	12/05/07 00:48	0.052	0.046	0.046	0.071
DOE 4.5.2.3	NP-237	OH207-7950-12	12/05/07 00:48	1.10	0.261	0.283	0.249
DOE 4.5.2.3	NP-239	OH207-7950-12	12/05/07 00:48	-0.127	0.124	0.124	0.206
DOE 4.5.2.3	AM-241	OH207-7950-12	12/05/07 00:48	0.084	0.116	0.116	0.182
DOE 4.5.2.3	AM-243	OH207-7950-12	12/05/07 00:48	0.286	0.075	0.081	0.061
DOE 4.5.2.3	CM-243	OH207-7950-12	12/05/07 00:48	0.010	0.064	0.064	0.108
DOE 4.5.2.3	AM-246	OH207-7950-12	12/05/07 00:48	0.008	0.069	0.069	0.120
DOE 4.5.2.3	CF-249	OH207-7950-12	12/05/07 00:48	0.020	0.022	0.022	0.039

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7950-LC1	SCAQC-7950-LD1		SCAQC-7950-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2282-ST</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7950</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7950-13	12/05/07 00:50	8.06	0.799	1.13	0.274
DOE 4.5.2.3	CO-60	OH207-7950-13	12/05/07 00:50	0.004	0.025	0.025	0.039
DOE 4.5.2.3	RH-101	OH207-7950-13	12/05/07 00:50	-0.007	0.022	0.022	0.036
DOE 4.5.2.3	SB-125	OH207-7950-13	12/05/07 00:50	-0.030	0.059	0.060	0.101
DOE 4.5.2.3	CS-137	OH207-7950-13	12/05/07 00:50	0.126	0.040	0.042	0.042
DOE 4.5.2.3	EU-155	OH207-7950-13	12/05/07 00:50	0.035	0.063	0.063	0.110
DOE 4.5.2.3	TL-208	OH207-7950-13	12/05/07 00:50	0.406	0.056	0.069	0.039
DOE 4.5.2.3	PO-209	OH207-7950-13	12/05/07 00:50	1.32	4.25	4.25	7.66
DOE 4.5.2.3	BI-211	OH207-7950-13	12/05/07 00:50	-0.170	0.679	0.680	1.13
DOE 4.5.2.3	BI-212	OH207-7950-13	12/05/07 00:50	0.704	0.254	0.263	0.287
DOE 4.5.2.3	PB-212	OH207-7950-13	12/05/07 00:50	1.33	0.123	0.181	0.057
DOE 4.5.2.3	BI-214	OH207-7950-13	12/05/07 00:50	1.11	0.130	0.171	0.064
DOE 4.5.2.3	PB-214	OH207-7950-13	12/05/07 00:50	1.20	0.140	0.184	0.068
DOE 4.5.2.3	RA-223	OH207-7950-13	12/05/07 00:50	0.402	0.182	0.186	0.184
DOE 4.5.2.3	AC-228	OH207-7950-13	12/05/07 00:50	1.32	0.213	0.250	0.145
DOE 4.5.2.3	PA-233	OH207-7950-13	12/05/07 00:50	-0.011	0.039	0.039	0.064
DOE 4.5.2.3	PA-234M	OH207-7950-13	12/05/07 00:50	2.05	2.77	2.78	5.06
DOE 4.5.2.3	TH-234	OH207-7950-13	12/05/07 00:50	1.99	0.488	0.528	0.422
DOE 4.5.2.3	U-235	OH207-7950-13	12/05/07 00:50	0.059	0.130	0.130	0.222
DOE 4.5.2.3	NP-236	OH207-7950-13	12/05/07 00:50	0.039	0.042	0.042	0.061
DOE 4.5.2.3	NP-237	OH207-7950-13	12/05/07 00:50	0.776	0.188	0.203	0.184
DOE 4.5.2.3	NP-239	OH207-7950-13	12/05/07 00:50	-0.100	0.144	0.145	0.236
DOE 4.5.2.3	AM-241	OH207-7950-13	12/05/07 00:50	0.080	0.045	0.046	0.069
DOE 4.5.2.3	AM-243	OH207-7950-13	12/05/07 00:50	0.240	0.059	0.063	0.038
DOE 4.5.2.3	CM-243	OH207-7950-13	12/05/07 00:50	-4.9e-04	0.057	0.057	0.098
DOE 4.5.2.3	AM-246	OH207-7950-13	12/05/07 00:50	0.037	0.076	0.076	0.138
DOE 4.5.2.3	CF-249	OH207-7950-13	12/05/07 00:50	6.8e-04	0.025	0.025	0.043

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7950-LC1	SCAQC-7950-LD1		SCAQC-7950-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2283-ST</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7950</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7950-14	12/05/07 09:13	7.07	0.706	0.999	0.222
DOE 4.5.2.3	CO-60	OH207-7950-14	12/05/07 09:13	0.013	0.017	0.017	0.025
DOE 4.5.2.3	RH-101	OH207-7950-14	12/05/07 09:13	9.0e-04	0.017	0.017	0.028
DOE 4.5.2.3	SB-125	OH207-7950-14	12/05/07 09:13	-0.027	0.043	0.044	0.072
DOE 4.5.2.3	CS-137	OH207-7950-14	12/05/07 09:13	0.105	0.034	0.035	0.030
DOE 4.5.2.3	EU-155	OH207-7950-14	12/05/07 09:13	0.043	0.062	0.062	0.106
DOE 4.5.2.3	TL-208	OH207-7950-14	12/05/07 09:13	0.353	0.051	0.062	0.028
DOE 4.5.2.3	PO-209	OH207-7950-14	12/05/07 09:13	-0.277	3.01	3.01	5.24
DOE 4.5.2.3	BI-211	OH207-7950-14	12/05/07 09:13	-0.414	0.460	0.462	0.754
DOE 4.5.2.3	BI-212	OH207-7950-14	12/05/07 09:13	0.770	0.203	0.217	0.185
DOE 4.5.2.3	PB-212	OH207-7950-14	12/05/07 09:13	0.894	0.092	0.128	0.058
DOE 4.5.2.3	BI-214	OH207-7950-14	12/05/07 09:13	0.904	0.120	0.151	0.053
DOE 4.5.2.3	PB-214	OH207-7950-14	12/05/07 09:13	0.922	0.106	0.141	0.052
DOE 4.5.2.3	RA-223	OH207-7950-14	12/05/07 09:13	0.337	0.160	0.163	0.133
DOE 4.5.2.3	AC-228	OH207-7950-14	12/05/07 09:13	1.08	0.152	0.186	0.098
DOE 4.5.2.3	PA-233	OH207-7950-14	12/05/07 09:13	0.004	0.028	0.028	0.049
DOE 4.5.2.3	PA-234M	OH207-7950-14	12/05/07 09:13	-0.157	1.73	1.73	3.03
DOE 4.5.2.3	TH-234	OH207-7950-14	12/05/07 09:13	1.56	0.475	0.500	0.626
DOE 4.5.2.3	U-235	OH207-7950-14	12/05/07 09:13	-0.086	0.108	0.109	0.175
DOE 4.5.2.3	NP-236	OH207-7950-14	12/05/07 09:13	0.049	0.040	0.040	0.063
DOE 4.5.2.3	NP-237	OH207-7950-14	12/05/07 09:13	0.750	0.230	0.242	0.222
DOE 4.5.2.3	NP-239	OH207-7950-14	12/05/07 09:13	0.031	0.108	0.108	0.178
DOE 4.5.2.3	AM-241	OH207-7950-14	12/05/07 09:13	0.015	0.098	0.098	0.171
DOE 4.5.2.3	AM-243	OH207-7950-14	12/05/07 09:13	0.225	0.064	0.068	0.054
DOE 4.5.2.3	CM-243	OH207-7950-14	12/05/07 09:13	-0.035	0.056	0.056	0.092
DOE 4.5.2.3	AM-246	OH207-7950-14	12/05/07 09:13	-0.013	0.053	0.053	0.091
DOE 4.5.2.3	CF-249	OH207-7950-14	12/05/07 09:13	0.010	0.018	0.018	0.032

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7950-LC1	SCAQC-7950-LD1		SCAQC-7950-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2270-SD</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7951</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7951-01	12/05/07 12:33	5.47	0.629	0.834	0.231
DOE 4.5.2.3	CO-60	OH207-7951-01	12/05/07 12:33	-0.005	0.015	0.015	0.026
DOE 4.5.2.3	RH-101	OH207-7951-01	12/05/07 12:33	0.003	0.017	0.017	0.027
DOE 4.5.2.3	SB-125	OH207-7951-01	12/05/07 12:33	-0.010	0.043	0.043	0.072
DOE 4.5.2.3	CS-137	OH207-7951-01	12/05/07 12:33	0.052	0.022	0.023	0.027
DOE 4.5.2.3	EU-155	OH207-7951-01	12/05/07 12:33	-0.018	0.059	0.059	0.097
DOE 4.5.2.3	TL-208	OH207-7951-01	12/05/07 12:33	0.311	0.047	0.057	0.026
DOE 4.5.2.3	PO-209	OH207-7951-01	12/05/07 12:33	-3.03	2.91	2.92	4.52
DOE 4.5.2.3	BI-211	OH207-7951-01	12/05/07 12:33	0.049	0.435	0.435	0.768
DOE 4.5.2.3	BI-212	OH207-7951-01	12/05/07 12:33	0.500	0.214	0.220	0.195
DOE 4.5.2.3	PB-212	OH207-7951-01	12/05/07 12:33	0.944	0.089	0.130	0.042
DOE 4.5.2.3	BI-214	OH207-7951-01	12/05/07 12:33	0.609	0.096	0.113	0.051
DOE 4.5.2.3	PB-214	OH207-7951-01	12/05/07 12:33	0.628	0.079	0.101	0.053
DOE 4.5.2.3	RA-223	OH207-7951-01	12/05/07 12:33	0.313	0.127	0.131	0.144
DOE 4.5.2.3	AC-228	OH207-7951-01	12/05/07 12:33	1.02	0.178	0.205	0.109
DOE 4.5.2.3	PA-233	OH207-7951-01	12/05/07 12:33	-0.007	0.029	0.029	0.050
DOE 4.5.2.3	PA-234M	OH207-7951-01	12/05/07 12:33	1.23	1.88	1.88	3.48
DOE 4.5.2.3	TH-234	OH207-7951-01	12/05/07 12:33	1.58	0.458	0.484	0.590
DOE 4.5.2.3	U-235	OH207-7951-01	12/05/07 12:33	0.046	0.103	0.104	0.172
DOE 4.5.2.3	NP-236	OH207-7951-01	12/05/07 12:33	0.035	0.036	0.036	0.059
DOE 4.5.2.3	NP-237	OH207-7951-01	12/05/07 12:33	0.555	0.171	0.180	0.248
DOE 4.5.2.3	NP-239	OH207-7951-01	12/05/07 12:33	-0.006	0.100	0.100	0.173
DOE 4.5.2.3	AM-241	OH207-7951-01	12/05/07 12:33	-0.019	0.091	0.091	0.155
DOE 4.5.2.3	AM-243	OH207-7951-01	12/05/07 12:33	0.208	0.061	0.064	0.051
DOE 4.5.2.3	CM-243	OH207-7951-01	12/05/07 12:33	0.026	0.052	0.052	0.089
DOE 4.5.2.3	AM-246	OH207-7951-01	12/05/07 12:33	0.030	0.054	0.054	0.098
DOE 4.5.2.3	CF-249	OH207-7951-01	12/05/07 12:33	0.002	0.018	0.018	0.031

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7951-LC1	SCAQC-7951-LD1		SCAQC-7951-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2271-SD</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7951</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7951-02	12/05/07 12:34	2.94	0.438	0.528	0.233
DOE 4.5.2.3	CO-60	OH207-7951-02	12/05/07 12:34	0.009	0.015	0.015	0.025
DOE 4.5.2.3	RH-101	OH207-7951-02	12/05/07 12:34	-0.016	0.016	0.016	0.026
DOE 4.5.2.3	SB-125	OH207-7951-02	12/05/07 12:34	0.032	0.045	0.045	0.080
DOE 4.5.2.3	CS-137	OH207-7951-02	12/05/07 12:34	0.124	0.038	0.040	0.028
DOE 4.5.2.3	EU-155	OH207-7951-02	12/05/07 12:34	0.027	0.047	0.047	0.083
DOE 4.5.2.3	TL-208	OH207-7951-02	12/05/07 12:34	0.228	0.037	0.043	0.029
DOE 4.5.2.3	PO-209	OH207-7951-02	12/05/07 12:34	1.27	3.18	3.19	5.85
DOE 4.5.2.3	BI-211	OH207-7951-02	12/05/07 12:34	-0.004	0.505	0.505	0.864
DOE 4.5.2.3	BI-212	OH207-7951-02	12/05/07 12:34	0.460	0.212	0.217	0.206
DOE 4.5.2.3	PB-212	OH207-7951-02	12/05/07 12:34	0.766	0.077	0.109	0.042
DOE 4.5.2.3	BI-214	OH207-7951-02	12/05/07 12:34	0.430	0.073	0.085	0.059
DOE 4.5.2.3	PB-214	OH207-7951-02	12/05/07 12:34	0.471	0.072	0.086	0.052
DOE 4.5.2.3	RA-223	OH207-7951-02	12/05/07 12:34	0.151	0.114	0.115	0.131
DOE 4.5.2.3	AC-228	OH207-7951-02	12/05/07 12:34	0.802	0.139	0.160	0.107
DOE 4.5.2.3	PA-233	OH207-7951-02	12/05/07 12:34	-0.001	0.030	0.030	0.050
DOE 4.5.2.3	PA-234M	OH207-7951-02	12/05/07 12:34	-1.47	1.90	1.91	3.14
DOE 4.5.2.3	TH-234	OH207-7951-02	12/05/07 12:34	0.790	0.327	0.337	0.465
DOE 4.5.2.3	U-235	OH207-7951-02	12/05/07 12:34	0.068	0.100	0.101	0.174
DOE 4.5.2.3	NP-236	OH207-7951-02	12/05/07 12:34	0.017	0.030	0.030	0.044
DOE 4.5.2.3	NP-237	OH207-7951-02	12/05/07 12:34	0.220	0.112	0.114	0.147
DOE 4.5.2.3	NP-239	OH207-7951-02	12/05/07 12:34	-0.022	0.104	0.104	0.175
DOE 4.5.2.3	AM-241	OH207-7951-02	12/05/07 12:34	-0.101	0.035	0.036	0.051
DOE 4.5.2.3	AM-243	OH207-7951-02	12/05/07 12:34	0.118	0.035	0.037	0.028
DOE 4.5.2.3	CM-243	OH207-7951-02	12/05/07 12:34	0.009	0.042	0.042	0.074
DOE 4.5.2.3	AM-246	OH207-7951-02	12/05/07 12:34	0.014	0.052	0.052	0.096
DOE 4.5.2.3	CF-249	OH207-7951-02	12/05/07 12:34	9.9e-04	0.018	0.018	0.032

Quality Control Samples			
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)
Gamma	SCAQC-7951-LC1	SCAQC-7951-LD1	SCAQC-7951-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2272-SD</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7951</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7951-03	12/05/07 15:36	8.66	0.800	1.18	0.197
DOE 4.5.2.3	CO-60	OH207-7951-03	12/05/07 15:36	0.015	0.016	0.016	0.026
DOE 4.5.2.3	RH-101	OH207-7951-03	12/05/07 15:36	-0.003	0.017	0.017	0.027
DOE 4.5.2.3	SB-125	OH207-7951-03	12/05/07 15:36	0.004	0.042	0.042	0.072
DOE 4.5.2.3	CS-137	OH207-7951-03	12/05/07 15:36	0.053	0.033	0.033	0.027
DOE 4.5.2.3	EU-155	OH207-7951-03	12/05/07 15:36	0.041	0.063	0.063	0.107
DOE 4.5.2.3	TL-208	OH207-7951-03	12/05/07 15:36	0.413	0.056	0.069	0.026
DOE 4.5.2.3	PO-209	OH207-7951-03	12/05/07 15:36	0.590	2.93	2.93	5.18
DOE 4.5.2.3	BI-211	OH207-7951-03	12/05/07 15:36	0.083	0.471	0.471	0.726
DOE 4.5.2.3	BI-212	OH207-7951-03	12/05/07 15:36	0.889	0.216	0.233	0.199
DOE 4.5.2.3	PB-212	OH207-7951-03	12/05/07 15:36	1.03	0.100	0.143	0.058
DOE 4.5.2.3	BI-214	OH207-7951-03	12/05/07 15:36	0.974	0.129	0.162	0.050
DOE 4.5.2.3	PB-214	OH207-7951-03	12/05/07 15:36	1.04	0.115	0.155	0.052
DOE 4.5.2.3	RA-223	OH207-7951-03	12/05/07 15:36	0.368	0.145	0.150	0.138
DOE 4.5.2.3	AC-228	OH207-7951-03	12/05/07 15:36	1.38	0.148	0.203	0.100
DOE 4.5.2.3	PA-233	OH207-7951-03	12/05/07 15:36	-0.003	0.028	0.028	0.048
DOE 4.5.2.3	PA-234M	OH207-7951-03	12/05/07 15:36	0.569	1.82	1.82	3.24
DOE 4.5.2.3	TH-234	OH207-7951-03	12/05/07 15:36	1.33	0.353	0.377	0.591
DOE 4.5.2.3	U-235	OH207-7951-03	12/05/07 15:36	0.094	0.108	0.109	0.183
DOE 4.5.2.3	NP-236	OH207-7951-03	12/05/07 15:36	0.049	0.039	0.039	0.061
DOE 4.5.2.3	NP-237	OH207-7951-03	12/05/07 15:36	0.771	0.212	0.225	0.218
DOE 4.5.2.3	NP-239	OH207-7951-03	12/05/07 15:36	0.001	0.110	0.110	0.179
DOE 4.5.2.3	AM-241	OH207-7951-03	12/05/07 15:36	-0.087	0.097	0.098	0.163
DOE 4.5.2.3	AM-243	OH207-7951-03	12/05/07 15:36	0.249	0.070	0.074	0.054
DOE 4.5.2.3	CM-243	OH207-7951-03	12/05/07 15:36	0.049	0.056	0.057	0.097
DOE 4.5.2.3	AM-246	OH207-7951-03	12/05/07 15:36	-0.007	0.054	0.054	0.092
DOE 4.5.2.3	CF-249	OH207-7951-03	12/05/07 15:36	0.005	0.018	0.018	0.031

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7951-LC1	SCAQC-7951-LD1		SCAQC-7951-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2273-SD</u>	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
Other Sample ID:	Batch Number: <u>7951</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7951-04	12/05/07 15:37	8.82	0.796	1.19	0.196
DOE 4.5.2.3	CO-60	OH207-7951-04	12/05/07 15:37	0.020	0.016	0.016	0.027
DOE 4.5.2.3	RH-101	OH207-7951-04	12/05/07 15:37	-0.003	0.017	0.017	0.028
DOE 4.5.2.3	SB-125	OH207-7951-04	12/05/07 15:37	-0.019	0.044	0.044	0.073
DOE 4.5.2.3	CS-137	OH207-7951-04	12/05/07 15:37	0.035	0.022	0.022	0.033
DOE 4.5.2.3	EU-155	OH207-7951-04	12/05/07 15:37	0.062	0.062	0.062	0.105
DOE 4.5.2.3	TL-208	OH207-7951-04	12/05/07 15:37	0.385	0.056	0.068	0.027
DOE 4.5.2.3	PO-209	OH207-7951-04	12/05/07 15:37	0.511	3.05	3.05	5.34
DOE 4.5.2.3	BI-211	OH207-7951-04	12/05/07 15:37	-0.352	0.496	0.497	0.818
DOE 4.5.2.3	BI-212	OH207-7951-04	12/05/07 15:37	0.656	0.215	0.225	0.210
DOE 4.5.2.3	PB-212	OH207-7951-04	12/05/07 15:37	1.02	0.100	0.143	0.052
DOE 4.5.2.3	BI-214	OH207-7951-04	12/05/07 15:37	0.805	0.113	0.139	0.052
DOE 4.5.2.3	PB-214	OH207-7951-04	12/05/07 15:37	0.829	0.091	0.123	0.052
DOE 4.5.2.3	RA-223	OH207-7951-04	12/05/07 15:37	0.536	0.150	0.159	0.138
DOE 4.5.2.3	AC-228	OH207-7951-04	12/05/07 15:37	1.31	0.193	0.233	0.103
DOE 4.5.2.3	PA-233	OH207-7951-04	12/05/07 15:37	0.002	0.029	0.029	0.049
DOE 4.5.2.3	PA-234M	OH207-7951-04	12/05/07 15:37	0.761	1.81	1.81	3.25
DOE 4.5.2.3	TH-234	OH207-7951-04	12/05/07 15:37	1.87	0.483	0.518	0.590
DOE 4.5.2.3	U-235	OH207-7951-04	12/05/07 15:37	0.111	0.106	0.107	0.178
DOE 4.5.2.3	NP-236	OH207-7951-04	12/05/07 15:37	0.019	0.040	0.040	0.060
DOE 4.5.2.3	NP-237	OH207-7951-04	12/05/07 15:37	0.873	0.236	0.252	0.203
DOE 4.5.2.3	NP-239	OH207-7951-04	12/05/07 15:37	-0.027	0.105	0.105	0.180
DOE 4.5.2.3	AM-241	OH207-7951-04	12/05/07 15:37	-0.065	0.090	0.091	0.151
DOE 4.5.2.3	AM-243	OH207-7951-04	12/05/07 15:37	0.254	0.069	0.074	0.051
DOE 4.5.2.3	CM-243	OH207-7951-04	12/05/07 15:37	-0.006	0.055	0.055	0.092
DOE 4.5.2.3	AM-246	OH207-7951-04	12/05/07 15:37	0.016	0.055	0.055	0.096
DOE 4.5.2.3	CF-249	OH207-7951-04	12/05/07 15:37	0.010	0.018	0.018	0.031

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7951-LC1	SCAQC-7951-LD1		SCAQC-7951-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2274-SD</u>	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
Other Sample ID:	Batch Number: <u>7951</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7951-05	12/05/07 15:39	2.63	0.411	0.488	0.230
DOE 4.5.2.3	CO-60	OH207-7951-05	12/05/07 15:39	0.001	0.016	0.016	0.025
DOE 4.5.2.3	RH-101	OH207-7951-05	12/05/07 15:39	0.007	0.016	0.016	0.028
DOE 4.5.2.3	SB-125	OH207-7951-05	12/05/07 15:39	0.009	0.042	0.042	0.074
DOE 4.5.2.3	CS-137	OH207-7951-05	12/05/07 15:39	0.016	0.021	0.021	0.032
DOE 4.5.2.3	EU-155	OH207-7951-05	12/05/07 15:39	0.040	0.046	0.046	0.081
DOE 4.5.2.3	TL-208	OH207-7951-05	12/05/07 15:39	0.265	0.040	0.048	0.026
DOE 4.5.2.3	PO-209	OH207-7951-05	12/05/07 15:39	1.04	3.29	3.29	5.94
DOE 4.5.2.3	BI-211	OH207-7951-05	12/05/07 15:39	0.084	0.491	0.491	0.847
DOE 4.5.2.3	BI-212	OH207-7951-05	12/05/07 15:39	0.512	0.181	0.188	0.211
DOE 4.5.2.3	PB-212	OH207-7951-05	12/05/07 15:39	0.779	0.080	0.111	0.046
DOE 4.5.2.3	BI-214	OH207-7951-05	12/05/07 15:39	0.658	0.092	0.114	0.050
DOE 4.5.2.3	PB-214	OH207-7951-05	12/05/07 15:39	0.759	0.099	0.125	0.052
DOE 4.5.2.3	RA-223	OH207-7951-05	12/05/07 15:39	0.313	0.138	0.142	0.135
DOE 4.5.2.3	AC-228	OH207-7951-05	12/05/07 15:39	0.832	0.146	0.168	0.102
DOE 4.5.2.3	PA-233	OH207-7951-05	12/05/07 15:39	0.015	0.031	0.031	0.052
DOE 4.5.2.3	PA-234M	OH207-7951-05	12/05/07 15:39	-0.704	1.83	1.83	3.13
DOE 4.5.2.3	TH-234	OH207-7951-05	12/05/07 15:39	0.936	0.311	0.325	0.317
DOE 4.5.2.3	U-235	OH207-7951-05	12/05/07 15:39	0.102	0.099	0.099	0.172
DOE 4.5.2.3	NP-236	OH207-7951-05	12/05/07 15:39	0.035	0.030	0.031	0.045
DOE 4.5.2.3	NP-237	OH207-7951-05	12/05/07 15:39	0.466	0.143	0.151	0.138
DOE 4.5.2.3	NP-239	OH207-7951-05	12/05/07 15:39	-0.006	0.105	0.105	0.176
DOE 4.5.2.3	AM-241	OH207-7951-05	12/05/07 15:39	0.036	0.031	0.032	0.048
DOE 4.5.2.3	AM-243	OH207-7951-05	12/05/07 15:39	0.116	0.033	0.035	0.027
DOE 4.5.2.3	CM-243	OH207-7951-05	12/05/07 15:39	-0.031	0.042	0.042	0.071
DOE 4.5.2.3	AM-246	OH207-7951-05	12/05/07 15:39	0.019	0.050	0.050	0.092
DOE 4.5.2.3	CF-249	OH207-7951-05	12/05/07 15:39	-0.009	0.018	0.018	0.031

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7951-LC1	SCAQC-7951-LD1		SCAQC-7951-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2275-SD</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7951</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7951-06	12/05/07 18:37	1.22	0.358	0.378	0.268
DOE 4.5.2.3	CO-60	OH207-7951-06	12/05/07 18:37	0.007	0.015	0.015	0.025
DOE 4.5.2.3	RH-101	OH207-7951-06	12/05/07 18:37	0.011	0.021	0.021	0.036
DOE 4.5.2.3	SB-125	OH207-7951-06	12/05/07 18:37	0.007	0.050	0.050	0.088
DOE 4.5.2.3	CS-137	OH207-7951-06	12/05/07 18:37	-0.023	0.021	0.021	0.034
DOE 4.5.2.3	EU-155	OH207-7951-06	12/05/07 18:37	0.099	0.076	0.077	0.134
DOE 4.5.2.3	TL-208	OH207-7951-06	12/05/07 18:37	0.558	0.076	0.094	0.035
DOE 4.5.2.3	PO-209	OH207-7951-06	12/05/07 18:37	-0.129	3.36	3.36	5.97
DOE 4.5.2.3	BI-211	OH207-7951-06	12/05/07 18:37	0.622	0.553	0.556	0.966
DOE 4.5.2.3	BI-212	OH207-7951-06	12/05/07 18:37	1.05	0.340	0.355	0.278
DOE 4.5.2.3	PB-212	OH207-7951-06	12/05/07 18:37	1.57	0.142	0.212	0.055
DOE 4.5.2.3	BI-214	OH207-7951-06	12/05/07 18:37	0.474	0.102	0.113	0.062
DOE 4.5.2.3	PB-214	OH207-7951-06	12/05/07 18:37	0.498	0.095	0.107	0.067
DOE 4.5.2.3	RA-223	OH207-7951-06	12/05/07 18:37	0.562	0.205	0.213	0.157
DOE 4.5.2.3	AC-228	OH207-7951-06	12/05/07 18:37	1.73	0.202	0.265	0.103
DOE 4.5.2.3	PA-233	OH207-7951-06	12/05/07 18:37	0.014	0.036	0.036	0.063
DOE 4.5.2.3	PA-234M	OH207-7951-06	12/05/07 18:37	0.333	1.98	1.98	3.62
DOE 4.5.2.3	TH-234	OH207-7951-06	12/05/07 18:37	1.24	0.489	0.504	0.558
DOE 4.5.2.3	U-235	OH207-7951-06	12/05/07 18:37	0.049	0.127	0.127	0.213
DOE 4.5.2.3	NP-236	OH207-7951-06	12/05/07 18:37	-0.009	0.045	0.045	0.076
DOE 4.5.2.3	NP-237	OH207-7951-06	12/05/07 18:37	0.624	0.212	0.221	0.300
DOE 4.5.2.3	NP-239	OH207-7951-06	12/05/07 18:37	0.039	0.137	0.137	0.227
DOE 4.5.2.3	AM-241	OH207-7951-06	12/05/07 18:37	-0.001	0.135	0.135	0.212
DOE 4.5.2.3	AM-243	OH207-7951-06	12/05/07 18:37	0.293	0.082	0.087	0.068
DOE 4.5.2.3	CM-243	OH207-7951-06	12/05/07 18:37	-0.023	0.069	0.069	0.116
DOE 4.5.2.3	AM-246	OH207-7951-06	12/05/07 18:37	0.026	0.064	0.064	0.116
DOE 4.5.2.3	CF-249	OH207-7951-06	12/05/07 18:37	-5.5e-04	0.022	0.022	0.038

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7951-LC1	SCAQC-7951-LD1		SCAQC-7951-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2276-SD</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7951</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7951-07	12/05/07 18:38	2.92	0.426	0.517	0.180
DOE 4.5.2.3	CO-60	OH207-7951-07	12/05/07 18:38	-0.009	0.012	0.012	0.019
DOE 4.5.2.3	RH-101	OH207-7951-07	12/05/07 18:38	-0.006	0.013	0.013	0.021
DOE 4.5.2.3	SB-125	OH207-7951-07	12/05/07 18:38	0.008	0.032	0.032	0.056
DOE 4.5.2.3	CS-137	OH207-7951-07	12/05/07 18:38	0.033	0.019	0.019	0.022
DOE 4.5.2.3	EU-155	OH207-7951-07	12/05/07 18:38	0.075	0.048	0.048	0.083
DOE 4.5.2.3	TL-208	OH207-7951-07	12/05/07 18:38	0.181	0.034	0.039	0.021
DOE 4.5.2.3	PO-209	OH207-7951-07	12/05/07 18:38	2.98	2.29	2.31	4.38
DOE 4.5.2.3	BI-211	OH207-7951-07	12/05/07 18:38	-0.179	0.331	0.332	0.557
DOE 4.5.2.3	BI-212	OH207-7951-07	12/05/07 18:38	0.336	0.133	0.138	0.162
DOE 4.5.2.3	PB-212	OH207-7951-07	12/05/07 18:38	0.561	0.058	0.080	0.034
DOE 4.5.2.3	BI-214	OH207-7951-07	12/05/07 18:38	0.390	0.066	0.077	0.045
DOE 4.5.2.3	PB-214	OH207-7951-07	12/05/07 18:38	0.427	0.064	0.077	0.041
DOE 4.5.2.3	RA-223	OH207-7951-07	12/05/07 18:38	0.239	0.100	0.103	0.106
DOE 4.5.2.3	AC-228	OH207-7951-07	12/05/07 18:38	0.702	0.123	0.142	0.068
DOE 4.5.2.3	PA-233	OH207-7951-07	12/05/07 18:38	-0.007	0.023	0.023	0.039
DOE 4.5.2.3	PA-234M	OH207-7951-07	12/05/07 18:38	0.119	1.36	1.36	2.45
DOE 4.5.2.3	TH-234	OH207-7951-07	12/05/07 18:38	0.372	0.256	0.258	0.448
DOE 4.5.2.3	U-235	OH207-7951-07	12/05/07 18:38	0.048	0.084	0.084	0.140
DOE 4.5.2.3	NP-236	OH207-7951-07	12/05/07 18:38	0.016	0.026	0.026	0.044
DOE 4.5.2.3	NP-237	OH207-7951-07	12/05/07 18:38	0.253	0.124	0.127	0.182
DOE 4.5.2.3	NP-239	OH207-7951-07	12/05/07 18:38	0.023	0.077	0.077	0.135
DOE 4.5.2.3	AM-241	OH207-7951-07	12/05/07 18:38	-0.025	0.068	0.068	0.115
DOE 4.5.2.3	AM-243	OH207-7951-07	12/05/07 18:38	0.115	0.038	0.039	0.038
DOE 4.5.2.3	CM-243	OH207-7951-07	12/05/07 18:38	0.034	0.043	0.043	0.073
DOE 4.5.2.3	AM-246	OH207-7951-07	12/05/07 18:38	0.010	0.038	0.038	0.069
DOE 4.5.2.3	CF-249	OH207-7951-07	12/05/07 18:38	-0.005	0.015	0.015	0.024

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7951-LC1	SCAQC-7951-LD1		SCAQC-7951-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2277-SD</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7951</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7951-08	12/06/07 09:33	3.04	0.409	0.510	0.185
DOE 4.5.2.3	CO-60	OH207-7951-08	12/06/07 09:33	0.005	0.013	0.013	0.023
DOE 4.5.2.3	RH-101	OH207-7951-08	12/06/07 09:33	-0.008	0.014	0.014	0.022
DOE 4.5.2.3	SB-125	OH207-7951-08	12/06/07 09:33	0.012	0.038	0.038	0.066
DOE 4.5.2.3	CS-137	OH207-7951-08	12/06/07 09:33	0.234	0.046	0.052	0.023
DOE 4.5.2.3	EU-155	OH207-7951-08	12/06/07 09:33	0.042	0.049	0.049	0.086
DOE 4.5.2.3	TL-208	OH207-7951-08	12/06/07 09:33	0.190	0.037	0.041	0.024
DOE 4.5.2.3	PO-209	OH207-7951-08	12/06/07 09:33	-0.684	2.30	2.30	3.99
DOE 4.5.2.3	BI-211	OH207-7951-08	12/06/07 09:33	0.054	0.376	0.376	0.673
DOE 4.5.2.3	BI-212	OH207-7951-08	12/06/07 09:33	0.346	0.165	0.169	0.173
DOE 4.5.2.3	PB-212	OH207-7951-08	12/06/07 09:33	0.528	0.058	0.079	0.037
DOE 4.5.2.3	BI-214	OH207-7951-08	12/06/07 09:33	0.464	0.082	0.094	0.043
DOE 4.5.2.3	PB-214	OH207-7951-08	12/06/07 09:33	0.433	0.063	0.076	0.046
DOE 4.5.2.3	RA-223	OH207-7951-08	12/06/07 09:33	0.246	0.112	0.115	0.111
DOE 4.5.2.3	AC-228	OH207-7951-08	12/06/07 09:33	0.633	0.118	0.134	0.084
DOE 4.5.2.3	PA-233	OH207-7951-08	12/06/07 09:33	0.021	0.024	0.024	0.043
DOE 4.5.2.3	PA-234M	OH207-7951-08	12/06/07 09:33	1.29	1.52	1.53	2.91
DOE 4.5.2.3	TH-234	OH207-7951-08	12/06/07 09:33	0.359	0.333	0.335	0.507
DOE 4.5.2.3	U-235	OH207-7951-08	12/06/07 09:33	0.032	0.087	0.088	0.147
DOE 4.5.2.3	NP-236	OH207-7951-08	12/06/07 09:33	0.008	0.029	0.029	0.050
DOE 4.5.2.3	NP-237	OH207-7951-08	12/06/07 09:33	0.332	0.158	0.161	0.202
DOE 4.5.2.3	NP-239	OH207-7951-08	12/06/07 09:33	0.026	0.089	0.089	0.148
DOE 4.5.2.3	AM-241	OH207-7951-08	12/06/07 09:33	0.029	0.080	0.080	0.141
DOE 4.5.2.3	AM-243	OH207-7951-08	12/06/07 09:33	0.140	0.046	0.048	0.046
DOE 4.5.2.3	CM-243	OH207-7951-08	12/06/07 09:33	-0.038	0.044	0.044	0.071
DOE 4.5.2.3	AM-246	OH207-7951-08	12/06/07 09:33	0.016	0.044	0.044	0.080
DOE 4.5.2.3	CF-249	OH207-7951-08	12/06/07 09:33	0.012	0.015	0.015	0.026

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7951-LC1	SCAQC-7951-LD1		SCAQC-7951-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2278-SD</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7951</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7951-09	12/06/07 09:36	3.24	0.449	0.554	0.195
DOE 4.5.2.3	CO-60	OH207-7951-09	12/06/07 09:36	-0.002	0.015	0.015	0.020
DOE 4.5.2.3	RH-101	OH207-7951-09	12/06/07 09:36	-0.003	0.015	0.015	0.025
DOE 4.5.2.3	SB-125	OH207-7951-09	12/06/07 09:36	0.013	0.038	0.038	0.067
DOE 4.5.2.3	CS-137	OH207-7951-09	12/06/07 09:36	0.072	0.033	0.034	0.026
DOE 4.5.2.3	EU-155	OH207-7951-09	12/06/07 09:36	0.061	0.043	0.043	0.076
DOE 4.5.2.3	TL-208	OH207-7951-09	12/06/07 09:36	0.182	0.039	0.043	0.024
DOE 4.5.2.3	PO-209	OH207-7951-09	12/06/07 09:36	0.992	2.65	2.65	4.88
DOE 4.5.2.3	BI-211	OH207-7951-09	12/06/07 09:36	-0.180	0.443	0.443	0.734
DOE 4.5.2.3	BI-212	OH207-7951-09	12/06/07 09:36	0.446	0.207	0.212	0.202
DOE 4.5.2.3	PB-212	OH207-7951-09	12/06/07 09:36	0.604	0.064	0.088	0.039
DOE 4.5.2.3	BI-214	OH207-7951-09	12/06/07 09:36	0.441	0.073	0.086	0.048
DOE 4.5.2.3	PB-214	OH207-7951-09	12/06/07 09:36	0.494	0.073	0.088	0.048
DOE 4.5.2.3	RA-223	OH207-7951-09	12/06/07 09:36	0.190	0.105	0.107	0.120
DOE 4.5.2.3	AC-228	OH207-7951-09	12/06/07 09:36	0.656	0.115	0.132	0.083
DOE 4.5.2.3	PA-233	OH207-7951-09	12/06/07 09:36	-0.014	0.028	0.028	0.046
DOE 4.5.2.3	PA-234M	OH207-7951-09	12/06/07 09:36	2.07	1.72	1.74	3.31
DOE 4.5.2.3	TH-234	OH207-7951-09	12/06/07 09:36	1.10	0.289	0.309	0.415
DOE 4.5.2.3	U-235	OH207-7951-09	12/06/07 09:36	0.028	0.091	0.091	0.155
DOE 4.5.2.3	NP-236	OH207-7951-09	12/06/07 09:36	0.026	0.025	0.026	0.040
DOE 4.5.2.3	NP-237	OH207-7951-09	12/06/07 09:36	0.431	0.128	0.135	0.122
DOE 4.5.2.3	NP-239	OH207-7951-09	12/06/07 09:36	-0.020	0.095	0.095	0.159
DOE 4.5.2.3	AM-241	OH207-7951-09	12/06/07 09:36	-0.077	0.030	0.031	0.046
DOE 4.5.2.3	AM-243	OH207-7951-09	12/06/07 09:36	0.121	0.036	0.038	0.025
DOE 4.5.2.3	CM-243	OH207-7951-09	12/06/07 09:36	0.029	0.038	0.038	0.067
DOE 4.5.2.3	AM-246	OH207-7951-09	12/06/07 09:36	0.013	0.052	0.052	0.095
DOE 4.5.2.3	CF-249	OH207-7951-09	12/06/07 09:36	-0.002	0.016	0.016	0.029

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7951-LC1	SCAQC-7951-LD1		SCAQC-7951-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2279-SD</u>	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
Other Sample ID:	Batch Number: <u>7951</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7951-10	12/06/07 12:34	3.47	0.419	0.544	0.190
DOE 4.5.2.3	CO-60	OH207-7951-10	12/06/07 12:34	0.014	0.013	0.013	0.021
DOE 4.5.2.3	RH-101	OH207-7951-10	12/06/07 12:34	-0.004	0.014	0.014	0.022
DOE 4.5.2.3	SB-125	OH207-7951-10	12/06/07 12:34	0.017	0.034	0.034	0.060
DOE 4.5.2.3	CS-137	OH207-7951-10	12/06/07 12:34	0.061	0.021	0.022	0.022
DOE 4.5.2.3	EU-155	OH207-7951-10	12/06/07 12:34	0.035	0.048	0.048	0.083
DOE 4.5.2.3	TL-208	OH207-7951-10	12/06/07 12:34	0.211	0.036	0.042	0.023
DOE 4.5.2.3	PO-209	OH207-7951-10	12/06/07 12:34	-1.69	2.17	2.18	3.54
DOE 4.5.2.3	BI-211	OH207-7951-10	12/06/07 12:34	0.122	0.356	0.356	0.643
DOE 4.5.2.3	BI-212	OH207-7951-10	12/06/07 12:34	0.416	0.146	0.152	0.162
DOE 4.5.2.3	PB-212	OH207-7951-10	12/06/07 12:34	0.557	0.066	0.086	0.044
DOE 4.5.2.3	BI-214	OH207-7951-10	12/06/07 12:34	0.542	0.077	0.094	0.040
DOE 4.5.2.3	PB-214	OH207-7951-10	12/06/07 12:34	0.548	0.075	0.093	0.040
DOE 4.5.2.3	RA-223	OH207-7951-10	12/06/07 12:34	0.164	0.077	0.079	0.110
DOE 4.5.2.3	AC-228	OH207-7951-10	12/06/07 12:34	0.736	0.121	0.142	0.074
DOE 4.5.2.3	PA-233	OH207-7951-10	12/06/07 12:34	0.006	0.022	0.022	0.039
DOE 4.5.2.3	PA-234M	OH207-7951-10	12/06/07 12:34	0.071	1.49	1.49	2.65
DOE 4.5.2.3	TH-234	OH207-7951-10	12/06/07 12:34	0.634	0.291	0.297	0.488
DOE 4.5.2.3	U-235	OH207-7951-10	12/06/07 12:34	0.013	0.084	0.084	0.141
DOE 4.5.2.3	NP-236	OH207-7951-10	12/06/07 12:34	0.014	0.030	0.030	0.047
DOE 4.5.2.3	NP-237	OH207-7951-10	12/06/07 12:34	0.327	0.121	0.126	0.197
DOE 4.5.2.3	NP-239	OH207-7951-10	12/06/07 12:34	-0.046	0.085	0.085	0.136
DOE 4.5.2.3	AM-241	OH207-7951-10	12/06/07 12:34	-0.015	0.079	0.079	0.136
DOE 4.5.2.3	AM-243	OH207-7951-10	12/06/07 12:34	0.128	0.043	0.045	0.042
DOE 4.5.2.3	CM-243	OH207-7951-10	12/06/07 12:34	0.029	0.043	0.043	0.075
DOE 4.5.2.3	AM-246	OH207-7951-10	12/06/07 12:34	0.024	0.039	0.039	0.073
DOE 4.5.2.3	CF-249	OH207-7951-10	12/06/07 12:34	-0.006	0.014	0.014	0.024

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7951-LC1	SCAQC-7951-LD1		SCAQC-7951-PB1

Sanford Cohen & Associates Southeastern Environmental Laboratory

Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2280-SD</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7951</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7951-11	12/06/07 12:32	6.26	0.656	0.907	0.252
DOE 4.5.2.3	CO-60	OH207-7951-11	12/06/07 12:32	4.6e-06	0.017	0.017	0.028
DOE 4.5.2.3	RH-101	OH207-7951-11	12/06/07 12:32	-0.002	0.017	0.017	0.028
DOE 4.5.2.3	SB-125	OH207-7951-11	12/06/07 12:32	0.019	0.044	0.044	0.076
DOE 4.5.2.3	CS-137	OH207-7951-11	12/06/07 12:32	0.081	0.028	0.029	0.030
DOE 4.5.2.3	EU-155	OH207-7951-11	12/06/07 12:32	0.115	0.089	0.089	0.100
DOE 4.5.2.3	TL-208	OH207-7951-11	12/06/07 12:32	0.316	0.048	0.058	0.026
DOE 4.5.2.3	PO-209	OH207-7951-11	12/06/07 12:32	0.728	3.16	3.17	5.62
DOE 4.5.2.3	BI-211	OH207-7951-11	12/06/07 12:32	0.139	0.480	0.481	0.853
DOE 4.5.2.3	BI-212	OH207-7951-11	12/06/07 12:32	0.540	0.186	0.194	0.223
DOE 4.5.2.3	PB-212	OH207-7951-11	12/06/07 12:32	0.954	0.091	0.132	0.046
DOE 4.5.2.3	BI-214	OH207-7951-11	12/06/07 12:32	0.639	0.104	0.122	0.053
DOE 4.5.2.3	PB-214	OH207-7951-11	12/06/07 12:32	0.704	0.092	0.116	0.053
DOE 4.5.2.3	RA-223	OH207-7951-11	12/06/07 12:32	0.305	0.151	0.154	0.140
DOE 4.5.2.3	AC-228	OH207-7951-11	12/06/07 12:32	1.04	0.175	0.204	0.096
DOE 4.5.2.3	PA-233	OH207-7951-11	12/06/07 12:32	0.003	0.029	0.029	0.051
DOE 4.5.2.3	PA-234M	OH207-7951-11	12/06/07 12:32	1.20	1.77	1.78	3.33
DOE 4.5.2.3	TH-234	OH207-7951-11	12/06/07 12:32	1.24	0.430	0.448	0.449
DOE 4.5.2.3	U-235	OH207-7951-11	12/06/07 12:32	0.060	0.110	0.111	0.183
DOE 4.5.2.3	NP-236	OH207-7951-11	12/06/07 12:32	0.032	0.037	0.037	0.060
DOE 4.5.2.3	NP-237	OH207-7951-11	12/06/07 12:32	0.674	0.209	0.220	0.212
DOE 4.5.2.3	NP-239	OH207-7951-11	12/06/07 12:32	-0.126	0.104	0.105	0.171
DOE 4.5.2.3	AM-241	OH207-7951-11	12/06/07 12:32	0.083	0.098	0.098	0.155
DOE 4.5.2.3	AM-243	OH207-7951-11	12/06/07 12:32	0.170	0.053	0.056	0.054
DOE 4.5.2.3	CM-243	OH207-7951-11	12/06/07 12:32	0.105	0.081	0.082	0.087
DOE 4.5.2.3	AM-246	OH207-7951-11	12/06/07 12:32	0.040	0.059	0.059	0.107
DOE 4.5.2.3	CF-249	OH207-7951-11	12/06/07 12:32	-1.9e-04	0.018	0.018	0.031

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7951-LC1	SCAQC-7951-LD1		SCAQC-7951-PB1

Sanford Cohen & Associates Southeastern Environmental Laboratory

Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>GOC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2281-SD</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7951</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7951-12	12/06/07 12:37	5.62	0.643	0.854	0.226
DOE 4.5.2.3	CO-60	OH207-7951-12	12/06/07 12:37	0.006	0.019	0.019	0.031
DOE 4.5.2.3	RH-101	OH207-7951-12	12/06/07 12:37	0.007	0.019	0.019	0.032
DOE 4.5.2.3	SB-125	OH207-7951-12	12/06/07 12:37	0.008	0.049	0.049	0.085
DOE 4.5.2.3	CS-137	OH207-7951-12	12/06/07 12:37	-0.012	0.020	0.020	0.033
DOE 4.5.2.3	EU-155	OH207-7951-12	12/06/07 12:37	0.034	0.055	0.055	0.095
DOE 4.5.2.3	TL-208	OH207-7951-12	12/06/07 12:37	0.366	0.051	0.063	0.031
DOE 4.5.2.3	PO-209	OH207-7951-12	12/06/07 12:37	-0.073	3.29	3.29	5.87
DOE 4.5.2.3	BI-211	OH207-7951-12	12/06/07 12:37	-0.103	0.570	0.570	0.959
DOE 4.5.2.3	BI-212	OH207-7951-12	12/06/07 12:37	0.743	0.229	0.241	0.256
DOE 4.5.2.3	PB-212	OH207-7951-12	12/06/07 12:37	0.981	0.095	0.136	0.050
DOE 4.5.2.3	BI-214	OH207-7951-12	12/06/07 12:37	0.685	0.095	0.117	0.058
DOE 4.5.2.3	PB-214	OH207-7951-12	12/06/07 12:37	0.753	0.097	0.123	0.063
DOE 4.5.2.3	RA-223	OH207-7951-12	12/06/07 12:37	0.296	0.133	0.136	0.149
DOE 4.5.2.3	AC-228	OH207-7951-12	12/06/07 12:37	1.00	0.161	0.190	0.098
DOE 4.5.2.3	PA-233	OH207-7951-12	12/06/07 12:37	0.021	0.032	0.032	0.056
DOE 4.5.2.3	PA-234M	OH207-7951-12	12/06/07 12:37	0.940	2.06	2.06	3.75
DOE 4.5.2.3	TH-234	OH207-7951-12	12/06/07 12:37	1.17	0.383	0.400	0.370
DOE 4.5.2.3	U-235	OH207-7951-12	12/06/07 12:37	3.7e-04	0.114	0.114	0.193
DOE 4.5.2.3	NP-236	OH207-7951-12	12/06/07 12:37	0.006	0.033	0.033	0.051
DOE 4.5.2.3	NP-237	OH207-7951-12	12/06/07 12:37	0.364	0.190	0.193	0.180
DOE 4.5.2.3	NP-239	OH207-7951-12	12/06/07 12:37	0.011	0.121	0.121	0.204
DOE 4.5.2.3	AM-241	OH207-7951-12	12/06/07 12:37	0.064	0.040	0.041	0.062
DOE 4.5.2.3	AM-243	OH207-7951-12	12/06/07 12:37	0.168	0.045	0.048	0.032
DOE 4.5.2.3	CM-243	OH207-7951-12	12/06/07 12:37	-0.005	0.049	0.049	0.084
DOE 4.5.2.3	AM-246	OH207-7951-12	12/06/07 12:37	0.066	0.069	0.069	0.129
DOE 4.5.2.3	CF-249	OH207-7951-12	12/06/07 12:37	0.011	0.021	0.021	0.037

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7951-LC1	SCAQC-7951-LD1		SCAQC-7951-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2282-SD</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7951</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7951-13	12/06/07 15:35	6.91	0.707	0.989	0.213
DOE 4.5.2.3	CO-60	OH207-7951-13	12/06/07 15:35	0.008	0.018	0.018	0.023
DOE 4.5.2.3	RH-101	OH207-7951-13	12/06/07 15:35	0.006	0.018	0.018	0.029
DOE 4.5.2.3	SB-125	OH207-7951-13	12/06/07 15:35	0.011	0.046	0.046	0.080
DOE 4.5.2.3	CS-137	OH207-7951-13	12/06/07 15:35	0.052	0.025	0.026	0.032
DOE 4.5.2.3	EU-155	OH207-7951-13	12/06/07 15:35	0.041	0.064	0.064	0.110
DOE 4.5.2.3	TL-208	OH207-7951-13	12/06/07 15:35	0.408	0.059	0.072	0.029
DOE 4.5.2.3	PO-209	OH207-7951-13	12/06/07 15:35	-1.25	3.12	3.12	5.29
DOE 4.5.2.3	BI-211	OH207-7951-13	12/06/07 15:35	0.242	0.477	0.478	0.864
DOE 4.5.2.3	BI-212	OH207-7951-13	12/06/07 15:35	0.812	0.213	0.228	0.202
DOE 4.5.2.3	PB-212	OH207-7951-13	12/06/07 15:35	0.962	0.097	0.137	0.060
DOE 4.5.2.3	BI-214	OH207-7951-13	12/06/07 15:35	0.816	0.113	0.140	0.053
DOE 4.5.2.3	PB-214	OH207-7951-13	12/06/07 15:35	0.781	0.091	0.120	0.053
DOE 4.5.2.3	RA-223	OH207-7951-13	12/06/07 15:35	0.293	0.152	0.155	0.142
DOE 4.5.2.3	AC-228	OH207-7951-13	12/06/07 15:35	1.16	0.173	0.208	0.105
DOE 4.5.2.3	PA-233	OH207-7951-13	12/06/07 15:35	-0.010	0.028	0.028	0.049
DOE 4.5.2.3	PA-234M	OH207-7951-13	12/06/07 15:35	2.26	1.96	1.98	3.19
DOE 4.5.2.3	TH-234	OH207-7951-13	12/06/07 15:35	1.62	0.516	0.541	0.651
DOE 4.5.2.3	U-235	OH207-7951-13	12/06/07 15:35	0.100	0.109	0.110	0.186
DOE 4.5.2.3	NP-236	OH207-7951-13	12/06/07 15:35	0.009	0.038	0.038	0.062
DOE 4.5.2.3	NP-237	OH207-7951-13	12/06/07 15:35	0.775	0.218	0.232	0.220
DOE 4.5.2.3	NP-239	OH207-7951-13	12/06/07 15:35	0.020	0.111	0.111	0.183
DOE 4.5.2.3	AM-241	OH207-7951-13	12/06/07 15:35	0.035	0.102	0.103	0.180
DOE 4.5.2.3	AM-243	OH207-7951-13	12/06/07 15:35	0.218	0.064	0.068	0.056
DOE 4.5.2.3	CM-243	OH207-7951-13	12/06/07 15:35	0.021	0.057	0.057	0.098
DOE 4.5.2.3	AM-246	OH207-7951-13	12/06/07 15:35	0.018	0.054	0.054	0.097
DOE 4.5.2.3	CF-249	OH207-7951-13	12/06/07 15:35	0.018	0.019	0.019	0.034

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7951-LC1	SCAQC-7951-LD1		SCAQC-7951-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2283-SD</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7951</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7951-14	12/06/07 15:36	6.47	0.646	0.915	0.198
DOE 4.5.2.3	CO-60	OH207-7951-14	12/06/07 15:36	0.010	0.016	0.016	0.023
DOE 4.5.2.3	RH-101	OH207-7951-14	12/06/07 15:36	0.010	0.016	0.016	0.027
DOE 4.5.2.3	SB-125	OH207-7951-14	12/06/07 15:36	0.016	0.040	0.040	0.068
DOE 4.5.2.3	CS-137	OH207-7951-14	12/06/07 15:36	0.102	0.032	0.033	0.026
DOE 4.5.2.3	EU-155	OH207-7951-14	12/06/07 15:36	0.094	0.057	0.058	0.099
DOE 4.5.2.3	TL-208	OH207-7951-14	12/06/07 15:36	0.300	0.046	0.055	0.025
DOE 4.5.2.3	PO-209	OH207-7951-14	12/06/07 15:36	1.70	2.83	2.83	5.11
DOE 4.5.2.3	BI-211	OH207-7951-14	12/06/07 15:36	-0.133	0.440	0.440	0.748
DOE 4.5.2.3	BI-212	OH207-7951-14	12/06/07 15:36	0.668	0.193	0.205	0.200
DOE 4.5.2.3	PB-212	OH207-7951-14	12/06/07 15:36	0.889	0.083	0.122	0.041
DOE 4.5.2.3	BI-214	OH207-7951-14	12/06/07 15:36	0.674	0.093	0.115	0.051
DOE 4.5.2.3	PB-214	OH207-7951-14	12/06/07 15:36	0.718	0.085	0.112	0.049
DOE 4.5.2.3	RA-223	OH207-7951-14	12/06/07 15:36	0.362	0.108	0.114	0.121
DOE 4.5.2.3	AC-228	OH207-7951-14	12/06/07 15:36	1.04	0.154	0.185	0.093
DOE 4.5.2.3	PA-233	OH207-7951-14	12/06/07 15:36	-0.008	0.027	0.027	0.045
DOE 4.5.2.3	PA-234M	OH207-7951-14	12/06/07 15:36	0.614	1.66	1.66	3.00
DOE 4.5.2.3	TH-234	OH207-7951-14	12/06/07 15:36	1.49	0.433	0.458	0.402
DOE 4.5.2.3	U-235	OH207-7951-14	12/06/07 15:36	0.078	0.099	0.099	0.165
DOE 4.5.2.3	NP-236	OH207-7951-14	12/06/07 15:36	-0.031	0.033	0.033	0.054
DOE 4.5.2.3	NP-237	OH207-7951-14	12/06/07 15:36	0.334	0.160	0.164	0.190
DOE 4.5.2.3	NP-239	OH207-7951-14	12/06/07 15:36	-0.017	0.093	0.093	0.160
DOE 4.5.2.3	AM-241	OH207-7951-14	12/06/07 15:36	-0.012	0.090	0.090	0.137
DOE 4.5.2.3	AM-243	OH207-7951-14	12/06/07 15:36	0.227	0.063	0.067	0.046
DOE 4.5.2.3	CM-243	OH207-7951-14	12/06/07 15:36	0.031	0.050	0.050	0.085
DOE 4.5.2.3	AM-246	OH207-7951-14	12/06/07 15:36	0.053	0.053	0.053	0.097
DOE 4.5.2.3	CF-249	OH207-7951-14	12/06/07 15:36	0.015	0.018	0.018	0.031

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7951-LC1	SCAQC-7951-LD1		SCAQC-7951-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2284-ST</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7952</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7952-01	12/06/07 21:45	5.27	0.608	0.805	0.192
DOE 4.5.2.3	CO-60	OH207-7952-01	12/06/07 21:45	0.009	0.015	0.015	0.024
DOE 4.5.2.3	RH-101	OH207-7952-01	12/06/07 21:45	0.003	0.016	0.016	0.027
DOE 4.5.2.3	SB-125	OH207-7952-01	12/06/07 21:45	-0.015	0.042	0.042	0.071
DOE 4.5.2.3	CS-137	OH207-7952-01	12/06/07 21:45	0.300	0.052	0.060	0.031
DOE 4.5.2.3	EU-155	OH207-7952-01	12/06/07 21:45	0.025	0.056	0.056	0.096
DOE 4.5.2.3	TL-208	OH207-7952-01	12/06/07 21:45	0.228	0.043	0.049	0.026
DOE 4.5.2.3	PO-209	OH207-7952-01	12/06/07 21:45	-0.608	2.81	2.81	4.84
DOE 4.5.2.3	BI-211	OH207-7952-01	12/06/07 21:45	0.072	0.497	0.497	0.766
DOE 4.5.2.3	BI-212	OH207-7952-01	12/06/07 21:45	0.434	0.249	0.253	0.202
DOE 4.5.2.3	PB-212	OH207-7952-01	12/06/07 21:45	0.750	0.075	0.106	0.044
DOE 4.5.2.3	BI-214	OH207-7952-01	12/06/07 21:45	0.631	0.097	0.116	0.047
DOE 4.5.2.3	PB-214	OH207-7952-01	12/06/07 21:45	0.606	0.081	0.101	0.054
DOE 4.5.2.3	RA-223	OH207-7952-01	12/06/07 21:45	0.187	0.117	0.119	0.134
DOE 4.5.2.3	AC-228	OH207-7952-01	12/06/07 21:45	0.793	0.137	0.159	0.094
DOE 4.5.2.3	PA-233	OH207-7952-01	12/06/07 21:45	-0.008	0.028	0.028	0.047
DOE 4.5.2.3	PA-234M	OH207-7952-01	12/06/07 21:45	0.949	1.84	1.85	3.40
DOE 4.5.2.3	TH-234	OH207-7952-01	12/06/07 21:45	1.21	0.478	0.493	0.561
DOE 4.5.2.3	U-235	OH207-7952-01	12/06/07 21:45	-0.074	0.101	0.101	0.160
DOE 4.5.2.3	NP-236	OH207-7952-01	12/06/07 21:45	-0.023	0.034	0.034	0.056
DOE 4.5.2.3	NP-237	OH207-7952-01	12/06/07 21:45	0.431	0.169	0.175	0.184
DOE 4.5.2.3	NP-239	OH207-7952-01	12/06/07 21:45	-0.041	0.095	0.095	0.162
DOE 4.5.2.3	AM-241	OH207-7952-01	12/06/07 21:45	-0.031	0.086	0.086	0.146
DOE 4.5.2.3	AM-243	OH207-7952-01	12/06/07 21:45	0.172	0.050	0.053	0.049
DOE 4.5.2.3	CM-243	OH207-7952-01	12/06/07 21:45	-0.034	0.051	0.051	0.083
DOE 4.5.2.3	AM-246	OH207-7952-01	12/06/07 21:45	-3.4e-04	0.049	0.049	0.086
DOE 4.5.2.3	CF-249	OH207-7952-01	12/06/07 21:45	9.3e-04	0.018	0.018	0.030

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7952-LC1	SCAQC-7952-LD1		SCAQC-7952-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2285-ST</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7952</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7952-02	12/06/07 18:43	7.82	0.773	1.10	0.246
DOE 4.5.2.3	CO-60	OH207-7952-02	12/06/07 18:43	-0.009	0.018	0.018	0.030
DOE 4.5.2.3	RH-101	OH207-7952-02	12/06/07 18:43	-0.004	0.018	0.018	0.029
DOE 4.5.2.3	SB-125	OH207-7952-02	12/06/07 18:43	0.001	0.049	0.049	0.083
DOE 4.5.2.3	CS-137	OH207-7952-02	12/06/07 18:43	0.091	0.027	0.029	0.033
DOE 4.5.2.3	EU-155	OH207-7952-02	12/06/07 18:43	0.027	0.064	0.064	0.109
DOE 4.5.2.3	TL-208	OH207-7952-02	12/06/07 18:43	0.358	0.058	0.068	0.030
DOE 4.5.2.3	PO-209	OH207-7952-02	12/06/07 18:43	-0.900	3.35	3.35	5.70
DOE 4.5.2.3	BI-211	OH207-7952-02	12/06/07 18:43	-0.130	0.520	0.520	0.888
DOE 4.5.2.3	BI-212	OH207-7952-02	12/06/07 18:43	0.721	0.298	0.306	0.225
DOE 4.5.2.3	PB-212	OH207-7952-02	12/06/07 18:43	1.06	0.099	0.145	0.047
DOE 4.5.2.3	BI-214	OH207-7952-02	12/06/07 18:43	0.811	0.120	0.145	0.053
DOE 4.5.2.3	PB-214	OH207-7952-02	12/06/07 18:43	0.873	0.105	0.137	0.056
DOE 4.5.2.3	RA-223	OH207-7952-02	12/06/07 18:43	0.327	0.144	0.147	0.150
DOE 4.5.2.3	AC-228	OH207-7952-02	12/06/07 18:43	1.23	0.179	0.217	0.104
DOE 4.5.2.3	PA-233	OH207-7952-02	12/06/07 18:43	-0.010	0.031	0.031	0.052
DOE 4.5.2.3	PA-234M	OH207-7952-02	12/06/07 18:43	1.39	2.17	2.18	3.97
DOE 4.5.2.3	TH-234	OH207-7952-02	12/06/07 18:43	0.825	0.360	0.369	0.625
DOE 4.5.2.3	U-235	OH207-7952-02	12/06/07 18:43	0.063	0.115	0.115	0.190
DOE 4.5.2.3	NP-236	OH207-7952-02	12/06/07 18:43	0.052	0.041	0.041	0.064
DOE 4.5.2.3	NP-237	OH207-7952-02	12/06/07 18:43	0.681	0.203	0.214	0.261
DOE 4.5.2.3	NP-239	OH207-7952-02	12/06/07 18:43	0.015	0.108	0.108	0.189
DOE 4.5.2.3	AM-241	OH207-7952-02	12/06/07 18:43	-0.002	0.106	0.106	0.162
DOE 4.5.2.3	AM-243	OH207-7952-02	12/06/07 18:43	0.189	0.058	0.061	0.056
DOE 4.5.2.3	CM-243	OH207-7952-02	12/06/07 18:43	-0.002	0.057	0.057	0.095
DOE 4.5.2.3	AM-246	OH207-7952-02	12/06/07 18:43	-0.038	0.057	0.057	0.093
DOE 4.5.2.3	CF-249	OH207-7952-02	12/06/07 18:43	0.011	0.019	0.019	0.034

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7952-LC1	SCAQC-7952-LD1		SCAQC-7952-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2286-ST</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7952</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7952-03	12/06/07 21:41	5.88	0.604	0.843	0.179
DOE 4.5.2.3	CO-60	OH207-7952-03	12/06/07 21:41	0.016	0.016	0.016	0.024
DOE 4.5.2.3	RH-101	OH207-7952-03	12/06/07 21:41	0.012	0.016	0.016	0.027
DOE 4.5.2.3	SB-125	OH207-7952-03	12/06/07 21:41	0.005	0.041	0.041	0.070
DOE 4.5.2.3	CS-137	OH207-7952-03	12/06/07 21:41	0.198	0.041	0.045	0.028
DOE 4.5.2.3	EU-155	OH207-7952-03	12/06/07 21:41	0.069	0.058	0.058	0.101
DOE 4.5.2.3	TL-208	OH207-7952-03	12/06/07 21:41	0.301	0.050	0.058	0.025
DOE 4.5.2.3	PO-209	OH207-7952-03	12/06/07 21:41	-1.44	2.57	2.58	4.30
DOE 4.5.2.3	BI-211	OH207-7952-03	12/06/07 21:41	-0.135	0.408	0.408	0.700
DOE 4.5.2.3	BI-212	OH207-7952-03	12/06/07 21:41	0.462	0.208	0.213	0.188
DOE 4.5.2.3	PB-212	OH207-7952-03	12/06/07 21:41	0.806	0.079	0.113	0.042
DOE 4.5.2.3	BI-214	OH207-7952-03	12/06/07 21:41	0.713	0.099	0.122	0.048
DOE 4.5.2.3	PB-214	OH207-7952-03	12/06/07 21:41	0.697	0.087	0.112	0.050
DOE 4.5.2.3	RA-223	OH207-7952-03	12/06/07 21:41	0.359	0.140	0.145	0.124
DOE 4.5.2.3	AC-228	OH207-7952-03	12/06/07 21:41	0.910	0.124	0.154	0.084
DOE 4.5.2.3	PA-233	OH207-7952-03	12/06/07 21:41	0.008	0.027	0.027	0.047
DOE 4.5.2.3	PA-234M	OH207-7952-03	12/06/07 21:41	0.298	1.59	1.59	2.87
DOE 4.5.2.3	TH-234	OH207-7952-03	12/06/07 21:41	1.27	0.428	0.447	0.570
DOE 4.5.2.3	U-235	OH207-7952-03	12/06/07 21:41	0.028	0.098	0.098	0.163
DOE 4.5.2.3	NP-236	OH207-7952-03	12/06/07 21:41	-0.004	0.036	0.036	0.054
DOE 4.5.2.3	NP-237	OH207-7952-03	12/06/07 21:41	0.557	0.188	0.196	0.220
DOE 4.5.2.3	NP-239	OH207-7952-03	12/06/07 21:41	-0.059	0.100	0.101	0.160
DOE 4.5.2.3	AM-241	OH207-7952-03	12/06/07 21:41	6.1e-04	0.092	0.092	0.160
DOE 4.5.2.3	AM-243	OH207-7952-03	12/06/07 21:41	0.205	0.061	0.064	0.049
DOE 4.5.2.3	CM-243	OH207-7952-03	12/06/07 21:41	-0.011	0.052	0.052	0.088
DOE 4.5.2.3	AM-246	OH207-7952-03	12/06/07 21:41	0.025	0.047	0.047	0.086
DOE 4.5.2.3	CF-249	OH207-7952-03	12/06/07 21:41	0.009	0.018	0.018	0.031

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7952-LC1	SCAQC-7952-LD1		SCAQC-7952-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2287-ST</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7952</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7952-04	12/07/07 09:00	5.34	0.582	0.790	0.216
DOE 4.5.2.3	CO-60	OH207-7952-04	12/07/07 09:00	-0.016	0.014	0.014	0.021
DOE 4.5.2.3	RH-101	OH207-7952-04	12/07/07 09:00	-0.006	0.015	0.015	0.025
DOE 4.5.2.3	SB-125	OH207-7952-04	12/07/07 09:00	0.005	0.037	0.037	0.064
DOE 4.5.2.3	CS-137	OH207-7952-04	12/07/07 09:00	0.208	0.040	0.045	0.025
DOE 4.5.2.3	EU-155	OH207-7952-04	12/07/07 09:00	0.098	0.055	0.056	0.097
DOE 4.5.2.3	TL-208	OH207-7952-04	12/07/07 09:00	0.317	0.047	0.057	0.023
DOE 4.5.2.3	PO-209	OH207-7952-04	12/07/07 09:00	-0.881	2.45	2.45	4.19
DOE 4.5.2.3	BI-211	OH207-7952-04	12/07/07 09:00	-0.567	0.433	0.436	0.686
DOE 4.5.2.3	BI-212	OH207-7952-04	12/07/07 09:00	0.590	0.185	0.194	0.181
DOE 4.5.2.3	PB-212	OH207-7952-04	12/07/07 09:00	0.899	0.084	0.123	0.040
DOE 4.5.2.3	BI-214	OH207-7952-04	12/07/07 09:00	0.673	0.097	0.118	0.051
DOE 4.5.2.3	PB-214	OH207-7952-04	12/07/07 09:00	0.816	0.094	0.125	0.046
DOE 4.5.2.3	RA-223	OH207-7952-04	12/07/07 09:00	0.291	0.136	0.139	0.121
DOE 4.5.2.3	AC-228	OH207-7952-04	12/07/07 09:00	1.05	0.136	0.172	0.081
DOE 4.5.2.3	PA-233	OH207-7952-04	12/07/07 09:00	-0.009	0.026	0.026	0.045
DOE 4.5.2.3	PA-234M	OH207-7952-04	12/07/07 09:00	1.36	1.64	1.64	3.06
DOE 4.5.2.3	TH-234	OH207-7952-04	12/07/07 09:00	1.29	0.466	0.483	0.565
DOE 4.5.2.3	U-235	OH207-7952-04	12/07/07 09:00	-0.023	0.098	0.098	0.161
DOE 4.5.2.3	NP-236	OH207-7952-04	12/07/07 09:00	0.022	0.033	0.033	0.056
DOE 4.5.2.3	NP-237	OH207-7952-04	12/07/07 09:00	0.476	0.188	0.194	0.226
DOE 4.5.2.3	NP-239	OH207-7952-04	12/07/07 09:00	0.037	0.096	0.096	0.160
DOE 4.5.2.3	AM-241	OH207-7952-04	12/07/07 09:00	0.017	0.089	0.089	0.156
DOE 4.5.2.3	AM-243	OH207-7952-04	12/07/07 09:00	0.186	0.056	0.059	0.053
DOE 4.5.2.3	CM-243	OH207-7952-04	12/07/07 09:00	-0.032	0.050	0.050	0.083
DOE 4.5.2.3	AM-246	OH207-7952-04	12/07/07 09:00	-0.035	0.045	0.045	0.073
DOE 4.5.2.3	CF-249	OH207-7952-04	12/07/07 09:00	0.001	0.017	0.017	0.030

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7952-LC1	SCAQC-7952-LD1		SCAQC-7952-PB1

Sanford Cohen & Associates Southeastern Environmental Laboratory

Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2288-ST</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7952</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7952-05	12/07/07 09:02	5.72	0.595	0.825	0.194
DOE 4.5.2.3	CO-60	OH207-7952-05	12/07/07 09:02	0.004	0.015	0.015	0.022
DOE 4.5.2.3	RH-101	OH207-7952-05	12/07/07 09:02	-0.003	0.015	0.015	0.025
DOE 4.5.2.3	SB-125	OH207-7952-05	12/07/07 09:02	-0.004	0.040	0.040	0.068
DOE 4.5.2.3	CS-137	OH207-7952-05	12/07/07 09:02	0.197	0.034	0.039	0.024
DOE 4.5.2.3	EU-155	OH207-7952-05	12/07/07 09:02	0.050	0.054	0.054	0.092
DOE 4.5.2.3	TL-208	OH207-7952-05	12/07/07 09:02	0.255	0.043	0.050	0.023
DOE 4.5.2.3	PO-209	OH207-7952-05	12/07/07 09:02	-1.73	2.96	2.97	4.89
DOE 4.5.2.3	BI-211	OH207-7952-05	12/07/07 09:02	-0.072	0.413	0.413	0.712
DOE 4.5.2.3	BI-212	OH207-7952-05	12/07/07 09:02	0.475	0.187	0.193	0.191
DOE 4.5.2.3	PB-212	OH207-7952-05	12/07/07 09:02	0.685	0.073	0.100	0.056
DOE 4.5.2.3	BI-214	OH207-7952-05	12/07/07 09:02	0.707	0.101	0.123	0.046
DOE 4.5.2.3	PB-214	OH207-7952-05	12/07/07 09:02	0.675	0.086	0.109	0.046
DOE 4.5.2.3	RA-223	OH207-7952-05	12/07/07 09:02	0.308	0.132	0.135	0.119
DOE 4.5.2.3	AC-228	OH207-7952-05	12/07/07 09:02	0.851	0.148	0.171	0.089
DOE 4.5.2.3	PA-233	OH207-7952-05	12/07/07 09:02	0.012	0.025	0.025	0.044
DOE 4.5.2.3	PA-234M	OH207-7952-05	12/07/07 09:02	1.30	1.77	1.77	3.27
DOE 4.5.2.3	TH-234	OH207-7952-05	12/07/07 09:02	0.901	0.310	0.322	0.503
DOE 4.5.2.3	U-235	OH207-7952-05	12/07/07 09:02	0.056	0.097	0.097	0.161
DOE 4.5.2.3	NP-236	OH207-7952-05	12/07/07 09:02	0.036	0.034	0.034	0.053
DOE 4.5.2.3	NP-237	OH207-7952-05	12/07/07 09:02	0.416	0.146	0.151	0.180
DOE 4.5.2.3	NP-239	OH207-7952-05	12/07/07 09:02	0.009	0.093	0.093	0.162
DOE 4.5.2.3	AM-241	OH207-7952-05	12/07/07 09:02	0.028	0.077	0.077	0.134
DOE 4.5.2.3	AM-243	OH207-7952-05	12/07/07 09:02	0.133	0.044	0.046	0.047
DOE 4.5.2.3	CM-243	OH207-7952-05	12/07/07 09:02	0.003	0.049	0.049	0.082
DOE 4.5.2.3	AM-246	OH207-7952-05	12/07/07 09:02	0.021	0.048	0.048	0.086
DOE 4.5.2.3	CF-249	OH207-7952-05	12/07/07 09:02	0.005	0.017	0.017	0.029

Quality Control Samples			
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)
Gamma	SCAQC-7952-LC1	SCAQC-7952-LD1	SCAQC-7952-PB1

Sanford Cohen & Associates Southeastern Environmental Laboratory

Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2289-ST</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7952</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7952-06	12/07/07 09:03	3.86	0.494	0.627	0.250
DOE 4.5.2.3	CO-60	OH207-7952-06	12/07/07 09:03	-0.018	0.018	0.018	0.028
DOE 4.5.2.3	RH-101	OH207-7952-06	12/07/07 09:03	0.004	0.017	0.017	0.029
DOE 4.5.2.3	SB-125	OH207-7952-06	12/07/07 09:03	0.010	0.045	0.046	0.080
DOE 4.5.2.3	CS-137	OH207-7952-06	12/07/07 09:03	0.133	0.037	0.040	0.032
DOE 4.5.2.3	EU-155	OH207-7952-06	12/07/07 09:03	0.024	0.049	0.049	0.086
DOE 4.5.2.3	TL-208	OH207-7952-06	12/07/07 09:03	0.270	0.046	0.053	0.026
DOE 4.5.2.3	PO-209	OH207-7952-06	12/07/07 09:03	-0.871	2.96	2.96	5.18
DOE 4.5.2.3	BI-211	OH207-7952-06	12/07/07 09:03	-0.212	0.546	0.546	0.904
DOE 4.5.2.3	BI-212	OH207-7952-06	12/07/07 09:03	0.430	0.207	0.212	0.220
DOE 4.5.2.3	PB-212	OH207-7952-06	12/07/07 09:03	0.838	0.082	0.118	0.044
DOE 4.5.2.3	BI-214	OH207-7952-06	12/07/07 09:03	0.446	0.076	0.088	0.058
DOE 4.5.2.3	PB-214	OH207-7952-06	12/07/07 09:03	0.551	0.085	0.102	0.055
DOE 4.5.2.3	RA-223	OH207-7952-06	12/07/07 09:03	0.344	0.149	0.153	0.142
DOE 4.5.2.3	AC-228	OH207-7952-06	12/07/07 09:03	0.986	0.143	0.174	0.102
DOE 4.5.2.3	PA-233	OH207-7952-06	12/07/07 09:03	-0.021	0.032	0.032	0.052
DOE 4.5.2.3	PA-234M	OH207-7952-06	12/07/07 09:03	-0.589	1.82	1.82	3.13
DOE 4.5.2.3	TH-234	OH207-7952-06	12/07/07 09:03	0.907	0.347	0.359	0.466
DOE 4.5.2.3	U-235	OH207-7952-06	12/07/07 09:03	0.059	0.104	0.104	0.179
DOE 4.5.2.3	NP-236	OH207-7952-06	12/07/07 09:03	0.023	0.032	0.032	0.046
DOE 4.5.2.3	NP-237	OH207-7952-06	12/07/07 09:03	0.237	0.132	0.134	0.169
DOE 4.5.2.3	NP-239	OH207-7952-06	12/07/07 09:03	-0.069	0.110	0.111	0.182
DOE 4.5.2.3	AM-241	OH207-7952-06	12/07/07 09:03	-0.116	0.035	0.037	0.051
DOE 4.5.2.3	AM-243	OH207-7952-06	12/07/07 09:03	0.134	0.039	0.042	0.028
DOE 4.5.2.3	CM-243	OH207-7952-06	12/07/07 09:03	0.022	0.044	0.044	0.077
DOE 4.5.2.3	AM-246	OH207-7952-06	12/07/07 09:03	0.050	0.059	0.060	0.112
DOE 4.5.2.3	CF-249	OH207-7952-06	12/07/07 09:03	-0.002	0.019	0.019	0.034

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7952-LC1	SCAQC-7952-LD1		SCAQC-7952-PB1

Sanford Cohen & Associates Southeastern Environmental Laboratory

Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2290-ST</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7952</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7952-07	12/07/07 12:11	3.10	0.419	0.521	0.187
DOE 4.5.2.3	CO-60	OH207-7952-07	12/07/07 12:11	-0.015	0.015	0.015	0.023
DOE 4.5.2.3	RH-101	OH207-7952-07	12/07/07 12:11	-0.004	0.016	0.016	0.026
DOE 4.5.2.3	SB-125	OH207-7952-07	12/07/07 12:11	-0.014	0.040	0.040	0.067
DOE 4.5.2.3	CS-137	OH207-7952-07	12/07/07 12:11	0.258	0.041	0.049	0.030
DOE 4.5.2.3	EU-155	OH207-7952-07	12/07/07 12:11	0.035	0.059	0.059	0.101
DOE 4.5.2.3	TL-208	OH207-7952-07	12/07/07 12:11	0.306	0.048	0.057	0.024
DOE 4.5.2.3	PO-209	OH207-7952-07	12/07/07 12:11	-0.594	2.64	2.64	4.57
DOE 4.5.2.3	BI-211	OH207-7952-07	12/07/07 12:11	-0.135	0.418	0.418	0.718
DOE 4.5.2.3	BI-212	OH207-7952-07	12/07/07 12:11	0.629	0.170	0.181	0.196
DOE 4.5.2.3	PB-212	OH207-7952-07	12/07/07 12:11	0.893	0.085	0.124	0.042
DOE 4.5.2.3	BI-214	OH207-7952-07	12/07/07 12:11	0.718	0.102	0.125	0.050
DOE 4.5.2.3	PB-214	OH207-7952-07	12/07/07 12:11	0.787	0.092	0.121	0.048
DOE 4.5.2.3	RA-223	OH207-7952-07	12/07/07 12:11	0.313	0.121	0.125	0.136
DOE 4.5.2.3	AC-228	OH207-7952-07	12/07/07 12:11	1.05	0.143	0.177	0.086
DOE 4.5.2.3	PA-233	OH207-7952-07	12/07/07 12:11	-0.001	0.028	0.028	0.048
DOE 4.5.2.3	PA-234M	OH207-7952-07	12/07/07 12:11	1.48	1.50	1.51	2.90
DOE 4.5.2.3	TH-234	OH207-7952-07	12/07/07 12:11	1.17	0.464	0.479	0.575
DOE 4.5.2.3	U-235	OH207-7952-07	12/07/07 12:11	0.003	0.099	0.099	0.164
DOE 4.5.2.3	NP-236	OH207-7952-07	12/07/07 12:11	0.023	0.034	0.034	0.057
DOE 4.5.2.3	NP-237	OH207-7952-07	12/07/07 12:11	0.496	0.186	0.192	0.230
DOE 4.5.2.3	NP-239	OH207-7952-07	12/07/07 12:11	0.064	0.101	0.102	0.170
DOE 4.5.2.3	AM-241	OH207-7952-07	12/07/07 12:11	-0.010	0.090	0.090	0.156
DOE 4.5.2.3	AM-243	OH207-7952-07	12/07/07 12:11	0.169	0.053	0.055	0.051
DOE 4.5.2.3	CM-243	OH207-7952-07	12/07/07 12:11	0.059	0.053	0.053	0.092
DOE 4.5.2.3	AM-246	OH207-7952-07	12/07/07 12:11	0.003	0.048	0.048	0.084
DOE 4.5.2.3	CF-249	OH207-7952-07	12/07/07 12:11	0.003	0.017	0.017	0.030

Quality Control Samples			
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)
Gamma	SCAQC-7952-LC1	SCAQC-7952-LD1	SCAQC-7952-PB1

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Southeastern Environmental Laboratory

Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2291-ST</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7952</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7952-08	12/07/07 12:12	2.05	0.300	0.363	0.162
DOE 4.5.2.3	CO-60	OH207-7952-08	12/07/07 12:12	0.001	0.012	0.012	0.021
DOE 4.5.2.3	RH-101	OH207-7952-08	12/07/07 12:12	-0.011	0.015	0.015	0.024
DOE 4.5.2.3	SB-125	OH207-7952-08	12/07/07 12:12	0.003	0.036	0.036	0.062
DOE 4.5.2.3	CS-137	OH207-7952-08	12/07/07 12:12	0.122	0.029	0.032	0.026
DOE 4.5.2.3	EU-155	OH207-7952-08	12/07/07 12:12	0.022	0.051	0.051	0.086
DOE 4.5.2.3	TL-208	OH207-7952-08	12/07/07 12:12	0.233	0.038	0.045	0.024
DOE 4.5.2.3	PO-209	OH207-7952-08	12/07/07 12:12	-0.057	2.47	2.47	4.32
DOE 4.5.2.3	BI-211	OH207-7952-08	12/07/07 12:12	-0.334	0.377	0.379	0.613
DOE 4.5.2.3	BI-212	OH207-7952-08	12/07/07 12:12	0.494	0.215	0.221	0.164
DOE 4.5.2.3	PB-212	OH207-7952-08	12/07/07 12:12	0.734	0.071	0.102	0.038
DOE 4.5.2.3	BI-214	OH207-7952-08	12/07/07 12:12	0.722	0.100	0.123	0.043
DOE 4.5.2.3	PB-214	OH207-7952-08	12/07/07 12:12	0.768	0.087	0.116	0.043
DOE 4.5.2.3	RA-223	OH207-7952-08	12/07/07 12:12	0.289	0.120	0.123	0.119
DOE 4.5.2.3	AC-228	OH207-7952-08	12/07/07 12:12	0.868	0.143	0.167	0.078
DOE 4.5.2.3	PA-233	OH207-7952-08	12/07/07 12:12	-0.019	0.024	0.024	0.040
DOE 4.5.2.3	PA-234M	OH207-7952-08	12/07/07 12:12	0.012	1.57	1.57	2.77
DOE 4.5.2.3	TH-234	OH207-7952-08	12/07/07 12:12	1.30	0.386	0.407	0.367
DOE 4.5.2.3	U-235	OH207-7952-08	12/07/07 12:12	-0.013	0.092	0.092	0.150
DOE 4.5.2.3	NP-236	OH207-7952-08	12/07/07 12:12	0.028	0.030	0.030	0.050
DOE 4.5.2.3	NP-237	OH207-7952-08	12/07/07 12:12	0.422	0.127	0.134	0.182
DOE 4.5.2.3	NP-239	OH207-7952-08	12/07/07 12:12	-0.016	0.089	0.089	0.154
DOE 4.5.2.3	AM-241	OH207-7952-08	12/07/07 12:12	0.001	0.079	0.079	0.122
DOE 4.5.2.3	AM-243	OH207-7952-08	12/07/07 12:12	0.154	0.045	0.047	0.042
DOE 4.5.2.3	CM-243	OH207-7952-08	12/07/07 12:12	-0.029	0.045	0.046	0.074
DOE 4.5.2.3	AM-246	OH207-7952-08	12/07/07 12:12	0.014	0.040	0.040	0.072
DOE 4.5.2.3	CF-249	OH207-7952-08	12/07/07 12:12	0.024	0.016	0.016	0.029

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7952-LC1	SCAQC-7952-LD1		SCAQC-7952-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2292-ST</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7952</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7952-09	12/07/07 12:14	1.21	0.297	0.321	0.214
DOE 4.5.2.3	CO-60	OH207-7952-09	12/07/07 12:14	6.9e-04	0.013	0.013	0.024
DOE 4.5.2.3	RH-101	OH207-7952-09	12/07/07 12:14	-0.003	0.015	0.015	0.026
DOE 4.5.2.3	SB-125	OH207-7952-09	12/07/07 12:14	-0.042	0.040	0.040	0.065
DOE 4.5.2.3	CS-137	OH207-7952-09	12/07/07 12:14	0.141	0.030	0.033	0.028
DOE 4.5.2.3	EU-155	OH207-7952-09	12/07/07 12:14	0.052	0.043	0.043	0.075
DOE 4.5.2.3	TL-208	OH207-7952-09	12/07/07 12:14	0.178	0.033	0.037	0.025
DOE 4.5.2.3	PO-209	OH207-7952-09	12/07/07 12:14	1.46	2.75	2.75	5.07
DOE 4.5.2.3	BI-211	OH207-7952-09	12/07/07 12:14	0.153	0.440	0.440	0.770
DOE 4.5.2.3	BI-212	OH207-7952-09	12/07/07 12:14	0.383	0.155	0.160	0.191
DOE 4.5.2.3	PB-212	OH207-7952-09	12/07/07 12:14	0.609	0.064	0.088	0.042
DOE 4.5.2.3	BI-214	OH207-7952-09	12/07/07 12:14	0.699	0.086	0.111	0.045
DOE 4.5.2.3	PB-214	OH207-7952-09	12/07/07 12:14	0.759	0.094	0.121	0.047
DOE 4.5.2.3	RA-223	OH207-7952-09	12/07/07 12:14	0.236	0.121	0.123	0.121
DOE 4.5.2.3	AC-228	OH207-7952-09	12/07/07 12:14	0.614	0.133	0.146	0.095
DOE 4.5.2.3	PA-233	OH207-7952-09	12/07/07 12:14	0.008	0.027	0.027	0.047
DOE 4.5.2.3	PA-234M	OH207-7952-09	12/07/07 12:14	2.06	1.73	1.74	3.30
DOE 4.5.2.3	TH-234	OH207-7952-09	12/07/07 12:14	0.719	0.278	0.287	0.390
DOE 4.5.2.3	U-235	OH207-7952-09	12/07/07 12:14	-0.017	0.091	0.091	0.154
DOE 4.5.2.3	NP-236	OH207-7952-09	12/07/07 12:14	0.027	0.028	0.028	0.041
DOE 4.5.2.3	NP-237	OH207-7952-09	12/07/07 12:14	0.359	0.118	0.123	0.125
DOE 4.5.2.3	NP-239	OH207-7952-09	12/07/07 12:14	-0.012	0.098	0.098	0.164
DOE 4.5.2.3	AM-241	OH207-7952-09	12/07/07 12:14	-0.105	0.028	0.030	0.040
DOE 4.5.2.3	AM-243	OH207-7952-09	12/07/07 12:14	0.100	0.029	0.031	0.023
DOE 4.5.2.3	CM-243	OH207-7952-09	12/07/07 12:14	0.018	0.038	0.038	0.066
DOE 4.5.2.3	AM-246	OH207-7952-09	12/07/07 12:14	-0.009	0.043	0.043	0.076
DOE 4.5.2.3	CF-249	OH207-7952-09	12/07/07 12:14	0.015	0.016	0.017	0.030

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7952-LC1	SCAQC-7952-LD1		SCAQC-7952-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2293-ST</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7952</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7952-10	12/07/07 15:17	3.12	0.437	0.537	0.153
DOE 4.5.2.3	CO-60	OH207-7952-10	12/07/07 15:17	0.003	0.012	0.012	0.020
DOE 4.5.2.3	RH-101	OH207-7952-10	12/07/07 15:17	0.006	0.013	0.013	0.023
DOE 4.5.2.3	SB-125	OH207-7952-10	12/07/07 15:17	-0.027	0.033	0.033	0.053
DOE 4.5.2.3	CS-137	OH207-7952-10	12/07/07 15:17	0.058	0.036	0.036	0.023
DOE 4.5.2.3	EU-155	OH207-7952-10	12/07/07 15:17	0.024	0.047	0.047	0.082
DOE 4.5.2.3	TL-208	OH207-7952-10	12/07/07 15:17	0.180	0.034	0.039	0.021
DOE 4.5.2.3	PO-209	OH207-7952-10	12/07/07 15:17	1.42	2.63	2.63	4.84
DOE 4.5.2.3	BI-211	OH207-7952-10	12/07/07 15:17	-0.124	0.366	0.366	0.631
DOE 4.5.2.3	BI-212	OH207-7952-10	12/07/07 15:17	0.294	0.222	0.223	0.176
DOE 4.5.2.3	PB-212	OH207-7952-10	12/07/07 15:17	0.550	0.058	0.080	0.036
DOE 4.5.2.3	BI-214	OH207-7952-10	12/07/07 15:17	0.399	0.076	0.086	0.044
DOE 4.5.2.3	PB-214	OH207-7952-10	12/07/07 15:17	0.391	0.068	0.079	0.044
DOE 4.5.2.3	RA-223	OH207-7952-10	12/07/07 15:17	0.284	0.108	0.111	0.118
DOE 4.5.2.3	AC-228	OH207-7952-10	12/07/07 15:17	0.480	0.113	0.123	0.088
DOE 4.5.2.3	PA-233	OH207-7952-10	12/07/07 15:17	0.002	0.023	0.023	0.040
DOE 4.5.2.3	PA-234M	OH207-7952-10	12/07/07 15:17	-0.472	1.44	1.44	2.50
DOE 4.5.2.3	TH-234	OH207-7952-10	12/07/07 15:17	0.597	0.317	0.322	0.492
DOE 4.5.2.3	U-235	OH207-7952-10	12/07/07 15:17	0.011	0.081	0.081	0.136
DOE 4.5.2.3	NP-236	OH207-7952-10	12/07/07 15:17	0.028	0.029	0.030	0.049
DOE 4.5.2.3	NP-237	OH207-7952-10	12/07/07 15:17	0.317	0.156	0.159	0.195
DOE 4.5.2.3	NP-239	OH207-7952-10	12/07/07 15:17	0.027	0.084	0.084	0.141
DOE 4.5.2.3	AM-241	OH207-7952-10	12/07/07 15:17	0.045	0.076	0.076	0.136
DOE 4.5.2.3	AM-243	OH207-7952-10	12/07/07 15:17	0.118	0.040	0.042	0.042
DOE 4.5.2.3	CM-243	OH207-7952-10	12/07/07 15:17	1.3e-04	0.042	0.042	0.072
DOE 4.5.2.3	AM-246	OH207-7952-10	12/07/07 15:17	0.029	0.046	0.046	0.085
DOE 4.5.2.3	CF-249	OH207-7952-10	12/07/07 15:17	-0.003	0.015	0.015	0.025

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7952-LC1	SCAQC-7952-LD1		SCAQC-7952-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2294-ST</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7952</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7952-11	12/07/07 15:19	5.11	0.565	0.762	0.218
DOE 4.5.2.3	CO-60	OH207-7952-11	12/07/07 15:19	-0.002	0.015	0.015	0.028
DOE 4.5.2.3	RH-101	OH207-7952-11	12/07/07 15:19	0.001	0.016	0.016	0.026
DOE 4.5.2.3	SB-125	OH207-7952-11	12/07/07 15:19	0.015	0.041	0.041	0.072
DOE 4.5.2.3	CS-137	OH207-7952-11	12/07/07 15:19	0.354	0.054	0.065	0.027
DOE 4.5.2.3	EU-155	OH207-7952-11	12/07/07 15:19	0.037	0.054	0.054	0.093
DOE 4.5.2.3	TL-208	OH207-7952-11	12/07/07 15:19	0.180	0.038	0.042	0.025
DOE 4.5.2.3	PO-209	OH207-7952-11	12/07/07 15:19	-0.216	2.83	2.83	4.96
DOE 4.5.2.3	BI-211	OH207-7952-11	12/07/07 15:19	0.004	0.427	0.427	0.754
DOE 4.5.2.3	BI-212	OH207-7952-11	12/07/07 15:19	0.353	0.161	0.165	0.193
DOE 4.5.2.3	PB-212	OH207-7952-11	12/07/07 15:19	0.513	0.058	0.077	0.043
DOE 4.5.2.3	BI-214	OH207-7952-11	12/07/07 15:19	0.431	0.076	0.087	0.050
DOE 4.5.2.3	PB-214	OH207-7952-11	12/07/07 15:19	0.430	0.071	0.083	0.051
DOE 4.5.2.3	RA-223	OH207-7952-11	12/07/07 15:19	0.221	0.083	0.086	0.154
DOE 4.5.2.3	AC-228	OH207-7952-11	12/07/07 15:19	0.584	0.134	0.146	0.086
DOE 4.5.2.3	PA-233	OH207-7952-11	12/07/07 15:19	-0.008	0.028	0.028	0.047
DOE 4.5.2.3	PA-234M	OH207-7952-11	12/07/07 15:19	0.515	1.76	1.76	3.24
DOE 4.5.2.3	TH-234	OH207-7952-11	12/07/07 15:19	0.622	0.294	0.301	0.526
DOE 4.5.2.3	U-235	OH207-7952-11	12/07/07 15:19	0.025	0.098	0.098	0.163
DOE 4.5.2.3	NP-236	OH207-7952-11	12/07/07 15:19	0.005	0.034	0.034	0.051
DOE 4.5.2.3	NP-237	OH207-7952-11	12/07/07 15:19	0.413	0.144	0.150	0.206
DOE 4.5.2.3	NP-239	OH207-7952-11	12/07/07 15:19	-0.002	0.094	0.094	0.163
DOE 4.5.2.3	AM-241	OH207-7952-11	12/07/07 15:19	-0.023	0.081	0.081	0.138
DOE 4.5.2.3	AM-243	OH207-7952-11	12/07/07 15:19	0.146	0.049	0.052	0.045
DOE 4.5.2.3	CM-243	OH207-7952-11	12/07/07 15:19	0.004	0.048	0.048	0.081
DOE 4.5.2.3	AM-246	OH207-7952-11	12/07/07 15:19	7.7e-05	0.054	0.054	0.094
DOE 4.5.2.3	CF-249	OH207-7952-11	12/07/07 15:19	0.003	0.017	0.017	0.030

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7952-LC1	SCAQC-7952-LD1		SCAQC-7952-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2295-ST</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7952</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7952-12	12/07/07 15:21	2.69	0.423	0.501	0.257
DOE 4.5.2.3	CO-60	OH207-7952-12	12/07/07 15:21	0.004	0.018	0.018	0.029
DOE 4.5.2.3	RH-101	OH207-7952-12	12/07/07 15:21	-0.007	0.017	0.017	0.028
DOE 4.5.2.3	SB-125	OH207-7952-12	12/07/07 15:21	0.010	0.047	0.047	0.083
DOE 4.5.2.3	CS-137	OH207-7952-12	12/07/07 15:21	0.399	0.054	0.067	0.032
DOE 4.5.2.3	EU-155	OH207-7952-12	12/07/07 15:21	-0.006	0.047	0.047	0.081
DOE 4.5.2.3	TL-208	OH207-7952-12	12/07/07 15:21	0.173	0.033	0.037	0.029
DOE 4.5.2.3	PO-209	OH207-7952-12	12/07/07 15:21	-0.067	3.22	3.22	5.78
DOE 4.5.2.3	BI-211	OH207-7952-12	12/07/07 15:21	-0.141	0.500	0.500	0.842
DOE 4.5.2.3	BI-212	OH207-7952-12	12/07/07 15:21	0.523	0.280	0.285	0.220
DOE 4.5.2.3	PB-212	OH207-7952-12	12/07/07 15:21	0.538	0.064	0.084	0.047
DOE 4.5.2.3	BI-214	OH207-7952-12	12/07/07 15:21	0.386	0.078	0.087	0.053
DOE 4.5.2.3	PB-214	OH207-7952-12	12/07/07 15:21	0.406	0.079	0.089	0.055
DOE 4.5.2.3	RA-223	OH207-7952-12	12/07/07 15:21	0.149	0.094	0.095	0.167
DOE 4.5.2.3	AC-228	OH207-7952-12	12/07/07 15:21	0.598	0.150	0.161	0.108
DOE 4.5.2.3	PA-233	OH207-7952-12	12/07/07 15:21	0.012	0.032	0.032	0.055
DOE 4.5.2.3	PA-234M	OH207-7952-12	12/07/07 15:21	1.47	2.10	2.11	3.92
DOE 4.5.2.3	TH-234	OH207-7952-12	12/07/07 15:21	0.965	0.306	0.321	0.337
DOE 4.5.2.3	U-235	OH207-7952-12	12/07/07 15:21	-0.024	0.102	0.102	0.172
DOE 4.5.2.3	NP-236	OH207-7952-12	12/07/07 15:21	0.053	0.031	0.032	0.048
DOE 4.5.2.3	NP-237	OH207-7952-12	12/07/07 15:21	0.392	0.142	0.148	0.146
DOE 4.5.2.3	NP-239	OH207-7952-12	12/07/07 15:21	-0.067	0.111	0.112	0.184
DOE 4.5.2.3	AM-241	OH207-7952-12	12/07/07 15:21	-0.004	0.035	0.035	0.051
DOE 4.5.2.3	AM-243	OH207-7952-12	12/07/07 15:21	0.128	0.036	0.038	0.028
DOE 4.5.2.3	CM-243	OH207-7952-12	12/07/07 15:21	-0.021	0.043	0.043	0.072
DOE 4.5.2.3	AM-246	OH207-7952-12	12/07/07 15:21	-0.035	0.058	0.058	0.098
DOE 4.5.2.3	CF-249	OH207-7952-12	12/07/07 15:21	0.002	0.020	0.020	0.035

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7952-LC1	SCAQC-7952-LD1		SCAQC-7952-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2284-SD</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7953</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7953-01	12/11/07 08:44	6.10	0.596	0.852	0.173
DOE 4.5.2.3	CO-60	OH207-7953-01	12/11/07 08:44	-0.006	0.014	0.014	0.021
DOE 4.5.2.3	RH-101	OH207-7953-01	12/11/07 08:44	-0.016	0.016	0.016	0.025
DOE 4.5.2.3	SB-125	OH207-7953-01	12/11/07 08:44	0.004	0.039	0.039	0.067
DOE 4.5.2.3	CS-137	OH207-7953-01	12/11/07 08:44	0.058	0.027	0.028	0.029
DOE 4.5.2.3	EU-155	OH207-7953-01	12/11/07 08:44	0.014	0.055	0.055	0.092
DOE 4.5.2.3	TL-208	OH207-7953-01	12/11/07 08:44	0.268	0.041	0.049	0.026
DOE 4.5.2.3	PO-209	OH207-7953-01	12/11/07 08:44	-0.614	2.98	2.99	5.10
DOE 4.5.2.3	BI-211	OH207-7953-01	12/11/07 08:44	-0.224	0.411	0.412	0.688
DOE 4.5.2.3	BI-212	OH207-7953-01	12/11/07 08:44	0.517	0.192	0.199	0.167
DOE 4.5.2.3	PB-212	OH207-7953-01	12/11/07 08:44	0.897	0.084	0.123	0.040
DOE 4.5.2.3	BI-214	OH207-7953-01	12/11/07 08:44	0.712	0.104	0.126	0.046
DOE 4.5.2.3	PB-214	OH207-7953-01	12/11/07 08:44	0.751	0.085	0.114	0.049
DOE 4.5.2.3	RA-223	OH207-7953-01	12/11/07 08:44	0.308	0.138	0.141	0.121
DOE 4.5.2.3	AC-228	OH207-7953-01	12/11/07 08:44	0.964	0.142	0.172	0.089
DOE 4.5.2.3	PA-233	OH207-7953-01	12/11/07 08:44	0.002	0.027	0.027	0.047
DOE 4.5.2.3	PA-234M	OH207-7953-01	12/11/07 08:44	1.86	1.75	1.76	3.29
DOE 4.5.2.3	TH-234	OH207-7953-01	12/11/07 08:44	1.14	0.330	0.349	0.528
DOE 4.5.2.3	U-235	OH207-7953-01	12/11/07 08:44	0.071	0.099	0.100	0.166
DOE 4.5.2.3	NP-236	OH207-7953-01	12/11/07 08:44	0.033	0.032	0.032	0.054
DOE 4.5.2.3	NP-237	OH207-7953-01	12/11/07 08:44	0.545	0.176	0.184	0.204
DOE 4.5.2.3	NP-239	OH207-7953-01	12/11/07 08:44	0.037	0.098	0.098	0.171
DOE 4.5.2.3	AM-241	OH207-7953-01	12/11/07 08:44	-0.010	0.080	0.080	0.136
DOE 4.5.2.3	AM-243	OH207-7953-01	12/11/07 08:44	0.216	0.059	0.063	0.045
DOE 4.5.2.3	CM-243	OH207-7953-01	12/11/07 08:44	0.005	0.049	0.049	0.082
DOE 4.5.2.3	AM-246	OH207-7953-01	12/11/07 08:44	-0.021	0.050	0.050	0.083
DOE 4.5.2.3	CF-249	OH207-7953-01	12/11/07 08:44	0.003	0.017	0.017	0.029

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7953-LC1	SCAQC-7953-LD1		SCAQC-7953-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2285-SD</u>	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
Other Sample ID:	Batch Number: <u>7953</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7953-02	12/11/07 08:45	7.80	0.791	1.11	0.248
DOE 4.5.2.3	CO-60	OH207-7953-02	12/11/07 08:45	-0.013	0.024	0.024	0.038
DOE 4.5.2.3	RH-101	OH207-7953-02	12/11/07 08:45	0.002	0.021	0.021	0.036
DOE 4.5.2.3	SB-125	OH207-7953-02	12/11/07 08:45	0.034	0.059	0.059	0.105
DOE 4.5.2.3	CS-137	OH207-7953-02	12/11/07 08:45	0.115	0.030	0.032	0.041
DOE 4.5.2.3	EU-155	OH207-7953-02	12/11/07 08:45	0.043	0.061	0.061	0.107
DOE 4.5.2.3	TL-208	OH207-7953-02	12/11/07 08:45	0.390	0.066	0.076	0.035
DOE 4.5.2.3	PO-209	OH207-7953-02	12/11/07 08:45	0.972	3.80	3.81	6.87
DOE 4.5.2.3	BI-211	OH207-7953-02	12/11/07 08:45	-0.377	0.625	0.626	1.02
DOE 4.5.2.3	BI-212	OH207-7953-02	12/11/07 08:45	0.737	0.290	0.299	0.278
DOE 4.5.2.3	PB-212	OH207-7953-02	12/11/07 08:45	1.30	0.118	0.176	0.057
DOE 4.5.2.3	BI-214	OH207-7953-02	12/11/07 08:45	1.02	0.116	0.155	0.070
DOE 4.5.2.3	PB-214	OH207-7953-02	12/11/07 08:45	0.940	0.118	0.151	0.070
DOE 4.5.2.3	RA-223	OH207-7953-02	12/11/07 08:45	0.419	0.202	0.206	0.175
DOE 4.5.2.3	AC-228	OH207-7953-02	12/11/07 08:45	1.50	0.223	0.269	0.139
DOE 4.5.2.3	PA-233	OH207-7953-02	12/11/07 08:45	0.019	0.038	0.038	0.065
DOE 4.5.2.3	PA-234M	OH207-7953-02	12/11/07 08:45	3.60	2.51	2.53	4.78
DOE 4.5.2.3	TH-234	OH207-7953-02	12/11/07 08:45	1.87	0.457	0.494	0.412
DOE 4.5.2.3	U-235	OH207-7953-02	12/11/07 08:45	0.155	0.131	0.132	0.227
DOE 4.5.2.3	NP-236	OH207-7953-02	12/11/07 08:45	0.042	0.040	0.040	0.059
DOE 4.5.2.3	NP-237	OH207-7953-02	12/11/07 08:45	0.742	0.174	0.189	0.179
DOE 4.5.2.3	NP-239	OH207-7953-02	12/11/07 08:45	-0.005	0.141	0.141	0.237
DOE 4.5.2.3	AM-241	OH207-7953-02	12/11/07 08:45	0.063	0.044	0.045	0.067
DOE 4.5.2.3	AM-243	OH207-7953-02	12/11/07 08:45	0.236	0.058	0.062	0.037
DOE 4.5.2.3	CM-243	OH207-7953-02	12/11/07 08:45	-0.023	0.055	0.055	0.093
DOE 4.5.2.3	AM-246	OH207-7953-02	12/11/07 08:45	0.015	0.078	0.078	0.138
DOE 4.5.2.3	CF-249	OH207-7953-02	12/11/07 08:45	0.020	0.024	0.024	0.043

Quality Control Samples			
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Preparation Blank (PB)
Gamma	SCAQC-7953-LC1	SCAQC-7953-LD1	SCAQC-7953-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2286-SD</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7953</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7953-03	12/11/07 11:43	5.66	0.580	0.810	0.195
DOE 4.5.2.3	CO-60	OH207-7953-03	12/11/07 11:43	-0.003	0.015	0.015	0.021
DOE 4.5.2.3	RH-101	OH207-7953-03	12/11/07 11:43	-0.004	0.015	0.015	0.024
DOE 4.5.2.3	SB-125	OH207-7953-03	12/11/07 11:43	0.006	0.039	0.039	0.068
DOE 4.5.2.3	CS-137	OH207-7953-03	12/11/07 11:43	-2.3e-04	0.015	0.015	0.027
DOE 4.5.2.3	EU-155	OH207-7953-03	12/11/07 11:43	0.041	0.053	0.054	0.093
DOE 4.5.2.3	TL-208	OH207-7953-03	12/11/07 11:43	0.280	0.043	0.051	0.025
DOE 4.5.2.3	PO-209	OH207-7953-03	12/11/07 11:43	-1.57	2.75	2.76	4.59
DOE 4.5.2.3	BI-211	OH207-7953-03	12/11/07 11:43	-0.021	0.420	0.420	0.640
DOE 4.5.2.3	BI-212	OH207-7953-03	12/11/07 11:43	0.723	0.212	0.224	0.180
DOE 4.5.2.3	PB-212	OH207-7953-03	12/11/07 11:43	0.895	0.085	0.123	0.041
DOE 4.5.2.3	BI-214	OH207-7953-03	12/11/07 11:43	0.740	0.101	0.125	0.047
DOE 4.5.2.3	PB-214	OH207-7953-03	12/11/07 11:43	0.722	0.091	0.116	0.046
DOE 4.5.2.3	RA-223	OH207-7953-03	12/11/07 11:43	0.083	0.066	0.067	0.122
DOE 4.5.2.3	AC-228	OH207-7953-03	12/11/07 11:43	0.952	0.148	0.176	0.084
DOE 4.5.2.3	PA-233	OH207-7953-03	12/11/07 11:43	-0.006	0.025	0.025	0.043
DOE 4.5.2.3	PA-234M	OH207-7953-03	12/11/07 11:43	0.560	1.54	1.54	2.80
DOE 4.5.2.3	TH-234	OH207-7953-03	12/11/07 11:43	1.22	0.394	0.412	0.416
DOE 4.5.2.3	U-235	OH207-7953-03	12/11/07 11:43	0.038	0.093	0.093	0.157
DOE 4.5.2.3	NP-236	OH207-7953-03	12/11/07 11:43	0.061	0.033	0.033	0.057
DOE 4.5.2.3	NP-237	OH207-7953-03	12/11/07 11:43	0.517	0.186	0.193	0.201
DOE 4.5.2.3	NP-239	OH207-7953-03	12/11/07 11:43	-0.016	0.094	0.094	0.152
DOE 4.5.2.3	AM-241	OH207-7953-03	12/11/07 11:43	0.015	0.092	0.092	0.144
DOE 4.5.2.3	AM-243	OH207-7953-03	12/11/07 11:43	0.209	0.061	0.064	0.046
DOE 4.5.2.3	CM-243	OH207-7953-03	12/11/07 11:43	-0.031	0.048	0.048	0.080
DOE 4.5.2.3	AM-246	OH207-7953-03	12/11/07 11:43	0.027	0.047	0.047	0.085
DOE 4.5.2.3	CF-249	OH207-7953-03	12/11/07 11:43	-0.009	0.016	0.016	0.027

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7953-LC1	SCAQC-7953-LD1		SCAQC-7953-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2287-SD</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7953</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7953-04	12/11/07 11:45	6.72	0.702	0.972	0.301
DOE 4.5.2.3	CO-60	OH207-7953-04	12/11/07 11:45	-0.009	0.018	0.018	0.030
DOE 4.5.2.3	RH-101	OH207-7953-04	12/11/07 11:45	0.009	0.018	0.019	0.030
DOE 4.5.2.3	SB-125	OH207-7953-04	12/11/07 11:45	-0.011	0.049	0.049	0.083
DOE 4.5.2.3	CS-137	OH207-7953-04	12/11/07 11:45	-0.007	0.019	0.019	0.033
DOE 4.5.2.3	EU-155	OH207-7953-04	12/11/07 11:45	0.107	0.068	0.069	0.106
DOE 4.5.2.3	TL-208	OH207-7953-04	12/11/07 11:45	0.381	0.058	0.070	0.031
DOE 4.5.2.3	PO-209	OH207-7953-04	12/11/07 11:45	-0.067	3.34	3.34	5.82
DOE 4.5.2.3	BI-211	OH207-7953-04	12/11/07 11:45	0.026	0.518	0.518	0.905
DOE 4.5.2.3	BI-212	OH207-7953-04	12/11/07 11:45	0.698	0.277	0.285	0.222
DOE 4.5.2.3	PB-212	OH207-7953-04	12/11/07 11:45	1.10	0.103	0.151	0.047
DOE 4.5.2.3	BI-214	OH207-7953-04	12/11/07 11:45	0.784	0.114	0.138	0.061
DOE 4.5.2.3	PB-214	OH207-7953-04	12/11/07 11:45	0.842	0.102	0.133	0.056
DOE 4.5.2.3	RA-223	OH207-7953-04	12/11/07 11:45	0.365	0.152	0.156	0.147
DOE 4.5.2.3	AC-228	OH207-7953-04	12/11/07 11:45	1.13	0.195	0.226	0.111
DOE 4.5.2.3	PA-233	OH207-7953-04	12/11/07 11:45	-0.018	0.031	0.031	0.052
DOE 4.5.2.3	PA-234M	OH207-7953-04	12/11/07 11:45	-1.81	1.98	1.98	3.21
DOE 4.5.2.3	TH-234	OH207-7953-04	12/11/07 11:45	1.45	0.385	0.411	0.661
DOE 4.5.2.3	U-235	OH207-7953-04	12/11/07 11:45	0.027	0.116	0.116	0.190
DOE 4.5.2.3	NP-236	OH207-7953-04	12/11/07 11:45	0.025	0.038	0.039	0.066
DOE 4.5.2.3	NP-237	OH207-7953-04	12/11/07 11:45	0.673	0.208	0.219	0.235
DOE 4.5.2.3	NP-239	OH207-7953-04	12/11/07 11:45	-0.014	0.109	0.109	0.189
DOE 4.5.2.3	AM-241	OH207-7953-04	12/11/07 11:45	0.058	0.108	0.108	0.170
DOE 4.5.2.3	AM-243	OH207-7953-04	12/11/07 11:45	0.264	0.072	0.076	0.058
DOE 4.5.2.3	CM-243	OH207-7953-04	12/11/07 11:45	0.097	0.062	0.063	0.098
DOE 4.5.2.3	AM-246	OH207-7953-04	12/11/07 11:45	0.017	0.060	0.060	0.107
DOE 4.5.2.3	CF-249	OH207-7953-04	12/11/07 11:45	0.009	0.021	0.021	0.036

Quality Control Samples			
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)
Gamma	SCAQC-7953-LC1	SCAQC-7953-LD1	SCAQC-7953-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2288-SD</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7953</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7953-05	12/11/07 11:46	5.69	0.643	0.859	0.255
DOE 4.5.2.3	CO-60	OH207-7953-05	12/11/07 11:46	-0.020	0.022	0.022	0.030
DOE 4.5.2.3	RH-101	OH207-7953-05	12/11/07 11:46	-0.014	0.020	0.020	0.032
DOE 4.5.2.3	SB-125	OH207-7953-05	12/11/07 11:46	0.023	0.049	0.049	0.088
DOE 4.5.2.3	CS-137	OH207-7953-05	12/11/07 11:46	0.053	0.027	0.028	0.037
DOE 4.5.2.3	EU-155	OH207-7953-05	12/11/07 11:46	-0.013	0.057	0.057	0.098
DOE 4.5.2.3	TL-208	OH207-7953-05	12/11/07 11:46	0.302	0.052	0.061	0.033
DOE 4.5.2.3	PO-209	OH207-7953-05	12/11/07 11:46	1.50	3.98	3.98	7.24
DOE 4.5.2.3	BI-211	OH207-7953-05	12/11/07 11:46	-0.675	0.567	0.571	0.876
DOE 4.5.2.3	BI-212	OH207-7953-05	12/11/07 11:46	0.551	0.266	0.272	0.260
DOE 4.5.2.3	PB-212	OH207-7953-05	12/11/07 11:46	0.922	0.092	0.130	0.051
DOE 4.5.2.3	BI-214	OH207-7953-05	12/11/07 11:46	0.671	0.098	0.118	0.068
DOE 4.5.2.3	PB-214	OH207-7953-05	12/11/07 11:46	0.718	0.093	0.117	0.063
DOE 4.5.2.3	RA-223	OH207-7953-05	12/11/07 11:46	0.428	0.176	0.181	0.165
DOE 4.5.2.3	AC-228	OH207-7953-05	12/11/07 11:46	1.08	0.167	0.199	0.121
DOE 4.5.2.3	PA-233	OH207-7953-05	12/11/07 11:46	-0.017	0.035	0.035	0.058
DOE 4.5.2.3	PA-234M	OH207-7953-05	12/11/07 11:46	-0.991	2.38	2.39	4.06
DOE 4.5.2.3	TH-234	OH207-7953-05	12/11/07 11:46	1.73	0.440	0.473	0.380
DOE 4.5.2.3	U-235	OH207-7953-05	12/11/07 11:46	0.016	0.123	0.123	0.210
DOE 4.5.2.3	NP-236	OH207-7953-05	12/11/07 11:46	0.028	0.037	0.037	0.054
DOE 4.5.2.3	NP-237	OH207-7953-05	12/11/07 11:46	0.559	0.182	0.190	0.165
DOE 4.5.2.3	NP-239	OH207-7953-05	12/11/07 11:46	-0.097	0.127	0.127	0.208
DOE 4.5.2.3	AM-241	OH207-7953-05	12/11/07 11:46	0.044	0.039	0.039	0.059
DOE 4.5.2.3	AM-243	OH207-7953-05	12/11/07 11:46	0.178	0.047	0.050	0.034
DOE 4.5.2.3	CM-243	OH207-7953-05	12/11/07 11:46	0.018	0.051	0.051	0.088
DOE 4.5.2.3	AM-246	OH207-7953-05	12/11/07 11:46	0.065	0.066	0.066	0.126
DOE 4.5.2.3	CF-249	OH207-7953-05	12/11/07 11:46	-0.006	0.023	0.023	0.040

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7953-LC1	SCAQC-7953-LD1		SCAQC-7953-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2289-SD</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7953</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7953-06	12/11/07 14:49	4.00	0.491	0.633	0.204
DOE 4.5.2.3	CO-60	OH207-7953-06	12/11/07 14:49	0.002	0.015	0.015	0.024
DOE 4.5.2.3	RH-101	OH207-7953-06	12/11/07 14:49	0.010	0.017	0.017	0.029
DOE 4.5.2.3	SB-125	OH207-7953-06	12/11/07 14:49	-0.002	0.043	0.043	0.073
DOE 4.5.2.3	CS-137	OH207-7953-06	12/11/07 14:49	0.035	0.025	0.025	0.028
DOE 4.5.2.3	EU-155	OH207-7953-06	12/11/07 14:49	0.108	0.061	0.062	0.108
DOE 4.5.2.3	TL-208	OH207-7953-06	12/11/07 14:49	0.358	0.053	0.064	0.026
DOE 4.5.2.3	PO-209	OH207-7953-06	12/11/07 14:49	0.227	3.04	3.04	5.38
DOE 4.5.2.3	BI-211	OH207-7953-06	12/11/07 14:49	-0.400	0.450	0.451	0.737
DOE 4.5.2.3	BI-212	OH207-7953-06	12/11/07 14:49	0.805	0.210	0.225	0.209
DOE 4.5.2.3	PB-212	OH207-7953-06	12/11/07 14:49	1.05	0.099	0.144	0.044
DOE 4.5.2.3	BI-214	OH207-7953-06	12/11/07 14:49	0.518	0.085	0.100	0.051
DOE 4.5.2.3	PB-214	OH207-7953-06	12/11/07 14:49	0.606	0.087	0.106	0.053
DOE 4.5.2.3	RA-223	OH207-7953-06	12/11/07 14:49	0.217	0.109	0.111	0.130
DOE 4.5.2.3	AC-228	OH207-7953-06	12/11/07 14:49	1.23	0.161	0.203	0.093
DOE 4.5.2.3	PA-233	OH207-7953-06	12/11/07 14:49	-0.016	0.028	0.028	0.047
DOE 4.5.2.3	PA-234M	OH207-7953-06	12/11/07 14:49	0.140	1.56	1.56	2.82
DOE 4.5.2.3	TH-234	OH207-7953-06	12/11/07 14:49	1.40	0.505	0.524	0.627
DOE 4.5.2.3	U-235	OH207-7953-06	12/11/07 14:49	0.060	0.104	0.104	0.176
DOE 4.5.2.3	NP-236	OH207-7953-06	12/11/07 14:49	0.025	0.037	0.037	0.062
DOE 4.5.2.3	NP-237	OH207-7953-06	12/11/07 14:49	0.342	0.178	0.182	0.250
DOE 4.5.2.3	NP-239	OH207-7953-06	12/11/07 14:49	0.021	0.105	0.105	0.173
DOE 4.5.2.3	AM-241	OH207-7953-06	12/11/07 14:49	0.010	0.099	0.099	0.172
DOE 4.5.2.3	AM-243	OH207-7953-06	12/11/07 14:49	0.203	0.061	0.064	0.054
DOE 4.5.2.3	CM-243	OH207-7953-06	12/11/07 14:49	-0.015	0.055	0.055	0.092
DOE 4.5.2.3	AM-246	OH207-7953-06	12/11/07 14:49	0.008	0.050	0.050	0.090
DOE 4.5.2.3	CF-249	OH207-7953-06	12/11/07 14:49	-0.003	0.018	0.018	0.031

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7953-LC1	SCAQC-7953-LD1		SCAQC-7953-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2290-SD</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7953</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7953-07	12/11/07 14:51	3.84	0.483	0.617	0.176
DOE 4.5.2.3	CO-60	OH207-7953-07	12/11/07 14:51	0.010	0.014	0.014	0.026
DOE 4.5.2.3	RH-101	OH207-7953-07	12/11/07 14:51	-0.009	0.016	0.016	0.026
DOE 4.5.2.3	SB-125	OH207-7953-07	12/11/07 14:51	-0.027	0.043	0.043	0.071
DOE 4.5.2.3	CS-137	OH207-7953-07	12/11/07 14:51	0.169	0.039	0.042	0.027
DOE 4.5.2.3	EU-155	OH207-7953-07	12/11/07 14:51	0.026	0.055	0.055	0.094
DOE 4.5.2.3	TL-208	OH207-7953-07	12/11/07 14:51	0.239	0.047	0.052	0.025
DOE 4.5.2.3	PO-209	OH207-7953-07	12/11/07 14:51	1.77	3.02	3.02	5.52
DOE 4.5.2.3	BI-211	OH207-7953-07	12/11/07 14:51	-0.614	0.428	0.432	0.652
DOE 4.5.2.3	BI-212	OH207-7953-07	12/11/07 14:51	0.400	0.227	0.231	0.208
DOE 4.5.2.3	PB-212	OH207-7953-07	12/11/07 14:51	0.723	0.073	0.103	0.043
DOE 4.5.2.3	BI-214	OH207-7953-07	12/11/07 14:51	0.588	0.094	0.111	0.050
DOE 4.5.2.3	PB-214	OH207-7953-07	12/11/07 14:51	0.600	0.083	0.102	0.049
DOE 4.5.2.3	RA-223	OH207-7953-07	12/11/07 14:51	0.199	0.092	0.094	0.125
DOE 4.5.2.3	AC-228	OH207-7953-07	12/11/07 14:51	0.797	0.162	0.181	0.094
DOE 4.5.2.3	PA-233	OH207-7953-07	12/11/07 14:51	0.011	0.028	0.028	0.050
DOE 4.5.2.3	PA-234M	OH207-7953-07	12/11/07 14:51	1.59	1.87	1.88	3.53
DOE 4.5.2.3	TH-234	OH207-7953-07	12/11/07 14:51	0.524	0.316	0.320	0.554
DOE 4.5.2.3	U-235	OH207-7953-07	12/11/07 14:51	-0.034	0.100	0.100	0.161
DOE 4.5.2.3	NP-236	OH207-7953-07	12/11/07 14:51	0.008	0.032	0.032	0.054
DOE 4.5.2.3	NP-237	OH207-7953-07	12/11/07 14:51	0.438	0.172	0.177	0.236
DOE 4.5.2.3	NP-239	OH207-7953-07	12/11/07 14:51	0.118	0.100	0.100	0.178
DOE 4.5.2.3	AM-241	OH207-7953-07	12/11/07 14:51	0.046	0.086	0.086	0.149
DOE 4.5.2.3	AM-243	OH207-7953-07	12/11/07 14:51	0.120	0.041	0.043	0.050
DOE 4.5.2.3	CM-243	OH207-7953-07	12/11/07 14:51	-0.011	0.050	0.050	0.084
DOE 4.5.2.3	AM-246	OH207-7953-07	12/11/07 14:51	-0.035	0.056	0.056	0.091
DOE 4.5.2.3	CF-249	OH207-7953-07	12/11/07 14:51	0.009	0.018	0.018	0.031

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7953-LC1	SCAQC-7953-LD1		SCAQC-7953-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2291-SD</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7953</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7953-08	12/11/07 14:52	3.03	0.425	0.522	0.224
DOE 4.5.2.3	CO-60	OH207-7953-08	12/11/07 14:52	0.008	0.015	0.015	0.024
DOE 4.5.2.3	RH-101	OH207-7953-08	12/11/07 14:52	-6.1e-04	0.016	0.016	0.027
DOE 4.5.2.3	SB-125	OH207-7953-08	12/11/07 14:52	-0.001	0.042	0.042	0.072
DOE 4.5.2.3	CS-137	OH207-7953-08	12/11/07 14:52	0.008	0.017	0.017	0.030
DOE 4.5.2.3	EU-155	OH207-7953-08	12/11/07 14:52	0.013	0.045	0.045	0.079
DOE 4.5.2.3	TL-208	OH207-7953-08	12/11/07 14:52	0.314	0.044	0.054	0.026
DOE 4.5.2.3	PO-209	OH207-7953-08	12/11/07 14:52	-0.527	2.86	2.86	5.00
DOE 4.5.2.3	BI-211	OH207-7953-08	12/11/07 14:52	-0.085	0.432	0.432	0.728
DOE 4.5.2.3	BI-212	OH207-7953-08	12/11/07 14:52	0.693	0.222	0.232	0.192
DOE 4.5.2.3	PB-212	OH207-7953-08	12/11/07 14:52	0.923	0.087	0.127	0.043
DOE 4.5.2.3	BI-214	OH207-7953-08	12/11/07 14:52	0.754	0.087	0.115	0.046
DOE 4.5.2.3	PB-214	OH207-7953-08	12/11/07 14:52	0.777	0.105	0.131	0.050
DOE 4.5.2.3	RA-223	OH207-7953-08	12/11/07 14:52	0.193	0.116	0.118	0.134
DOE 4.5.2.3	AC-228	OH207-7953-08	12/11/07 14:52	0.897	0.142	0.168	0.091
DOE 4.5.2.3	PA-233	OH207-7953-08	12/11/07 14:52	0.011	0.029	0.029	0.049
DOE 4.5.2.3	PA-234M	OH207-7953-08	12/11/07 14:52	1.65	1.77	1.78	3.30
DOE 4.5.2.3	TH-234	OH207-7953-08	12/11/07 14:52	1.29	0.331	0.355	0.414
DOE 4.5.2.3	U-235	OH207-7953-08	12/11/07 14:52	0.027	0.096	0.096	0.164
DOE 4.5.2.3	NP-236	OH207-7953-08	12/11/07 14:52	0.031	0.029	0.030	0.043
DOE 4.5.2.3	NP-237	OH207-7953-08	12/11/07 14:52	0.473	0.139	0.147	0.135
DOE 4.5.2.3	NP-239	OH207-7953-08	12/11/07 14:52	0.003	0.103	0.103	0.173
DOE 4.5.2.3	AM-241	OH207-7953-08	12/11/07 14:52	-0.099	0.030	0.032	0.044
DOE 4.5.2.3	AM-243	OH207-7953-08	12/11/07 14:52	0.152	0.040	0.043	0.026
DOE 4.5.2.3	CM-243	OH207-7953-08	12/11/07 14:52	-0.011	0.041	0.041	0.070
DOE 4.5.2.3	AM-246	OH207-7953-08	12/11/07 14:52	0.010	0.048	0.048	0.087
DOE 4.5.2.3	CF-249	OH207-7953-08	12/11/07 14:52	0.013	0.018	0.018	0.032

Quality Control Samples			
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Preparation Blank (PB)
Gamma	SCAQC-7953-LC1	SCAQC-7953-LD1	SCAQC-7953-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2292-SD</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7953</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7953-09	12/11/07 17:55	2.18	0.320	0.387	0.176
DOE 4.5.2.3	CO-60	OH207-7953-09	12/11/07 17:55	0.006	0.013	0.013	0.018
DOE 4.5.2.3	RH-101	OH207-7953-09	12/11/07 17:55	-0.003	0.015	0.015	0.025
DOE 4.5.2.3	SB-125	OH207-7953-09	12/11/07 17:55	-0.002	0.035	0.035	0.061
DOE 4.5.2.3	CS-137	OH207-7953-09	12/11/07 17:55	-0.013	0.014	0.014	0.023
DOE 4.5.2.3	EU-155	OH207-7953-09	12/11/07 17:55	0.023	0.040	0.040	0.070
DOE 4.5.2.3	TL-208	OH207-7953-09	12/11/07 17:55	0.226	0.038	0.045	0.022
DOE 4.5.2.3	PO-209	OH207-7953-09	12/11/07 17:55	1.29	2.40	2.40	4.41
DOE 4.5.2.3	BI-211	OH207-7953-09	12/11/07 17:55	-0.205	0.399	0.400	0.656
DOE 4.5.2.3	BI-212	OH207-7953-09	12/11/07 17:55	0.428	0.199	0.203	0.179
DOE 4.5.2.3	PB-212	OH207-7953-09	12/11/07 17:55	0.704	0.068	0.098	0.038
DOE 4.5.2.3	BI-214	OH207-7953-09	12/11/07 17:55	0.598	0.069	0.092	0.045
DOE 4.5.2.3	PB-214	OH207-7953-09	12/11/07 17:55	0.687	0.081	0.106	0.045
DOE 4.5.2.3	RA-223	OH207-7953-09	12/11/07 17:55	0.312	0.129	0.133	0.114
DOE 4.5.2.3	AC-228	OH207-7953-09	12/11/07 17:55	0.778	0.122	0.145	0.075
DOE 4.5.2.3	PA-233	OH207-7953-09	12/11/07 17:55	-0.007	0.025	0.025	0.042
DOE 4.5.2.3	PA-234M	OH207-7953-09	12/11/07 17:55	1.64	1.58	1.59	2.96
DOE 4.5.2.3	TH-234	OH207-7953-09	12/11/07 17:55	0.987	0.275	0.293	0.348
DOE 4.5.2.3	U-235	OH207-7953-09	12/11/07 17:55	-0.040	0.088	0.088	0.147
DOE 4.5.2.3	NP-236	OH207-7953-09	12/11/07 17:55	0.043	0.026	0.026	0.038
DOE 4.5.2.3	NP-237	OH207-7953-09	12/11/07 17:55	0.291	0.105	0.109	0.111
DOE 4.5.2.3	NP-239	OH207-7953-09	12/11/07 17:55	0.015	0.092	0.092	0.155
DOE 4.5.2.3	AM-241	OH207-7953-09	12/11/07 17:55	-0.062	0.025	0.026	0.038
DOE 4.5.2.3	AM-243	OH207-7953-09	12/11/07 17:55	0.111	0.029	0.031	0.021
DOE 4.5.2.3	CM-243	OH207-7953-09	12/11/07 17:55	-0.025	0.036	0.036	0.060
DOE 4.5.2.3	AM-246	OH207-7953-09	12/11/07 17:55	0.018	0.043	0.043	0.079
DOE 4.5.2.3	CF-249	OH207-7953-09	12/11/07 17:55	8.4e-04	0.015	0.015	0.026

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7953-LC1	SCAQC-7953-LD1		SCAQC-7953-PB1

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Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2293-SD</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7953</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7953-10	12/11/07 22:37	2.73	0.425	0.505	0.267
DOE 4.5.2.3	CO-60	OH207-7953-10	12/11/07 22:37	0.017	0.019	0.019	0.037
DOE 4.5.2.3	RH-101	OH207-7953-10	12/11/07 22:37	2.9e-04	0.020	0.020	0.033
DOE 4.5.2.3	SB-125	OH207-7953-10	12/11/07 22:37	-0.009	0.051	0.051	0.088
DOE 4.5.2.3	CS-137	OH207-7953-10	12/11/07 22:37	0.002	0.021	0.021	0.037
DOE 4.5.2.3	EU-155	OH207-7953-10	12/11/07 22:37	0.034	0.055	0.055	0.097
DOE 4.5.2.3	TL-208	OH207-7953-10	12/11/07 22:37	0.202	0.042	0.047	0.032
DOE 4.5.2.3	PO-209	OH207-7953-10	12/11/07 22:37	-0.049	3.87	3.87	6.97
DOE 4.5.2.3	BI-211	OH207-7953-10	12/11/07 22:37	-0.098	0.560	0.560	0.957
DOE 4.5.2.3	BI-212	OH207-7953-10	12/11/07 22:37	0.438	0.367	0.370	0.253
DOE 4.5.2.3	PB-212	OH207-7953-10	12/11/07 22:37	0.665	0.075	0.100	0.051
DOE 4.5.2.3	BI-214	OH207-7953-10	12/11/07 22:37	0.410	0.093	0.102	0.130
DOE 4.5.2.3	PB-214	OH207-7953-10	12/11/07 22:37	0.532	0.085	0.101	0.062
DOE 4.5.2.3	RA-223	OH207-7953-10	12/11/07 22:37	0.165	0.125	0.126	0.167
DOE 4.5.2.3	AC-228	OH207-7953-10	12/11/07 22:37	0.625	0.153	0.165	0.133
DOE 4.5.2.3	PA-233	OH207-7953-10	12/11/07 22:37	-0.035	0.036	0.036	0.057
DOE 4.5.2.3	PA-234M	OH207-7953-10	12/11/07 22:37	1.24	2.40	2.40	4.45
DOE 4.5.2.3	TH-234	OH207-7953-10	12/11/07 22:37	0.841	0.390	0.399	0.348
DOE 4.5.2.3	U-235	OH207-7953-10	12/11/07 22:37	0.012	0.114	0.114	0.196
DOE 4.5.2.3	NP-236	OH207-7953-10	12/11/07 22:37	0.014	0.033	0.033	0.051
DOE 4.5.2.3	NP-237	OH207-7953-10	12/11/07 22:37	0.304	0.120	0.123	0.190
DOE 4.5.2.3	NP-239	OH207-7953-10	12/11/07 22:37	0.019	0.122	0.122	0.209
DOE 4.5.2.3	AM-241	OH207-7953-10	12/11/07 22:37	0.010	0.040	0.040	0.060
DOE 4.5.2.3	AM-243	OH207-7953-10	12/11/07 22:37	0.133	0.042	0.045	0.033
DOE 4.5.2.3	CM-243	OH207-7953-10	12/11/07 22:37	0.049	0.050	0.051	0.089
DOE 4.5.2.3	AM-246	OH207-7953-10	12/11/07 22:37	0.013	0.070	0.070	0.129
DOE 4.5.2.3	CF-249	OH207-7953-10	12/11/07 22:37	0.010	0.021	0.021	0.038

Quality Control Samples			
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Preparation Blank (PB)
Gamma	SCAQC-7953-LC1	SCAQC-7953-LD1	SCAQC-7953-PB1

Sanford Cohen & Associates Southeastern Environmental Laboratory

Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2294-SD</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7953</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7953-11	12/12/07 02:27	6.36	0.695	0.942	0.288
DOE 4.5.2.3	CO-60	OH207-7953-11	12/12/07 02:27	0.009	0.020	0.020	0.029
DOE 4.5.2.3	RH-101	OH207-7953-11	12/12/07 02:27	-0.002	0.018	0.018	0.031
DOE 4.5.2.3	SB-125	OH207-7953-11	12/12/07 02:27	0.009	0.048	0.048	0.085
DOE 4.5.2.3	CS-137	OH207-7953-11	12/12/07 02:27	0.045	0.033	0.033	0.036
DOE 4.5.2.3	EU-155	OH207-7953-11	12/12/07 02:27	0.041	0.052	0.052	0.091
DOE 4.5.2.3	TL-208	OH207-7953-11	12/12/07 02:27	0.256	0.043	0.050	0.027
DOE 4.5.2.3	PO-209	OH207-7953-11	12/12/07 02:27	3.69	3.57	3.59	6.78
DOE 4.5.2.3	BI-211	OH207-7953-11	12/12/07 02:27	0.079	0.503	0.503	0.879
DOE 4.5.2.3	BI-212	OH207-7953-11	12/12/07 02:27	0.563	0.316	0.321	0.234
DOE 4.5.2.3	PB-212	OH207-7953-11	12/12/07 02:27	0.701	0.075	0.103	0.049
DOE 4.5.2.3	BI-214	OH207-7953-11	12/12/07 02:27	0.579	0.093	0.110	0.064
DOE 4.5.2.3	PB-214	OH207-7953-11	12/12/07 02:27	0.628	0.095	0.114	0.058
DOE 4.5.2.3	RA-223	OH207-7953-11	12/12/07 02:27	0.151	0.098	0.099	0.174
DOE 4.5.2.3	AC-228	OH207-7953-11	12/12/07 02:27	0.776	0.160	0.178	0.114
DOE 4.5.2.3	PA-233	OH207-7953-11	12/12/07 02:27	0.007	0.033	0.033	0.056
DOE 4.5.2.3	PA-234M	OH207-7953-11	12/12/07 02:27	0.134	2.49	2.49	4.39
DOE 4.5.2.3	TH-234	OH207-7953-11	12/12/07 02:27	0.743	0.321	0.330	0.499
DOE 4.5.2.3	U-235	OH207-7953-11	12/12/07 02:27	-0.050	0.110	0.110	0.184
DOE 4.5.2.3	NP-236	OH207-7953-11	12/12/07 02:27	0.056	0.033	0.034	0.050
DOE 4.5.2.3	NP-237	OH207-7953-11	12/12/07 02:27	0.401	0.136	0.142	0.184
DOE 4.5.2.3	NP-239	OH207-7953-11	12/12/07 02:27	-0.069	0.116	0.116	0.191
DOE 4.5.2.3	AM-241	OH207-7953-11	12/12/07 02:27	-0.123	0.039	0.041	0.057
DOE 4.5.2.3	AM-243	OH207-7953-11	12/12/07 02:27	0.147	0.041	0.043	0.031
DOE 4.5.2.3	CM-243	OH207-7953-11	12/12/07 02:27	0.004	0.046	0.046	0.080
DOE 4.5.2.3	AM-246	OH207-7953-11	12/12/07 02:27	0.018	0.074	0.074	0.133
DOE 4.5.2.3	CF-249	OH207-7953-11	12/12/07 02:27	0.010	0.020	0.020	0.036

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7953-LC1	SCAQC-7953-LD1		SCAQC-7953-PB1

Sanford Cohen & Associates Southeastern Environmental Laboratory

Radioanalytical Results

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2295-SD</u>		
Other Sample ID:	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
	Batch Number: <u>7953</u>	Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	OH207-7953-12	12/12/07 13:22	4.08	0.538	0.675	0.258
DOE 4.5.2.3	CO-60	OH207-7953-12	12/12/07 13:22	0.020	0.016	0.016	0.025
DOE 4.5.2.3	RH-101	OH207-7953-12	12/12/07 13:22	0.006	0.018	0.018	0.030
DOE 4.5.2.3	SB-125	OH207-7953-12	12/12/07 13:22	-0.004	0.045	0.045	0.078
DOE 4.5.2.3	CS-137	OH207-7953-12	12/12/07 13:22	0.111	0.038	0.040	0.029
DOE 4.5.2.3	EU-155	OH207-7953-12	12/12/07 13:22	-0.016	0.062	0.062	0.104
DOE 4.5.2.3	TL-208	OH207-7953-12	12/12/07 13:22	0.262	0.045	0.052	0.031
DOE 4.5.2.3	PO-209	OH207-7953-12	12/12/07 13:22	0.601	2.88	2.88	5.23
DOE 4.5.2.3	BI-211	OH207-7953-12	12/12/07 13:22	-0.013	0.457	0.457	0.808
DOE 4.5.2.3	BI-212	OH207-7953-12	12/12/07 13:22	0.578	0.238	0.245	0.203
DOE 4.5.2.3	PB-212	OH207-7953-12	12/12/07 13:22	0.808	0.082	0.115	0.045
DOE 4.5.2.3	BI-214	OH207-7953-12	12/12/07 13:22	0.530	0.091	0.106	0.061
DOE 4.5.2.3	PB-214	OH207-7953-12	12/12/07 13:22	0.695	0.096	0.119	0.051
DOE 4.5.2.3	RA-223	OH207-7953-12	12/12/07 13:22	0.325	0.166	0.169	0.138
DOE 4.5.2.3	AC-228	OH207-7953-12	12/12/07 13:22	0.755	0.130	0.150	0.109
DOE 4.5.2.3	PA-233	OH207-7953-12	12/12/07 13:22	-0.001	0.030	0.030	0.052
DOE 4.5.2.3	PA-234M	OH207-7953-12	12/12/07 13:22	2.02	2.00	2.01	3.82
DOE 4.5.2.3	TH-234	OH207-7953-12	12/12/07 13:22	1.29	0.495	0.512	0.636
DOE 4.5.2.3	U-235	OH207-7953-12	12/12/07 13:22	0.027	0.110	0.110	0.185
DOE 4.5.2.3	NP-236	OH207-7953-12	12/12/07 13:22	0.017	0.038	0.038	0.063
DOE 4.5.2.3	NP-237	OH207-7953-12	12/12/07 13:22	0.464	0.160	0.167	0.221
DOE 4.5.2.3	NP-239	OH207-7953-12	12/12/07 13:22	-0.072	0.108	0.109	0.172
DOE 4.5.2.3	AM-241	OH207-7953-12	12/12/07 13:22	-0.006	0.099	0.099	0.173
DOE 4.5.2.3	AM-243	OH207-7953-12	12/12/07 13:22	0.167	0.056	0.058	0.056
DOE 4.5.2.3	CM-243	OH207-7953-12	12/12/07 13:22	0.036	0.055	0.056	0.096
DOE 4.5.2.3	AM-246	OH207-7953-12	12/12/07 13:22	-0.023	0.046	0.046	0.078
DOE 4.5.2.3	CF-249	OH207-7953-12	12/12/07 13:22	0.001	0.019	0.019	0.033

Quality Control Samples			
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)
Gamma	SCAQC-7953-LC1	SCAQC-7953-LD1	SCAQC-7953-PB1

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Radioanalytical Results

Quality Control Sample
Laboratory Control (LC1)

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>None</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>N/A</u>		
Other Sample ID: <u>LC1</u>	Collection Date: <u>10/1/2007 9:15:00 AM</u>	Date Received: <u>10/1/2007 9:15:00</u>
		Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	CO-60	SCAQC-7950-LC1	12/05/07 14:33	30.9	1.94	3.65	0.084
DOE 4.5.2.3	CS-137	SCAQC-7950-LC1	12/05/07 14:33	31.0	3.36	4.58	0.160
DOE 4.5.2.3	AM-241	SCAQC-7950-LC1	12/05/07 14:33	77.5	6.36	10.0	0.986

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7950-LC1	SCAQC-7950-LD1		SCAQC-7950-PB1

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Radioanalytical Results

**Quality Control Sample
Laboratory Control (LC1)**

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>None</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>N/A</u>		
Other Sample ID: <u>LC1</u>	Collection Date: <u>10/1/2007 9:15:00 AM</u>	Date Received: <u>10/1/2007 9:15:00</u>
		Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	CO-60	SCAQC-7951-LC1	12/05/07 13:25	31.0	1.95	3.66	0.099
DOE 4.5.2.3	CS-137	SCAQC-7951-LC1	12/05/07 13:25	30.9	3.35	4.56	0.165
DOE 4.5.2.3	AM-241	SCAQC-7951-LC1	12/05/07 13:25	75.6	6.14	9.74	0.992

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7951-LC1	SCAQC-7951-LD1		SCAQC-7951-PB1

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Radioanalytical Results

**Quality Control Sample
Laboratory Control (LC1)**

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>None</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>N/A</u>	Collection Date: <u>10/1/2007 9:15:00 AM</u>	Date Received: <u>10/1/2007 9:15:00</u>
Other Sample ID: <u>LC1</u>		Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	CO-60	SCAQC-7952-LC1	12/06/07 09:57	31.0	1.78	3.57	0.092
DOE 4.5.2.3	CS-137	SCAQC-7952-LC1	12/06/07 09:57	30.6	3.51	4.66	0.166
DOE 4.5.2.3	AM-241	SCAQC-7952-LC1	12/06/07 09:57	75.5	5.09	9.11	0.984

Quality Control Samples				
Radionuclide	Laboratory Control (LC)	Laboratory Duplicate (LD)	Matrix Spike (MS)	Preparation Blank (PB)
Gamma	SCAQC-7952-LC1	SCAQC-7952-LD1		SCAQC-7952-PB1

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Radioanalytical Results

Quality Control Sample
Laboratory Control (LC1)

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>None</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>N/A</u>		
Other Sample ID: <u>LC1</u>	Collection Date: <u>10/1/2007 9:15:00 AM</u>	Date Received: <u>10/1/2007 9:15:00</u>
		Laboratory Code: <u>SCA</u>

<u>Method Number</u>	<u>Radionuclide</u>	<u>Laboratory Sample ID</u>	<u>Analysis Date/Time</u>	<u>Activity (pCi/g)</u>	<u>2 σ Counting Error (pCi/g)</u>	<u>Total Error (pCi/g)</u>	<u>MDA (pCi/g)</u>
DOE 4.5.2.3	CO-60	SCAQC-7953-LC1	12/12/07 08:58	32.0	2.02	3.78	0.101
DOE 4.5.2.3	CS-137	SCAQC-7953-LC1	12/12/07 08:58	30.4	2.24	3.78	0.186
DOE 4.5.2.3	AM-241	SCAQC-7953-LC1	12/12/07 08:58	77.2	4.92	9.15	0.331

<u>Quality Control Samples</u>				
<u>Radionuclide</u>	<u>Laboratory Control (LC)</u>	<u>Laboratory Duplicate (LD)</u>	<u>Matrix Spike (MS)</u>	<u>Preparation Blank (PB)</u>
Gamma	SCAQC-7953-LC1	SCAQC-7953-LD1		SCAQC-7953-PB1

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Radioanalytical Results

Quality Control Sample
Duplicate (LD1)

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2270-ST</u>		
Other Sample ID: <u>LD1</u>	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
		Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	SCAQC-7950-LD1	12/04/07 11:38	7.40	0.743	1.05	0.240
DOE 4.5.2.3	CO-60	SCAQC-7950-LD1	12/04/07 11:38	-0.007	0.017	0.017	0.029
DOE 4.5.2.3	RH-101	SCAQC-7950-LD1	12/04/07 11:38	-2.4e-04	0.020	0.020	0.032
DOE 4.5.2.3	SB-125	SCAQC-7950-LD1	12/04/07 11:38	0.006	0.050	0.050	0.084
DOE 4.5.2.3	CS-137	SCAQC-7950-LD1	12/04/07 11:38	0.320	0.054	0.062	0.037
DOE 4.5.2.3	EU-155	SCAQC-7950-LD1	12/04/07 11:38	0.042	0.067	0.067	0.113
DOE 4.5.2.3	TL-208	SCAQC-7950-LD1	12/04/07 11:38	0.338	0.057	0.066	0.030
DOE 4.5.2.3	PO-209	SCAQC-7950-LD1	12/04/07 11:38	-0.409	3.62	3.62	6.24
DOE 4.5.2.3	BI-211	SCAQC-7950-LD1	12/04/07 11:38	-0.214	0.561	0.561	0.813
DOE 4.5.2.3	BI-212	SCAQC-7950-LD1	12/04/07 11:38	0.818	0.239	0.252	0.234
DOE 4.5.2.3	PB-212	SCAQC-7950-LD1	12/04/07 11:38	1.10	0.102	0.150	0.048
DOE 4.5.2.3	BI-214	SCAQC-7950-LD1	12/04/07 11:38	1.01	0.141	0.174	0.057
DOE 4.5.2.3	PB-214	SCAQC-7950-LD1	12/04/07 11:38	0.987	0.112	0.150	0.063
DOE 4.5.2.3	RA-223	SCAQC-7950-LD1	12/04/07 11:38	0.089	0.083	0.083	0.152
DOE 4.5.2.3	AC-228	SCAQC-7950-LD1	12/04/07 11:38	1.04	0.181	0.208	0.114
DOE 4.5.2.3	PA-233	SCAQC-7950-LD1	12/04/07 11:38	-0.015	0.033	0.033	0.055
DOE 4.5.2.3	PA-234M	SCAQC-7950-LD1	12/04/07 11:38	0.167	2.04	2.04	3.62
DOE 4.5.2.3	TH-234	SCAQC-7950-LD1	12/04/07 11:38	1.16	0.491	0.504	0.652
DOE 4.5.2.3	U-235	SCAQC-7950-LD1	12/04/07 11:38	0.247	0.180	0.181	0.184
DOE 4.5.2.3	NP-236	SCAQC-7950-LD1	12/04/07 11:38	0.036	0.039	0.039	0.067
DOE 4.5.2.3	NP-237	SCAQC-7950-LD1	12/04/07 11:38	0.635	0.238	0.246	0.270
DOE 4.5.2.3	NP-239	SCAQC-7950-LD1	12/04/07 11:38	-0.019	0.118	0.118	0.203
DOE 4.5.2.3	AM-241	SCAQC-7950-LD1	12/04/07 11:38	-0.002	0.102	0.102	0.174
DOE 4.5.2.3	AM-243	SCAQC-7950-LD1	12/04/07 11:38	0.229	0.065	0.068	0.061
DOE 4.5.2.3	CM-243	SCAQC-7950-LD1	12/04/07 11:38	-0.007	0.060	0.060	0.100
DOE 4.5.2.3	AM-246	SCAQC-7950-LD1	12/04/07 11:38	0.044	0.061	0.062	0.112
DOE 4.5.2.3	CF-249	SCAQC-7950-LD1	12/04/07 11:38	0.012	0.022	0.022	0.038

Laboratory Samples for Duplicates

Radionuclide	Laboratory Sample ID	Duplicate of Sample ID
GAMMA	SCAQC-7950-LD1	OH207-7950-01

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Southeastern Environmental Laboratory

Radioanalytical Results

Quality Control Sample
Duplicate (LD1)

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2270-ST</u>		
Other Sample ID: <u>LD1</u>	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
		Laboratory Code: <u>SCA</u>

Quality Control Samples				
<u>Radionuclide</u>	<u>Laboratory Control (LC)</u>	<u>Laboratory Duplicate (LD)</u>	<u>Matrix Spike (MS)</u>	<u>Preparation Blank (PB)</u>
Gamma	SCAQC-7950-LC1	SCAQC-7950-LD1		SCAQC-7950-PB1

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Southeastern Environmental Laboratory

Radioanalytical Results

Quality Control Sample
Duplicate (LD1)

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2270-SD</u>		
Other Sample ID: <u>LD1</u>	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
		Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	SCAQC-7951-LD1	12/05/07 09:15	5.96	0.642	0.877	0.284
DOE 4.5.2.3	CO-60	SCAQC-7951-LD1	12/05/07 09:15	-0.024	0.021	0.021	0.033
DOE 4.5.2.3	RH-101	SCAQC-7951-LD1	12/05/07 09:15	0.002	0.019	0.019	0.032
DOE 4.5.2.3	SB-125	SCAQC-7951-LD1	12/05/07 09:15	0.014	0.052	0.052	0.092
DOE 4.5.2.3	CS-137	SCAQC-7951-LD1	12/05/07 09:15	0.062	0.041	0.041	0.033
DOE 4.5.2.3	EU-155	SCAQC-7951-LD1	12/05/07 09:15	0.050	0.056	0.056	0.098
DOE 4.5.2.3	TL-208	SCAQC-7951-LD1	12/05/07 09:15	0.323	0.054	0.063	0.032
DOE 4.5.2.3	PO-209	SCAQC-7951-LD1	12/05/07 09:15	0.704	3.77	3.77	6.79
DOE 4.5.2.3	BI-211	SCAQC-7951-LD1	12/05/07 09:15	-0.346	0.574	0.575	0.937
DOE 4.5.2.3	BI-212	SCAQC-7951-LD1	12/05/07 09:15	0.562	0.282	0.288	0.249
DOE 4.5.2.3	PB-212	SCAQC-7951-LD1	12/05/07 09:15	0.978	0.096	0.137	0.053
DOE 4.5.2.3	BI-214	SCAQC-7951-LD1	12/05/07 09:15	0.613	0.101	0.118	0.064
DOE 4.5.2.3	PB-214	SCAQC-7951-LD1	12/05/07 09:15	0.643	0.091	0.111	0.063
DOE 4.5.2.3	RA-223	SCAQC-7951-LD1	12/05/07 09:15	0.365	0.178	0.182	0.157
DOE 4.5.2.3	AC-228	SCAQC-7951-LD1	12/05/07 09:15	1.09	0.166	0.199	0.116
DOE 4.5.2.3	PA-233	SCAQC-7951-LD1	12/05/07 09:15	-0.009	0.034	0.034	0.057
DOE 4.5.2.3	PA-234M	SCAQC-7951-LD1	12/05/07 09:15	2.58	2.38	2.39	4.48
DOE 4.5.2.3	TH-234	SCAQC-7951-LD1	12/05/07 09:15	1.62	0.427	0.457	0.354
DOE 4.5.2.3	U-235	SCAQC-7951-LD1	12/05/07 09:15	0.066	0.114	0.114	0.196
DOE 4.5.2.3	NP-236	SCAQC-7951-LD1	12/05/07 09:15	0.026	0.035	0.035	0.051
DOE 4.5.2.3	NP-237	SCAQC-7951-LD1	12/05/07 09:15	0.473	0.142	0.150	0.154
DOE 4.5.2.3	NP-239	SCAQC-7951-LD1	12/05/07 09:15	0.105	0.128	0.128	0.220
DOE 4.5.2.3	AM-241	SCAQC-7951-LD1	12/05/07 09:15	0.014	0.040	0.040	0.059
DOE 4.5.2.3	AM-243	SCAQC-7951-LD1	12/05/07 09:15	0.169	0.047	0.050	0.034
DOE 4.5.2.3	CM-243	SCAQC-7951-LD1	12/05/07 09:15	0.010	0.050	0.050	0.086
DOE 4.5.2.3	AM-246	SCAQC-7951-LD1	12/05/07 09:15	0.030	0.063	0.063	0.116
DOE 4.5.2.3	CF-249	SCAQC-7951-LD1	12/05/07 09:15	-0.013	0.022	0.022	0.037

Laboratory Samples for Duplicates		
Radionuclide	Laboratory Sample ID	Duplicate of Sample ID
GAMMA	SCAQC-7951-LD1	OH207-7951-01

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Radioanalytical Results

Quality Control Sample
Duplicate (LD1)

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2270-SD</u>		
Other Sample ID: <u>LD1</u>	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
		Laboratory Code: <u>SCA</u>

Quality Control Samples				
<u>Radionuclide</u>	<u>Laboratory Control (LC)</u>	<u>Laboratory Duplicate (LD)</u>	<u>Matrix Spike (MS)</u>	<u>Preparation Blank (PB)</u>
Gamma	SCAQC-7951-LC1	SCAQC-7951-LD1		SCAQC-7951-PB1

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Southeastern Environmental Laboratory

Radioanalytical Results

Quality Control Sample
Duplicate (LD1)

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2284-ST</u>		
Other Sample ID: <u>LD1</u>	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
		Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	SCAQC-7952-LD1	12/06/07 18:39	5.37	0.575	0.787	0.200
DOE 4.5.2.3	CO-60	SCAQC-7952-LD1	12/06/07 18:39	-6.2e-04	0.014	0.014	0.023
DOE 4.5.2.3	RH-101	SCAQC-7952-LD1	12/06/07 18:39	0.002	0.016	0.016	0.027
DOE 4.5.2.3	SB-125	SCAQC-7952-LD1	12/06/07 18:39	-0.042	0.043	0.043	0.069
DOE 4.5.2.3	CS-137	SCAQC-7952-LD1	12/06/07 18:39	0.318	0.053	0.062	0.029
DOE 4.5.2.3	EU-155	SCAQC-7952-LD1	12/06/07 18:39	0.057	0.059	0.060	0.104
DOE 4.5.2.3	TL-208	SCAQC-7952-LD1	12/06/07 18:39	0.240	0.039	0.046	0.028
DOE 4.5.2.3	PO-209	SCAQC-7952-LD1	12/06/07 18:39	0.596	2.73	2.73	4.93
DOE 4.5.2.3	BI-211	SCAQC-7952-LD1	12/06/07 18:39	-0.116	0.428	0.428	0.739
DOE 4.5.2.3	BI-212	SCAQC-7952-LD1	12/06/07 18:39	0.474	0.192	0.197	0.191
DOE 4.5.2.3	PB-212	SCAQC-7952-LD1	12/06/07 18:39	0.768	0.078	0.109	0.042
DOE 4.5.2.3	BI-214	SCAQC-7952-LD1	12/06/07 18:39	0.621	0.100	0.117	0.049
DOE 4.5.2.3	PB-214	SCAQC-7952-LD1	12/06/07 18:39	0.663	0.084	0.107	0.052
DOE 4.5.2.3	RA-223	SCAQC-7952-LD1	12/06/07 18:39	0.058	0.056	0.056	0.131
DOE 4.5.2.3	AC-228	SCAQC-7952-LD1	12/06/07 18:39	0.828	0.129	0.153	0.095
DOE 4.5.2.3	PA-233	SCAQC-7952-LD1	12/06/07 18:39	-0.016	0.027	0.027	0.045
DOE 4.5.2.3	PA-234M	SCAQC-7952-LD1	12/06/07 18:39	0.623	1.66	1.66	3.05
DOE 4.5.2.3	TH-234	SCAQC-7952-LD1	12/06/07 18:39	0.998	0.397	0.409	0.580
DOE 4.5.2.3	U-235	SCAQC-7952-LD1	12/06/07 18:39	-0.033	0.099	0.099	0.162
DOE 4.5.2.3	NP-236	SCAQC-7952-LD1	12/06/07 18:39	-0.004	0.033	0.033	0.056
DOE 4.5.2.3	NP-237	SCAQC-7952-LD1	12/06/07 18:39	0.520	0.192	0.199	0.223
DOE 4.5.2.3	NP-239	SCAQC-7952-LD1	12/06/07 18:39	0.049	0.101	0.102	0.169
DOE 4.5.2.3	AM-241	SCAQC-7952-LD1	12/06/07 18:39	0.046	0.093	0.093	0.165
DOE 4.5.2.3	AM-243	SCAQC-7952-LD1	12/06/07 18:39	0.184	0.056	0.059	0.054
DOE 4.5.2.3	CM-243	SCAQC-7952-LD1	12/06/07 18:39	0.048	0.053	0.053	0.092
DOE 4.5.2.3	AM-246	SCAQC-7952-LD1	12/06/07 18:39	0.023	0.051	0.051	0.093
DOE 4.5.2.3	CF-249	SCAQC-7952-LD1	12/06/07 18:39	0.018	0.019	0.019	0.034

Laboratory Samples for Duplicates		
Radionuclide	Laboratory Sample ID	Duplicate of Sample ID
GAMMA	SCAQC-7952-LD1	OH207-7952-01

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Radioanalytical Results

Quality Control Sample
Duplicate (LD1)

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2284-ST</u>		
Other Sample ID: <u>LD1</u>	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
		Laboratory Code: <u>SCA</u>

Quality Control Samples				
<u>Radionuclide</u>	<u>Laboratory Control (LC)</u>	<u>Laboratory Duplicate (LD)</u>	<u>Matrix Spike (MS)</u>	<u>Preparation Blank (PB)</u>
Gamma	SCAQC-7952-LC1	SCAQC-7952-LD1		SCAQC-7952-PB1

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Southeastern Environmental Laboratory

Radioanalytical Results

Quality Control Sample
Duplicate (LD1)

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Qah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2284-SD</u>		
Other Sample ID: <u>LD1</u>	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
		Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	SCAQC-7953-LD1	12/11/07 03:55	6.04	0.610	0.859	0.218
DOE 4.5.2.3	CO-60	SCAQC-7953-LD1	12/11/07 03:55	0.002	0.016	0.016	0.023
DOE 4.5.2.3	RH-101	SCAQC-7953-LD1	12/11/07 03:55	0.003	0.016	0.016	0.026
DOE 4.5.2.3	SB-125	SCAQC-7953-LD1	12/11/07 03:55	0.004	0.041	0.041	0.069
DOE 4.5.2.3	CS-137	SCAQC-7953-LD1	12/11/07 03:55	0.073	0.025	0.026	0.028
DOE 4.5.2.3	EU-155	SCAQC-7953-LD1	12/11/07 03:55	0.006	0.055	0.055	0.093
DOE 4.5.2.3	TL-208	SCAQC-7953-LD1	12/11/07 03:55	0.308	0.049	0.058	0.024
DOE 4.5.2.3	PO-209	SCAQC-7953-LD1	12/11/07 03:55	-1.09	2.77	2.77	4.67
DOE 4.5.2.3	BI-211	SCAQC-7953-LD1	12/11/07 03:55	0.426	0.440	0.442	0.730
DOE 4.5.2.3	BI-212	SCAQC-7953-LD1	12/11/07 03:55	0.572	0.229	0.236	0.207
DOE 4.5.2.3	PB-212	SCAQC-7953-LD1	12/11/07 03:55	0.908	0.084	0.124	0.040
DOE 4.5.2.3	BI-214	SCAQC-7953-LD1	12/11/07 03:55	0.720	0.102	0.125	0.049
DOE 4.5.2.3	PB-214	SCAQC-7953-LD1	12/11/07 03:55	0.781	0.090	0.119	0.047
DOE 4.5.2.3	RA-223	SCAQC-7953-LD1	12/11/07 03:55	0.274	0.118	0.121	0.127
DOE 4.5.2.3	AC-228	SCAQC-7953-LD1	12/11/07 03:55	1.12	0.164	0.199	0.088
DOE 4.5.2.3	PA-233	SCAQC-7953-LD1	12/11/07 03:55	-0.011	0.027	0.027	0.045
DOE 4.5.2.3	PA-234M	SCAQC-7953-LD1	12/11/07 03:55	-0.494	1.84	1.84	3.14
DOE 4.5.2.3	TH-234	SCAQC-7953-LD1	12/11/07 03:55	0.412	0.332	0.334	0.537
DOE 4.5.2.3	U-235	SCAQC-7953-LD1	12/11/07 03:55	0.057	0.101	0.101	0.167
DOE 4.5.2.3	NP-236	SCAQC-7953-LD1	12/11/07 03:55	0.037	0.031	0.032	0.054
DOE 4.5.2.3	NP-237	SCAQC-7953-LD1	12/11/07 03:55	0.431	0.191	0.196	0.219
DOE 4.5.2.3	NP-239	SCAQC-7953-LD1	12/11/07 03:55	0.057	0.095	0.095	0.166
DOE 4.5.2.3	AM-241	SCAQC-7953-LD1	12/11/07 03:55	-0.076	0.081	0.081	0.134
DOE 4.5.2.3	AM-243	SCAQC-7953-LD1	12/11/07 03:55	0.201	0.057	0.060	0.048
DOE 4.5.2.3	CM-243	SCAQC-7953-LD1	12/11/07 03:55	0.043	0.049	0.049	0.084
DOE 4.5.2.3	AM-246	SCAQC-7953-LD1	12/11/07 03:55	0.011	0.048	0.048	0.086
DOE 4.5.2.3	CF-249	SCAQC-7953-LD1	12/11/07 03:55	0.004	0.017	0.017	0.029

Laboratory Samples for Duplicates		
Radionuclide	Laboratory Sample ID	Duplicate of Sample ID
GAMMA	SCAQC-7953-LD1	OH207-7953-01

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Southeastern Environmental Laboratory

Radioanalytical Results

Quality Control Sample
Duplicate (LD1)

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>COC #31/07-3080.04</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>SB-CZ-SS-2284-SD</u>		
Other Sample ID: <u>LD1</u>	Collection Date: <u>9/27/2007</u>	Date Received: <u>10/1/2007 9:15:00</u>
		Laboratory Code: <u>SCA</u>

Quality Control Samples				
<u>Radionuclide</u>	<u>Laboratory Control (LC)</u>	<u>Laboratory Duplicate (LD)</u>	<u>Matrix Spike (MS)</u>	<u>Preparation Blank (PB)</u>
Gamma	SCAQC-7953-LC1	SCAQC-7953-LD1		SCAQC-7953-PB1

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Radioanalytical Results

Quality Control Sample
Preparation Blank (PB)

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>None</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>N/A</u>		
Other Sample ID: <u>PB</u>	Collection Date: <u>10/1/2007 9:15:00 AM</u>	Date Received: <u>10/1/2007 9:15:00</u>
		Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	SCAQC-7950-PB1	12/04/07 11:37	-0.067	0.104	0.104	0.198
DOE 4.5.2.3	CO-60	SCAQC-7950-PB1	12/04/07 11:37	-0.003	0.011	0.011	0.016
DOE 4.5.2.3	RH-101	SCAQC-7950-PB1	12/04/07 11:37	-0.009	0.010	0.010	0.016
DOE 4.5.2.3	SB-125	SCAQC-7950-PB1	12/04/07 11:37	-0.030	0.024	0.025	0.038
DOE 4.5.2.3	CS-137	SCAQC-7950-PB1	12/04/07 11:37	-0.004	0.009	0.009	0.016
DOE 4.5.2.3	EU-155	SCAQC-7950-PB1	12/04/07 11:37	-0.006	0.032	0.032	0.055
DOE 4.5.2.3	TL-208	SCAQC-7950-PB1	12/04/07 11:37	-0.006	0.012	0.012	0.019
DOE 4.5.2.3	PO-209	SCAQC-7950-PB1	12/04/07 11:37	-0.584	2.06	2.06	3.62
DOE 4.5.2.3	BI-211	SCAQC-7950-PB1	12/04/07 11:37	0.181	0.315	0.315	0.603
DOE 4.5.2.3	BI-212	SCAQC-7950-PB1	12/04/07 11:37	-0.051	0.075	0.075	0.127
DOE 4.5.2.3	PB-212	SCAQC-7950-PB1	12/04/07 11:37	0.024	0.022	0.022	0.032
DOE 4.5.2.3	BI-214	SCAQC-7950-PB1	12/04/07 11:37	0.024	0.025	0.025	0.046
DOE 4.5.2.3	PB-214	SCAQC-7950-PB1	12/04/07 11:37	0.002	0.021	0.021	0.038
DOE 4.5.2.3	RA-223	SCAQC-7950-PB1	12/04/07 11:37	0.007	0.046	0.046	0.084
DOE 4.5.2.3	AC-228	SCAQC-7950-PB1	12/04/07 11:37	-0.030	0.034	0.034	0.059
DOE 4.5.2.3	PA-233	SCAQC-7950-PB1	12/04/07 11:37	9.1e-04	0.016	0.016	0.029
DOE 4.5.2.3	PA-234M	SCAQC-7950-PB1	12/04/07 11:37	-0.018	1.12	1.12	2.10
DOE 4.5.2.3	TH-234	SCAQC-7950-PB1	12/04/07 11:37	-0.047	0.184	0.184	0.335
DOE 4.5.2.3	U-235	SCAQC-7950-PB1	12/04/07 11:37	-0.024	0.059	0.059	0.096
DOE 4.5.2.3	NP-236	SCAQC-7950-PB1	12/04/07 11:37	-0.021	0.019	0.019	0.030
DOE 4.5.2.3	NP-237	SCAQC-7950-PB1	12/04/07 11:37	-0.032	0.070	0.071	0.120
DOE 4.5.2.3	NP-239	SCAQC-7950-PB1	12/04/07 11:37	-1.6e-04	0.062	0.063	0.105
DOE 4.5.2.3	AM-241	SCAQC-7950-PB1	12/04/07 11:37	0.009	0.054	0.054	0.097
DOE 4.5.2.3	AM-243	SCAQC-7950-PB1	12/04/07 11:37	0.007	0.018	0.018	0.032
DOE 4.5.2.3	CM-243	SCAQC-7950-PB1	12/04/07 11:37	0.005	0.030	0.030	0.053
DOE 4.5.2.3	AM-246	SCAQC-7950-PB1	12/04/07 11:37	0.021	0.031	0.031	0.063
DOE 4.5.2.3	CF-249	SCAQC-7950-PB1	12/04/07 11:37	7.1e-04	0.010	0.010	0.018

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Radioanalytical Results

Quality Control Sample
Preparation Blank (PB)

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>None</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>N/A</u>		
Other Sample ID: <u>PB</u>	Collection Date: <u>10/1/2007 9:15:00 AM</u>	Date Received: <u>10/1/2007 9:15:00</u>
		Laboratory Code: <u>SCA</u>

Quality Control Samples				
<u>Radionuclide</u>	<u>Laboratory Control (LC)</u>	<u>Laboratory Duplicate (LD)</u>	<u>Matrix Spike (MS)</u>	<u>Preparation Blank (PB)</u>
Gamma	SCAQC-7950-LC1	SCAQC-7950-LD1		SCAQC-7950-PB1

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Southeastern Environmental Laboratory

Radioanalytical Results

Quality Control Sample
Preparation Blank (PB)

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>None</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>N/A</u>		
Other Sample ID: <u>PB</u>	Collection Date: <u>10/1/2007 9:15:00 AM</u>	Date Received: <u>10/1/2007 9:15:00</u>
		Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	SCAQC-7951-PB1	12/05/07 09:14	-0.045	0.119	0.119	0.252
DOE 4.5.2.3	CO-60	SCAQC-7951-PB1	12/05/07 09:14	-3.0e-04	0.009	0.009	0.018
DOE 4.5.2.3	RH-101	SCAQC-7951-PB1	12/05/07 09:14	-0.003	0.012	0.012	0.019
DOE 4.5.2.3	SB-125	SCAQC-7951-PB1	12/05/07 09:14	-0.020	0.028	0.028	0.046
DOE 4.5.2.3	CS-137	SCAQC-7951-PB1	12/05/07 09:14	-0.003	0.010	0.010	0.018
DOE 4.5.2.3	EU-155	SCAQC-7951-PB1	12/05/07 09:14	2.2e-04	0.034	0.034	0.058
DOE 4.5.2.3	TL-208	SCAQC-7951-PB1	12/05/07 09:14	-0.004	0.012	0.012	0.022
DOE 4.5.2.3	PO-209	SCAQC-7951-PB1	12/05/07 09:14	0.169	1.94	1.94	3.58
DOE 4.5.2.3	BI-211	SCAQC-7951-PB1	12/05/07 09:14	-0.022	0.258	0.258	0.410
DOE 4.5.2.3	BI-212	SCAQC-7951-PB1	12/05/07 09:14	0.026	0.071	0.071	0.135
DOE 4.5.2.3	PB-212	SCAQC-7951-PB1	12/05/07 09:14	0.003	0.018	0.018	0.033
DOE 4.5.2.3	BI-214	SCAQC-7951-PB1	12/05/07 09:14	0.002	0.027	0.027	0.050
DOE 4.5.2.3	PB-214	SCAQC-7951-PB1	12/05/07 09:14	-0.013	0.026	0.026	0.043
DOE 4.5.2.3	RA-223	SCAQC-7951-PB1	12/05/07 09:14	-0.012	0.047	0.047	0.082
DOE 4.5.2.3	AC-228	SCAQC-7951-PB1	12/05/07 09:14	0.032	0.042	0.042	0.081
DOE 4.5.2.3	PA-233	SCAQC-7951-PB1	12/05/07 09:14	0.009	0.019	0.019	0.034
DOE 4.5.2.3	PA-234M	SCAQC-7951-PB1	12/05/07 09:14	-0.559	1.15	1.15	2.06
DOE 4.5.2.3	TH-234	SCAQC-7951-PB1	12/05/07 09:14	-0.039	0.186	0.186	0.332
DOE 4.5.2.3	U-235	SCAQC-7951-PB1	12/05/07 09:14	-0.033	0.066	0.066	0.104
DOE 4.5.2.3	NP-236	SCAQC-7951-PB1	12/05/07 09:14	0.014	0.019	0.019	0.034
DOE 4.5.2.3	NP-237	SCAQC-7951-PB1	12/05/07 09:14	-0.001	0.071	0.071	0.123
DOE 4.5.2.3	NP-239	SCAQC-7951-PB1	12/05/07 09:14	-0.005	0.066	0.066	0.117
DOE 4.5.2.3	AM-241	SCAQC-7951-PB1	12/05/07 09:14	-0.020	0.053	0.053	0.081
DOE 4.5.2.3	AM-243	SCAQC-7951-PB1	12/05/07 09:14	0.005	0.017	0.017	0.030
DOE 4.5.2.3	CM-243	SCAQC-7951-PB1	12/05/07 09:14	0.030	0.030	0.030	0.054
DOE 4.5.2.3	AM-246	SCAQC-7951-PB1	12/05/07 09:14	0.022	0.032	0.032	0.065
DOE 4.5.2.3	CF-249	SCAQC-7951-PB1	12/05/07 09:14	0.006	0.012	0.012	0.021

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Southeastern Environmental Laboratory

Radioanalytical Results

Quality Control Sample
Preparation Blank (PB)

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>None</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>N/A</u>		
Other Sample ID: <u>PB</u>	Collection Date: <u>10/1/2007 9:15:00 AM</u>	Date Received: <u>10/1/2007 9:15:00</u>
		Laboratory Code: <u>SCA</u>

Quality Control Samples				
<u>Radionuclide</u>	<u>Laboratory Control (LC)</u>	<u>Laboratory Duplicate (LD)</u>	<u>Matrix Spike (MS)</u>	<u>Preparation Blank (PB)</u>
Gamma	SCAQC-7951-LC1	SCAQC-7951-LD1		SCAQC-7951-PB1

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Southeastern Environmental Laboratory

Radioanalytical Results

Quality Control Sample
Preparation Blank (PB)

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>None</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>N/A</u>		
Other Sample ID: <u>PB</u>	Collection Date: <u>10/1/2007 9:15:00 AM</u>	Date Received: <u>10/1/2007 9:15:00</u>
		Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	SCAQC-7952-PB1	12/06/07 15:38	-0.111	0.158	0.158	0.309
DOE 4.5.2.3	CO-60	SCAQC-7952-PB1	12/06/07 15:38	-0.001	0.012	0.012	0.022
DOE 4.5.2.3	RH-101	SCAQC-7952-PB1	12/06/07 15:38	0.003	0.012	0.012	0.021
DOE 4.5.2.3	SB-125	SCAQC-7952-PB1	12/06/07 15:38	-0.014	0.035	0.035	0.061
DOE 4.5.2.3	CS-137	SCAQC-7952-PB1	12/06/07 15:38	0.009	0.013	0.013	0.025
DOE 4.5.2.3	EU-155	SCAQC-7952-PB1	12/06/07 15:38	-0.004	0.033	0.033	0.057
DOE 4.5.2.3	TL-208	SCAQC-7952-PB1	12/06/07 15:38	-0.004	0.015	0.015	0.026
DOE 4.5.2.3	PO-209	SCAQC-7952-PB1	12/06/07 15:38	-1.49	2.67	2.67	4.57
DOE 4.5.2.3	BI-211	SCAQC-7952-PB1	12/06/07 15:38	-0.356	0.376	0.377	0.587
DOE 4.5.2.3	BI-212	SCAQC-7952-PB1	12/06/07 15:38	-0.001	0.091	0.091	0.162
DOE 4.5.2.3	PB-212	SCAQC-7952-PB1	12/06/07 15:38	-0.011	0.023	0.023	0.039
DOE 4.5.2.3	BI-214	SCAQC-7952-PB1	12/06/07 15:38	0.021	0.029	0.029	0.055
DOE 4.5.2.3	PB-214	SCAQC-7952-PB1	12/06/07 15:38	0.026	0.028	0.028	0.050
DOE 4.5.2.3	RA-223	SCAQC-7952-PB1	12/06/07 15:38	0.012	0.068	0.068	0.117
DOE 4.5.2.3	AC-228	SCAQC-7952-PB1	12/06/07 15:38	0.033	0.051	0.051	0.101
DOE 4.5.2.3	PA-233	SCAQC-7952-PB1	12/06/07 15:38	-0.009	0.025	0.025	0.042
DOE 4.5.2.3	PA-234M	SCAQC-7952-PB1	12/06/07 15:38	0.996	1.64	1.65	3.15
DOE 4.5.2.3	TH-234	SCAQC-7952-PB1	12/06/07 15:38	-0.030	0.184	0.185	0.344
DOE 4.5.2.3	U-235	SCAQC-7952-PB1	12/06/07 15:38	0.017	0.073	0.073	0.127
DOE 4.5.2.3	NP-236	SCAQC-7952-PB1	12/06/07 15:38	-4.9e-04	0.019	0.019	0.031
DOE 4.5.2.3	NP-237	SCAQC-7952-PB1	12/06/07 15:38	-0.042	0.062	0.062	0.099
DOE 4.5.2.3	NP-239	SCAQC-7952-PB1	12/06/07 15:38	-0.041	0.081	0.081	0.135
DOE 4.5.2.3	AM-241	SCAQC-7952-PB1	12/06/07 15:38	-0.092	0.025	0.027	0.034
DOE 4.5.2.3	AM-243	SCAQC-7952-PB1	12/06/07 15:38	-0.014	0.012	0.012	0.018
DOE 4.5.2.3	CM-243	SCAQC-7952-PB1	12/06/07 15:38	0.008	0.029	0.029	0.052
DOE 4.5.2.3	AM-246	SCAQC-7952-PB1	12/06/07 15:38	-0.016	0.047	0.047	0.083
DOE 4.5.2.3	CF-249	SCAQC-7952-PB1	12/06/07 15:38	0.005	0.015	0.015	0.027

Sanford Cohen & Associates
Southeastern Environmental Laboratory

Radioanalytical Results

Quality Control Sample
Preparation Blank (PB)

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>None</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>N/A</u>		
Other Sample ID: <u>PB</u>	Collection Date: <u>10/1/2007 9:15:00 AM</u>	Date Received: <u>10/1/2007 9:15:00</u>
		Laboratory Code: <u>SCA</u>

Quality Control Samples				
<u>Radionuclide</u>	<u>Laboratory Control (LC)</u>	<u>Laboratory Duplicate (LD)</u>	<u>Matrix Spike (MS)</u>	<u>Preparation Blank (PB)</u>
Gamma	SCAQC-7952-LC1	SCAQC-7952-LD1		SCAQC-7952-PB1

Sanford Cohen & Associates
Southeastern Environmental Laboratory

Radioanalytical Results

Quality Control Sample
Preparation Blank (PB)

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>None</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>N/A</u>		
Other Sample ID: <u>PB</u>	Collection Date: <u>10/1/2007 9:15:00 AM</u>	Date Received: <u>10/1/2007 9:15:00</u>
		Laboratory Code: <u>SCA</u>

Method Number	Radionuclide	Laboratory Sample ID	Analysis Date/Time	Activity (pCi/g)	2 σ Counting Error (pCi/g)	Total Error (pCi/g)	MDA (pCi/g)
DOE 4.5.2.3	K-40	SCAQC-7953-PB1	12/11/07 03:57	-0.101	0.162	0.162	0.317
DOE 4.5.2.3	CO-60	SCAQC-7953-PB1	12/11/07 03:57	-0.002	0.011	0.011	0.021
DOE 4.5.2.3	RH-101	SCAQC-7953-PB1	12/11/07 03:57	-0.009	0.012	0.012	0.020
DOE 4.5.2.3	SB-125	SCAQC-7953-PB1	12/11/07 03:57	0.007	0.033	0.033	0.061
DOE 4.5.2.3	CS-137	SCAQC-7953-PB1	12/11/07 03:57	-0.010	0.015	0.015	0.024
DOE 4.5.2.3	EU-155	SCAQC-7953-PB1	12/11/07 03:57	0.006	0.031	0.031	0.055
DOE 4.5.2.3	TL-208	SCAQC-7953-PB1	12/11/07 03:57	0.002	0.015	0.015	0.027
DOE 4.5.2.3	PO-209	SCAQC-7953-PB1	12/11/07 03:57	0.058	2.26	2.26	4.24
DOE 4.5.2.3	BI-211	SCAQC-7953-PB1	12/11/07 03:57	-0.040	0.366	0.366	0.641
DOE 4.5.2.3	BI-212	SCAQC-7953-PB1	12/11/07 03:57	-0.131	0.104	0.104	0.156
DOE 4.5.2.3	PB-212	SCAQC-7953-PB1	12/11/07 03:57	-3.6e-04	0.022	0.022	0.038
DOE 4.5.2.3	BI-214	SCAQC-7953-PB1	12/11/07 03:57	0.020	0.030	0.030	0.056
DOE 4.5.2.3	PB-214	SCAQC-7953-PB1	12/11/07 03:57	0.024	0.030	0.030	0.053
DOE 4.5.2.3	RA-223	SCAQC-7953-PB1	12/11/07 03:57	0.082	0.064	0.065	0.118
DOE 4.5.2.3	AC-228	SCAQC-7953-PB1	12/11/07 03:57	0.008	0.050	0.050	0.095
DOE 4.5.2.3	PA-233	SCAQC-7953-PB1	12/11/07 03:57	-0.004	0.025	0.025	0.042
DOE 4.5.2.3	PA-234M	SCAQC-7953-PB1	12/11/07 03:57	-0.215	1.64	1.64	2.90
DOE 4.5.2.3	TH-234	SCAQC-7953-PB1	12/11/07 03:57	0.082	0.189	0.189	0.356
DOE 4.5.2.3	U-235	SCAQC-7953-PB1	12/11/07 03:57	0.043	0.076	0.076	0.134
DOE 4.5.2.3	NP-236	SCAQC-7953-PB1	12/11/07 03:57	-0.001	0.019	0.019	0.031
DOE 4.5.2.3	NP-237	SCAQC-7953-PB1	12/11/07 03:57	-0.030	0.061	0.061	0.098
DOE 4.5.2.3	NP-239	SCAQC-7953-PB1	12/11/07 03:57	0.020	0.076	0.076	0.133
DOE 4.5.2.3	AM-241	SCAQC-7953-PB1	12/11/07 03:57	0.004	0.024	0.024	0.036
DOE 4.5.2.3	AM-243	SCAQC-7953-PB1	12/11/07 03:57	-0.010	0.013	0.013	0.019
DOE 4.5.2.3	CM-243	SCAQC-7953-PB1	12/11/07 03:57	-5.6e-05	0.028	0.028	0.048
DOE 4.5.2.3	AM-246	SCAQC-7953-PB1	12/11/07 03:57	0.067	0.045	0.046	0.096
DOE 4.5.2.3	CF-249	SCAQC-7953-PB1	12/11/07 03:57	-0.005	0.014	0.014	0.025

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Southeastern Environmental Laboratory

Radioanalytical Results

Quality Control Sample
Preparation Blank (PB)

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>	Chain-of-Custody Number: <u>None</u>	Matrix: <u>Soil</u>
Site Sample ID: <u>N/A</u>		
Other Sample ID: <u>PB</u>	Collection Date: <u>10/1/2007 9:15:00 AM</u>	Date Received: <u>10/1/2007 9:15:00</u>
		Laboratory Code: <u>SCA</u>

Quality Control Samples				
<u>Radionuclide</u>	<u>Laboratory Control (LC)</u>	<u>Laboratory Duplicate (LD)</u>	<u>Matrix Spike (MS)</u>	<u>Preparation Blank (PB)</u>
Gamma	SCAQC-7953-LC1	SCAQC-7953-LD1		SCAQC-7953-PB1

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Southeastern Environmental Laboratory

Radioanalytical Results

Quality Control Sample Evaluation

Report Identification Number: S7950_7953

Project Name: Cabrera Services-Oah

Matrix: Soil

Laboratory Code: SCA

Laboratory Control Sample (LC1) Evaluation

(CV)

Decay Corrected
Activity of
Spike Added
(pCi/g)

(OV)

Laboratory Control
Sample Activity
(pCi/g)

Laboratory Control
Sample
% Recovery
(Accuracy)

Number of σ
Between CV and OV

Method Number	Radionuclide	Laboratory Sample ID	Decay Corrected Activity of Spike Added (pCi/g)	Laboratory Control Sample Activity (pCi/g)	Laboratory Control Sample % Recovery (Accuracy)	Number of σ Between CV and OV
DOE 4.5.2.3	CO-60	SCAQC-7953-LC1	31.0 $\pm$ 0.838	32.0 $\pm$ 3.78	103	0.365
DOE 4.5.2.3	CO-60	SCAQC-7952-LC1	31.0 $\pm$ 0.838	31.0 $\pm$ 3.57	99.9	0.014
DOE 4.5.2.3	CO-60	SCAQC-7951-LC1	31.0 $\pm$ 0.838	31.0 $\pm$ 3.66	99.7	0.038
DOE 4.5.2.3	CO-60	SCAQC-7950-LC1	31.0 $\pm$ 0.838	30.9 $\pm$ 3.65	99.5	0.065
DOE 4.5.2.3	CS-137	SCAQC-7953-LC1	28.8 $\pm$ 0.864	30.4 $\pm$ 3.78	106	0.630
DOE 4.5.2.3	CS-137	SCAQC-7952-LC1	28.8 $\pm$ 0.864	30.6 $\pm$ 4.66	106	0.634
DOE 4.5.2.3	CS-137	SCAQC-7951-LC1	28.8 $\pm$ 0.864	30.9 $\pm$ 4.56	107	0.745
DOE 4.5.2.3	CS-137	SCAQC-7950-LC1	28.8 $\pm$ 0.864	31.0 $\pm$ 4.58	108	0.778
DOE 4.5.2.3	AM-241	SCAQC-7953-LC1	77.0 $\pm$ 2.31	77.2 $\pm$ 9.15	100	0.029
DOE 4.5.2.3	AM-241	SCAQC-7952-LC1	77.0 $\pm$ 2.31	75.5 $\pm$ 9.11	98.1	0.231
DOE 4.5.2.3	AM-241	SCAQC-7951-LC1	77.0 $\pm$ 2.31	75.6 $\pm$ 9.74	98.3	0.204
DOE 4.5.2.3	AM-241	SCAQC-7950-LC1	77.0 $\pm$ 2.31	77.5 $\pm$ 10.0	101	0.075

Laboratory Duplicate Sample (LD1) Evaluation

Ratio of the Difference
Between the Sample

Difference Between
Original Activity and
Duplicate Sample
Activity
(F)

Activity and the
Propagated
Measurement
at 1 σ
(F/E)

Method Number	Radionuclide	Laboratory Sample ID	Original Sample Activity (pCi/g)	Duplicate Sample Activity (pCi/g)	Difference Between Original Activity and Duplicate Sample Activity (F)	Ratio of the Difference Between the Sample Activity and the Propagated Measurement at 1 σ (F/E)
DOE 4.5.2.3	K-40	SCAQC-7950-LD1	6.88 $\pm$ 1.02	7.40 $\pm$ 1.05	0.526	0.721
DOE 4.5.2.3	K-40	SCAQC-7951-LD1	5.47 $\pm$ 0.834	5.96 $\pm$ 0.877	0.493	0.815
DOE 4.5.2.3	K-40	SCAQC-7952-LD1	5.27 $\pm$ 0.805	5.37 $\pm$ 0.787	0.104	0.185
DOE 4.5.2.3	K-40	SCAQC-7953-LD1	6.10 $\pm$ 0.852	6.04 $\pm$ 0.859	0.056	0.093
DOE 4.5.2.3	CO-60	SCAQC-7952-LD1	0.009 $\pm$ 0.015	-6.2e-04 $\pm$ 0.014	0.010	0.937
DOE 4.5.2.3	CO-60	SCAQC-7950-LD1	0.013 $\pm$ 0.018	-0.007 $\pm$ 0.017	0.020	1.64
DOE 4.5.2.3	CO-60	SCAQC-7953-LD1	-0.006 $\pm$ 0.014	0.002 $\pm$ 0.016	0.008	0.758
DOE 4.5.2.3	CO-60	SCAQC-7951-LD1	-0.005 $\pm$ 0.015	-0.024 $\pm$ 0.021	0.018	1.41
DOE 4.5.2.3	RH-101	SCAQC-7953-LD1	-0.016 $\pm$ 0.016	0.003 $\pm$ 0.016	0.019	1.67
DOE 4.5.2.3	RH-101	SCAQC-7951-LD1	0.003 $\pm$ 0.017	0.002 $\pm$ 0.019	5.4e-04	0.043
DOE 4.5.2.3	RH-101	SCAQC-7950-LD1	0.008 $\pm$ 0.019	-2.4e-04 $\pm$ 0.020	0.008	0.560
DOE 4.5.2.3	RH-101	SCAQC-7952-LD1	0.003 $\pm$ 0.016	0.002 $\pm$ 0.016	0.001	0.110
DOE 4.5.2.3	SB-125	SCAQC-7952-LD1	-0.015 $\pm$ 0.042	-0.042 $\pm$ 0.043	0.027	0.905

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Radioanalytical Results

Quality Control Sample Evaluation

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>			Laboratory Code: <u>SCA</u>					
Matrix: <u>Soil</u>								
DOE 4.5.2.3	SB-125	SCAQC-7951-LD1	-0.010	± 0.043	0.014	± 0.052	0.024	0.715
DOE 4.5.2.3	SB-125	SCAQC-7953-LD1	0.004	± 0.039	0.004	± 0.041	5.9e-04	0.021
DOE 4.5.2.3	SB-125	SCAQC-7950-LD1	0.020	± 0.050	0.006	± 0.050	0.014	0.407
DOE 4.5.2.3	CS-137	SCAQC-7953-LD1	0.058	± 0.028	0.073	± 0.026	0.015	0.774
DOE 4.5.2.3	CS-137	SCAQC-7950-LD1	0.367	± 0.067	0.320	± 0.062	0.046	1.01
DOE 4.5.2.3	CS-137	SCAQC-7952-LD1	0.300	± 0.060	0.318	± 0.062	0.018	0.405
DOE 4.5.2.3	CS-137	SCAQC-7951-LD1	0.052	± 0.023	0.062	± 0.041	0.010	0.438
DOE 4.5.2.3	EU-155	SCAQC-7953-LD1	0.014	± 0.055	0.006	± 0.055	0.009	0.226
DOE 4.5.2.3	EU-155	SCAQC-7952-LD1	0.025	± 0.056	0.057	± 0.060	0.032	0.788
DOE 4.5.2.3	EU-155	SCAQC-7951-LD1	-0.018	± 0.059	0.050	± 0.056	0.068	1.69
DOE 4.5.2.3	EU-155	SCAQC-7950-LD1	0.063	± 0.069	0.042	± 0.067	0.020	0.423
DOE 4.5.2.3	TL-208	SCAQC-7952-LD1	0.228	± 0.049	0.240	± 0.046	0.012	0.353
DOE 4.5.2.3	TL-208	SCAQC-7951-LD1	0.311	± 0.057	0.323	± 0.063	0.011	0.273
DOE 4.5.2.3	TL-208	SCAQC-7953-LD1	0.268	± 0.049	0.308	± 0.058	0.040	1.06
DOE 4.5.2.3	TL-208	SCAQC-7950-LD1	0.364	± 0.065	0.338	± 0.066	0.026	0.551
DOE 4.5.2.3	PO-209	SCAQC-7952-LD1	-0.608	± 2.81	0.596	± 2.73	1.20	0.614
DOE 4.5.2.3	PO-209	SCAQC-7950-LD1	-1.75	± 3.43	-0.409	± 3.62	1.34	0.537
DOE 4.5.2.3	PO-209	SCAQC-7953-LD1	-0.614	± 2.99	-1.09	± 2.77	0.472	0.232
DOE 4.5.2.3	PO-209	SCAQC-7951-LD1	-3.03	± 2.92	0.704	± 3.77	3.74	1.57
DOE 4.5.2.3	BI-211	SCAQC-7951-LD1	0.049	± 0.435	-0.346	± 0.575	0.395	1.09
DOE 4.5.2.3	BI-211	SCAQC-7950-LD1	-0.416	± 0.519	-0.214	± 0.561	0.203	0.531
DOE 4.5.2.3	BI-211	SCAQC-7953-LD1	-0.224	± 0.412	0.426	± 0.442	0.650	2.15
DOE 4.5.2.3	BI-211	SCAQC-7952-LD1	0.072	± 0.497	-0.116	± 0.428	0.188	0.573
DOE 4.5.2.3	BI-212	SCAQC-7950-LD1	0.640	± 0.247	0.818	± 0.252	0.178	1.01
DOE 4.5.2.3	BI-212	SCAQC-7952-LD1	0.434	± 0.253	0.474	± 0.197	0.039	0.245
DOE 4.5.2.3	BI-212	SCAQC-7953-LD1	0.517	± 0.199	0.572	± 0.236	0.055	0.354
DOE 4.5.2.3	BI-212	SCAQC-7951-LD1	0.500	± 0.220	0.562	± 0.288	0.062	0.342
DOE 4.5.2.3	PB-212	SCAQC-7951-LD1	0.944	± 0.130	0.978	± 0.137	0.034	0.364
DOE 4.5.2.3	PB-212	SCAQC-7953-LD1	0.897	± 0.123	0.908	± 0.124	0.011	0.128
DOE 4.5.2.3	PB-212	SCAQC-7950-LD1	1.14	± 0.155	1.10	± 0.150	0.034	0.315
DOE 4.5.2.3	PB-212	SCAQC-7952-LD1	0.750	± 0.106	0.768	± 0.109	0.019	0.246
DOE 4.5.2.3	BI-214	SCAQC-7951-LD1	0.609	± 0.113	0.613	± 0.118	0.004	0.044
DOE 4.5.2.3	BI-214	SCAQC-7952-LD1	0.631	± 0.116	0.621	± 0.117	0.010	0.115
DOE 4.5.2.3	BI-214	SCAQC-7953-LD1	0.712	± 0.126	0.720	± 0.125	0.008	0.089
DOE 4.5.2.3	BI-214	SCAQC-7950-LD1	0.989	± 0.169	1.01	± 0.174	0.022	0.179
DOE 4.5.2.3	PB-214	SCAQC-7953-LD1	0.751	± 0.114	0.781	± 0.119	0.030	0.362
DOE 4.5.2.3	PB-214	SCAQC-7952-LD1	0.606	± 0.101	0.663	± 0.107	0.057	0.774
DOE 4.5.2.3	PB-214	SCAQC-7951-LD1	0.628	± 0.101	0.643	± 0.111	0.015	0.201
DOE 4.5.2.3	PB-214	SCAQC-7950-LD1	1.06	± 0.165	0.987	± 0.150	0.078	0.698
DOE 4.5.2.3	RA-223	SCAQC-7950-LD1	0.091	± 0.111	0.089	± 0.083	0.002	0.030
DOE 4.5.2.3	RA-223	SCAQC-7953-LD1	0.308	± 0.141	0.274	± 0.121	0.034	0.362
DOE 4.5.2.3	RA-223	SCAQC-7952-LD1	0.187	± 0.119	0.058	± 0.056	0.128	1.95
DOE 4.5.2.3	RA-223	SCAQC-7951-LD1	0.313	± 0.131	0.365	± 0.182	0.053	0.471
DOE 4.5.2.3	AC-228	SCAQC-7951-LD1	1.02	± 0.205	1.09	± 0.199	0.071	0.497
DOE 4.5.2.3	AC-228	SCAQC-7950-LD1	1.38	± 0.231	1.04	± 0.208	0.339	2.18

Sanford Cohen & Associates Southeastern Environmental Laboratory

Radioanalytical Results

Quality Control Sample Evaluation

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>			Laboratory Code: <u>SCA</u>					
Matrix: <u>Soil</u>								
DOE 4.5.2.3	AC-228	SCAQC-7952-LD1	0.793	± 0.159	0.828	± 0.153	0.034	0.312
DOE 4.5.2.3	AC-228	SCAQC-7953-LD1	0.964	± 0.172	1.12	± 0.199	0.156	1.19
DOE 4.5.2.3	PA-233	SCAQC-7953-LD1	0.002	± 0.027	-0.011	± 0.027	0.013	0.701
DOE 4.5.2.3	PA-233	SCAQC-7951-LD1	-0.007	± 0.029	-0.009	± 0.034	0.002	0.087
DOE 4.5.2.3	PA-233	SCAQC-7950-LD1	-0.006	± 0.032	-0.015	± 0.033	0.009	0.402
DOE 4.5.2.3	PA-233	SCAQC-7952-LD1	-0.008	± 0.028	-0.016	± 0.027	0.008	0.393
DOE 4.5.2.3	PA-234M	SCAQC-7953-LD1	1.86	± 1.76	-0.494	± 1.84	2.36	1.86
DOE 4.5.2.3	PA-234M	SCAQC-7951-LD1	1.23	± 1.88	2.58	± 2.39	1.35	0.891
DOE 4.5.2.3	PA-234M	SCAQC-7950-LD1	0.307	± 2.04	0.167	± 2.04	0.140	0.097
DOE 4.5.2.3	PA-234M	SCAQC-7952-LD1	0.949	± 1.85	0.623	± 1.66	0.326	0.263
DOE 4.5.2.3	TH-234	SCAQC-7952-LD1	1.21	± 0.493	0.998	± 0.409	0.211	0.659
DOE 4.5.2.3	TH-234	SCAQC-7953-LD1	1.14	± 0.349	0.412	± 0.334	0.731	3.03
DOE 4.5.2.3	TH-234	SCAQC-7950-LD1	1.66	± 0.443	1.16	± 0.504	0.494	1.47
DOE 4.5.2.3	TH-234	SCAQC-7951-LD1	1.58	± 0.484	1.62	± 0.457	0.033	0.099
DOE 4.5.2.3	U-235	SCAQC-7953-LD1	0.071	± 0.100	0.057	± 0.101	0.014	0.195
DOE 4.5.2.3	U-235	SCAQC-7950-LD1	-0.022	± 0.114	0.247	± 0.181	0.269	2.51
DOE 4.5.2.3	U-235	SCAQC-7951-LD1	0.046	± 0.104	0.066	± 0.114	0.020	0.257
DOE 4.5.2.3	U-235	SCAQC-7952-LD1	-0.074	± 0.101	-0.033	± 0.099	0.041	0.581
DOE 4.5.2.3	NP-236	SCAQC-7952-LD1	0.023	± 0.034	-0.004	± 0.033	0.028	1.16
DOE 4.5.2.3	NP-236	SCAQC-7953-LD1	0.033	± 0.032	0.037	± 0.032	0.004	0.176
DOE 4.5.2.3	NP-236	SCAQC-7950-LD1	-0.001	± 0.041	0.036	± 0.039	0.037	1.30
DOE 4.5.2.3	NP-236	SCAQC-7951-LD1	0.035	± 0.036	0.026	± 0.035	0.010	0.388
DOE 4.5.2.3	NP-237	SCAQC-7951-LD1	0.555	± 0.180	0.473	± 0.150	0.082	0.703
DOE 4.5.2.3	NP-237	SCAQC-7952-LD1	0.431	± 0.175	0.520	± 0.199	0.089	0.673
DOE 4.5.2.3	NP-237	SCAQC-7953-LD1	0.545	± 0.184	0.431	± 0.196	0.114	0.850
DOE 4.5.2.3	NP-237	SCAQC-7950-LD1	0.477	± 0.202	0.635	± 0.246	0.158	0.991
DOE 4.5.2.3	NP-239	SCAQC-7953-LD1	0.037	± 0.098	0.057	± 0.095	0.020	0.297
DOE 4.5.2.3	NP-239	SCAQC-7950-LD1	-0.037	± 0.123	-0.019	± 0.118	0.018	0.209
DOE 4.5.2.3	NP-239	SCAQC-7951-LD1	-0.006	± 0.100	0.105	± 0.128	0.111	1.37
DOE 4.5.2.3	NP-239	SCAQC-7952-LD1	-0.041	± 0.095	0.049	± 0.102	0.091	1.30
DOE 4.5.2.3	AM-241	SCAQC-7950-LD1	-0.005	± 0.110	-0.002	± 0.102	0.003	0.041
DOE 4.5.2.3	AM-241	SCAQC-7953-LD1	-0.010	± 0.080	-0.076	± 0.081	0.066	1.16
DOE 4.5.2.3	AM-241	SCAQC-7952-LD1	-0.031	± 0.086	0.046	± 0.093	0.077	1.21
DOE 4.5.2.3	AM-241	SCAQC-7951-LD1	-0.019	± 0.091	0.014	± 0.040	0.032	0.651
DOE 4.5.2.3	AM-243	SCAQC-7950-LD1	0.261	± 0.078	0.229	± 0.068	0.032	0.628
DOE 4.5.2.3	AM-243	SCAQC-7952-LD1	0.172	± 0.053	0.184	± 0.059	0.012	0.300
DOE 4.5.2.3	AM-243	SCAQC-7951-LD1	0.208	± 0.064	0.169	± 0.050	0.039	0.969
DOE 4.5.2.3	AM-243	SCAQC-7953-LD1	0.216	± 0.063	0.201	± 0.060	0.015	0.343
DOE 4.5.2.3	CM-243	SCAQC-7953-LD1	0.005	± 0.049	0.043	± 0.049	0.038	1.08
DOE 4.5.2.3	CM-243	SCAQC-7952-LD1	-0.034	± 0.051	0.048	± 0.053	0.082	2.23
DOE 4.5.2.3	CM-243	SCAQC-7950-LD1	-0.021	± 0.062	-0.007	± 0.060	0.014	0.325
DOE 4.5.2.3	CM-243	SCAQC-7951-LD1	0.026	± 0.052	0.010	± 0.050	0.016	0.433
DOE 4.5.2.3	AM-246	SCAQC-7952-LD1	-3.4e-04	± 0.049	0.023	± 0.051	0.023	0.646
DOE 4.5.2.3	AM-246	SCAQC-7950-LD1	0.015	± 0.061	0.044	± 0.062	0.030	0.684
DOE 4.5.2.3	AM-246	SCAQC-7953-LD1	-0.021	± 0.050	0.011	± 0.048	0.032	0.931

Sanford Cohen & Associates
Southeastern Environmental Laboratory

Radioanalytical Results

Quality Control Sample Evaluation

Report Identification Number: S7950_7953

Project Name: <u>Cabrera Services-Oah</u>					Laboratory Code: <u>SCA</u>				
Matrix: <u>Soil</u>									
DOE 4.5.2.3	AM-246	SCAQC-7951-LD1	0.030	± 0.054	0.030	± 0.063	3.5e-04	0.008	
DOE 4.5.2.3	CF-249	SCAQC-7953-LD1	0.003	± 0.017	0.004	± 0.017	0.002	0.152	
DOE 4.5.2.3	CF-249	SCAQC-7950-LD1	0.020	± 0.022	0.012	± 0.022	0.008	0.507	
DOE 4.5.2.3	CF-249	SCAQC-7952-LD1	9.3e-04	± 0.018	0.018	± 0.019	0.017	1.34	
DOE 4.5.2.3	CF-249	SCAQC-7951-LD1	0.002	± 0.018	-0.013	± 0.022	0.015	1.08	

PREPARATION LOGS

SC&A, Inc.
Southeastern Environmental Laboratory

PREPARATION SUMMARY

Sample Volume Received

Sample Prefix: 04287

Sample Matrix: Soil

SOP No.: 362

Sample Batch Number: 7956

Balance I.D. 1138

Sample Number	Approximate Weight or Volume of Sample Received (g-wet of L) <u>g-wet</u>	Initials Date
01	1238.6	CJ 10/11/07 ↓
02	1045.8	
03	1022.8	
04	1209.9	
05	1193.7	
06	1129.3	
07	967.2	
08	1021.3	
09	1151.6	
10	1002.0	
11	858.0	
12	926.0	
13	852.5	
14	1011.8	

PREPARATION SUMMARY

Sample Volume Received

Sample Prefix: 04207

Sample Matrix: Soil

SOP No.: 302

Sample Batch Number: 7951

Balance I.D.: 1138

Sample Number	Approximate Weight or Volume of Sample Received (g-wet of L) <u>g-wet</u>	Initials Date
01	1029.8	CD 9/10/1
02	1065.8	
03	1295.9	
04	1416.9	
05	1225.1	
06	1129.6	
07	1192.3	
08	1029.4	
09	978.2	
10	1231.1	
11	1114.8	
12	864.3	
13	1099.5	
14	1193.2	

PREPARATION SUMMARY

Sample Volume Received

Sample Prefix: 014207

Sample Matrix: Soil

SOP No.: 302

Sample Batch Number: 7952

Balance I.D. 1138

[illegible]

PREPARATION SUMMARY

Sample Volume Received

Sample Prefix: 014207

Sample Matrix: Soil

SOP No.: 302

Sample Batch Number: 7953

Balance I.D. 1138

[illegible]

Gamma Spectrometry Liquid or Solid Preparation Log

SOP No.: 302
Date: 10-18-07

SC&A - Southeastern Environmental Laboratory
SCA-Form 302-12 Rev. 0

Gamma Spectrometry Liquid or Solid Preparation Log

SOP No.: 302
Date: 10.18.07

SC&A - Southeastern Environmental Laboratory
SCA-Form 302-12 Rev. 0

PREPARATION SUMMARY

Gamma Spectrometry Liquid or Solid Preparation Log

Sample Prefix: 011287
Sample Batch Number: 7952
Balance I.D.: 1138

Sample Matrix: Soil
Sample Geometry: 400 μ l

SOP No.: 302
Date: 10-18-07

[illegible]

Gamma Spectrometry Liquid or Solid Preparation Log

SOP No.: 382
Date: 10-19-07

[illegible]

SOIL PERMITS



UNITED STATES
DEPARTMENT OF
AGRICULTURE

Animal and Plant
Health Inspection
Service

Plant Protection and
Quarantine

Soil Permit

Permit
Number:

S-76792

SC&A, Inc., Southeastern Environmental Laboratory
(Cynthia White)
1000 Monticello Court
Montgomery, Alabama 36117

TELEPHONE: (334) 272-2234

Issued To:

Under the authority of the Federal Plant Pest Act of May 23, 1957, permission is hereby granted to the facility/individual named above subject to the following conditions:

1. Valid for shipments of soil not heat treated at the port of entry, only if a Compliance Agreement (PPQ Form 519) has been completed and signed. Compliance Agreements and Soil Permits are non-transferable. If you hold a Soil Permit and you leave your present employer or Company, you must notify your local USDA office promptly. A copy of this permit must accompany all shipments.
2. To be shipped in sturdy, leakproof, containers.
3. To be released without treatment at the port of entry to permittee or authorized user.
4. To be used only for analysis and only in the facility of the permittee at SC&A, Inc., Southeastern Environmental Laboratory, located in Montgomery, Alabama..
5. No use of soil for growing purposes is authorized, including the isolation or culture of organisms imported in soil.
6. All unconsumed soil, containers, and effluent is to be autoclaved, incinerated, or heat treated by the permittee at the conclusion of the project as approved and prescribed by PPQ.
7. This permit authorizes shipments from all foreign sources, including Guam, Hawaii, Puerto Rico, and the U.S. Virgin Islands through any U.S. port of entry.

SEPTEMBER 30, 2010

Expiration Date

[Signature]
Approving Official LIA STEWART

WARNING: Any alteration, forgery, or unauthorized use of this Federal form is subject to civil penalties of up to \$250,000 (7 U.S.C. s 7734(b)) or punishable by a fine of not more than \$10,000, or imprisonment of not more than 5 years, or both (18 U.S.C. s 1001).



UNITED STATES
DEPARTMENT OF
AGRICULTURE

Animal and Plant
Health Inspection
Service

Plant Protection and
Quarantine

Soil Permit

Permit
Number: S-73685

GPL Laboratories
(Yemane Yohannes)
7210-A Corporate Court
Frederick, Maryland 21703-8386

Issued To:

TELEPHONE: (301) 694-5310

Under the authority of the Federal Plant Pest Act of May 23, 1957, permission is hereby granted to the facility/individual named above subject to the following conditions:

1. Valid for shipments of soil not heat treated at the port of entry, only if a Compliance Agreement (PPQ Form 519) has been completed and signed. Compliance Agreements and Soil Permits are non-transferable. If you hold a Soil Permit and you leave your present employer or Company, you must notify your local USDA office promptly. A copy of this permit must accompany all shipments.
2. To be shipped in sturdy, leakproof, containers.
3. To be released without treatment at the port of entry to permittee or authorized user.
4. To be used only for analysis and only in the facility of the permittee at GPL Laboratories, located in Frederick, Maryland.
5. No use of soil for growing purposes is authorized, including the isolation or culture of organisms imported in soil.
6. All unconsumed soil, containers, and effluent is to be autoclaved, incinerated, or heat treated by the permittee at the conclusion of the project as approved and prescribed by PPQ.
7. This permit authorizes shipments from all foreign sources, including Guam, Hawaii, Puerto Rico, and the U.S. Virgin Islands through any U.S. port of entry.

SEPTEMBER 30, 2010

Expiration Date

Lia Stewart
Approving Official LIA STEWART

WARNING: Any alteration, forgery, or unauthorized use of this Federal form is subject to civil penalties of up to \$250,000 (7 U.S.C. s 7734(b)) or punishable by a fine of not more than \$10,000, or imprisonment of not more than 5 years, or both (18 U.S.C. s 1001).

GAMMA LIBRARY

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Page: 1

Nuclide	Nuclide	Half	Key	Energy	
K-40	NATURAL	4.03E+16S	*	1460.80	10.66
CO-60	GAMMA	1.66E+08S	*	1173.23	100.00
				1332.51	100.00
RH-101	ACTIVATION	1.04E+08S	*	198.00	73.00
SB-125	ACTIVATION	8.62E+07S	*	427.87	29.80
CS-137	GAMMA	9.47E+08S	*	661.66	85.10
EU-155	ACTIVATION	1.57E+08S	*	105.31	21.20
TL-208	GAMMA	4.43E+17S		277.36	6.31
				510.77	22.60
			*	583.19	84.50
				763.13	1.81
				860.56	12.42
PO-209	GAMMA	3.22E+09S	*	896.60	0.47
BI-211	GAMMA	2.22E+16S	*	831.80	3.30
BI-212	GAMMA	4.43E+17S	*	727.33	11.80
				785.37	1.10
				1620.50	1.49
PB-212	GAMMA	4.43E+17S		74.81	10.40
				77.11	17.50
				87.30	7.81
			*	238.63	43.30
				300.09	3.28
BI-214	GAMMA	5.05E+10S	*	609.31	46.10
				768.36	4.94
				806.17	1.22
				934.06	3.03
				1120.29	15.10
				1155.19	1.63
				1238.11	5.79
				1280.96	1.43
				1377.67	4.00
				1401.50	1.27
				1407.98	2.15
				1509.23	2.11
				1729.60	2.92
				1764.49	15.40
PB-214	GAMMA	5.05E+10S		74.81	6.44
				77.11	10.80
				87.30	4.84
				242.00	7.43
				295.22	19.30
			*	351.93	37.60
RA-223	GAMMA	1.04E+12S	*	269.46	13.70
AC-228	NATURAL	4.43E+17S		129.07	2.42
				209.25	3.89
				270.25	3.46
				338.32	11.27
				409.46	1.92
				463.00	4.40
				794.95	4.25
			*	911.20	25.80

Nuclide	Nuclide	Half	Key	Energy	
				964.77	4.99
				968.97	15.80
				1588.20	3.22
PA-233	ACTIVATION	6.75E+13S	*	312.17	38.60
PA-234M	NATURAL	1.41E+17S	*	1001.03	0.84
TH-234	NATURAL	1.41E+17S		63.29	4.80
			*	92.58	5.41
U-235	GAMMA	2.22E+16S	*	143.76	10.96
NP-236	ACTIVATION	4.89E+12S	*	98.44	38.00
NP-237	ALPHA	6.75E+13S	*	86.48	12.40
NP-239	ACTIVATION	2.33E+11S	*	228.18	10.76
AM-241	ALPHA	1.36E+10S	*	59.54	35.90
AM-243	ALPHA	2.33E+11S	*	74.66	68.20
CM-243	ALPHA	8.99E+08S	*	103.76	23.00
AM-246	BETA	2.18E+11S	*	1078.86	27.80
CF-249	ALPHA	1.11E+10S	*	387.59	66.00

STANDARDS SUMMARY

CERTIFICATE OF CALIBRATION

Standard Radionuclide Source

67B34-301

400 mL Sand in 500 mL Plastic Container

This standard radionuclide source was prepared using aliquots measured gravimetrically from master radionuclide solution sources. The Am-241 was calibrated by 4 pi alpha liquid scintillation counting. All other radionuclides were calibrated using a germanium gamma spectrometer system. Calibration and purity were checked using a germanium gamma spectrometer system. At the time of calibration no interfering gamma-ray emitting impurities were detected. The gamma-ray emission rates for the most intense gamma-ray lines are given. Analytics maintains traceability to the National Institute of Standards and Technology through a Measurements Assurance Program as described in USNRC Regulatory Guide 4.15, Rev. 1, February, 1979.

Calibration date: January 1, 2004 12:00 EST

ISOTOPE	GAMMA-RAY ENERGY	HALF-LIFE	GAMMA-RAYS PER SECOND	TOTAL UNCERTAINTY %
Am-241	59.5	432 Y	658.4	3.0
Cd-109	88	462.6 d	934.5	3.3
Co-57	122	271.79 d	543.4	3.0
Ce-139	166	137.6 d	734.4	2.8
Hg-203	279	46.61 d	1645	2.7
Sn-113	392	115.1 d	959.6	2.6
Cs-137	662	30.07 Y	632.3	3.0
Y-88	898	106.6 d	2461	2.6
Co-60	1173	5.2714 Y	1199	2.7
Co-60	1332	5.2714 Y	1208	2.6
Y-88	1836	106.6 d	2571	2.6

640 grams of sand.

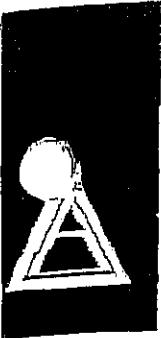
P O NUMBER A01488, Item 1

SOURCE PREPARED BY: M. Dimitrova
M. Dimitrova, RadiochemistQ A APPROVED: UM NT 4-5-07

This standard will expire one year after the calibration date.

ANALYTICS

S142-150



1380 Seaboard Industrial Blvd.
Atlanta, Georgia 30318-U.S.A.

Phone (404) 352-8677
Fax (404) 352-2837
email: analytics@mindspring.com
www.analyticsinc.com

February 4, 2005

Richard Blanchard, Ph.D.
Quality Assurance Manager
Sanford Cohen & Associates
1000 Monticello Court
Montgomery, AL 36117

Subject: Expiration Date of Radioactivity Standards

Dear Dr. Blanchard;

The following is provided in response to your request for information regarding the use of Analytics standards beyond the expiration date.

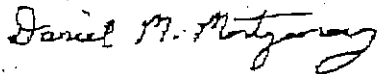
The expiration date is based on the half-life of the nuclide and the expected stability of the matrix. The longest expiration date is generally 3 years from the date of calibration for long-lived radionuclides such as Cs-137 in a polyester resin matrix. We do not have adequate information about radiation damage of the resin over longer periods of time and cannot provide longer expiration dates.

The expiration date for a Mixed Gamma Standard is one year from the calibration date. This is considered the maximum useful life for such a standard to perform efficiency calibrations over the entire energy range since Hg-203 and Y-88 would have decayed by more than a factor of eight after one year. These sources can be used beyond the expiration date for efficiency and energy calibrations if they have been properly handled and measurements show that there have been no changes in the source geometry. Such a source would be considered NIST traceable for those radionuclides that can be corrected for decay without adding a significant uncertainty to the original calibration.

2

You specifically asked about standards labeled SRM 67834-301 through SRM 67842-302. These standards are all sealed and if they have been handled properly should still be fine for calibrating your detector systems. You do need to be sure and count for sufficient time to get good statistics for the short-lived gamma-ray emitters, and propagate the uncertainties for decay corrections. The expiration date for the referenced standards can be extended to April 1, 2005 subject to the above considerations.

Sincerely yours,



Daniel M. Montgomery, Ph.D.
Quality Assurance Manager

S142

MIXED GAMMA IN 400ML SAND IN 500ML PLASTIC CONTAINER

RECEIVED: 04.07.2004

SUPPLIER: ANALYTICS

SOURCE ID: 67834-301

ACTIVITY: 1.01 μ Ci

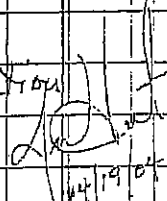
WEIGHT: 640g

CALIB. DATE: 01-01-2004 12:00 EST

EXP. DATE: 01-01-2005 4-1-05

2-5-05
CW

see explanation
attached to
certificate



VERIFICATION OF STANDARD CONCENTRATION

Standard I.D. No. 5142

Isotope Mixed Gamma
(60Co)

Date 6-08-07

Certificate Concentration of Standard as Diluted 32,527 ^{pc}
~~dpm/ml~~ sample

Measurement Results

Measurement (n)	Concentration (x) (<u>pc/sample</u>)	Difference (Δx_n) ^a	(Δx_n) ²
1	32,540	520	270,400
2	31,800	220	48,400
3	31,730	290	84,100
4			
5			
Mean	32,020 <u>pc/sample</u>		Σ 402,900

^a $\Delta x_n = (\bar{x} - x_n)$

$$\sigma = \sqrt{\frac{\sum (\Delta x_n)^2}{n-1}}$$

Mean Concentration = 32,020 ^{pc}
~~dpm/ml~~ sample) 2.8%

Two Standard Deviations (2σ) = 900 ^{pc}
~~dpm/ml~~ sample

Upper Limit ($\bar{x} + 2\sigma$) 32,920 pc Lower Limit ($\bar{x} - 2\sigma$) 31,120 pc

Concentration Verified ☒ not Verified ☐

Comments: _____

Signature R. Blum

VERIFICATION OF STANDARD CONCENTRATION

Standard I.D. No. 5142

Isotope Mixed Gamma
(129Cd)

Date 6-08-07

Certificate Concentration of Standard as Diluted 678,945 ~~ppm~~ ^{pc}/ml Sample

Measurement Results

Measurement (n)	Concentration (x) (<u>pc/sample</u>)	Difference (Δx_n) ^a	(Δx_n) ²
1	679,900	21,000	441,000,000
2	725,500	24,600	605,160,000
3	697,300	3,600	12,960,000
4			
5			
Mean	700,900 <u>pc/sample</u>		$\Sigma 1,059,120,000$

^a $\Delta x_n = (\bar{x} - x_n)$

$$\sigma = \sqrt{\frac{\sum (\Delta x_n)^2}{n-1}}$$

Mean Concentration = 700,900 ~~ppm~~ ^{pc}/ml Sample 6.6%

Two Standard Deviations (2σ) = 46,000 ~~ppm~~ ^{pc}/ml Sample

Upper Limit ($\bar{x} + 2\sigma$) 746,900 pc Lower Limit ($\bar{x} - 2\sigma$) 654,900 pc

Concentration Verified ☒ not Verified ☐

Comments: _____

Signature R. Blum

VERIFICATION OF STANDARD CONCENTRATION

Standard I.D. No. 5142

Isotope Mixed Gamma
(¹³⁷Cs)

Date 6-03-07

Certificate Concentration of Standard as Diluted 20,081 ~~cpm/ml~~ ^{pl}/Sample

Measurement Results

Measurement (n)	Concentration (x) (^{pl} /Sample)	Difference (Δx _n) ^a	(Δx _n) ²
1	21,880	850	722,500
2	21,200	170	28,900
3	20,000	1030	1,060,900
4			
5			
Mean	21,030 ^{pl} /Sample		Σ 1,812,300

$$\Delta x_n = (\bar{x} - x_n)$$

$$\sigma = \sqrt{\frac{\sum (\Delta x_n)^2}{n-1}}$$

Mean Concentration = 21,030 ^{pl}/Sample $\times 1.01$

Two Standard Deviations (2σ) = 1,900 ^{pl}/Sample

Upper Limit ($\bar{x} + 2\sigma$) 22,930 ^{pl} Lower Limit ($\bar{x} - 2\sigma$) 19,130 ^{pl}

Concentration Verified ☒ not Verified ☐

Comments: _____

Signature

R. Blawie

COUNTING RAW DATA

SC&A, Inc.
Southeastern Environmental Laboratory

BENCH SHEET

Method: Gamma Spec (DOE 4.5.2.3)	Project Name: Cabrera Services-Oahu, HI
Analysis Type: Gamma (DOE 21 day ing)	Project Location:
Matrix: Soil	Project Number: FOAH2/L
Date Received: 10/1/2007	Client Project Manager: Greg Miller
SC&A Project Manager:	
S7950 7953	

Prefix	Batch and Sample Number	Client ID	Collection Date	Date Submitted to Counting Room
SCAQC	7950-PB ✓		10/1/2007 9:15:00 AM	
SCAQC	7950-LD1 ✓ OH207-7950-01	SB-CZ-SS-2270-ST	9/27/2007	
SCAQC	7950-LC1 ✓		10/1/2007 9:15:00 AM	

Prefix	Batch and Sample Number	Client ID	Collection Date	Date Submitted to Counting Room
OH207	7950-01 ✓	SB-CZ-SS-2270-ST	9/27/2007	
OH207	7950-02 ✓	SB-CZ-SS-2271-ST	9/27/2007	
OH207	7950-03 ✓	SB-CZ-SS-2272-ST	9/27/2007	
OH207	7950-04 ✓	SB-CZ-SS-2273-ST	9/27/2007	
OH207	7950-05 ✓	SB-CZ-SS-2274-ST	9/27/2007	
OH207	7950-06 ✓	SB-CZ-SS-2275-ST	9/27/2007	
OH207	7950-07 ✓	SB-CZ-SS-2276-ST	9/27/2007	
OH207	7950-08 ✓	SB-CZ-SS-2277-ST	9/27/2007	
OH207	7950-09 ✓	SB-CZ-SS-2278-ST	9/27/2007	
OH207	7950-10 ✓	SB-CZ-SS-2279-ST	9/27/2007	
OH207	7950-11 ✓	SB-CZ-SS-2280-ST	9/27/2007	
OH207	7950-12 ✓	SB-CZ-SS-2281-ST	9/27/2007	
OH207	7950-13 ✓	SB-CZ-SS-2282-ST	9/27/2007	
OH207	7950-14 ✓	SB-CZ-SS-2283-ST	9/27/2007	

Radiochemist Reviewer

12/05/07
 Date

QA Reviewer

12/7/2007
 Date

Gamma Spectrometry Run Log

Count Date/Time Detector No.	Length of Count	Prefix	Batch No.	Sample No.	RIN No.	Collection Date	Field I.D.	Sample Type	Sample Size (w/units)	Geometry
12-3-07 1829 G1 K	180	0H207	7949	04	-	9/26/07	SB-CZ-SS- 2241-ST	SOIL	507.3 gdm	400 mL Liquid ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐
12-3-07 1832 G3 K				05	-		2242-ST		460.6 gdm	400 mL Liquid ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐
12-3-07 2130 G1 K				06	-		2243-ST		508.9 gdm	400 mL Liquid ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐
12-3-07 2132 G2 K				07	-		2244-ST		510.5 gdm	400 mL Liquid ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐
12-3-07 2133 G3 K				08	-		2245-ST		455.3 gdm	400 mL Liquid ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐
12-4-07 1137 WZ-0836 G1				09	-		2246-ST		507.8 gdm	400 mL Liquid ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐
12-4-07 1137 WZ-0836 G3				10	-		2247-ST		423.9 gdm	400 mL Liquid ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐
12-4-07 1137 G1 K	180	SCAQC	7950	PBI	-	10/1/07 0915	PREP BLK	LIQUID	400g	400 mL Liquid ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐
12-5-07 1137 G1 K	60			LC1	-		CTRL SAMP S-142	SOIL	640g	400 mL Liquid ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐
12-4-07 1138 G2 K	180			LD1	-	9/27/07	DUP 7950-01	↓	402.8 gdm	400 mL Liquid ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐

animal = G1
animal2 = G2

Gamma Spectrometry Run Log

Count Date/Time Detector No.	Length of Count	Prefix	Batch No.	Sample No.	RIN No.	Collection Date	Field I.D.	Sample Type	Sample Size (w/units)	Geometry
12-4-07 1416 61K	180	04207	7950	01	-	9/27/07	SB-CZ-SS- 2270-ST	soil	402.8 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-4-07 1439 63K				02	-		2271-ST		380.2 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-4-07 1447 62K				03	-		2272-ST		447.3 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-4-07 1447 63K				04	-		2273-ST		491.4 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-4-07 1447 61K				05	-		2274-ST		427.3 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-4-07 1449 62K				06	-		2275-ST		464.7 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-4-07 1449 63K				07	-		2276-ST		450.9 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-4-07 2122 61K				08	-		2277-ST		421.2 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-4-07 2123 62K				09	-		2278-ST		447.4 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-4-07 2124 63K				10	-		2279-ST		417.4 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐

Gamma Spectrometry Run Log

Count Date/Time Detector No.	Length of Count	Prefix	Batch No.	Sample No.	RIN No.	Collection Date	Field I.D.	Sample Type	Sample Size (w/units)	Geometry
12-5-07 00:49 G1 NW	180	04207	7950	11	-	9/27/07	SB-CZ-SS- 2280-ST	SOIL	412.6 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-5-07 00:49 G2 NW				12	-		2281-ST		377.9 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-5-07 00:50 G3 NW				13	-		2282-ST		416.3 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-5-07 09:13 G1 NW	180			14	-		2283-ST		452.1 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-5-07 09:14 G2 IC	180	SCAQUE	7951	PB1	-	10/1/07 0915	PREP BUC	LIQUID	400g	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-5-07 13:52 G1 IC	180			LC1	-		CTRL SAMP S-142	SOIL	640g	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-5-07 09:15 G3 IC	180			LD1	-	9/27/07	DUP 7951-01		429.5 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-5-07 12:33 G2 IC		04207		01	-		SB-CZ-SS- 2270-SD		429.5 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-5-07 12:34 G3 IC				02	-		2271-SD		472.8 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-5-07 15:36 G3 IC				03	-		2272-SD		508.8 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐

Gamma 1 = G1
Gamma 2 = G2

01 - 62
02 - 63

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Montgomery, AL

Gamma Spectroscopy Report Generated 4-DEC-2007 14:37:47

Configuration :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_SCAQC7950PB1_GAMMA1_400MLSA_17390.CNF

----- Sample Information -----

Sample ID : SCAQC-7950-PB1 ✓
Sample Title : PREP BLK
Sample Quantity : 4.00000E+02 G ✓
Sample Type : LIQUID
Sample Geometry : 400 ml sand
Sample Seq No. : 17390

----- Sample Decay/Count Information -----

Collection Date : 1-OCT-2007 09:15:00. Acquisition date : 4-DEC-2007 11:37:30.
Decay time : 64 02:22:30.03 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:01.17

----- Detector Parameters -----

Energy cal. time : 23-MAR-2006 15:15:18 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA1 Counting geometry: 400 ml sand
Effic. cal. time : 23-MAR-2006 15:18:11 Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$x = \ln(a1/\text{energy})$

a1=9.47750E+02 a2=-4.65904E+00 a3=6.59172E-01 a4=3.93115E-02
a5=1.38137E-01 a6=-8.70295E-02 a7=0.00000E+00

----- Processing Parameters -----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA1_17241.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

J M Moore

Date:

12/7/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw %Err	Fit	Nuclides
0	238.78*	44	95	1.04	477.36	474	9 92.5		
0	609.10*	23	20	2.42	1218.82	1215	10102.8		

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	238.78	44	95	1.04	477.36	474	9	4.04E-03	92.5	2.66E+00	T
0	609.10	23	20	2.42	1218.82	1215	10	2.13E-03	****	1.29E+00	T

Flags: "T" = Tentatively associated

----- Non-Identified Nuclides -----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	-6.719E-02		1.037E-01	1.979E-01	1.351E-02	-0.340
CO-60	-3.260E-03		1.128E-02	1.569E-02	1.024E-03	-0.208
RH-101	-9.444E-03		1.042E-02	1.645E-02	2.551E-03	-0.574
SB-125	-3.007E-02		2.439E-02	3.760E-02	3.083E-03	-0.800
CS-137	-4.004E-03		9.128E-03	1.614E-02	1.734E-03	-0.248
EU-155	-6.412E-03		3.183E-02	5.473E-02	5.434E-03	-0.117
TL-208	-5.734E-03		1.150E-02	1.948E-02	1.955E-03	-0.294
PO-209	-5.840E-01		2.060E+00	3.621E+00	6.480E-01	-0.161
BI-211	1.809E-01		3.147E-01	6.027E-01	4.391E-02	0.300
BI-212	-5.128E-02		7.467E-02	1.266E-01	1.218E-02	-0.405
PB-212	2.374E-02	+	2.204E-02	3.167E-02	2.444E-03	0.749
BI-214	2.422E-02	+	2.501E-02	4.551E-02	4.636E-03	0.532
PB-214	1.894E-03		2.063E-02	3.784E-02	2.986E-03	0.050
RA-223	6.722E-03		4.604E-02	8.355E-02	7.688E-03	0.080
AC-228	-2.979E-02		3.378E-02	5.915E-02	3.269E-03	-0.504
PA-233	9.051E-04		1.621E-02	2.925E-02	2.456E-03	0.031
PA-234M	-1.771E-02		1.118E+00	2.105E+00	1.210E-01	-0.008
TH-234✓	-4.667E-02✓		1.842E-01	3.353E-01✓	3.912E-02	-0.139
U-235	-2.412E-02		5.918E-02	9.603E-02	6.704E-03	-0.251
NP-236	-2.149E-02		1.899E-02	2.970E-02	3.263E-03	-0.723
NP-237	-3.167E-02		7.043E-02	1.198E-01	1.733E-02	-0.264
NP-239	-1.587E-04		6.250E-02	1.048E-01	1.414E-02	-0.002
AM-241	9.266E-03		5.372E-02	9.690E-02	7.704E-03	0.096
AM-243	7.081E-03		1.791E-02	3.176E-02	6.663E-03	0.223
CM-243	5.391E-03		3.009E-02	5.293E-02	6.033E-03	0.102
AM-246	2.143E-02		3.141E-02	6.345E-02	7.810E-03	0.338
CF-249	7.061E-04		9.831E-03	1.774E-02	1.712E-03	0.040

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Montgomery, AL

Gamma Spectroscopy Report Generated 7-DEC-2007 10:16:36

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_SCAQC7950LC1_GAMMA1_400MLSA_17412.CNF

---- Sample Information ----

Sample ID : SCAQC-7950-LC1 ✓
Sample Title : CTRL SAMP S-142 ✓
Sample Quantity : 6.40000E+02 G ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17412

---- Sample Decay/Count Information ----

Collection Date : 1-OCT-2007 09:15:00 ✓ Acquisition date : 5-DEC-2007 14:33:45.
Decay time : 65 05:18:45.33 % dead time : 0.4%
Elapsed live time: 0 01:00:00.00 ✓ Elapsed real time: 0 01:00:14.81

---- Detector Parameters ----

Energy cal. time : 23-MAR-2006 15:15:18 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA1 Counting geometry: 400 ml sand
Effic. cal. time : 23-MAR-2006 15:18:11 Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$x = \ln(a1/\text{energy})$

a1=9.47750E+02 a2=-4.65904E+00 a3=6.59172E-01 a4=3.93115E-02
a5=1.38137E-01 a6=-8.70295E-02 a7=0.00000E+00

---- Processing Parameters ----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA1_17241.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

Th Moore

Date:

12/7/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	59.52	21333	7117	1.02	118.42	112	11	2.0		AM-241
0	88.06	9622	3578	1.05	175.57	171	9	3.0		
0	122.10	1719	3078	1.11	243.73	240	9	12.6		
0	238.71*	333	2152	0.96	477.21	474	7	47.6		
0	582.71*	144	794	1.15	1166.00	1163	8	69.9		
0	609.06*	142	916	1.33	1218.75	1215	9	78.6		
0	661.48	27204	1471	1.45	1323.69	1317	15	1.4		CS-137
0	1172.89	21172	690	1.87	2347.48	2337	19	1.5		CO-60
0	1332.10	19419	221	1.96	2666.17	2656	20	1.5		CO-60
0	1720.70	41	22	3.72	3443.95	3434	18	63.1		

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	88.06	9622	3578	1.05	175.57	171	9	2.67E+00	3.0	2.26E+00	T
0	122.10	1719	3078	1.11	243.73	240	9	4.78E-01	12.6	3.05E+00	
0	238.71	333	2152	0.96	477.21	474	7	9.24E-02	47.6	2.66E+00	T
0	582.71	144	794	1.15	1166.00	1163	8	3.99E-02	69.9	1.33E+00	T
0	609.06	142	916	1.33	1218.75	1215	9	3.95E-02	78.6	1.29E+00	T
0	1720.70	41	22	3.72	3443.95	3434	18	1.13E-02	63.1	6.23E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
CO-60	3.088E+01✓	1.940E+00	8.433E-02	5.503E-03	366.141
CS-137	3.104E+01✓	3.362E+00	1.595E-01	1.713E-02	194.686
AM-241	7.749E+01✓	6.361E+00	9.860E-01	7.838E-02	78.595

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	3.051E-01		3.579E-01	6.845E-01	4.672E-02	0.446
RH-101	-2.890E-03		7.829E-02	1.267E-01	1.965E-02	-0.023
SB-125	4.512E-02		2.722E-01	4.543E-01	3.726E-02	0.099
EU-155	-4.894E-02		2.561E-01	4.267E-01	4.237E-02	-0.115
TL-208	1.498E-01	+	1.057E-01	1.590E-01	1.595E-02	0.942
PO-209	9.485E+00		2.450E+01	4.120E+01	7.374E+00	0.230
BI-211	-1.381E-01		2.926E+00	4.928E+00	3.590E-01	-0.028
BI-212	3.852E-01		6.943E-01	1.197E+00	1.152E-01	0.322
PB-212	3.392E-01	+	1.637E-01	2.393E-01	1.847E-02	1.417
BI-214	2.808E-01	+	2.227E-01	3.049E-01	3.106E-02	0.921
PB-214	4.002E-01		1.801E-01	3.101E-01	2.447E-02	1.291
RA-223	2.860E-01		4.177E-01	7.202E-01	6.627E-02	0.397
AC-228	2.031E-01		4.582E-01	7.724E-01	4.269E-02	0.263
PA-233	1.039E-01		1.565E-01	2.681E-01	2.251E-02	0.388
PA-234M	-1.645E+01		1.367E+01	2.203E+01	1.266E+00	-0.747
TH-234✓	9.423E-01✓		1.158E+00	1.883E+00✓	2.197E-01	0.500
U-235	-8.015E-02		4.395E-01	7.217E-01	5.039E-02	-0.111
NP-236	2.548E-02		1.467E-01	2.466E-01	2.710E-02	0.103
NP-237	1.362E+01		2.152E+00	1.567E+00	2.267E-01	8.690
NP-239	-1.206E-01		5.469E-01	8.739E-01	1.179E-01	-0.138
AM-243	8.930E-02		1.454E-01	2.461E-01	5.164E-02	0.363
CM-243	-2.241E-02		2.354E-01	3.930E-01	4.479E-02	-0.057
AM-246	1.883E-01		4.110E-01	6.857E-01	8.439E-02	0.275
CF-249	-1.090E-01		1.075E-01	1.760E-01	1.698E-02	-0.619

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 4-DEC-2007 14:38:48

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_SCAQC7950LD1_GAMMA2_400MLSA_17391.CNF

---- Sample Information ----

Sample ID : SCAQC-7950-LD1✓
Sample Title : DUP 7950-01✓
Sample Quantity : 4.02800E+02 GDRY✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17391

---- Sample Decay/Count Information ----

Collection Date : 27-SEP-2007✓00:00:00 Acquisition date : 4-DEC-2007 11:38:33.
Decay time : 68 11:38:33.04 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 Elapsed real time: 0 03:00:01.62

---- Detector Parameters ----

Energy cal. time : 1-MAY-2007 11:12:10. Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA2 Counting geometry: 400 ml sand
Effic. cal. time : 1-MAY-2007 11:13:44. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$$x = \ln(a1/\text{energy})$$

a1=9.47750E+02 a2=-4.68491E+00 a3=7.34327E-01 a4=7.12916E-02
a5=8.21331E-02 a6=-7.02143E-02 a7=0.00000E+00

---- Processing Parameters ----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA2_17242.CNF;1
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

T M Neal

Date:

12/7/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
3	74.77*	489	750	1.00	149.12	142	24	20.0	1.30E+00	AM-243 PB-214 PB-212
3	77.06*	813	713	0.93	153.68	142	24	12.7		PB-214 PB-212
0	87.13	314	919	1.21	173.73	170	8	35.3		NP-237 PB-214 PB-212
5	89.99	170	686	0.97	179.42	177	12	50.5	2.58E+00	
5	92.82*	273	892	1.31	185.06	177	12	41.1		
0	129.04	159	727	1.08	257.17	253	9	63.5		AC-228
0	143.64*	148	758	1.11	286.25	282	10	72.5		U-235
2	185.87*	304	493	1.14	370.36	366	10	28.2	8.26E+00	
2	209.03	160	601	1.43	416.49	412	10	57.9	1.15E+01	AC-228
2	209.54	151	592	1.43	417.50	412	10	61.6		
2	238.75*	2152	331	1.14	475.68	468	19	5.2	4.64E+00	PB-212
2	241.02*	233	305	1.23	480.20	468	19	37.1		
2	242.03*	380	300	1.18	482.21	468	19	20.3		PB-214
2	269.49	50	206	1.24	536.91	534	11	92.9	1.75E+00	RA-223
2	270.66	176	379	1.52	539.25	534	11	43.5		AC-228
1	277.19	86	241	1.39	552.25	549	10	62.5	7.92E+00	TL-208
1	278.06	83	317	1.26	554.00	549	10	80.4		
0	295.34*	698	456	1.21	588.41	582	12	14.5		PB-214
0	300.46	152	363	1.39	598.61	594	10	49.7		PB-212
0	328.27	124	349	1.02	654.03	649	10	59.1		
0	338.56*	432	363	1.12	674.53	669	11	19.7		AC-228
0	352.13*	1240	350	1.27	701.57	696	12	8.4		PB-214
0	463.47	161	144	1.95	923.47	919	9	31.4		AC-228
0	511.00*	300	213	1.66	1018.22	1011	14	25.8		TL-208
0	583.34*	620	217	1.55	1162.46	1155	15	13.3		TL-208
0	609.36*	976	184	1.47	1214.35	1206	16	9.1		BI-214
0	661.74	532	140	1.57	1318.81	1313	11	12.2		CS-137
0	727.47	175	99	1.88	1449.94	1445	12	27.0		BI-212
0	768.60*	75	101	1.21	1531.99	1527	9	55.1		BI-214
0	795.06*	70	99	1.35	1584.78	1578	12	62.1		AC-228
0	835.37	50	62	1.44	1665.21	1660	11	66.3		
0	860.57*	115	71	1.99	1715.52	1709	15	37.4		TL-208
0	911.17*	410	115	1.66	1816.51	1811	15	15.0		AC-228
1	964.51	90	69	1.85	1922.99	1917	23	40.8	6.04E-01	AC-228
1	968.70*	248	55	1.62	1931.35	1917	23	17.4		AC-228
0	1120.11*	216	80	1.45	2233.70	2226	16	23.3		BI-214
0	1238.02*	91	79	1.85	2469.26	2462	17	51.2		BI-214
0	1411.10	110	31	10.94	2815.18	2799	40	38.3		
0	1459.64*	857	35	1.93	2912.23	2902	18	7.7		K-40
0	1587.40	31	34	1.55	3167.75	3161	12	81.9		AC-228
0	1762.53*	154	13	2.31	3518.16	3511	13	19.6		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
5	89.99	170	686	0.97	179.42	177	12	1.57E-02	50.5	2.61E+00	
5	92.82	273	892	1.31	185.06	177	12	2.53E-02	41.1	2.71E+00	T
2	185.87	304	493	1.14	370.36	366	10	2.82E-02	28.2	3.21E+00	
2	209.54	151	592	1.43	417.50	412	10	1.39E-02	61.6	3.03E+00	
2	241.02	233	305	1.23	480.20	468	19	2.16E-02	37.1	2.78E+00	
1	278.06	83	317	1.26	554.00	549	10	7.65E-03	80.4	2.51E+00	
0	328.27	124	349	1.02	654.03	649	10	1.15E-02	59.1	2.20E+00	
0	835.37	50	62	1.44	1665.21	1660	11	4.66E-03	66.3	1.01E+00	
0	1411.10	110	31	10.94	2815.18	2799	40	1.02E-02	38.3	6.92E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	7.401E+00	7.427E-01	2.396E-01	1.542E-02	30.886
CS-137	3.205E-01	5.354E-02	3.713E-02	4.224E-03	8.633
TL-208	3.383E-01	5.702E-02	3.002E-02	3.126E-03	11.267
BI-212	8.185E-01	2.386E-01	2.340E-01	2.558E-02	3.498
PB-212	1.102E+00	1.021E-01	4.832E-02	3.692E-03	22.812
BI-214	1.011E+00	1.413E-01	5.700E-02	6.069E-03	17.735
PB-214	9.873E-01	1.125E-01	6.339E-02	4.861E-03	15.575
RA-223	8.861E-02	8.270E-02	1.515E-01	1.348E-02	0.585
AC-228	1.040E+00	1.806E-01	1.138E-01	9.886E-03	9.140
U-235	2.469E-01	1.798E-01	1.841E-01	1.344E-02	1.341
NP-237	6.347E-01	2.377E-01	2.695E-01	3.387E-02	2.355
AM-243	2.286E-01	6.452E-02	6.059E-02	1.208E-02	3.773

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	-7.265E-03		1.735E-02	2.946E-02	1.714E-03	-0.247
RH-101	-2.372E-04		1.989E-02	3.216E-02	5.020E-03	-0.007
SB-125	5.646E-03		4.951E-02	8.437E-02	6.918E-03	0.067
EU-155	4.225E-02		6.661E-02	1.131E-01	1.059E-02	0.373
PO-209	-4.086E-01		3.624E+00	6.240E+00	1.196E+00	-0.065
BI-211	-2.136E-01		5.607E-01	8.129E-01	7.958E-02	-0.263
PA-233	-1.497E-02		3.252E-02	5.474E-02	4.409E-03	-0.273
PA-234M	1.674E-01		2.043E+00	3.619E+00	2.826E-01	0.046
TH-234✓	1.161E+00✓+		4.906E-01	6.516E-01✓	6.518E-02	1.782
NP-236	3.554E-02		3.888E-02	6.654E-02	6.614E-03	0.534
NP-239	-1.940E-02		1.180E-01	2.033E-01	2.743E-02	-0.095
AM-241	-2.057E-03		1.019E-01	1.737E-01	1.139E-02	-0.012
CM-243	-6.874E-03		6.010E-02	1.001E-01	1.082E-02	-0.069
AM-246	4.447E-02		6.136E-02	1.121E-01	1.434E-02	0.397
CF-249	1.226E-02		2.183E-02	3.792E-02	3.633E-03	0.323

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 4-DEC-2007 17:46:34

Configuration :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795001_GAMMA1_400MLSAN_17393.CNF

---- Sample Information ----

Sample ID : OH207-7950-01 ✓
Sample Title : SB-CZ-SS-2270-ST ✓
Sample Quantity : 4.02800E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17393

---- Sample Decay/Count Information ----

Collection Date : 27-SEP-2007 00:00:00 ✓ Acquisition date : 4-DEC-2007 14:46:13.
Decay time : 68 14:46:13.59 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:02.82

---- Detector Parameters ----

Energy cal. time : 23-MAR-2006 15:15:18 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA1 Counting geometry: 400 ml sand
Effic. cal. time : 23-MAR-2006 15:18:11 Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$x = \ln(a1/\text{energy})$

a1=9.47750E+02 a2=-4.65904E+00 a3=6.59172E-01 a4=3.93115E-02
a5=1.38137E-01 a6=-8.70295E-02 a7=0.00000E+00

---- Processing Parameters ----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA1_17241.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

T M Noel

Date:

12/7/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
2	74.96*	479	594	1.05	149.32	144	13	18.6	1.70E+00	AM-243 PB-214 PB-212
2	77.18*	734	536	0.95	153.77	144	13	12.8		PB-214 PB-212
3	86.94	209	488	1.03	173.33	163	28	38.4	2.57E+00	NP-237 PB-214 PB-212
3	87.69	206	570	1.22	174.83	163	28	43.0		
3	89.92	220	489	0.99	179.28	163	28	34.8		
0	129.23	161	516	1.03	258.01	255	7	49.3		AC-228
0	185.93*	511	671	1.14	371.53	367	11	21.8		
0	209.17	236	745	1.00	418.08	412	12	48.0		AC-228
3	238.63*	2105	281	1.07	477.06	472	19	5.1	1.22E+00	PB-212
3	240.84*	233	381	1.42	481.49	472	19	51.1		
3	241.94*	398	329	1.37	483.69	472	19	20.7		PB-214
1	268.94	49	264	1.24	537.76	534	11	21.2	1.08E+00	RA-223
1	270.18	168	299	1.32	540.24	534	11	39.8		AC-228
0	277.63	99	396	1.22	555.16	550	10	78.3		TL-208
0	295.18*	747	373	1.20	590.30	586	10	12.2		PB-214
0	300.13*	139	412	1.30	600.20	596	12	62.1		PB-212
0	328.49	212	367	1.39	656.99	652	13	39.6		
0	338.19	528	365	1.21	676.42	670	13	17.3		AC-228
0	351.85*	1283	402	1.28	703.76	697	14	8.7		PB-214
0	463.03	193	184	1.34	926.37	921	12	31.6		AC-228
0	510.59*	267	238	2.03	1021.60	1014	17	31.5		TL-208
0	583.08*	659	148	1.38	1166.72	1161	12	10.9		TL-208
0	609.17*	946	220	1.51	1218.97	1212	14	9.4		BI-214
0	661.41	607	118	1.47	1323.55	1318	11	10.7		CS-137
0	727.11	138	118	1.47	1455.09	1450	12	36.0		BI-212
0	768.03	57	118	1.71	1537.00	1533	10	76.5		BI-214
0	786.41	94	84	3.61	1573.80	1568	15	47.7		BI-212
0	794.38	64	90	0.95	1589.76	1586	10	60.2		AC-228
0	860.44	95	104	1.90	1722.01	1715	13	48.6		TL-208
0	910.98*	557	113	1.89	1823.18	1816	17	12.3		AC-228
4	964.53	86	80	2.44	1930.38	1923	24	53.0	4.52E-01	AC-228
4	968.63*	324	48	1.68	1938.59	1923	24	14.0		AC-228
0	1120.15*	215	97	1.94	2241.90	2236	17	25.4		BI-214
0	1238.05	80	77	1.55	2477.90	2470	14	49.7		BI-214
0	1377.29*	76	49	2.37	2756.62	2750	13	44.4		BI-214
0	1460.23*	835	65	2.11	2922.63	2912	20	8.5		K-40
0	1588.00	41	30	1.60	3178.35	3171	12	62.0		AC-228
0	1728.97	32	25	1.53	3460.49	3453	13	75.0		BI-214
0	1763.66*	180	7	2.39	3529.92	3522	15	16.9		BI-214
0	1846.46	40	5	3.15	3695.63	3690	13	41.0		

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
3	87.69	206	570	1.22	174.83	163	28	1.91E-02	43.0	2.24E+00	
3	89.92	220	489	0.99	179.28	163	28	2.04E-02	34.8	2.32E+00	
0	185.93	511	671	1.14	371.53	367	11	4.73E-02	21.8	3.03E+00	
3	240.84	233	381	1.42	481.49	472	19	2.15E-02	51.1	2.64E+00	
0	328.49	212	367	1.39	656.99	652	13	1.96E-02	39.6	2.10E+00	
0	1846.46	40	5	3.15	3695.63	3690	13	3.67E-03	41.0	5.86E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	6.875E+00	7.477E-01	2.460E-01	1.679E-02	27.948
CS-137	3.668E-01	5.557E-02	3.645E-02	3.917E-03	10.063
TL-208	3.639E-01	5.387E-02	3.109E-02	3.120E-03	11.706
BI-212	6.402E-01	2.386E-01	2.406E-01	2.314E-02	2.661
PB-212	1.136E+00	1.050E-01	4.931E-02	3.805E-03	23.043
BI-214	9.893E-01	1.372E-01	5.588E-02	5.692E-03	17.704
PB-214	1.065E+00	1.255E-01	6.021E-02	4.751E-03	17.693
RA-223	9.066E-02	1.102E-01	1.505E-01	1.385E-02	0.602
AC-228	1.379E+00	1.859E-01	1.111E-01	6.142E-03	12.406
NP-237	4.771E-01	1.958E-01	2.400E-01	3.470E-02	1.988
AM-243	2.611E-01	7.321E-02	6.178E-02	1.296E-02	4.227

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	1.295E-02		1.752E-02	2.964E-02	1.934E-03	0.437
RH-101	7.527E-03		1.933E-02	3.213E-02	4.983E-03	0.234
SB-125	2.001E-02		5.037E-02	8.773E-02	7.196E-03	0.228
EU-155	6.258E-02		6.885E-02	1.192E-01	1.184E-02	0.525
PO-209	-1.749E+00		3.427E+00	5.746E+00	1.028E+00	-0.304
BI-211	-4.164E-01		5.170E-01	8.542E-01	6.223E-02	-0.487
PA-233	-5.774E-03		3.207E-02	5.523E-02	4.638E-03	-0.105
PA-234M	3.072E-01		2.041E+00	3.623E+00	2.083E-01	0.085
TH-234 ✓	1.655E+00 ✓		4.107E-01	6.896E-01 ✓	8.046E-02	2.399
U-235	-2.249E-02		1.143E-01	1.882E-01	1.314E-02	-0.119
NP-236	-1.371E-03		4.143E-02	6.681E-02	7.339E-03	-0.021
NP-239	-3.721E-02		1.228E-01	1.978E-01	2.669E-02	-0.188
AM-241	-5.162E-03		1.096E-01	1.899E-01	1.510E-02	-0.027
CM-243	-2.087E-02		6.164E-02	1.033E-01	1.177E-02	-0.202
AM-246	1.486E-02		6.099E-02	1.079E-01	1.327E-02	0.138
CF-249	2.013E-02		2.195E-02	3.898E-02	3.760E-03	0.516

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 4-DEC-2007 14:40:01

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795002_GAMMA3_400MLSAN_17392.CNF

---- Sample Information ----

Sample ID : OH207-7950-02 ✓
Sample Title : SB-CZ-SS-2271-ST ✓
Sample Quantity : 3.80200E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17392

---- Sample Decay/Count Information ----

Collection Date : 27-SEP-2007 00:00:00 Acquisition date : 4-DEC-2007 11:39:35.
Decay time : 68 11:39:35.83 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:00.93

---- Detector Parameters ----

Energy cal. time : 30-OCT-2006 16:06:41 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA3 Counting geometry: 400 ml sand
Effic. cal. time : 7-FEB-2007 13:40:24. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a_2 + a_3 \cdot x + a_4 \cdot x^2 + a_5 \cdot x^3 + a_6 \cdot x^4 + a_7 \cdot x^5)$$

where:

$x = \ln(a_1/\text{energy})$

a1=9.47750E+02 a2=-4.85663E+00 a3=8.12782E-01 a4=8.53513E-02
a5=-4.88423E-02 a6=-7.49502E-03 a7=0.00000E+00

---- Processing Parameters ----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA3_17240.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

T. M. Moore

Date:

12/7/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	46.54*	95	454	0.90	103.48	99	10	90.8		
4	74.92*	703	820	1.73	166.37	158	20	19.9	1.40E+00	AM-243 PB-214 PB-212
4	77.21*	882	555	1.19	171.45	158	20	12.4		PB-214 PB-212
2	86.89	285	715	1.61	192.90	182	31	38.6	3.77E+00	NP-237 PB-214 PB-212
2	89.86	270	680	1.62	199.49	182	31	41.0		
2	92.76*	296	633	1.63	205.93	182	31	38.8		
0	129.21	152	566	1.30	286.72	281	12	64.4		AC-228
0	185.72*	286	449	1.61	411.97	406	12	33.3		
0	209.33	208	519	1.52	464.31	458	15	49.9		AC-228
0	238.61*	1275	614	1.42	529.21	523	11	9.5		PB-212
0	242.05	172	433	1.39	536.83	533	9	47.9		PB-214
0	269.66	132	335	0.83	598.02	592	13	59.9		RA-223 AC-228
0	295.28*	400	257	1.66	654.81	650	11	18.6		PB-214
0	300.19	85	248	1.61	665.70	661	10	72.3		PB-212
0	338.24*	317	244	1.41	750.03	744	13	23.4		AC-228
0	351.81*	660	234	1.45	780.12	773	14	12.7		PB-214
0	582.96*	474	148	1.69	1292.44	1286	17	14.9		
0	609.32*	503	150	1.68	1350.86	1343	15	14.0		BI-214
0	661.49	343	115	1.67	1466.49	1461	13	16.8		CS-137
0	727.38*	122	107	1.50	1612.52	1606	16	42.6		BI-212
0	794.84	72	72	1.37	1762.02	1753	17	59.0		AC-228
0	910.99*	283	63	1.89	2019.45	2013	12	16.6		AC-228
1	964.28	77	22	2.21	2137.56	2129	28	42.0	1.18E+00	AC-228
1	968.85*	166	39	2.22	2147.68	2129	28	23.3		AC-228
0	1119.91*	105	38	1.63	2482.45	2475	15	32.9		BI-214
0	1240.22	42	77	2.10	2749.06	2737	24	116.1		BI-214
0	1460.43*	417	10	2.01	3237.04	3225	22	11.0		K-40
0	1764.40*	76	25	1.39	3910.61	3902	14	36.8		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	46.54	95	454	0.90	103.48	99	10	8.83E-03	90.8	2.77E+00	
2	89.86	270	680	1.62	199.49	182	31	2.50E-02	41.0	3.55E+00	
2	92.76	296	633	1.63	205.93	182	31	2.74E-02	38.8	3.55E+00	T
0	185.72	286	449	1.61	411.97	406	12	2.65E-02	33.3	2.82E+00	
0	582.96	474	148	1.69	1292.44	1286	17	4.39E-02	14.9	1.17E+00	T

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	4.610E+00	5.743E-01	3.205E-01	1.886E-02	14.387
CS-137	2.536E-01	4.630E-02	3.798E-02	2.735E-03	6.678
BI-212	7.030E-01	3.036E-01	2.693E-01	1.954E-02	2.611
PB-212	8.064E-01	9.769E-02	7.429E-02	5.553E-03	10.854
BI-214	6.373E-01	1.018E-01	6.998E-02	5.332E-03	9.107
PB-214	6.449E-01	9.680E-02	6.734E-02	5.357E-03	9.578
RA-223	2.872E-01	1.739E-01	1.773E-01	1.569E-02	1.620
AC-228	8.989E-01	1.619E-01	1.278E-01	8.984E-03	7.035
NP-237	4.261E-01	1.710E-01	1.706E-01	1.902E-02	2.497
AM-243	1.942E-01	5.374E-02	3.323E-02	6.390E-03	5.845

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	-5.012E-03		2.073E-02	3.599E-02	2.190E-03	-0.139
RH-101	-2.005E-02		2.000E-02	3.217E-02	4.965E-03	-0.623
SB-125	7.454E-03		5.426E-02	9.541E-02	7.888E-03	0.078
EU-155	6.423E-02		5.818E-02	1.029E-01	9.678E-03	0.624
TL-208	3.152E-01	+	5.330E-02	7.757E-02	6.174E-03	4.064
PO-209	-1.319E+00		4.085E+00	7.096E+00	1.307E+00	-0.186
BI-211	-2.897E-01		5.988E-01	9.880E-01	7.116E-02	-0.293
PA-233	1.684E-02		3.737E-02	6.414E-02	5.235E-03	0.263
PA-234M	1.220E+00		2.421E+00	4.442E+00	3.033E-01	0.275
TH-234✓	1.016E+00✓	+	4.049E-01	5.573E-01✓	4.989E-02	1.822
U-235	2.019E-01		1.227E-01	2.169E-01	1.610E-02	0.931
NP-236	3.058E-02		3.811E-02	5.595E-02	5.339E-03	0.547
NP-239	-3.431E-02		1.322E-01	2.214E-01	2.962E-02	-0.155
AM-241	-1.123E-01		4.172E-02	6.244E-02	3.951E-03	-1.798
CM-243	1.352E-02		5.241E-02	9.110E-02	9.817E-03	0.148
AM-246	8.077E-03		6.816E-02	1.230E-01	1.552E-02	0.066
CF-249	1.562E-02		2.356E-02	4.231E-02	4.214E-03	0.369

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 7-DEC-2007 13:17:42

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795003_GAMMA2_400MLSAN_17394.CNF

---- Sample Information ----

Sample ID : OH207-7950-03 ✓
Sample Title : SB-CZ-SS-2272-ST ✓
Sample Quantity : 4.47300E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17394

---- Sample Decay/Count Information ----

Collection Date : 27-SEP-2007 00:00:00 ✓ Acquisition date : 4-DEC-2007 14:47:06.
Decay time : 68 14:47:06.94 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:01.94

---- Detector Parameters ----

Energy cal. time : 1-MAY-2007 11:12:10. Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA2 Counting geometry: 400 ml sand
Effic. cal. time : 1-MAY-2007 11:13:44. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$x = \ln(a1/\text{energy})$

a1=9.47750E+02 a2=-4.68491E+00 a3=7.34327E-01 a4=7.12916E-02
a5=8.21331E-02 a6=-7.02143E-02 a7=0.00000E+00

---- Processing Parameters ----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA2_17242.CNF;1
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature: Tim Moore

Date: 12/7/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
2	74.82*	564	941	0.97	149.23	145	20	18.9	6.96E-01	AM-243 PB-214 PB-212
2	77.05*	935	838	0.96	153.67	145	20	12.0		PB-214 PB-212
3	87.10	483	948	1.34	173.66	164	27	23.7	3.14E+00	NP-237 PB-214 PB-212
3	89.95	247	807	1.16	179.35	164	27	40.6		
3	93.08*	315	782	1.18	185.58	164	27	34.0		
0	186.06*	589	1183	1.42	370.73	364	14	26.4		
0	209.46	241	755	1.17	417.34	413	10	44.7		AC-228
5	238.75*	2578	495	1.13	475.68	470	29	4.9	2.29E+00	PB-212
5	241.80*	829	662	1.94	481.76	470	29	17.6		PB-214
0	270.56	271	584	1.26	539.05	534	11	36.8		RA-223 AC-228
0	295.35*	954	548	1.29	588.45	583	11	11.6		PB-214
0	300.39	198	489	1.31	598.47	594	11	45.6		PB-212
0	328.19	127	371	1.01	653.86	650	9	57.5		
0	338.58*	466	416	1.39	674.57	670	10	18.9		AC-228
0	352.15*	1670	496	1.25	701.60	696	13	7.4		PB-214
0	463.26	200	323	1.33	923.05	917	14	40.7		AC-228
0	510.96*	198	289	1.65	1018.15	1011	13	41.2		TL-208
0	583.33*	817	258	1.37	1162.44	1155	15	11.2		TL-208
0	609.39*	1320	163	1.47	1214.40	1208	13	6.9		BI-214
1	661.72	713	103	1.64	1318.77	1313	20	9.2	1.69E+00	CS-137
1	665.50	86	116	1.73	1326.31	1313	20	52.6		
0	727.44	215	152	1.57	1449.86	1444	13	27.3		BI-212
0	769.12*	123	226	1.73	1533.03	1526	17	59.3		BI-214
0	785.82	76	95	1.22	1566.35	1561	11	55.1		BI-212
0	795.17*	103	92	1.06	1585.00	1580	11	41.9		AC-228
0	860.65*	113	111	2.03	1715.67	1709	15	45.8		TL-208
0	911.01*	563	97	1.77	1816.18	1811	12	11.0		AC-228
0	934.64	61	75	1.40	1863.36	1858	12	62.0		BI-214
3	964.54	128	91	2.33	1923.04	1916	25	37.4	1.07E+00	AC-228
3	968.71*	321	65	1.59	1931.38	1916	25	15.1		AC-228
0	1120.16*	331	88	1.75	2233.81	2225	19	17.8		BI-214
0	1237.63*	93	98	1.66	2468.47	2463	14	50.4		BI-214
0	1376.77	59	64	2.11	2746.56	2737	17	66.9		BI-214
0	1407.79	52	63	1.99	2808.58	2800	17	76.0		BI-214
0	1459.68*	1210	48	2.09	2912.33	2903	20	6.5		K-40
0	1618.99	32	21	1.21	3230.93	3225	12	67.1		BI-212
0	1728.22*	74	4	2.12	3449.48	3441	19	27.9		BI-214
0	1762.41*	238	12	1.88	3517.91	3511	15	14.8		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
3	89.95	247	807	1.16	179.35	164	27	2.28E-02	40.6	2.61E+00	
3	93.08	315	782	1.18	185.58	164	27	2.92E-02	34.0	2.71E+00	T
0	186.06	589	1183	1.42	370.73	364	14	5.46E-02	26.4	3.21E+00	
0	328.19	127	371	1.01	653.86	650	9	1.17E-02	57.5	2.20E+00	
1	665.50	86	116	1.73	1326.31	1313	20	8.01E-03	52.6	1.21E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	9.411E+00	8.603E-01	2.492E-01	1.604E-02	37.766
CS-137	3.868E-01	5.652E-02	3.121E-02	3.550E-03	12.395
TL-208	4.012E-01	6.127E-02	2.924E-02	3.044E-03	13.722
BI-212	9.043E-01	2.660E-01	2.342E-01	2.561E-02	3.861
PB-212	1.189E+00	1.078E-01	4.878E-02	3.727E-03	24.374
BI-214	1.231E+00	1.561E-01	5.669E-02	6.037E-03	21.720
PB-214	1.198E+00	1.280E-01	5.963E-02	4.573E-03	20.082
RA-223	4.297E-01	1.626E-01	1.573E-01	1.399E-02	2.732
AC-228	1.285E+00	1.800E-01	1.122E-01	9.749E-03	11.453
NP-237	8.801E-01	2.363E-01	2.262E-01	2.843E-02	3.890
AM-243	2.374E-01	6.521E-02	5.892E-02	1.175E-02	4.029

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	-1.261E-02		1.781E-02	2.820E-02	1.641E-03	-0.447
RH-101	-9.181E-03		1.947E-02	3.090E-02	4.824E-03	-0.297
SB-125	1.461E-02		4.907E-02	8.395E-02	6.883E-03	0.174
EU-155	5.054E-02		6.724E-02	1.140E-01	1.067E-02	0.443
PO-209	-2.521E+00		3.387E+00	5.490E+00	1.053E+00	-0.459
BI-211	-4.345E-01		5.145E-01	8.396E-01	8.219E-02	-0.518
PA-233	2.065E-02		3.201E-02	5.601E-02	4.511E-03	0.369
PA-234M	9.608E-01		2.139E+00	3.827E+00	2.987E-01	0.251
TH-234 ✓	1.208E+00 ✓	+	4.277E-01	6.392E-01 ✓	6.393E-02	1.890
U-235	1.233E-01		1.220E-01	2.039E-01	1.488E-02	0.605
NP-236	5.107E-03		4.053E-02	6.474E-02	6.436E-03	0.079
NP-239	1.359E-02		1.156E-01	2.004E-01	2.704E-02	0.068
AM-241	-3.049E-03		1.000E-01	1.702E-01	1.116E-02	-0.018
CM-243	-1.290E-02		6.038E-02	1.000E-01	1.082E-02	-0.129
AM-246	-1.268E-02		6.097E-02	1.029E-01	1.316E-02	-0.123
CF-249	9.820E-04		2.163E-02	3.666E-02	3.513E-03	0.027

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 4-DEC-2007 17:48:17

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795004_GAMMA3_400MLSAN_17395.CNF

---- Sample Information ----

Sample ID : OH207-7950-04 ✓
Sample Title : SB-CZ-SS-2273-ST ✓
Sample Quantity : 4.91400E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17395

---- Sample Decay/Count Information ----

Collection Date : 27-SEP-2007 00:00:00 Acquisition date : 4-DEC-2007 14:47:56.
Decay time : 68 14:47:56.91 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:01.37

---- Detector Parameters ----

Energy cal. time : 30-OCT-2006 16:06:41 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA3 Counting geometry: 400 ml sand
Effic. cal. time : 7-FEB-2007 13:40:24. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$x = \ln(a1/\text{energy})$

a1=9.47750E+02 a2=-4.85663E+00 a3=8.12782E-01 a4=8.53513E-02
a5=-4.88423E-02 a6=-7.49502E-03 a7=0.00000E+00

---- Processing Parameters ----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA3_17240.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

TM Moore

Date:

12/7/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	46.48*	103	646	1.10	103.34	100	9	95.5		
0	63.11*	149	1111	1.51	140.20	136	10	88.3		TH-234
1	74.86*	987	1263	1.28	166.24	162	22	15.0	1.44E+00	AM-243
										PB-214
										PB-212
1	77.14*	1666	1048	1.19	171.29	162	22	8.8		PB-214
										PB-212
4	84.40*	330	940	1.95	187.39	183	32	35.4	1.74E+00	
4	87.25	672	1028	1.53	193.71	183	32	19.7		NP-237
										PB-214
										PB-212
4	89.93	444	912	1.38	199.66	183	32	27.2		
4	92.82*	595	1092	1.61	206.06	183	32	24.5		TH-234
0	129.35	198	1087	1.61	287.02	282	11	66.1		AC-228
0	185.82*	533	978	1.55	412.19	406	13	26.2		
0	209.49	327	811	1.14	464.66	459	13	37.5		AC-228
1	238.65*	2704	492	1.42	529.28	520	22	4.9	2.29E+00	PB-212
1	241.61	618	552	1.68	535.85	520	22	20.6		PB-214
0	270.13	257	668	1.71	599.07	591	15	45.5		RA-223
										AC-228
0	295.25*	886	670	1.33	654.75	647	16	14.7		PB-214
0	300.19	168	337	1.56	665.70	662	10	43.8		PB-212
0	338.60*	586	461	1.59	750.84	745	15	18.0		AC-228
0	351.99*	1770	340	1.51	780.52	775	13	6.5		PB-214
0	409.57	69	276	0.99	908.14	903	11	96.7		AC-228
0	462.96	227	234	1.18	1026.47	1019	14	31.6		AC-228
0	510.65*	322	366	2.07	1132.17	1122	22	33.8		TL-208
0	583.17*	829	228	1.53	1292.90	1287	15	10.7		TL-208
0	609.24*	1224	183	1.72	1350.69	1343	15	7.5		BI-214
0	661.44	348	190	1.71	1466.38	1461	12	19.1		CS-137
0	727.15*	141	166	1.13	1612.01	1606	13	41.8		BI-212
0	769.79	162	205	1.91	1706.51	1695	23	49.3		BI-214
0	794.85	113	85	2.32	1762.04	1757	12	37.8		AC-228
1	859.80	26	81	1.96	1906.00	1900	18	152.8	1.00E+00	
1	860.51	70	102	2.16	1907.57	1900	18	67.4		TL-208
0	911.11*	591	144	2.00	2019.72	2010	22	13.3		AC-228
0	933.90	74	56	1.36	2070.21	2065	11	46.0		BI-214
5	964.21	141	53	3.24	2137.39	2130	24	31.1	9.52E-01	AC-228
5	968.83*	336	52	1.88	2147.63	2130	24	14.3		AC-228
0	1120.42*	244	133	2.10	2483.58	2475	17	25.5		BI-214
0	1237.41	118	79	1.75	2742.83	2736	15	37.6		BI-214
0	1377.64	73	49	1.79	3053.58	3044	18	51.1		BI-214
0	1460.59*	1022	41	1.93	3237.41	3228	20	7.1		K-40
0	1729.46*	45	28	3.35	3833.19	3825	16	61.1		BI-214
0	1764.07*	217	27	2.24	3909.89	3897	22	18.5		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	46.48	103	646	1.10	103.34	100	9	9.51E-03	95.5	2.76E+00	
4	84.40	330	940	1.95	187.39	183	32	3.06E-02	35.4	3.55E+00	
4	89.93	444	912	1.38	199.66	183	32	4.12E-02	27.2	3.55E+00	
0	185.82	533	978	1.55	412.19	406	13	4.94E-02	26.2	2.82E+00	
1	859.80	26	81	1.96	1906.00	1900	18	2.41E-03	****	8.42E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	8.749E+00	8.036E-01	2.923E-01	1.720E-02	29.935
CS-137	1.990E-01	4.065E-02	3.951E-02	2.845E-03	5.035
TL-208	4.267E-01	5.698E-02	3.310E-02	2.634E-03	12.893
BI-212	6.292E-01	2.668E-01	2.773E-01	2.012E-02	2.269
PB-212	1.323E+00	1.183E-01	5.720E-02	4.275E-03	23.137
BI-214	1.199E+00	1.286E-01	6.188E-02	4.715E-03	19.380
PB-214	1.339E+00	1.372E-01	6.732E-02	5.356E-03	19.888
RA-223	4.342E-01	2.013E-01	1.752E-01	1.551E-02	2.479
AC-228	1.453E+00	2.181E-01	1.226E-01	8.617E-03	11.852
TH-234✓	1.577E+00✓	4.121E-01	3.885E-01✓	3.478E-02	4.060
NP-237	7.770E-01	1.757E-01	1.688E-01	1.881E-02	4.603
AM-243	2.109E-01	5.140E-02	3.507E-02	6.744E-03	6.015

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	7.202E-03		2.110E-02	3.244E-02	1.720E-03	0.222
RH-101	-8.849E-03		2.072E-02	3.435E-02	5.302E-03	-0.258
SB-125	-1.636E-03		5.301E-02	9.165E-02	7.577E-03	-0.018
EU-155	6.417E-02		6.062E-02	1.057E-01	9.942E-03	0.607
PO-209	-1.578E+00		4.092E+00	7.010E+00	1.292E+00	-0.225
BI-211	-4.581E-01		6.375E-01	1.030E+00	7.415E-02	-0.445
PA-233	9.119E-03		3.674E-02	6.188E-02	5.050E-03	0.147
PA-234M	3.423E-01		2.365E+00	4.165E+00	2.844E-01	0.082
U-235	1.034E-01		1.242E-01	2.140E-01	1.588E-02	0.483
NP-236	3.161E-02		3.946E-02	5.714E-02	5.453E-03	0.553
NP-239	-4.934E-02		1.372E-01	2.278E-01	3.048E-02	-0.217
AM-241	3.002E-02		4.047E-02	5.986E-02	3.788E-03	0.502
CM-243	-2.642E-03		5.375E-02	9.215E-02	9.930E-03	-0.029
AM-246	4.500E-02		7.313E-02	1.326E-01	1.673E-02	0.339
CF-249	1.882E-02		2.288E-02	4.070E-02	4.054E-03	0.462

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 4-DEC-2007 20:48:04

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795005_GAMMA1_400MLSAN_17396.CNF

---- Sample Information ----

Sample ID : OH207-7950-05 ✓
Sample Title : SB-CZ-SS-2274-ST ✓
Sample Quantity : 4.27300E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17396

---- Sample Decay/Count Information ----

Collection Date : 27-SEP-2007 00:00:00 Acquisition date : 4-DEC-2007 17:47:47.
Decay time : 68 17:47:47.87 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:02.52

---- Detector Parameters ----

Energy cal. time : 23-MAR-2006 15:15:18 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA1 Counting geometry: 400 ml sand
Effic. cal. time : 23-MAR-2006 15:18:11 Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$x = \ln(a1/\text{energy})$

a1=9.47750E+02 a2=-4.65904E+00 a3=6.59172E-01 a4=3.93115E-02
a5=1.38137E-01 a6=-8.70295E-02 a7=0.00000E+00

---- Processing Parameters ----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA1_17241.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

T M Moore

Date:

12/7/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.46*	121	580	1.04	126.30	122	9	75.6		TH-234
3	73.17	103	531	1.23	145.75	142	17	79.2	1.14E+00	
3	74.99*	435	541	1.10	149.39	142	17	20.7		AM-243
										PB-214
										PB-212
3	77.25*	645	476	0.97	153.92	142	17	13.5		PB-214
										PB-212
4	87.22	304	575	1.39	173.88	164	27	29.7	1.78E+00	NP-237
										PB-214
										PB-212
4	90.02	236	571	1.27	179.49	164	27	37.8		
4	92.89*	262	567	1.29	185.24	164	27	35.8		TH-234
0	129.08	96	545	1.01	257.70	254	8	87.0		AC-228
0	186.01*	335	470	1.29	371.71	368	8	25.6		
0	209.31	146	461	1.08	418.35	415	8	53.9		AC-228
2	238.62*	1782	295	1.07	477.04	472	20	5.7	2.08E+00	PB-212
2	240.82*	175	347	1.36	481.44	472	20	61.1		
2	241.98*	364	331	1.32	483.78	472	20	21.9		PB-214
0	269.70	174	454	1.45	539.28	533	12	51.2		RA-223
										AC-228
3	295.24*	804	255	1.31	590.41	584	21	9.7	3.28E+00	PB-214
3	300.02*	137	221	1.29	599.98	584	21	42.7		PB-212
0	327.72	134	237	1.07	655.45	652	9	44.9		
0	338.54	382	358	1.20	677.12	672	12	22.5		AC-228
0	351.83*	1180	311	1.27	703.72	698	13	8.6		PB-214
0	462.55	119	176	1.26	925.41	921	10	45.6		AC-228
0	510.67*	174	270	1.81	1021.75	1015	14	46.7		TL-208
0	583.08*	573	148	1.34	1166.73	1162	12	12.1		TL-208
0	609.11*	976	195	1.50	1218.85	1212	15	9.1		BI-214
0	661.36	362	150	1.33	1323.45	1316	13	17.5		CS-137
0	726.71	117	116	1.68	1454.29	1450	13	41.8		BI-212
0	768.18	110	80	2.10	1537.30	1531	13	39.3		BI-214
0	794.49	74	66	1.46	1589.97	1584	11	48.5		AC-228
0	860.54	89	92	2.00	1722.21	1715	17	54.1		TL-208
0	910.88*	385	98	1.19	1822.99	1816	14	15.1		AC-228
0	934.38	78	48	1.59	1870.03	1862	15	45.1		BI-214
2	964.34	79	74	1.73	1930.01	1925	21	44.3	1.14E+00	AC-228
2	968.62*	242	63	1.86	1938.57	1925	21	18.3		AC-228
0	1120.12*	252	49	1.89	2241.85	2234	18	18.4		BI-214
0	1377.47*	44	46	1.16	2756.98	2750	14	74.7		BI-214
0	1460.06*	386	25	2.32	2922.30	2912	20	12.3		K-40
0	1588.53	24	33	1.43	3179.41	3174	10	99.3		AC-228
0	1763.52*	161	8	2.47	3529.64	3521	16	18.3		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
3	73.17	103	531	1.23	145.75	142	17	9.54E-03	79.2	1.60E+00	
4	90.02	236	571	1.27	179.49	164	27	2.18E-02	37.8	2.33E+00	
0	186.01	335	470	1.29	371.71	368	8	3.10E-02	25.6	3.03E+00	
2	240.82	175	347	1.36	481.44	472	20	1.62E-02	61.1	2.64E+00	
0	327.72	134	237	1.07	655.45	652	9	1.24E-02	44.9	2.11E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	2.998E+00	4.206E-01	2.062E-01	1.407E-02	14.536
CS-137	2.061E-01	4.227E-02	3.075E-02	3.304E-03	6.701
TL-208	2.984E-01	4.688E-02	2.825E-02	2.835E-03	10.564
BI-212	5.102E-01	2.186E-01	1.988E-01	1.912E-02	2.567
PB-212	9.067E-01	8.696E-02	4.302E-02	3.320E-03	21.076
BI-214	9.626E-01	1.313E-01	5.406E-02	5.506E-03	17.806
PB-214	9.235E-01	1.075E-01	5.570E-02	4.395E-03	16.582
RA-223	3.046E-01	1.583E-01	1.404E-01	1.292E-02	2.170
AC-228	8.979E-01	1.442E-01	9.330E-02	5.156E-03	9.625
TH-234✓	1.174E+00✓	4.416E-01	4.518E-01✓	5.271E-02	2.599
NP-237	6.544E-01	2.161E-01	2.160E-01	3.124E-02	3.030
AM-243	2.239E-01	6.597E-02	5.185E-02	1.088E-02	4.319

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	6.433E-03		1.456E-02	2.194E-02	1.432E-03	0.293
RH-101	6.506E-03		1.703E-02	2.840E-02	4.405E-03	0.229
SB-125	3.497E-02		4.423E-02	7.881E-02	6.463E-03	0.444
EU-155	5.702E-02		5.964E-02	1.039E-01	1.031E-02	0.549
PO-209	-2.574E+00		2.989E+00	4.823E+00	8.632E-01	-0.534
BI-211	-3.440E-01		4.418E-01	7.315E-01	5.329E-02	-0.470
PA-233	1.945E-02		2.940E-02	5.241E-02	4.401E-03	0.371
PA-234M	1.661E+00		1.745E+00	3.319E+00	1.908E-01	0.500
U-235	-9.517E-03		1.055E-01	1.744E-01	1.217E-02	-0.055
NP-236	-2.287E-02		3.579E-02	5.632E-02	6.187E-03	-0.406
NP-239	-2.341E-02		1.100E-01	1.781E-01	2.403E-02	-0.131
AM-241	2.277E-03		1.050E-01	1.645E-01	1.308E-02	0.014
CM-243	-5.446E-02		5.453E-02	8.888E-02	1.013E-02	-0.613
AM-246	2.012E-02		4.628E-02	8.496E-02	1.046E-02	0.237
CF-249	1.245E-02		1.856E-02	3.292E-02	3.176E-03	0.378

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 4-DEC-2007 20:49:29

Configuration :
SYSS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795006_GAMMA2_400MLSAN_17397.CNF

----- Sample Information -----

Sample ID : OH207-7950-06 ✓
Sample Title : SB-CZ-SS-2275-ST ✓
Sample Quantity : 4.64700E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17397

----- Sample Decay/Count Information -----

Collection Date : 27-SEP-2007 00:00:00 Acquisition date : 4-DEC-2007 17:49:00.
Decay time : 68 17:49:00.55 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:01.51

----- Detector Parameters -----

Energy cal. time : 1-MAY-2007 11:12:10. Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA2 Counting geometry: 400 ml sand
Effic. cal. time : 1-MAY-2007 11:13:44. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$$x = \ln(a1/\text{energy})$$

a1=9.47750E+02 a2=-4.68491E+00 a3=7.34327E-01 a4=7.12916E-02
a5=8.21331E-02 a6=-7.02143E-02 a7=0.00000E+00

----- Processing Parameters -----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYSS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA2_17242.CNF;1 ✓
Nuclide Lib File : SYSS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYSS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

T. M. Moore

Date:

12/7/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
2	74.78*	445	637	1.19	149.14	144	15	21.7	1.85E+00	AM-243 PB-214 PB-212
2	77.07*	704	626	1.20	153.71	144	15	14.6		PB-214 PB-212
3	87.21	283	711	1.19	173.89	170	21	32.6	1.01E+00	NP-237 PB-214 PB-212
3	89.97	179	571	1.02	179.38	170	21	44.5		
3	92.85*	257	706	1.34	185.11	170	21	40.2		
0	128.85	135	573	1.01	256.80	255	7	61.2		AC-228
0	186.09*	258	783	1.24	370.80	366	10	43.4		
0	209.55	211	622	0.77	417.52	413	10	46.4		AC-228
0	238.71*	1739	954	1.14	475.61	470	10	8.3		PB-212
0	241.98*	285	481	1.43	482.13	480	7	29.5		PB-214
0	270.31	170	480	1.94	538.55	533	11	52.3		RA-223 AC-228
0	295.47*	651	430	1.23	588.68	584	11	14.8		PB-214
0	300.35	109	301	1.53	598.40	595	8	58.3		PB-212
0	328.04	109	262	1.43	653.58	650	8	55.3		
0	338.65*	443	312	1.33	674.71	670	12	18.8		AC-228
0	352.12*	1240	258	1.29	701.55	697	11	7.7		PB-214
0	462.73	158	144	1.56	922.00	916	12	34.3		AC-228
0	510.90*	232	273	2.21	1018.03	1010	18	38.1		TL-208
0	583.23*	598	150	1.50	1162.23	1157	13	11.9		TL-208
0	609.49*	923	163	1.40	1214.61	1209	14	9.0		BI-214
0	661.59	396	174	1.34	1318.51	1314	13	16.8		CS-137
0	727.16	116	146	1.50	1449.31	1443	13	47.0		BI-212
0	768.53*	74	90	1.83	1531.85	1527	10	54.2		BI-214
0	786.14	80	73	0.69	1566.98	1560	14	50.4		BI-212
0	794.84*	77	57	2.06	1584.35	1580	9	42.6		AC-228
0	860.36*	85	44	1.65	1715.09	1711	9	36.3		TL-208
0	911.16*	419	49	1.82	1816.50	1810	13	12.1		AC-228
0	934.49	53	74	1.16	1863.05	1856	14	75.9		BI-214
0	964.98	59	51	1.57	1923.92	1919	9	50.7		AC-228
0	968.82*	241	46	2.01	1931.59	1927	10	17.1		AC-228
0	1119.89*	199	45	1.61	2233.27	2226	16	21.0		BI-214
0	1237.57*	80	44	1.75	2468.36	2462	13	41.9		BI-214
0	1377.27	39	50	1.94	2747.56	2741	14	82.8		BI-214
0	1459.69*	273	56	2.09	2912.33	2903	20	18.5		K-40
0	1508.16	46	19	1.54	3009.25	3002	16	52.8		BI-214
0	1762.59*	177	4	2.25	3518.27	3512	14	16.4		BI-214
0	1844.54	35	8	1.54	3682.30	3675	15	47.6		

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
3	89.97	179	571	1.02	179.38	170	21	1.66E-02	44.5	2.61E+00	
3	92.85	257	706	1.34	185.11	170	21	2.38E-02	40.2	2.71E+00	T
0	186.09	258	783	1.24	370.80	366	10	2.39E-02	43.4	3.21E+00	
0	328.04	109	262	1.43	653.58	650	8	1.01E-02	55.3	2.20E+00	
0	1844.54	35	8	1.54	3682.30	3675	15	3.28E-03	47.6	5.63E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	2.043E+00	4.004E-01	2.136E-01	1.375E-02	9.564
CS-137	2.067E-01	4.199E-02	2.575E-02	2.930E-03	8.025
TL-208	2.827E-01	4.475E-02	2.576E-02	2.682E-03	10.977
BI-212	4.675E-01	2.255E-01	1.956E-01	2.138E-02	2.390
PB-212	7.722E-01	8.700E-02	4.943E-02	3.777E-03	15.623
BI-214	8.287E-01	1.156E-01	4.923E-02	5.243E-03	16.832
PB-214	8.563E-01	9.309E-02	5.114E-02	3.922E-03	16.743
RA-223	2.595E-01	1.378E-01	1.318E-01	1.172E-02	1.969
AC-228	9.205E-01	1.373E-01	8.485E-02	7.373E-03	10.849
NP-237	4.963E-01	1.734E-01	2.290E-01	2.877E-02	2.167
AM-243	1.804E-01	5.315E-02	4.693E-02	9.355E-03	3.843

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	-6.484E-04		1.427E-02	2.204E-02	1.282E-03	-0.029
RH-101	-7.102E-04		1.622E-02	2.624E-02	4.096E-03	-0.027
SB-125	-2.734E-02		4.321E-02	7.074E-02	5.800E-03	-0.386
EU-155	3.873E-02		5.803E-02	9.862E-02	9.234E-03	0.393
PO-209	2.270E+00		2.744E+00	5.072E+00	9.724E-01	0.448
BI-211	-1.165E-01		4.344E-01	7.426E-01	7.269E-02	-0.157
PA-233	7.180E-03		2.723E-02	4.730E-02	3.810E-03	0.152
PA-234M	3.270E-01		1.760E+00	3.145E+00	2.455E-01	0.104
TH-234 ✓	9.494E-01 ✓	+	3.934E-01	5.283E-01 ✓	5.284E-02	1.797
U-235	1.824E-02		1.018E-01	1.672E-01	1.220E-02	0.109
NP-236	3.405E-02		3.318E-02	5.464E-02	5.432E-03	0.623
NP-239	1.587E-02		1.012E-01	1.762E-01	2.378E-02	0.090
AM-241	4.499E-02		7.930E-02	1.379E-01	9.049E-03	0.326
CM-243	2.663E-02		5.152E-02	8.734E-02	9.443E-03	0.305
AM-246	3.133E-02		4.868E-02	8.940E-02	1.143E-02	0.350
CF-249	2.918E-02		1.851E-02	3.329E-02	3.189E-03	0.876

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 4-DEC-2007 20:50:07

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795007_GAMMA3_400MLSAN_17398.CNF

---- Sample Information ----

Sample ID : OH207-7950-07 ✓
Sample Title : SB-CZ-SS-2276-ST ✓
Sample Quantity : 4.50900E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17398

---- Sample Decay/Count Information ----

Collection Date : 27-SEP-2007 00:00:00 Acquisition date : 4-DEC-2007 17:49:53.
Decay time : 68 17:49:53.50 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:00.95

---- Detector Parameters ----

Energy cal. time : 30-OCT-2006 16:06:41 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA3 Counting geometry: 400 ml sand
Effic. cal. time : 7-FEB-2007 13:40:24. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$$x = \ln(a1/\text{energy})$$

a1=9.47750E+02 a2=-4.85663E+00 a3=8.12782E-01 a4=8.53513E-02
a5=-4.88423E-02 a6=-7.49502E-03 a7=0.00000E+00

---- Processing Parameters ----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA3_17240.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

Ten W. Moore

Date:

12/7/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	46.78*	121	405	1.40	104.00	100	10	68.8		
0	63.11*	216	670	1.36	140.20	134	12	52.5		TH-234
2	74.91*	604	663	1.41	166.36	158	20	18.1	2.57E+00	AM-243
										PB-214
										PB-212
2	77.18*	1009	730	1.59	171.39	158	20	13.1		PB-214
										PB-212
3	87.18	323	607	1.23	193.54	189	26	27.0	3.25E+00	NP-237
										PB-214
										PB-212
3	89.91	242	784	1.78	199.60	189	26	50.3		
3	92.71*	352	551	1.51	205.81	189	26	31.1		TH-234
0	185.77*	293	657	1.27	412.08	404	16	41.9		
0	209.33	225	468	1.68	464.31	458	14	43.1		AC-228
2	238.63*	1286	283	1.48	529.25	522	21	7.6	1.29E+00	PB-212
2	241.54	355	315	1.85	535.70	522	21	26.7		PB-214
0	270.23	121	355	1.35	599.30	593	13	66.9		RA-223
										AC-228
0	295.14*	486	278	1.49	654.51	649	12	16.5		PB-214
0	338.43*	318	300	1.48	750.45	743	16	27.0		AC-228
0	351.89*	757	285	1.62	780.28	770	17	12.7		PB-214
0	463.68	89	164	1.05	1028.07	1021	14	65.4		AC-228
0	510.88*	190	156	2.26	1132.68	1124	18	38.2		TL-208
0	583.11*	442	81	1.75	1292.77	1286	13	12.9		TL-208
0	609.18*	518	192	1.53	1350.55	1342	16	15.0		BI-214
0	661.56	556	186	1.90	1466.64	1456	22	15.1		CS-137
0	794.92	80	60	1.50	1762.21	1757	14	46.7		AC-228
0	910.93*	257	94	1.74	2019.30	2011	17	21.5		AC-228
1	964.62	75	61	2.21	2138.30	2128	34	49.0	1.92E+00	AC-228
1	968.81*	157	49	2.18	2147.59	2128	34	26.4		AC-228
0	1120.54*	111	68	2.46	2483.84	2475	16	38.8		BI-214
0	1238.28	43	60	1.65	2744.77	2736	15	84.2		BI-214
0	1460.61*	437	5	2.01	3237.44	3227	21	10.3		K-40
0	1728.85*	25	3	1.62	3831.85	3824	14	54.9		BI-214
0	1764.05*	91	9	2.32	3909.85	3899	17	26.6		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	46.78	121	405	1.40	104.00	100	10	1.12E-02	68.8	2.78E+00	
3	89.91	242	784	1.78	199.60	189	26	2.24E-02	50.3	3.55E+00	
0	185.77	293	657	1.27	412.08	404	16	2.71E-02	41.9	2.82E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	4.080E+00	4.836E-01	1.736E-01	1.021E-02	23.509
CS-137	3.469E-01	5.811E-02	3.314E-02	2.386E-03	10.466
TL-208	2.478E-01	3.767E-02	2.681E-02	2.134E-03	9.245
PB-212	6.862E-01	7.310E-02	4.805E-02	3.592E-03	14.280
BI-214	5.531E-01	9.311E-02	5.901E-02	4.496E-03	9.373
PB-214	6.238E-01	9.335E-02	5.721E-02	4.552E-03	10.902
RA-223	2.219E-01	1.497E-01	1.461E-01	1.294E-02	1.519
AC-228	6.886E-01	1.558E-01	1.148E-01	8.070E-03	5.999
TH-234✓	1.018E+00✓	3.292E-01	3.606E-01✓	3.228E-02	2.822
NP-237	4.077E-01	1.191E-01	1.737E-01	1.936E-02	2.347
AM-243	1.408E-01	3.714E-02	2.830E-02	5.442E-03	4.975

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	5.260E-03		1.703E-02	2.736E-02	1.451E-03	0.192
RH-101	-7.476E-03		1.765E-02	2.927E-02	4.518E-03	-0.255
SB-125	1.728E-02		4.600E-02	8.178E-02	6.761E-03	0.211
EU-155	3.127E-02		4.820E-02	8.459E-02	7.954E-03	0.370
PO-209	-1.089E+00		3.469E+00	6.028E+00	1.111E+00	-0.181
BI-211	-6.670E-03		5.028E-01	8.627E-01	6.213E-02	-0.008
BI-212	2.866E-01		1.652E-01	3.065E-01	2.225E-02	0.935
PA-233	-1.894E-02		3.198E-02	5.220E-02	4.260E-03	-0.363
PA-234M	4.242E-01		1.846E+00	3.343E+00	2.283E-01	0.127
U-235	2.648E-02		1.068E-01	1.828E-01	1.357E-02	0.145
NP-236	2.828E-02		3.063E-02	4.529E-02	4.322E-03	0.624
NP-239	-4.542E-02		1.143E-01	1.901E-01	2.543E-02	-0.239
AM-241	3.882E-02		3.546E-02	5.373E-02	3.400E-03	0.723
CM-243	2.618E-02		4.331E-02	7.592E-02	8.181E-03	0.345
AM-246	1.354E-02		5.924E-02	1.076E-01	1.358E-02	0.126
CF-249	-4.463E-03		2.003E-02	3.463E-02	3.449E-03	-0.129

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 5-DEC-2007 00:22:18

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795008_GAMMA1_400MLSAN_17399.CNF

----- Sample Information -----
Sample ID : OH207-7950-08 ✓
Sample Title : SB-CZ-SS-2277-ST ✓
Sample Quantity : 4.21200E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17399

----- Sample Decay/Count Information -----
Collection Date : 27-SEP-2007 00:00:00 Acquisition date : 4-DEC-2007 21:22:00.
Decay time : 68 21:22:00.70 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:02.18

----- Detector Parameters -----
Energy cal. time : 23-MAR-2006 15:15:18 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA1 Counting geometry: 400 ml sand
Effic. cal. time : 23-MAR-2006 15:18:11 Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a_2 + a_3 \cdot x + a_4 \cdot x^2 + a_5 \cdot x^3 + a_6 \cdot x^4 + a_7 \cdot x^5)$$

where:

$x = \ln(a_1/\text{energy})$

a1=9.47750E+02 a2=-4.65904E+00 a3=6.59172E-01 a4=3.93115E-02
a5=1.38137E-01 a6=-8.70295E-02 a7=0.00000E+00

----- Processing Parameters -----
Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA1_17241.CNF;1
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature: Tim Moore Date: 12/7/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
2	74.85*	226	400	0.76	149.12	145	14	29.5	7.53E-01	AM-243 PB-214 PB-212
2	77.14*	352	365	0.90	153.70	145	14	19.9		PB-214 PB-212
4	87.23	185	362	0.86	173.90	170	21	33.1	2.95E+00	NP-237 PB-214 PB-212
4	90.01	169	514	1.29	179.48	170	21	48.5		
4	92.85*	241	461	1.25	185.15	170	21	36.1		
0	185.67*	234	583	1.36	371.02	365	12	44.0		
0	209.08	177	461	1.07	417.90	412	12	50.9		AC-228
4	238.61*	1268	234	1.08	477.02	472	17	6.8	1.96E+00	PB-212
4	241.67*	350	308	1.71	483.15	472	17	25.5		PB-214
6	269.56	88	245	1.32	538.99	533	13	66.9	1.35E+00	RA-223
6	270.74	69	256	1.53	541.35	533	13	92.8		AC-228
0	295.15*	441	308	1.10	590.23	585	11	18.3		PB-214
1	299.65*	57	143	1.35	599.25	596	10	76.3	3.41E+00	
1	300.40*	76	184	1.35	600.75	596	10	70.2		PB-212
0	338.35	241	252	1.25	676.73	671	11	28.7		AC-228
0	351.79*	700	241	1.22	703.65	699	12	11.8		PB-214
0	462.73	101	142	1.41	925.77	921	11	49.6		AC-228
0	510.65*	165	172	1.85	1021.71	1014	17	43.9		TL-208
0	582.97*	352	142	1.24	1166.52	1162	12	17.4		TL-208
0	609.12*	620	135	1.40	1218.86	1212	15	11.7		BI-214
0	661.38	591	119	1.48	1323.49	1316	14	11.4		CS-137
0	726.94	120	42	1.60	1454.75	1449	12	28.4		BI-212
0	768.61	50	82	1.26	1538.17	1533	11	75.7		BI-214
0	794.99	47	72	1.30	1590.98	1584	12	77.9		AC-228
0	835.39	45	33	1.39	1671.87	1668	9	54.3		
0	861.22	109	54	1.51	1723.56	1716	17	36.5		TL-208
0	910.95*	263	69	1.15	1823.13	1817	12	17.9		AC-228
0	933.72	35	47	1.34	1868.72	1862	11	82.1		BI-214
1	964.36	54	22	1.87	1930.05	1921	27	47.5	1.28E+00	AC-228
1	968.76*	175	22	1.87	1938.85	1921	27	19.7		AC-228
0	1119.78*	117	77	1.89	2241.16	2232	17	39.5		BI-214
0	1239.06	33	73	0.91	2479.93	2472	15	119.7		BI-214
0	1354.79	17	24	1.02	2711.59	2704	12	125.1		
0	1460.33*	499	29	1.81	2922.83	2913	19	10.5		K-40
0	1763.59*	86	8	1.68	3529.79	3521	16	27.8		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
4	90.01	169	514	1.29	179.48	170	21	1.57E-02	48.5	2.33E+00	
4	92.85	241	461	1.25	185.15	170	21	2.23E-02	36.1	2.43E+00	T
0	185.67	234	583	1.36	371.02	365	12	2.17E-02	44.0	3.03E+00	
1	299.65	57	143	1.35	599.25	596	10	5.26E-03	76.3	2.26E+00	
0	835.39	45	33	1.39	1671.87	1668	9	4.16E-03	54.3	1.03E+00	
0	1354.79	17	24	1.02	2711.59	2704	12	1.57E-03	****	7.47E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	3.932E+00	4.926E-01	1.830E-01	1.249E-02	21.484
CS-137	3.419E-01	5.344E-02	2.618E-02	2.813E-03	13.060
TL-208	1.857E-01	3.732E-02	2.515E-02	2.524E-03	7.384
BI-212	5.316E-01	1.592E-01	1.732E-01	1.666E-02	3.070
PB-212	6.544E-01	6.752E-02	4.068E-02	3.140E-03	16.085
BI-214	6.201E-01	9.604E-02	4.657E-02	4.744E-03	13.315
PB-214	5.559E-01	7.888E-02	4.887E-02	3.857E-03	11.374
RA-223	1.562E-01	1.054E-01	1.269E-01	1.167E-02	1.231
AC-228	6.222E-01	1.167E-01	8.696E-02	4.806E-03	7.155
NP-237	4.044E-01	1.462E-01	2.058E-01	2.976E-02	1.965
AM-243	1.181E-01	4.280E-02	5.070E-02	1.064E-02	2.330

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	2.610E-03		1.402E-02	2.278E-02	1.487E-03	0.115
RH-101	-1.523E-02		1.647E-02	2.593E-02	4.021E-03	-0.588
SB-125	-1.046E-02		4.056E-02	6.879E-02	5.641E-03	-0.152
EU-155	4.855E-02		5.423E-02	9.490E-02	9.422E-03	0.512
PO-209	-8.671E-01		2.742E+00	4.714E+00	8.438E-01	-0.184
BI-211	-9.174E-02		3.794E-01	5.713E-01	4.162E-02	-0.161
PA-233	2.063E-02		2.640E-02	4.767E-02	4.003E-03	0.433
PA-234M	-8.578E-01		1.578E+00	2.680E+00	1.541E-01	-0.320
TH-234 ✓	1.093E+00 ✓ +		4.149E-01	5.583E-01 ✓	6.514E-02	1.958
U-235	6.210E-02		9.628E-02	1.634E-01	1.141E-02	0.380
NP-236	-4.293E-03		3.189E-02	5.140E-02	5.647E-03	-0.084
NP-239	-1.061E-01		1.030E-01	1.592E-01	2.148E-02	-0.666
AM-241	-1.884E-02		8.740E-02	1.512E-01	1.202E-02	-0.125
CM-243	2.559E-03		4.850E-02	8.280E-02	9.436E-03	0.031
AM-246	-3.837E-04		5.174E-02	9.042E-02	1.113E-02	-0.004
CF-249	1.135E-02		1.810E-02	3.213E-02	3.100E-03	0.353

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 5-DEC-2007 00:23:51

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795009_GAMMA2_400MLSAN_17400.CNF

---- Sample Information ----

Sample ID : OH207-7950-09 ✓
Sample Title : SB-CZ-SS-2278-ST ✓
Sample Quantity : 4.47400E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17400

---- Sample Decay/Count Information ----

Collection Date : 27-SEP-2007 ✓ 00:00:00 Acquisition date : 4-DEC-2007 21:23:34.
Decay time : 68 21:23:34.58 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:01.29

---- Detector Parameters ----

Energy cal. time : 1-MAY-2007 11:12:10. Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA2 Counting geometry: 400 ml sand
Effic. cal. time : 1-MAY-2007 11:13:44. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a_2 + a_3 \cdot x + a_4 \cdot x^2 + a_5 \cdot x^3 + a_6 \cdot x^4 + a_7 \cdot x^5)$$

where:

$x = \ln(a_1 / \text{energy})$

a1=9.47750E+02 a2=-4.68491E+00 a3=7.34327E-01 a4=7.12916E-02
a5=8.21331E-02 a6=-7.02143E-02 a7=0.00000E+00

---- Processing Parameters ----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA2_17242.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

T. W. Moore

Date:

12/7/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
2	74.86*	392	502	1.06	149.31	143	15	21.0	1.72E+00	AM-243 PB-214 PB-212
2	77.04*	621	554	1.12	153.65	143	15	15.7		PB-214 PB-212
0	87.13	217	541	1.03	173.74	171	7	38.0		NP-237 PB-214 PB-212
0	89.92	92	364	0.95	179.29	177	5	65.5		
0	92.97*	177	660	1.49	185.37	181	8	54.8		
0	128.99	89	396	1.27	257.09	254	6	73.5		AC-228
0	186.04*	230	704	1.36	370.69	366	12	49.3		
0	209.52	118	499	1.23	417.46	413	10	73.2		AC-228
5	238.76*	1352	285	1.11	475.71	471	15	6.9	1.53E+00	PB-212
5	241.73*	395	289	1.68	481.61	471	15	18.6		PB-214
3	270.14	117	273	1.67	538.22	531	16	57.3	2.30E+00	RA-223 AC-228
3	271.29	48	218	1.36	540.50	531	16	117.9		
0	295.39*	590	334	1.29	588.52	582	13	15.3		PB-214
0	299.98	95	187	1.23	597.66	595	7	52.0		PB-212
0	327.42	52	224	1.32	652.34	649	8	102.4		
0	338.81*	285	311	1.29	675.03	669	13	28.5		AC-228
0	352.14*	923	277	1.25	701.59	695	14	10.3		PB-214
0	462.74	72	183	2.23	922.02	918	11	76.7		AC-228
0	511.20*	177	181	1.86	1018.62	1011	16	40.8		TL-208
0	583.47*	386	128	1.31	1162.71	1157	11	15.6		TL-208
0	609.45*	642	115	1.58	1214.52	1209	10	10.3		BI-214
0	661.80	413	77	1.33	1318.92	1313	11	12.8		CS-137
0	727.32	86	105	1.19	1449.63	1443	12	52.3		BI-212
0	795.31*	65	94	3.26	1585.27	1577	17	73.4		AC-228
0	860.39*	90	70	1.83	1715.15	1708	16	46.7		TL-208
0	911.03*	275	53	1.52	1816.23	1810	11	16.1		AC-228
5	963.75	73	39	2.83	1921.46	1914	23	46.4	3.92E+00	AC-228
5	968.72*	206	31	1.92	1931.39	1914	23	17.5		AC-228
0	1120.11*	154	58	1.93	2233.71	2228	14	27.1		BI-214
0	1238.03*	88	36	0.80	2469.29	2462	17	39.0		BI-214
0	1459.62*	439	27	1.75	2912.21	2905	15	11.1		K-40
0	1601.63	26	3	1.52	3196.22	3189	16	52.4		
0	1629.97	21	20	1.53	3252.91	3244	16	104.4		
0	1762.36*	130	0	1.98	3517.81	3509	15	18.8		BI-214
0	1845.44	18	6	1.61	3684.11	3679	11	70.6		

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	89.92	92	364	0.95	179.29	177	5	8.55E-03	65.5	2.61E+00	
0	92.97	177	660	1.49	185.37	181	8	1.64E-02	54.8	2.71E+00	T
0	186.04	230	704	1.36	370.69	366	12	2.13E-02	49.3	3.21E+00	
3	271.29	48	218	1.36	540.50	531	16	4.44E-03	****	2.56E+00	
0	327.42	52	224	1.32	652.34	649	8	4.85E-03	****	2.20E+00	
0	1601.63	26	3	1.52	3196.22	3189	16	2.37E-03	52.4	6.30E-01	
0	1629.97	21	20	1.53	3252.91	3244	16	1.95E-03	****	6.21E-01	
0	1845.44	18	6	1.61	3684.11	3679	11	1.62E-03	70.6	5.62E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	3.415E+00	4.394E-01	1.846E-01	1.188E-02	18.497
CS-137	2.239E-01	3.841E-02	2.651E-02	3.016E-03	8.446
TL-208	1.893E-01	3.554E-02	2.472E-02	2.574E-03	7.656
BI-212	3.611E-01	1.931E-01	1.933E-01	2.113E-02	1.868
PB-212	6.235E-01	6.436E-02	3.934E-02	3.006E-03	15.848
BI-214	5.989E-01	8.884E-02	5.254E-02	5.594E-03	11.399
PB-214	6.615E-01	8.477E-02	4.266E-02	3.271E-03	15.508
RA-223	1.856E-01	1.075E-01	1.252E-01	1.114E-02	1.482
AC-228	6.270E-01	1.148E-01	8.836E-02	7.678E-03	7.096
NP-237	3.958E-01	1.582E-01	2.095E-01	2.632E-02	1.889
AM-243	1.653E-01	4.781E-02	4.535E-02	9.039E-03	3.644

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	4.786E-03		1.339E-02	2.361E-02	1.373E-03	0.203
RH-101	-9.844E-03		1.502E-02	2.365E-02	3.692E-03	-0.416
SB-125	2.498E-02		4.091E-02	7.177E-02	5.884E-03	0.348
EU-155	5.824E-02		5.155E-02	8.928E-02	8.360E-03	0.652
PO-209	-5.016E-01		2.988E+00	5.145E+00	9.864E-01	-0.098
BI-211	-5.278E-01		4.043E-01	6.272E-01	6.140E-02	-0.841
PA-233	-1.022E-02		2.596E-02	4.392E-02	3.537E-03	-0.233
PA-234M	-2.601E-01		1.490E+00	2.640E+00	2.061E-01	-0.099
TH-234 ✓	6.777E-01 ✓ +		3.774E-01	5.228E-01 ✓	5.229E-02	1.296
U-235	-3.683E-04		9.342E-02	1.528E-01	1.116E-02	-0.002
NP-236	1.141E-02		3.022E-02	5.139E-02	5.108E-03	0.222
NP-239	-1.044E-01		9.295E-02	1.535E-01	2.071E-02	-0.681
AM-241	-2.865E-02		7.770E-02	1.315E-01	8.625E-03	-0.218
CM-243	-9.241E-03		4.736E-02	7.886E-02	8.526E-03	-0.117
AM-246	3.344E-02		4.857E-02	8.997E-02	1.151E-02	0.372
CF-249	-3.797E-03		1.701E-02	2.870E-02	2.750E-03	-0.132

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 5-DEC-2007 00:25:10

Configuration :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795010_GAMMA3_400MLSAN_17401.CNF

---- Sample Information ----

Sample ID : OH207-7950-10 ✓
Sample Title : SB-CZ-SS-2279-ST ✓
Sample Quantity : 4.17400E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17401

---- Sample Decay/Count Information ----

Collection Date : 27-SEP-2007 00:00:00 Acquisition date : 4-DEC-2007 21:24:51.
Decay time : 68 21:24:51.90 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:00.95

---- Detector Parameters ----

Energy cal. time : 30-OCT-2006 16:06:41 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA3 Counting geometry: 400 ml sand
Effic. cal. time : 7-FEB-2007 13:40:24. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$x = \ln(a1/\text{energy})$

a1=9.47750E+02 a2=-4.85663E+00 a3=8.12782E-01 a4=8.53513E-02
a5=-4.88423E-02 a6=-7.49502E-03 a7=0.00000E+00

---- Processing Parameters ----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA3_17240.CNF;1
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

Tom Moore

Date:

12/7/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.34*	204	697	1.21	140.71	135	11	54.6		TH-234
4	74.80*	724	953	1.92	166.11	157	21	20.7	1.89E+00	AM-243
										PB-214
										PB-212
4	77.28*	835	506	1.11	171.60	157	21	12.1		PB-214
										PB-212
4	87.14	395	767	1.70	193.47	181	32	28.3	2.76E+00	NP-237
										PB-214
										PB-212
4	90.07	273	574	1.36	199.95	181	32	34.9		
4	92.81*	392	626	1.69	206.03	181	32	30.5		TH-234
0	105.38	125	368	1.42	233.90	231	8	56.1		EU-155
0	186.01*	317	542	1.46	412.62	405	14	34.4		
0	209.38	105	400	1.26	464.41	460	10	73.9		AC-228
2	238.65*	1412	290	1.48	529.29	521	21	7.1	2.27E+00	PB-212
2	241.81	408	281	1.85	536.29	521	21	23.9		PB-214
0	270.16	133	421	1.76	599.14	592	15	69.4		RA-223
										AC-228
0	295.41*	522	326	1.41	655.10	649	14	17.2		PB-214
0	300.84	72	226	1.00	667.13	662	10	83.2		PB-212
0	338.34*	338	243	1.79	750.25	743	15	23.0		AC-228
0	352.02*	779	341	1.54	780.58	774	16	13.0		PB-214
0	463.20	44	145	1.23	1027.00	1021	10	107.8		AC-228
0	510.60*	125	178	2.33	1132.06	1123	17	58.3		TL-208
0	582.95*	478	99	1.68	1292.41	1282	19	13.8		TL-208
0	609.28*	596	146	1.64	1350.76	1344	17	12.6		BI-214
0	661.56	280	175	1.62	1466.64	1460	16	24.3		CS-137
0	726.75*	131	91	2.41	1611.11	1604	20	39.2		BI-212
0	768.16*	57	80	1.54	1702.90	1696	13	72.1		BI-214
0	786.58	49	69	1.29	1743.73	1737	13	76.0		BI-212
0	860.74	56	65	1.36	1908.09	1899	15	69.4		TL-208
0	911.11*	281	51	1.63	2019.71	2011	19	17.4		AC-228
0	935.50	47	87	0.96	2073.76	2063	22	105.4		BI-214
1	964.33	62	72	2.21	2137.66	2127	43	60.4	1.38E+00	AC-228
1	968.85*	155	52	2.22	2147.67	2127	43	27.9		AC-228
0	1119.98*	145	54	1.98	2482.60	2476	15	27.9		BI-214
0	1237.50	67	52	2.39	2743.04	2733	19	57.3		BI-214
0	1460.75*	419	38	2.05	3237.77	3227	19	12.4		K-40
0	1729.26*	22	14	1.53	3832.76	3824	13	82.3		BI-214
0	1764.02*	124	0	2.23	3909.76	3899	19	18.6		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
4	90.07	273	574	1.36	199.95	181	32	2.53E-02	34.9	3.55E+00	
0	186.01	317	542	1.46	412.62	405	14	2.94E-02	34.4	2.81E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	4.228E+00	5.795E-01	3.006E-01	1.769E-02	14.067
CS-137	1.887E-01	4.783E-02	3.335E-02	2.401E-03	5.657
EU-155	1.032E-01	5.871E-02	8.932E-02	8.399E-03	1.155
TL-208	2.900E-01	4.608E-02	3.101E-02	2.468E-03	9.350
BI-212	6.882E-01	2.743E-01	2.328E-01	1.690E-02	2.956
PB-212	8.134E-01	8.405E-02	4.954E-02	3.703E-03	16.421
BI-214	6.882E-01	1.012E-01	6.327E-02	4.821E-03	10.878
PB-214	6.937E-01	1.057E-01	6.396E-02	5.088E-03	10.847
RA-223	2.641E-01	1.848E-01	1.634E-01	1.447E-02	1.616
AC-228	8.137E-01	1.524E-01	1.172E-01	8.239E-03	6.944
TH-234 ✓	1.225E+00 ✓	3.889E-01	3.533E-01 ✓	3.163E-02	3.467
NP-237	5.376E-01	1.637E-01	1.535E-01	1.711E-02	3.502
AM-243	1.821E-01	5.149E-02	3.059E-02	5.882E-03	5.952

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	4.460E-03		1.769E-02	3.208E-02	1.701E-03	0.139
RH-101	-1.195E-02		1.894E-02	3.112E-02	4.804E-03	-0.384
SB-125	1.727E-02		4.919E-02	8.742E-02	7.227E-03	0.198
PO-209	1.784E+00		3.691E+00	6.796E+00	1.252E+00	0.262
BI-211	-1.324E-01		5.481E-01	9.229E-01	6.646E-02	-0.144
PA-233	-2.995E-02		3.400E-02	5.461E-02	4.456E-03	-0.548
PA-234M	-5.117E-01		2.238E+00	3.877E+00	2.647E-01	-0.132
U-235	7.067E-02		1.111E-01	1.924E-01	1.428E-02	0.367
NP-236	4.670E-02		3.457E-02	5.169E-02	4.933E-03	0.904
NP-239	4.204E-03		1.181E-01	2.002E-01	2.678E-02	0.021
AM-241	1.993E-02		3.885E-02	5.752E-02	3.640E-03	0.346
CM-243	-2.660E-03		5.514E-02	8.279E-02	8.922E-03	-0.032
AM-246	8.720E-02		6.882E-02	1.326E-01	1.674E-02	0.657
CF-249	-7.286E-03		2.132E-02	3.666E-02	3.651E-03	-0.199

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 5-DEC-2007 03:47:35

Configuration :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795011_GAMMA1_400MLSAN_17402.CNF

----- Sample Information -----

Sample ID : OH207-7950-11 ✓
Sample Title : SB-CZ-SS-2280-ST ✓
Sample Quantity : 4.12600E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17402

----- Sample Decay/Count Information -----

Collection Date : 27-SEP-2007 00:00:00 ✓ Acquisition date : 5-DEC-2007 00:47:06.
Decay time : 69 00:47:06.78 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:02.70

----- Detector Parameters -----

Energy cal. time : 23-MAR-2006 15:15:18 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA1 Counting geometry: 400 ml sand
Effic. cal. time : 23-MAR-2006 15:18:11 Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a_2 + a_3 \cdot x + a_4 \cdot x^2 + a_5 \cdot x^3 + a_6 \cdot x^4 + a_7 \cdot x^5)$$

where:

$x = \ln(a_1/\text{energy})$

a1=9.47750E+02 a2=-4.65904E+00 a3=6.59172E-01 a4=3.93115E-02
a5=1.38137E-01 a6=-8.70295E-02 a7=0.00000E+00

----- Processing Parameters -----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA1_17241.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

Pat Moore

Date:

12/7/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
3	74.94*	516	516	0.99	149.28	142	15	16.6	1.99E+00	AM-243 PB-214 PB-212
3	77.17*	780	453	1.02	153.75	142	15	11.6		PB-214 PB-212
0	84.05*	129	491	1.30	167.54	165	6	57.8		
0	87.07	271	664	1.28	173.59	171	7	33.7		NP-237 PB-214 PB-212
6	90.04	187	364	1.03	179.52	177	12	31.7	2.96E+00	
6	92.88*	265	708	1.33	185.21	177	12	38.1		
0	186.02*	338	775	1.30	371.73	366	12	35.1		
0	209.24	183	450	1.11	418.21	414	8	42.7		AC-228
4	238.59*	1913	311	1.08	476.98	470	21	5.6	2.18E+00	PB-212
4	241.70*	522	434	1.71	483.22	470	21	19.6		PB-214
0	270.39	254	424	1.47	540.65	534	13	35.9		RA-223 AC-228
0	277.91	72	408	1.18	555.72	549	11	11.0		TL-208
0	295.25*	640	421	1.21	590.44	585	11	14.8		PB-214
0	328.05	86	330	1.43	656.12	652	11	84.6		
0	338.08	450	405	1.13	676.19	670	13	20.7		AC-228
0	351.75*	1148	284	1.18	703.57	699	10	8.1		PB-214
0	409.08	69	145	1.22	818.35	815	7	63.1		AC-228
0	463.13	132	203	1.62	926.58	921	12	46.6		AC-228
0	510.44*	210	294	1.89	1021.29	1013	19	44.0		TL-208
0	582.89*	665	213	1.62	1166.35	1158	17	12.8		TL-208
0	609.11*	928	140	1.49	1218.85	1213	12	8.5		BI-214
0	661.40	649	160	1.42	1323.53	1318	14	11.3		CS-137
0	727.01	176	69	1.63	1454.90	1450	11	23.7		BI-212
0	767.45	75	129	1.68	1535.84	1530	12	65.1		BI-214
0	794.97	85	88	1.59	1590.95	1585	12	49.4		AC-228
0	860.56	106	86	1.46	1722.26	1716	14	41.6		TL-208
0	910.93*	451	78	1.73	1823.08	1817	15	12.3		AC-228
0	933.67	66	75	1.33	1868.61	1861	13	59.1		BI-214
1	964.17	88	58	1.87	1929.66	1920	32	38.0	2.21E+00	AC-228
1	968.66*	275	54	1.87	1938.66	1920	32	16.2		AC-228
0	1120.03*	222	68	1.71	2241.67	2236	15	21.3		BI-214
0	1237.87	93	52	1.53	2477.56	2472	12	37.8		BI-214
0	1377.35*	41	33	1.39	2756.74	2750	12	65.2		BI-214
0	1460.20*	855	39	1.98	2922.57	2915	16	7.7		K-40
0	1495.53	23	20	0.86	2993.27	2986	12	90.9		
0	1763.77*	172	4	1.78	3530.14	3522	18	17.0		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	84.05	129	491	1.30	167.54	165	6	1.19E-02	57.8	2.10E+00	
6	90.04	187	364	1.03	179.52	177	12	1.73E-02	31.7	2.33E+00	
6	92.88	265	708	1.33	185.21	177	12	2.45E-02	38.1	2.43E+00	T
0	186.02	338	775	1.30	371.73	366	12	3.13E-02	35.1	3.03E+00	
0	328.05	86	330	1.43	656.12	652	11	7.96E-03	84.6	2.11E+00	
0	1495.53	23	20	0.86	2993.27	2986	12	2.10E-03	90.9	6.95E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	6.875E+00	7.064E-01	2.432E-01	1.660E-02	28.262
CS-137	3.832E-01	5.978E-02	2.944E-02	3.164E-03	13.014
TL-208	3.586E-01	5.830E-02	2.962E-02	2.973E-03	12.104
BI-212	7.957E-01	2.038E-01	2.026E-01	1.949E-02	3.927
PB-212	1.008E+00	9.603E-02	4.723E-02	3.645E-03	21.343
BI-214	9.471E-01	1.254E-01	5.407E-02	5.507E-03	17.517
PB-214	9.303E-01	1.054E-01	5.866E-02	4.628E-03	15.860
RA-223	4.595E-01	1.701E-01	1.470E-01	1.353E-02	3.126
AC-228	1.089E+00	1.470E-01	1.001E-01	5.530E-03	10.887
NP-237	6.036E-01	2.216E-01	2.391E-01	3.458E-02	2.524
AM-243	2.746E-01	7.352E-02	5.584E-02	1.171E-02	4.918

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	3.301E-03		1.671E-02	2.633E-02	1.718E-03	0.125
RH-101	4.737E-03		1.860E-02	3.083E-02	4.781E-03	0.154
SB-125	1.845E-02		4.873E-02	8.486E-02	6.960E-03	0.217
EU-155	4.102E-02		6.538E-02	1.127E-01	1.119E-02	0.364
PO-209	-1.753E-01		3.159E+00	5.526E+00	9.890E-01	-0.032
BI-211	-6.931E-01		4.909E-01	7.696E-01	5.607E-02	-0.901
PA-233	-2.014E-02		3.110E-02	5.243E-02	4.403E-03	-0.384
PA-234M	2.211E+00		1.963E+00	3.729E+00	2.143E-01	0.593
TH-234✓	1.228E+00	✓ +	4.894E-01	6.447E-01 ✓	7.521E-02	1.905
U-235	1.179E-01		1.139E-01	1.943E-01	1.357E-02	0.607
NP-236	-1.617E-02		3.760E-02	6.262E-02	6.879E-03	-0.258
NP-239	7.392E-02		1.121E-01	1.875E-01	2.529E-02	0.394
AM-241	3.190E-03		1.042E-01	1.812E-01	1.440E-02	0.018
CM-243	-4.641E-02		5.835E-02	9.601E-02	1.094E-02	-0.483
AM-246	-1.142E-02		5.965E-02	1.017E-01	1.252E-02	-0.112
CF-249	1.529E-02		1.996E-02	3.544E-02	3.418E-03	0.431

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 5-DEC-2007 03:48:59

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795012_GAMMA2_400MLSAN_17403.CNF

----- Sample Information -----

Sample ID : OH207-7950-12 ✓
Sample Title : SB-CZ-SS-2281-ST ✓
Sample Quantity : 3.77900E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17403

----- Sample Decay/Count Information -----

Collection Date : 27-SEP-2007 00:00:00 ✓ Acquisition date : 5-DEC-2007 00:48:43.
Decay time : 69 00:48:43.76 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:01.64

----- Detector Parameters -----

Energy cal. time : 1-MAY-2007 11:12:10. Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA2 Counting geometry: 400 ml sand
Effic. cal. time : 1-MAY-2007 11:13:44. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$x = \ln(a1/\text{energy})$

a1=9.47750E+02 a2=-4.68491E+00 a3=7.34327E-01 a4=7.12916E-02
a5=8.21331E-02 a6=-7.02143E-02 a7=0.00000E+00

----- Processing Parameters -----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA2_17242.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

Tim Moore

Date:

12/7/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	62.92*	175	809	0.89	125.54	121	9	61.4		TH-234
3	74.77*	574	737	1.00	149.13	144	18	17.2	1.97E+00	AM-243 PB-214 PB-212
3	77.06*	927	705	0.95	153.68	144	18	11.4		PB-214 PB-212
6	84.42*	244	623	1.58	168.33	165	28	36.5	1.98E+00	
6	87.12	510	698	1.37	173.71	165	28	20.2		NP-237 PB-214 PB-212
6	89.90	341	598	1.11	179.25	165	28	26.5		
6	92.71*	488	753	1.54	184.84	165	28	23.7		TH-234
0	129.20	100	733	0.96	257.49	254	8	95.7		AC-228
0	186.01*	363	763	1.37	370.64	366	10	31.2		
0	209.28	205	502	0.84	416.99	413	8	40.3		AC-228
3	238.73*	2235	405	1.15	475.63	469	17	5.2	5.56E-01	PB-212
3	241.81*	499	433	1.53	481.78	469	17	20.0		PB-214
0	270.18	246	411	1.81	538.30	533	11	34.3		RA-223 AC-228
0	295.33*	847	433	1.21	588.41	581	13	12.3		PB-214
0	300.03	150	330	1.15	597.77	594	9	46.3		PB-212
0	328.07	129	272	0.87	653.63	650	8	47.7		
0	338.39*	438	351	1.17	674.19	669	11	19.2		AC-228
0	352.07*	1342	385	1.24	701.46	694	14	8.4		PB-214
0	409.29	69	327	1.51	815.49	810	13	110.1		AC-228
0	463.11	146	152	1.47	922.75	919	9	34.8		AC-228
0	511.06*	301	231	1.73	1018.34	1011	17	27.9		TL-208
0	583.47*	695	151	1.53	1162.71	1158	9	10.1		TL-208
0	609.50*	1093	175	1.47	1214.63	1207	15	8.1		BI-214
0	661.76	72	131	1.21	1318.84	1314	11	64.3		CS-137
0	727.40	209	125	1.65	1449.80	1443	16	27.9		BI-212
0	768.30*	87	93	1.51	1531.38	1527	9	45.8		BI-214
0	795.08*	95	115	2.08	1584.82	1578	18	56.2		AC-228
0	860.65*	96	73	2.19	1715.67	1709	13	42.9		TL-208
0	910.97*	509	71	1.78	1816.11	1808	15	11.6		AC-228
0	934.37	46	84	1.72	1862.82	1858	11	81.8		BI-214
4	964.65	75	67	1.84	1923.27	1919	19	43.6	1.26E+00	AC-228
4	968.78*	283	63	1.78	1931.51	1919	19	16.6		AC-228
0	1120.04*	214	56	2.23	2233.57	2228	12	20.0		BI-214
0	1237.99*	69	64	2.04	2469.20	2464	10	50.8		BI-214
0	1459.67*	869	47	1.85	2912.30	2903	19	7.9		K-40
0	1762.58*	152	24	2.03	3518.25	3512	12	21.5		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
6	84.42	244	623	1.58	168.33	165	28	2.26E-02	36.5	2.39E+00	
6	89.90	341	598	1.11	179.25	165	28	3.16E-02	26.5	2.61E+00	
0	186.01	363	763	1.37	370.64	366	10	3.36E-02	31.2	3.21E+00	
0	328.07	129	272	0.87	653.63	650	8	1.19E-02	47.7	2.20E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	7.995E+00	8.145E-01	2.664E-01	1.715E-02	30.007
CS-137	4.623E-02	3.020E-02	3.622E-02	4.120E-03	1.276
TL-208	4.040E-01	5.857E-02	3.559E-02	3.706E-03	11.352
BI-212	1.037E+00	3.107E-01	2.312E-01	2.528E-02	4.486
PB-212	1.220E+00	1.130E-01	5.238E-02	4.002E-03	23.298
BI-214	1.207E+00	1.618E-01	6.220E-02	6.623E-03	19.402
PB-214	1.139E+00	1.294E-01	6.134E-02	4.703E-03	18.567
RA-223	4.634E-01	1.641E-01	1.652E-01	1.470E-02	2.805
AC-228	1.374E+00	1.988E-01	1.076E-01	9.352E-03	12.763
TH-234✓	2.216E+00✓	5.696E-01	5.261E-01✓	5.262E-02	4.213
NP-237	1.099E+00	2.610E-01	2.486E-01	3.124E-02	4.421
AM-243	2.863E-01	7.529E-02	6.085E-02	1.213E-02	4.706

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	4.720E-03		1.962E-02	3.232E-02	1.880E-03	0.146
RH-101	-1.051E-02		2.049E-02	3.248E-02	5.071E-03	-0.324
SB-125	7.081E-02		5.195E-02	9.352E-02	7.668E-03	0.757
EU-155	5.707E-02		7.184E-02	1.224E-01	1.146E-02	0.466
PO-209	-8.981E-01		3.831E+00	6.533E+00	1.253E+00	-0.137
BI-211	-3.793E-01		5.693E-01	9.424E-01	9.225E-02	-0.402
PA-233	4.273E-03		3.385E-02	5.845E-02	4.708E-03	0.073
PA-234M	8.404E-01		2.247E+00	4.054E+00	3.165E-01	0.207
U-235	-4.710E-02		1.298E-01	2.097E-01	1.531E-02	-0.225
NP-236	5.201E-02		4.563E-02	7.088E-02	7.046E-03	0.734
NP-239	-1.267E-01		1.237E-01	2.056E-01	2.775E-02	-0.616
AM-241	8.367E-02		1.158E-01	1.821E-01	1.195E-02	0.459
CM-243	9.979E-03		6.446E-02	1.082E-01	1.170E-02	0.092
AM-246	7.763E-03		6.883E-02	1.196E-01	1.530E-02	0.065
CF-249	2.046E-02		2.206E-02	3.898E-02	3.734E-03	0.525

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 5-DEC-2007 03:50:22

Configuration :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795013_GAMMA3_400MLSAN_17404.CNF

----- Sample Information -----

Sample ID : OH207-7950-13 ✓
Sample Title : SB-CZ-SS-2282-ST ✓
Sample Quantity : 4.16300E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17404

----- Sample Decay/Count Information -----

Collection Date : 27-SEP-2007 00:00:00 ✓ Acquisition date : 5-DEC-2007 00:50:03.
Decay time : 69 00:50:03.93 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:01.16

----- Detector Parameters -----

Energy cal. time : 30-OCT-2006 16:06:41 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA3 Counting geometry: 400 ml sand
Effic. cal. time : 7-FEB-2007 13:40:24. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a_2 + a_3 \cdot x + a_4 \cdot x^{**2} + a_5 \cdot x^{**3} + a_6 \cdot x^{**4} + a_7 \cdot x^{**5})$$

where:

$x = \ln(a_1/\text{energy})$

a1=9.47750E+02 a2=-4.85663E+00 a3=8.12782E-01 a4=8.53513E-02
a5=-4.88423E-02 a6=-7.49502E-03 a7=0.00000E+00

----- Processing Parameters -----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA3_17240.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

T M Moore

Date:

12/7/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.34*	156	872	1.43	140.72	136	9	73.7		TH-234
1	74.88*	950	1063	1.44	166.29	158	18	15.2	3.21E+00	AM-243
										PB-214
										PB-212
1	77.08*	1531	944	1.35	171.17	158	18	9.3		PB-214
										PB-212
3	87.24	569	919	1.45	193.69	182	31	21.5	2.63E+00	NP-237
										PB-214
										PB-212
3	89.81	346	941	1.58	199.39	182	31	38.2		
3	92.78*	637	930	1.79	205.97	182	31	22.8		TH-234
0	129.14	153	671	1.88	286.56	283	9	63.3		AC-228
0	185.70*	441	807	1.50	411.93	405	15	30.3		
0	208.99	241	423	1.55	463.56	459	9	33.4		AC-228
1	238.66*	2300	460	1.45	529.31	520	23	5.5	7.19E-01	PB-212
1	241.68	549	446	1.68	536.01	520	23	21.2		PB-214
0	270.13	202	424	1.41	599.08	594	13	44.3		RA-223
										AC-228
0	295.25*	746	374	1.60	654.76	648	13	13.0		PB-214
0	300.19	173	297	1.44	665.70	661	11	41.7		PB-212
0	328.10	153	305	1.63	727.56	722	12	48.2		
0	338.33*	411	472	1.26	750.24	742	15	25.2		AC-228
0	351.95*	1342	365	1.52	780.42	772	17	8.6		PB-214
0	463.18	105	216	1.36	1026.95	1020	12	59.3		AC-228
0	510.66*	257	182	2.04	1132.19	1126	13	28.0		TL-208
0	582.98*	669	169	1.67	1292.47	1286	13	11.3		TL-208
0	609.11*	958	149	1.68	1350.39	1341	18	8.9		BI-214
0	661.29	187	157	1.99	1466.05	1460	13	31.2		CS-137
0	727.24*	134	95	1.65	1612.20	1607	13	35.3		BI-212
0	785.78	50	78	1.56	1741.95	1737	11	73.2		BI-212
0	795.54	54	127	1.26	1763.59	1759	14	95.9		AC-228
0	860.20	79	83	1.17	1906.88	1899	14	54.2		TL-208
0	911.05*	455	112	1.95	2019.57	2012	18	14.5		AC-228
0	934.18	63	57	1.42	2070.83	2065	12	54.4		BI-214
2	964.64	72	63	1.69	2138.36	2134	24	44.5	1.90E+00	AC-228
2	968.95*	306	74	2.05	2147.90	2134	24	17.0		AC-228
0	1120.09*	222	92	2.24	2482.84	2475	20	24.7		BI-214
0	1460.56*	797	28	2.10	3237.35	3227	22	8.0		K-40
3	1587.82	43	10	2.37	3519.33	3514	27	40.7	1.08E+00	AC-228
3	1592.89	37	20	3.05	3530.58	3514	27	73.6		
0	1729.07*	40	8	2.19	3832.33	3824	15	44.9		BI-214
0	1764.44*	129	22	2.38	3910.69	3901	17	24.6		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
3	89.81	346	941	1.58	199.39	182	31	3.20E-02	38.2	3.55E+00	
0	185.70	441	807	1.50	411.93	405	15	4.08E-02	30.3	2.82E+00	
0	328.10	153	305	1.63	727.56	722	12	1.42E-02	48.2	1.89E+00	
3	1592.89	37	20	3.05	3530.58	3514	27	3.38E-03	73.6	5.25E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	8.056E+00	7.990E-01	2.743E-01	1.614E-02	29.365
CS-137	1.262E-01	4.044E-02	4.151E-02	2.988E-03	3.041
TL-208	4.064E-01	5.605E-02	3.876E-02	3.085E-03	10.484
BI-212	7.040E-01	2.539E-01	2.868E-01	2.081E-02	2.455
PB-212	1.329E+00	1.234E-01	5.696E-02	4.257E-03	23.336
BI-214	1.108E+00	1.297E-01	6.392E-02	4.870E-03	17.340
PB-214	1.198E+00	1.401E-01	6.765E-02	5.382E-03	17.706
RA-223	4.023E-01	1.816E-01	1.841E-01	1.630E-02	2.185
AC-228	1.321E+00	2.128E-01	1.453E-01	1.022E-02	9.092
TH-234✓	1.994E+00✓	4.885E-01	4.224E-01✓	3.781E-02	4.721
NP-237	7.764E-01	1.880E-01	1.835E-01	2.046E-02	4.231
AM-243	2.395E-01	5.877E-02	3.763E-02	7.236E-03	6.366

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	3.710E-03		2.483E-02	3.924E-02	2.081E-03	0.095
RH-101	-6.712E-03		2.187E-02	3.643E-02	5.623E-03	-0.184
SB-125	-2.982E-02		5.943E-02	1.008E-01	8.331E-03	-0.296
EU-155	3.489E-02		6.295E-02	1.095E-01	1.030E-02	0.319
PO-209	1.321E+00		4.249E+00	7.658E+00	1.411E+00	0.172
BI-211	-1.697E-01		6.793E-01	1.134E+00	8.167E-02	-0.150
PA-233	-1.088E-02		3.882E-02	6.422E-02	5.241E-03	-0.169
PA-234M	2.054E+00		2.770E+00	5.055E+00	3.451E-01	0.406
U-235	5.949E-02		1.296E-01	2.225E-01	1.652E-02	0.267
NP-236	3.872E-02		4.154E-02	6.067E-02	5.790E-03	0.638
NP-239	-9.963E-02		1.442E-01	2.365E-01	3.164E-02	-0.421
AM-241	8.008E-02		4.533E-02	6.933E-02	4.388E-03	1.155
CM-243	-4.873E-04		5.694E-02	9.792E-02	1.055E-02	-0.005
AM-246	3.720E-02		7.582E-02	1.381E-01	1.743E-02	0.269
CF-249	6.831E-04		2.454E-02	4.272E-02	4.255E-03	0.016

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 5-DEC-2007 12:13:27

Configuration :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795014_GAMMA1_400MLSAN_17405.CNF

---- Sample Information ----

Sample ID : OH207-7950-14 ✓
Sample Title : SB-CZ-SS-2283-ST ✓
Sample Quantity : 4.52100E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17405

---- Sample Decay/Count Information ----

Collection Date : 27-SEP-2007 00:00:00 Acquisition date : 5-DEC-2007 09:13:02.
Decay time : 69 09:13:02.91 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:02.78

---- Detector Parameters ----

Energy cal. time : 23-MAR-2006 15:15:18 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA1 Counting geometry: 400 ml sand
Effic. cal. time : 23-MAR-2006 15:18:11 Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$x = \ln(a1/\text{energy})$

a1=9.47750E+02 a2=-4.65904E+00 a3=6.59172E-01 a4=3.93115E-02
a5=1.38137E-01 a6=-8.70295E-02 a7=0.00000E+00

---- Processing Parameters ----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA1_17241.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

Tim Moore

Date:

12/7/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
2	74.87*	463	604	1.06	149.16	143	15	19.4	9.09E-01	AM-243 PB-214 PB-212
2	77.15*	726	590	1.08	153.72	143	15	13.5		PB-214 PB-212
4	87.38	369	718	1.40	174.19	164	28	27.0	2.18E+00	NP-237 PB-214 PB-212
4	90.09	225	607	1.10	179.62	164	28	38.9		
4	92.90*	369	667	1.40	185.26	164	28	28.1		
0	129.23	101	576	0.85	258.01	255	7	81.3		AC-228
0	185.96*	349	642	1.22	371.60	367	10	29.8		
0	209.34	206	609	1.14	418.41	414	10	46.9		AC-228
0	238.60*	1858	665	1.19	477.00	473	8	6.7		PB-212
0	241.72*	410	416	1.69	483.25	481	7	20.0		PB-214
0	270.37	204	511	1.40	540.61	535	12	46.4		RA-223 AC-228
0	277.03	98	402	0.95	553.94	549	10	79.2		TL-208
0	295.10*	770	349	1.15	590.13	584	11	11.9		PB-214
0	300.35*	179	362	1.11	600.65	596	12	45.6		PB-212
1	327.98	119	223	1.38	655.97	649	20	47.8	2.37E+00	
1	332.36	81	206	1.38	664.75	649	20	67.4		
0	337.93	485	369	1.16	675.88	669	13	18.7		AC-228
0	351.79*	1247	316	1.34	703.65	697	14	8.4		PB-214
0	462.83	146	234	1.35	925.97	921	13	46.0		AC-228
0	510.70*	226	267	1.76	1021.82	1015	15	37.0		TL-208
0	582.97*	717	159	1.31	1166.52	1161	12	10.4		TL-208
0	609.09*	970	171	1.28	1218.81	1213	13	8.6		BI-214
0	661.38	196	166	1.12	1323.50	1318	12	29.9		CS-137
0	726.93	186	84	1.66	1454.73	1449	12	24.6		BI-212
0	768.00	103	143	1.75	1536.95	1530	14	53.2		BI-214
0	795.49	97	116	1.34	1591.99	1585	15	52.5		AC-228
0	860.90	62	74	0.90	1722.94	1717	11	60.6		TL-208
0	910.84*	488	108	1.48	1822.90	1816	15	13.0		AC-228
1	964.17	106	94	1.87	1929.66	1923	24	39.0	1.57E+00	AC-228
1	968.69*	298	73	1.67	1938.71	1923	24	16.1		AC-228
0	1119.98*	183	87	1.40	2241.56	2235	13	26.1		BI-214
0	1237.69	93	85	1.27	2477.19	2470	14	45.7		BI-214
0	1376.96*	79	47	1.59	2755.96	2748	17	46.1		BI-214
0	1460.14*	963	45	2.03	2922.46	2915	18	7.3		K-40
0	1660.65	17	11	1.35	3323.77	3316	11	91.1		
0	1729.17	47	38	2.18	3460.90	3453	20	68.1		BI-214
0	1763.54*	197	0	2.12	3529.68	3519	21	14.9		BI-214
0	1846.64	36	7	2.04	3695.99	3690	14	45.6		

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
4	90.09	225	607	1.10	179.62	164	28	2.09E-02	38.9	2.33E+00	
4	92.90	369	667	1.40	185.26	164	28	3.42E-02	28.1	2.43E+00	T
0	185.96	349	642	1.22	371.60	367	10	3.24E-02	29.8	3.03E+00	
1	327.98	119	223	1.38	655.97	649	20	1.11E-02	47.8	2.11E+00	
1	332.36	81	206	1.38	664.75	649	20	7.48E-03	67.4	2.08E+00	
0	1660.65	17	11	1.35	3323.77	3316	11	1.55E-03	91.1	6.41E-01	
0	1846.64	36	7	2.04	3695.99	3690	14	3.33E-03	45.6	5.86E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	7.066E+00	7.061E-01	2.220E-01	1.515E-02	31.832
CS-137	1.054E-01	3.351E-02	2.974E-02	3.196E-03	3.542
TL-208	3.526E-01	5.090E-02	2.813E-02	2.823E-03	12.535
BI-212	7.696E-01	2.030E-01	1.849E-01	1.779E-02	4.162
PB-212	8.939E-01	9.154E-02	5.816E-02	4.488E-03	15.370
BI-214	9.040E-01	1.205E-01	5.258E-02	5.355E-03	17.194
PB-214	9.223E-01	1.061E-01	5.219E-02	4.118E-03	17.671
RA-223	3.372E-01	1.596E-01	1.331E-01	1.225E-02	2.534
AC-228	1.076E+00	1.520E-01	9.845E-02	5.441E-03	10.926
NP-237	7.500E-01	2.300E-01	2.218E-01	3.208E-02	3.381
AM-243	2.251E-01	6.428E-02	5.407E-02	1.134E-02	4.164

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	1.311E-02		1.732E-02	2.490E-02	1.625E-03	0.526
RH-101	8.989E-04		1.691E-02	2.787E-02	4.323E-03	0.032
SB-125	-2.705E-02		4.344E-02	7.187E-02	5.894E-03	-0.376
EU-155	4.335E-02		6.170E-02	1.064E-01	1.056E-02	0.408
PO-209	-2.770E-01		3.010E+00	5.238E+00	9.374E-01	-0.053
BI-211	-4.140E-01		4.600E-01	7.543E-01	5.496E-02	-0.549
PA-233	4.269E-03		2.819E-02	4.925E-02	4.135E-03	0.087
PA-234M	-1.571E-01		1.734E+00	3.034E+00	1.744E-01	-0.052
TH-234 ✓	1.561E+00 ✓	+	4.747E-01	6.265E-01 ✓	7.310E-02	2.492
U-235	-8.630E-02		1.083E-01	1.746E-01	1.219E-02	-0.494
NP-236	4.899E-02		4.012E-02	6.328E-02	6.951E-03	0.774
NP-239	3.099E-02		1.079E-01	1.779E-01	2.400E-02	0.174
AM-241	1.462E-02		9.805E-02	1.709E-01	1.358E-02	0.086
CM-243	-3.501E-02		5.560E-02	9.212E-02	1.050E-02	-0.380
AM-246	-1.317E-02		5.337E-02	9.066E-02	1.116E-02	-0.145
CF-249	1.050E-02		1.793E-02	3.164E-02	3.052E-03	0.332

BENCH SHEET

Method: Gamma Spec (DOE 4.5.2.3)	Project Name: Cabrera Services-Oahu, HI
Analysis Type: Gamma (DOE 21 day ing)	Project Location:
Matrix: Soil	Project Number: FOAH2/L
Date Received: 10/1/2007	Client Project Manager: Greg Miller
SC&A Project Manager:	
S7950 7953	

Prefix	Batch and Sample Number	Client ID	Collection Date	Date Submitted to Counting Room
SCAQC	7951-PB ✓		10/1/2007 9:15:00 AM	
SCAQC	7951-LD1 ✓ OH207-7951-01	SB-CZ-SS-2270-SD	9/27/2007	
SCAQC	7951-LC1 ✓		10/1/2007 9:15:00 AM	

Prefix	Batch and Sample Number	Client ID	Collection Date	Date Submitted to Counting Room
OH207	7951-01 ✓	SB-CZ-SS-2270-SD	9/27/2007	
OH207	7951-02 ✓	SB-CZ-SS-2271-SD	9/27/2007	
OH207	7951-03 ✓	SB-CZ-SS-2272-SD	9/27/2007	
OH207	7951-04 ✓	SB-CZ-SS-2273-SD	9/27/2007	
OH207	7951-05 ✓	SB-CZ-SS-2274-SD	9/27/2007	
OH207	7951-06 ✓	SB-CZ-SS-2275-SD	9/27/2007	
OH207	7951-07 ✓	SB-CZ-SS-2276-SD	9/27/2007	
OH207	7951-08 ✓	SB-CZ-SS-2277-SD	9/27/2007	
OH207	7951-09 ✓	SB-CZ-SS-2278-SD	9/27/2007	
OH207	7951-10 ✓	SB-CZ-SS-2279-SD	9/27/2007	
OH207	7951-11 ✓	SB-CZ-SS-2280-SD	9/27/2007	
OH207	7951-12 ✓	SB-CZ-SS-2281-SD	9/27/2007	
OH207	7951-13 ✓	SB-CZ-SS-2282-SD	9/27/2007	
OH207	7951-14 ✓	SB-CZ-SS-2283-SD	9/27/2007	

Radiochemistry Reviewer

Date

QA Reviewer

Date

SC&A - Southeastern Environmental Laboratory
SCA-Form 301-S Rev. 0

Gamma Spectrometry Run Log

Count Date/Time	Length of Count	Prefix	Batch No.	Sample No.	RIN No.	Collection Date	Field I.D.	Sample Type	Sample Size (w/units)	Geometry
12-5-07 00:47 G1 NW	180	04207	7950	11	-	9/27/07	SB-CZ-SS- 2280-ST	SOIL	412.6 gdy	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 200 mL Sand ☐
12-5-07 00:48 G2 NW				12	-		2281-ST		377.9 gdy	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 200 mL Sand ☐
12-5-07 00:50 G3 NW				13	-		2282-ST		416.3 gdy	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 200 mL Sand ☐
12-5-07 09:13 G1 NW				14	-		2283-ST		452.1 gdy	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 200 mL Sand ☐
12-5-07 09:14 G2 LC	180	SCAQA	7951	PB1	-	10/1/07 0915	PREP BUC	LIQUID	400g	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 200 mL Sand ☐
12-5-07 13:52 G1 LC	60			LC1	-		CIAL SAMP S-142	SOIL	640g	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 200 mL Sand ☐
12-5-07 09:15 G3 LC	180			LD1	-	9/27/07	DOP 7951-01		429.5 gdy	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 200 mL Sand ☐
12-5-07 12:33 G2 LC		04207		01	-		SB-CZ-SS- 2270-SD		429.5 gdy	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 200 mL Sand ☐
12-5-07 02:34 G3 LC				02	-		2271-SD		472.8 gdy	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 200 mL Sand ☐
12-5-07 15:36 G3 LC				03	-		2272-SD		508.8 gdy	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 200 mL Sand ☐

G1
 G2
 G3

01 - 62
 02 - 63

Gamma Spectrometry Run Log

Count Date/Time Detector No.	Length of Count	Prefix	Batch No.	Sample No.	RIN No.	Collection Date	Field I.D.	Sample Type	Sample Size (w/units)	Geometry
12-5-07 1537 G2 16m	180	0H207	7951	04	-	9/27/07	SB-C2-SS- 2273-SD	SD 1L	497.9 gdw	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-5-07 1539 G3 16m				05	-		2274-SD	/	521.1 gdw 347.8 gdw	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-5-07 1837 G1 1L				06	-		2275-SD	/	317.8 gdw	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-5-07 1838 G2 1L				07	-		2276-SD	/	509.9 gdw	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-6-07 0933 G1 1L				08	-		2277-SD	/	452.7 gdw	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-6-07 0934 G3 1L				09	-		2278-SD	/	533.4 gdw	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-6-07 1234 G4 1L				10	-		2279-SD	/	504.0 gdw	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-6-07 1235 G2 2				11	-		2280-SD	/	421.5 gdw	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-6-07 1237 G3 1L				12	-		2281-SD	/	458.7 gdw	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-6-07 1535 G1 1L				13	-		2282-SD	/	421.1 gdw	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐

Gamma1 = G1
Gamma2 = G2

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SCA-Form 012 Rev. 1

Gamma Spectrometry Run Log

Count Date/Time Detector No.	Length of Count	Prefix	Batch No.	Sample No.	RIN No.	Collection Date	Field I.D.	Sample Type	Sample Size (w/units)	Geometry
12-6-07 1536 62 14	180	0H207	7951	14	-	9/27/07	SB-CZ-SS- 2283-S0	SOIL	500.3 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-5-07 1840 63 K	500	SCAGC	8107	PB1	-	11-27-07 0830	Prep BLK	LIQUID	1 Liter	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-6-07 0852 62 K	60			LC1	-		CTRL samp S-146			400 mL Liquid ☐ 1 Liter Liquid ☒ 10 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-6-07 1847 63 48 JD	500			LD1	-	11-26-07 1430	DUP 8107-01			400 mL Liquid ☐ 1 Liter Liquid ☒ 10 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-7-07 1852 63 1C	500	VWU07		01	-		#07-08		V	400 mL Liquid ☐ 1 Liter Liquid ☒ 10 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-6-07 1819 63 1C	180	SCAGC	7952	PB1	-	10-1-07	Prep BLK	LIQUID	400g	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-6-07 0957 62 28	60			LC1	-		Ctrl Samp S-142	Soil	640g	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-6-07 1839 61 JD	180			LD1	-	9-27-07	DUP 7952-01		424.7 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-6-07 62 JD		0H207		01	-		SB-CZ-SS- 2284-ST		113.0 gdry 424.7 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-6-07 1843 62 JD				02	-		2285-ST		452.0 gdry 424.7 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐

Gamma1 = G1
Gamma2 = G2

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 5-DEC-2007 12:14:39

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_SCAQC7951PB1_GAMMA2_400MLSA_17406.CNF

----- Sample Information -----
Sample ID : SCAQC-7951-PB1 ✓
Sample Title : PREP BLK ✓
Sample Quantity : 4.00000E+02 G ✓
Sample Type : LIQUID
Sample Geometry : 400 ml sand
Sample Seq No. : 17406

----- Sample Decay/Count Information -----
Collection Date : 1-OCT-2007 09:15:00. Acquisition date : 5-DEC-2007 09:14:21.
Decay time : 64 23:59:21.93 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:00.60

----- Detector Parameters -----
Energy cal. time : 1-MAY-2007 11:12:10. Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA2 Counting geometry: 400 ml sand
Effic. cal. time : 1-MAY-2007 11:13:44. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$$x = \ln(a1/\text{energy})$$

a1=9.47750E+02 a2=-4.68491E+00 a3=7.34327E-01 a4=7.12916E-02
a5=8.21331E-02 a6=-7.02143E-02 a7=0.00000E+00

----- Processing Parameters -----
Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA2_17242.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

T. M. Moore

Date:

12/7/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw %Err	Fit	Nuclides
0	63.10*	52	156	1.15	125.90	121	8 94.1		
0	511.21*	45	73	3.08	1018.65	1011	17113.5		
0	837.70	18	14	2.17	1669.87	1664	10 95.1		
0	1119.28*	15	3	1.82	2232.05	2226	11 86.6		

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	63.10	52	156	1.15	125.90	121	8	4.85E-03	94.1	1.33E+00	T
0	511.21	45	73	3.08	1018.65	1011	17	4.19E-03	****	1.51E+00	T
0	837.70	18	14	2.17	1669.87	1664	10	1.62E-03	95.1	1.01E+00	
0	1119.28	15	3	1.82	2232.05	2226	11	1.39E-03	86.6	8.18E-01	T

Flags: "T" = Tentatively associated

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	-4.542E-02		1.194E-01	2.521E-01	1.623E-02	-0.180
CO-60	-3.030E-04		9.384E-03	1.751E-02	1.018E-03	-0.017
RH-101	-3.213E-03		1.156E-02	1.870E-02	2.919E-03	-0.172
SB-125	-1.994E-02		2.825E-02	4.614E-02	3.783E-03	-0.432
CS-137	-3.167E-03		9.979E-03	1.768E-02	2.011E-03	-0.179
EU-155	2.156E-04		3.369E-02	5.761E-02	5.394E-03	0.004
TL-208	-4.439E-03		1.230E-02	2.237E-02	2.329E-03	-0.198
PO-209	1.690E-01		1.939E+00	3.582E+00	6.867E-01	0.047
BI-211	-2.164E-02		2.579E-01	4.098E-01	4.011E-02	-0.053
BI-212	2.598E-02		7.077E-02	1.354E-01	1.481E-02	0.192
PB-212	3.203E-03		1.830E-02	3.262E-02	2.493E-03	0.098
BI-214	1.934E-03		2.680E-02	5.020E-02	5.345E-03	0.039
PB-214	-1.316E-02		2.556E-02	4.267E-02	3.272E-03	-0.308
RA-223	-1.169E-02		4.713E-02	8.219E-02	7.312E-03	-0.142
AC-228	3.173E-02		4.190E-02	8.118E-02	7.054E-03	0.391
PA-233	8.727E-03		1.877E-02	3.404E-02	2.742E-03	0.256
PA-234M	-5.586E-01		1.151E+00	2.061E+00	1.609E-01	-0.271
TH-234 ✓	-3.927E-02 ✓		1.862E-01	3.325E-01 ✓	3.326E-02	-0.118
U-235	-3.336E-02		6.567E-02	1.045E-01	7.630E-03	-0.319
NP-236	1.380E-02		1.911E-02	3.406E-02	3.385E-03	0.405
NP-237	-1.110E-03		7.134E-02	1.226E-01	1.541E-02	-0.009
NP-239	-4.865E-03		6.646E-02	1.171E-01	1.580E-02	-0.042
AM-241	-2.038E-02		5.296E-02	8.069E-02	5.293E-03	-0.253
AM-243	5.276E-03		1.742E-02	2.990E-02	5.960E-03	0.176
CM-243	2.953E-02		3.001E-02	5.404E-02	5.843E-03	0.546
AM-246	2.216E-02		3.199E-02	6.469E-02	8.274E-03	0.343
CF-249	6.085E-03		1.174E-02	2.137E-02	2.048E-03	0.285

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 5-DEC-2007 14:26:24

Configuration :
SYSSYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_SCAQC7951LC1_GAMMA1_400MLSA_17411.CNF

----- Sample Information -----

Sample ID : SCAQC-7951-LC1 ✓
Sample Title : CTRL SAMP S 142 ✓
Sample Quantity : 6.40000E+02 G ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17411

----- Sample Decay/Count Information -----

Collection Date : 1-OCT-2007 09:15:00 ✓ Acquisition date : 5-DEC-2007 13:25:52.
Decay time : 65 04:10:52.98 % dead time : 0.4%
Elapsed live time: 0 01:00:00.00 ✓ Elapsed real time: 0 01:00:14.83

----- Detector Parameters -----

Energy cal. time : 23-MAR-2006 15:15:18 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA1 Counting geometry: 400 ml sand
Effic. cal. time : 23-MAR-2006 15:18:11 Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$$x = \ln(a1/\text{energy})$$

a1=9.47750E+02 a2=-4.65904E+00 a3=6.59172E-01 a4=3.93115E-02
a5=1.38137E-01 a6=-8.70295E-02 a7=0.00000E+00

----- Processing Parameters -----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYSSYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG LNGBKG112107_GAMMA1_17241.CNF;1 ✓
Nuclide Lib File : SYSSYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYSSYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

Tim Moore

Date:

12/7/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
2	56.82	267	903	0.89	113.00	112	13	24.8	4.12E+01	
2	59.63	20825	3414	1.00	118.63	112	13	1.7		AM-241
0	88.08	9375	5034	1.04	175.60	170	12	3.7		
0	122.03	1614	3075	1.09	243.58	240	9	13.3		
0	136.58	333	2605	1.14	272.72	269	8	54.2		
0	238.19*	363	2826	1.42	476.19	472	9	53.9		
0	351.51*	152	1597	1.07	703.08	700	8	92.2		
0	583.22*	153	959	1.11	1167.00	1163	9	74.7		
0	609.57*	165	951	2.64	1219.76	1215	10	71.7		
0	661.44	27115	1385	1.46	1323.61	1317	14	1.3		CS-137
0	1172.80	21219	856	1.89	2347.30	2338	19	1.5		CO-60
0	1332.00	19419	280	1.96	2665.98	2656	19	1.5		CO-60

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
2	56.82	267	903	0.89	113.00	112	13	7.41E-02	24.8	7.65E-01	
0	88.08	9375	5034	1.04	175.60	170	12	2.60E+00	3.7	2.26E+00	T
0	122.03	1614	3075	1.09	243.58	240	9	4.48E-01	13.3	3.05E+00	
0	136.58	333	2605	1.14	272.72	269	8	9.26E-02	54.2	3.16E+00	
0	238.19	363	2826	1.42	476.19	472	9	1.01E-01	53.9	2.66E+00	T
0	351.51	152	1597	1.07	703.08	700	8	4.23E-02	92.2	1.99E+00	T
0	583.22	153	959	1.11	1167.00	1163	9	4.25E-02	74.7	1.33E+00	T
0	609.57	165	951	2.64	1219.76	1215	10	4.60E-02	71.7	1.29E+00	T

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
CO-60	3.095E+01 ✓	1.946E+00	9.911E-02	6.467E-03	312.265
CS-137	3.094E+01 ✓	3.351E+00	1.653E-01	1.777E-02	187.152
AM-241	7.564E+01 ✓	6.143E+00	9.917E-01	7.884E-02	76.276

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	3.824E-01		3.799E-01	7.272E-01	4.963E-02	0.526
RH-101	-3.762E-02		7.948E-02	1.274E-01	1.975E-02	-0.295
SB-125	3.061E-01		2.764E-01	4.670E-01	3.830E-02	0.656
EU-155	-1.296E-01		2.589E-01	4.288E-01	4.257E-02	-0.302
TL-208	1.596E-01	+	1.203E-01	1.633E-01	1.638E-02	0.978
PO-209	7.606E+00		2.465E+01	4.142E+01	7.413E+00	0.184
BI-211	-3.281E+00		3.018E+00	4.947E+00	3.604E-01	-0.663
BI-212	2.962E-01		6.969E-01	1.199E+00	1.153E-01	0.247
PB-212	3.704E-01	+	2.016E-01	2.411E-01	1.860E-02	1.536
BI-214	3.268E-01	+	2.368E-01	2.998E-01	3.054E-02	1.090
PB-214	2.389E-01	+	2.211E-01	3.048E-01	2.405E-02	0.784
RA-223	1.047E-01		4.117E-01	7.067E-01	6.504E-02	0.148
AC-228	5.864E-01		4.577E-01	7.826E-01	4.325E-02	0.749
PA-233	-2.569E-02		1.569E-01	2.655E-01	2.229E-02	-0.097
PA-234M	2.184E+00		1.369E+01	2.283E+01	1.313E+00	0.096
TH-234 ✓	-2.361E-01 ✓		1.249E+00	1.882E+00 ✓	2.196E-01	-0.125
U-235	9.425E-02		4.428E-01	7.315E-01	5.107E-02	0.129
NP-236	6.704E-02		1.496E-01	2.522E-01	2.770E-02	0.266
NP-237	1.599E+01		2.444E+00	1.581E+00	2.286E-01	10.114
NP-239	-6.092E-02		5.580E-01	8.934E-01	1.205E-01	-0.068
AM-243	-6.997E-02		1.485E-01	2.487E-01	5.218E-02	-0.281
CM-243	1.596E-01		2.368E-01	3.990E-01	4.547E-02	0.400
AM-246	2.458E-01		4.311E-01	7.193E-01	8.853E-02	0.342
CF-249	7.317E-02		1.070E-01	1.811E-01	1.747E-02	0.404

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 5-DEC-2007 12:15:42

Configuration :
SYSSYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_SCAQC7951LD1_GAMMA3_400MLSA_17407.CNF

----- Sample Information -----

Sample ID : SCAQC-7951-LD1 ✓
Sample Title : DUP 7951-01 ✓
Sample Quantity : 4.29500E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17407

----- Sample Decay/Count Information -----

Collection Date : 27-SEP-2007 00:00:00 Acquisition date : 5-DEC-2007 09:15:27.
Decay time : 69 09:15:27.06 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:01.00

----- Detector Parameters -----

Energy cal. time : 30-OCT-2006 16:06:41 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA3 Counting geometry: 400 ml sand
Effic. cal. time : 7-FEB-2007 13:40:24. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$$x = \ln(a1/\text{energy})$$

a1=9.47750E+02 a2=-4.85663E+00 a3=8.12782E-01 a4=8.53513E-02
a5=-4.88423E-02 a6=-7.49502E-03 a7=0.00000E+00

----- Processing Parameters -----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYSSYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA3_17240.CNF;1
Nuclide Lib File : SYSSYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYSSYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

TM Moore

Date:

12/7/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.16*	232	881	1.45	140.31	135	12	55.0		TH-234
3	74.87*	690	979	1.43	166.28	161	22	19.8	1.62E+00	AM-243
										PB-214
										PB-212
3	77.11*	1122	802	1.36	171.23	161	22	11.5		PB-214
										PB-212
8	84.16*	248	752	1.81	186.86	182	31	42.6	1.50E+00	
8	87.12	358	652	1.33	193.43	182	31	27.9		NP-237
										PB-214
										PB-212
8	89.88	299	769	1.70	199.54	182	31	39.3		
8	92.79*	533	798	1.75	205.99	182	31	24.9		TH-234
0	128.73	102	543	1.02	285.66	283	9	84.9		AC-228
0	186.04*	304	644	1.25	412.67	406	13	37.4		
0	209.14	108	519	0.92	463.89	459	11	84.5		AC-228
5	238.63*	1746	361	1.37	529.24	524	21	6.3	1.66E+00	PB-212
5	241.56	398	490	2.46	535.75	524	21	35.5		PB-214
0	270.09	189	393	2.00	598.99	591	15	47.9		RA-223
										AC-228
0	295.25*	506	275	1.61	654.75	648	13	16.3		PB-214
0	328.45	182	335	0.99	728.34	721	18	49.2		
0	338.24*	345	318	1.29	750.04	745	13	23.9		AC-228
0	351.90*	743	254	1.70	780.30	774	13	11.6		PB-214
0	463.03	169	94	1.65	1026.62	1020	13	28.2		AC-228
0	510.37*	243	186	2.35	1131.55	1122	20	33.0		TL-208
0	583.11*	548	176	1.60	1292.76	1283	19	14.6		TL-208
0	609.13*	546	191	1.70	1350.43	1342	17	14.6		BI-214
0	660.88	95	159	1.53	1465.14	1458	18	65.3		CS-137
0	726.64*	110	131	1.55	1610.89	1606	16	49.7		BI-212
4	794.77	87	76	2.82	1761.87	1753	45	53.3	1.29E+00	AC-228
4	805.87	61	76	2.83	1786.48	1753	45	73.6		BI-214
0	860.52	71	66	1.40	1907.60	1900	14	54.2		TL-208
0	910.92*	389	56	1.99	2019.30	2011	16	13.5		AC-228
0	969.04*	129	144	1.20	2148.10	2139	16	45.8		AC-228
0	1120.46*	107	86	1.63	2483.66	2474	15	43.0		BI-214
0	1416.53	22	8	1.15	3139.76	3134	14	65.8		
0	1460.54*	609	20	2.29	3237.29	3227	19	9.0		K-40
0	1638.40	24	8	0.62	3631.43	3625	15	65.4		
0	1764.39*	101	18	2.01	3910.60	3901	18	28.7		BI-214
0	1826.66	14	0	1.44	4048.57	4045	8	53.5		

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
8	84.16	248	752	1.81	186.86	182	31	2.30E-02	42.6	3.55E+00	
8	89.88	299	769	1.70	199.54	182	31	2.77E-02	39.3	3.55E+00	
0	186.04	304	644	1.25	412.67	406	13	2.81E-02	37.4	2.81E+00	
0	328.45	182	335	0.99	728.34	721	18	1.69E-02	49.2	1.89E+00	
0	1416.53	22	8	1.15	3139.76	3134	14	2.08E-03	65.8	5.70E-01	
0	1638.40	24	8	0.62	3631.43	3625	15	2.18E-03	65.4	5.15E-01	
0	1826.66	14	0	1.44	4048.57	4045	8	1.30E-03	53.5	4.79E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	5.964E+00	6.425E-01	2.837E-01	1.669E-02	21.023
CS-137	6.222E-02	4.087E-02	3.333E-02	2.399E-03	1.867
TL-208	3.228E-01	5.354E-02	3.192E-02	2.540E-03	10.114
BI-212	5.623E-01	2.824E-01	2.486E-01	1.804E-02	2.262
PB-212	9.781E-01	9.553E-02	5.258E-02	3.930E-03	18.602
BI-214	6.127E-01	1.007E-01	6.355E-02	4.842E-03	9.641
PB-214	6.426E-01	9.062E-02	6.317E-02	5.026E-03	10.173
RA-223	3.654E-01	1.781E-01	1.572E-01	1.392E-02	2.325
AC-228	1.093E+00	1.659E-01	1.165E-01	8.191E-03	9.379
TH-234✓	1.617E+00✓	4.274E-01	3.539E-01✓	3.168E-02	4.568
NP-237	4.731E-01	1.420E-01	1.538E-01	1.714E-02	3.077
AM-243	1.687E-01	4.658E-02	3.351E-02	6.444E-03	5.034

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	-2.353E-02		2.088E-02	3.309E-02	2.014E-03	-0.711
RH-101	2.045E-03		1.870E-02	3.162E-02	4.881E-03	0.065
SB-125	1.413E-02		5.227E-02	9.209E-02	7.614E-03	0.153
EU-155	5.017E-02		5.557E-02	9.761E-02	9.179E-03	0.514
PO-209	7.035E-01		3.767E+00	6.786E+00	1.250E+00	0.104
BI-211	-3.457E-01		5.743E-01	9.369E-01	6.748E-02	-0.369
PA-233	-9.249E-03		3.425E-02	5.681E-02	4.636E-03	-0.163
PA-234M	2.582E+00		2.376E+00	4.478E+00	3.058E-01	0.577
U-235	6.563E-02		1.136E-01	1.961E-01	1.456E-02	0.335
NP-236	2.566E-02		3.517E-02	5.140E-02	4.905E-03	0.499
NP-239	1.048E-01		1.278E-01	2.203E-01	2.947E-02	0.476
AM-241	1.384E-02		4.045E-02	5.931E-02	3.753E-03	0.233
CM-243	9.882E-03		4.958E-02	8.589E-02	9.255E-03	0.115
AM-246	2.951E-02		6.262E-02	1.158E-01	1.461E-02	0.255
CF-249	-1.292E-02		2.200E-02	3.733E-02	3.718E-03	-0.346

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 5-DEC-2007 15:33:30

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795101_GAMMA2_400MLSAN_17408.CNF

---- Sample Information ----

Sample ID : OH207-7951-01 ✓
Sample Title : SB-CZ-SS-2270-SD ✓
Sample Quantity : 4.29500E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17408

---- Sample Decay/Count Information ----

Collection Date : 27-SEP-2007 00:00:00 Acquisition date : 5-DEC-2007 12:33:13.
Decay time : 69 12:33:13.10 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:01.43

---- Detector Parameters ----

Energy cal. time : 1-MAY-2007 11:12:10. Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA2 Counting geometry: 400 ml sand
Effic. cal. time : 1-MAY-2007 11:13:44. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$x = \ln(a1/\text{energy})$

a1=9.47750E+02 a2=-4.68491E+00 a3=7.34327E-01 a4=7.12916E-02
a5=8.21331E-02 a6=-7.02143E-02 a7=0.00000E+00

---- Processing Parameters ----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA2_17242.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

Tim Moore

Date:

12/7/2007

Sample ID : OH207-7951-01

Acquisition date : 5-DEC-2007 12:33:13

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
2	74.77*	474	746	1.16	149.12	145	13	21.4	1.05E+00	AM-243 PB-214 PB-212
2	77.08*	648	621	1.00	153.73	145	13	14.8		PB-214 PB-212
2	87.13	293	576	1.02	173.74	171	11	28.2	1.26E+00	NP-237 PB-214 PB-212
2	89.79	181	446	1.10	179.03	171	11	38.2		
0	92.97*	397	700	1.56	185.37	182	9	27.1		
0	128.96	122	514	1.24	257.01	254	7	64.0		AC-228
0	185.97*	461	864	1.38	370.56	363	16	30.5		
0	209.46	160	527	1.17	417.34	413	9	54.2		AC-228
2	238.76*	1965	309	1.19	475.70	472	16	5.5	1.96E+00	PB-212
2	241.28*	206	378	1.44	480.72	472	16	52.1		
2	242.18*	220	291	1.21	482.51	472	16	32.4		PB-214
0	270.45	189	342	1.47	538.83	535	10	39.6		RA-223 AC-228
0	295.40*	529	369	1.22	588.54	582	12	17.0		PB-214
0	300.34	146	237	1.41	598.39	594	9	41.5		PB-212
0	328.08	152	309	1.59	653.65	647	12	48.9		
0	338.68*	336	278	1.25	674.78	669	10	21.7		AC-228
0	352.09*	840	250	1.23	701.49	697	10	10.1		PB-214
0	462.98	121	155	1.55	922.50	917	10	42.6		AC-228
0	510.83*	221	171	1.85	1017.88	1010	14	31.7		TL-208
0	583.32*	609	113	1.31	1162.41	1156	13	11.0		TL-208
0	609.40*	627	157	1.59	1214.43	1209	12	11.5		BI-214
3	661.84	92	70	2.09	1319.02	1314	17	41.1	2.47E+00	CS-137
3	665.84	51	50	1.71	1326.99	1314	17	57.2		
0	727.38	114	106	1.25	1449.76	1444	13	41.3		BI-212
0	795.27*	72	67	1.22	1585.19	1581	11	50.7		AC-228
0	860.63*	73	86	1.98	1715.64	1707	15	60.7		TL-208
0	911.12*	430	115	1.56	1816.40	1808	17	15.1		AC-228
1	964.46	71	69	1.93	1922.89	1916	23	51.7	1.38E+00	AC-228
1	968.85*	258	51	1.74	1931.65	1916	23	16.6		AC-228
0	1119.99*	178	42	1.56	2233.47	2228	14	22.0		BI-214
0	1376.99	53	43	1.74	2747.01	2741	15	64.9		BI-214
0	1459.71*	676	56	1.89	2912.37	2902	19	9.5		K-40
0	1727.62*	38	6	1.55	3448.29	3442	12	43.0		BI-214
0	1762.46*	130	3	2.52	3518.02	3510	15	19.8		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
2	89.79	181	446	1.10	179.03	171	11	1.68E-02	38.2	2.60E+00	
0	92.97	397	700	1.56	185.37	182	9	3.67E-02	27.1	2.71E+00	T
0	185.97	461	864	1.38	370.56	363	16	4.27E-02	30.5	3.21E+00	
2	241.28	206	378	1.44	480.72	472	16	1.90E-02	52.1	2.78E+00	
0	328.08	152	309	1.59	653.65	647	12	1.41E-02	48.9	2.20E+00	
3	665.84	51	50	1.71	1326.99	1314	17	4.72E-03	57.2	1.21E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	5.471E+00	6.294E-01	2.306E-01	1.484E-02	23.726
CS-137	5.188E-02	2.213E-02	2.724E-02	3.099E-03	1.904
TL-208	3.113E-01	4.725E-02	2.575E-02	2.682E-03	12.088
BI-212	5.003E-01	2.138E-01	1.949E-01	2.131E-02	2.567
PB-212	9.438E-01	8.868E-02	4.233E-02	3.235E-03	22.296
BI-214	6.091E-01	9.559E-02	5.139E-02	5.472E-03	11.853
PB-214	6.275E-01	7.944E-02	5.304E-02	4.067E-03	11.831
RA-223	3.127E-01	1.269E-01	1.440E-01	1.281E-02	2.172
AC-228	1.022E+00	1.778E-01	1.086E-01	9.433E-03	9.413
NP-237	5.554E-01	1.712E-01	2.480E-01	3.116E-02	2.240
AM-243	2.080E-01	6.082E-02	5.061E-02	1.009E-02	4.111

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	-5.176E-03		1.540E-02	2.595E-02	1.510E-03	-0.199
RH-101	2.584E-03		1.669E-02	2.721E-02	4.248E-03	0.095
SB-125	-1.005E-02		4.293E-02	7.203E-02	5.906E-03	-0.139
EU-155	-1.819E-02		5.853E-02	9.687E-02	9.070E-03	-0.188
PO-209	-3.032E+00		2.906E+00	4.516E+00	8.658E-01	-0.671
BI-211	4.898E-02		4.353E-01	7.685E-01	7.522E-02	0.064
PA-233	-7.294E-03		2.935E-02	4.991E-02	4.020E-03	-0.146
PA-234M	1.227E+00		1.879E+00	3.479E+00	2.716E-01	0.353
TH-234 ✓	1.584E+00 ✓	+	4.576E-01	5.904E-01 ✓	5.905E-02	2.683
U-235	4.590E-02		1.034E-01	1.715E-01	1.252E-02	0.268
NP-236	3.545E-02		3.593E-02	5.911E-02	5.876E-03	0.600
NP-239	-6.470E-03		1.000E-01	1.734E-01	2.339E-02	-0.037
AM-241	-1.862E-02		9.109E-02	1.547E-01	1.014E-02	-0.120
CM-243	2.550E-02		5.234E-02	8.889E-02	9.610E-03	0.287
AM-246	2.986E-02		5.384E-02	9.794E-02	1.253E-02	0.305
CF-249	2.462E-03		1.810E-02	3.108E-02	2.977E-03	0.079

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 5-DEC-2007 15:34:39

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795102_GAMMA3_400MLSAN_17409.CNF

---- Sample Information ----

Sample ID : OH207-7951-02 ✓
Sample Title : SB-CZ-SS-2271-SD ✓
Sample Quantity : 4.72800E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17409

---- Sample Decay/Count Information ----

Collection Date : 27-SEP-2007 00:00:00 ✓ Acquisition date : 5-DEC-2007 12:34:08.
Decay time : 69 12:34:08.31 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:00.92

---- Detector Parameters ----

Energy cal. time : 30-OCT-2006 16:06:41 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA3 Counting geometry: 400 ml sand
Effic. cal. time : 7-FEB-2007 13:40:24. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$x = \ln(a1/\text{energy})$

a1=9.47750E+02 a2=-4.85663E+00 a3=8.12782E-01 a4=8.53513E-02
a5=-4.88423E-02 a6=-7.49502E-03 a7=0.00000E+00

---- Processing Parameters ----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA3_17240.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

Tm Moad

Date:

12/7/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
1	74.88*	531	749	1.44	166.29	159	19	22.3	2.36E+00	AM-243 PB-214 PB-212
1	77.09*	919	649	1.42	171.18	159	19	12.9		PB-214 PB-212
2	87.20	183	709	1.20	193.59	188	27	49.6	2.95E+00	NP-237 PB-214 PB-212
2	89.84	189	791	1.48	199.45	188	27	57.6		
2	92.81*	287	675	1.47	206.04	188	27	40.5		
0	185.84*	277	479	1.34	412.23	406	12	35.3		
0	209.61	230	445	1.90	464.92	459	13	40.1		AC-228
3	238.63*	1506	261	1.45	529.26	520	23	6.7	2.05E+00	PB-212
3	241.58	382	303	2.03	535.79	520	23	28.9		PB-214
0	270.39	86	274	1.49	599.64	595	10	74.9		RA-223 AC-228
1	295.21*	358	218	1.67	654.65	649	25	18.9	1.18E+00	PB-214
1	300.03	143	206	1.74	665.35	649	25	44.7		PB-212
0	338.46*	328	272	1.71	750.52	745	16	25.5		AC-228
0	351.99*	599	214	1.69	780.52	774	13	13.2		PB-214
0	463.26	86	123	1.87	1027.13	1022	12	56.6		AC-228
0	510.91*	241	169	1.96	1132.75	1122	22	33.3		TL-208
0	583.07*	425	113	1.67	1292.69	1287	12	14.2		TL-208
0	609.14*	422	119	1.50	1350.46	1342	15	15.2		BI-214
0	662.92	209	109	3.98	1469.66	1460	23	30.0		CS-137
0	727.12*	99	80	1.94	1611.94	1605	16	45.6		BI-212
0	767.78*	58	45	0.94	1702.05	1696	13	56.5		BI-214
0	794.67	93	43	1.49	1761.66	1754	17	38.3		AC-228
0	861.02	74	80	0.85	1908.70	1899	17	60.6		TL-208
0	911.02*	314	59	1.70	2019.52	2013	15	15.8		AC-228
2	964.06	75	63	2.44	2137.06	2129	34	52.6	1.59E+00	AC-228
2	968.87*	192	48	1.98	2147.73	2129	34	21.3		AC-228
0	1119.93*	109	51	1.41	2482.48	2476	15	34.8		BI-214
0	1377.46	24	13	2.08	3053.19	3048	10	67.5		BI-214
0	1460.69*	331	21	2.37	3237.63	3229	20	13.7		K-40
0	1763.91*	97	6	2.85	3909.52	3899	22	24.5		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
2	89.84	189	791	1.48	199.45	188	27	1.75E-02	57.6	3.55E+00	
2	92.81	287	675	1.47	206.04	188	27	2.65E-02	40.5	3.55E+00	T
0	185.84	277	479	1.34	412.23	406	12	2.56E-02	35.3	2.82E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	2.941E+00	4.385E-01	2.330E-01	1.371E-02	12.623
CS-137	1.240E-01	3.828E-02	2.755E-02	1.984E-03	4.502
TL-208	2.275E-01	3.703E-02	2.877E-02	2.290E-03	7.909
BI-212	4.603E-01	2.125E-01	2.056E-01	1.492E-02	2.240
PB-212	7.661E-01	7.691E-02	4.244E-02	3.172E-03	18.051
BI-214	4.300E-01	7.295E-02	5.872E-02	4.474E-03	7.323
PB-214	4.708E-01	7.249E-02	5.216E-02	4.150E-03	9.025
RA-223	1.511E-01	1.140E-01	1.314E-01	1.164E-02	1.150
AC-228	8.024E-01	1.386E-01	1.068E-01	7.512E-03	7.511
NP-237	2.199E-01	1.118E-01	1.466E-01	1.634E-02	1.500
AM-243	1.179E-01	3.470E-02	2.760E-02	5.307E-03	4.272

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	9.131E-03		1.529E-02	2.546E-02	1.350E-03	0.359
RH-101	-1.632E-02		1.622E-02	2.609E-02	4.027E-03	-0.626
SB-125	3.243E-02		4.459E-02	8.042E-02	6.648E-03	0.403
EU-155	2.658E-02		4.717E-02	8.255E-02	7.762E-03	0.322
PO-209	1.274E+00		3.185E+00	5.848E+00	1.078E+00	0.218
BI-211	-4.146E-03		5.047E-01	8.636E-01	6.220E-02	-0.005
PA-233	-1.394E-03		2.997E-02	5.031E-02	4.106E-03	-0.028
PA-234M	-1.469E+00		1.903E+00	3.141E+00	2.145E-01	-0.468
TH-234 ✓	7.898E-01 ✓	+	3.274E-01	4.646E-01 ✓	4.159E-02	1.700
U-235	6.809E-02		1.003E-01	1.737E-01	1.289E-02	0.392
NP-236	1.737E-02		3.020E-02	4.400E-02	4.199E-03	0.395
NP-239	-2.192E-02		1.043E-01	1.750E-01	2.341E-02	-0.125
AM-241	-1.010E-01		3.454E-02	5.122E-02	3.241E-03	-1.971
CM-243	9.087E-03		4.234E-02	7.350E-02	7.921E-03	0.124
AM-246	1.411E-02		5.239E-02	9.613E-02	1.213E-02	0.147
CF-249	9.891E-04		1.817E-02	3.188E-02	3.176E-03	0.031

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 5-DEC-2007 18:37:10

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795103_GAMMA1_400MLSAN_17413.CNF

----- Sample Information -----
Sample ID : OH207-7951-03 ✓
Sample Title : SB-CZ-SS-2272-SD ✓
Sample Quantity : 5.08800E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17413

----- Sample Decay/Count Information -----
Collection Date : 27-SEP-2007 00:00:00 ✓ Acquisition date : 5-DEC-2007 15:36:49.
Decay time : 69 15:36:49.52 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:03.33

----- Detector Parameters -----
Energy cal. time : 23-MAR-2006 15:15:18 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA1 Counting geometry: 400 ml sand
Effic. cal. time : 23-MAR-2006 15:18:11 Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a_2 + a_3 \cdot x + a_4 \cdot x^2 + a_5 \cdot x^3 + a_6 \cdot x^4 + a_7 \cdot x^5)$$

where:

$x = \ln(a_1 / \text{energy})$

a1=9.47750E+02 a2=-4.65904E+00 a3=6.59172E-01 a4=3.93115E-02
a5=1.38137E-01 a6=-8.70295E-02 a7=0.00000E+00

----- Processing Parameters -----
Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA1_17241.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

T M Wloar

Date:

12/7/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
2	74.95*	577	823	1.11	149.31	144	13	18.6	2.72E+00	AM-243 PB-214 PB-212
2	77.19*	829	688	0.98	153.79	144	13	12.5		PB-214 PB-212
4	87.27	427	754	1.23	173.99	161	31	23.4	2.08E+00	NP-237 PB-214 PB-212
4	89.99	321	721	1.11	179.44	161	31	30.1		
0	129.09	104	847	0.88	257.73	254	8	98.7		AC-228
0	154.16	211	864	1.27	307.93	304	10	54.0		
0	186.01*	442	898	1.30	371.69	367	10	27.5		
0	209.31	198	726	0.98	418.35	414	9	51.2		AC-228
0	238.54*	2404	844	1.04	476.89	473	8	5.9		PB-212
3	241.13*	218	202	1.02	482.07	481	7	19.9	3.48E+00	
3	242.06*	316	472	1.08	483.94	481	7	26.7		PB-214
0	270.05	251	553	1.39	539.98	535	11	38.4		RA-223 AC-228
0	278.39	99	554	1.18	556.67	550	11	94.3		TL-208
0	295.12*	957	413	1.26	590.17	585	11	10.5		PB-214
1	299.62*	126	226	1.35	599.19	596	8	44.3	4.91E+00	
1	300.40*	78	273	1.11	600.75	596	8	78.6		PB-212
0	327.97	171	468	0.99	655.95	650	12	53.0		
0	338.16	619	378	1.18	676.35	671	10	14.2		AC-228
0	351.80*	1586	460	1.21	703.67	697	14	7.7		PB-214
0	409.50	124	330	1.20	819.19	814	12	61.0		AC-228
0	462.87	188	241	1.18	926.05	921	12	36.3		AC-228
0	510.69*	301	317	1.47	1021.80	1015	15	30.3		TL-208
0	562.75	39	165	1.50	1126.03	1120		9124.8		
0	582.99*	944	179	1.53	1166.54	1160	14	9.0		TL-208
0	609.09*	1177	248	1.37	1218.80	1211	16	8.4		BI-214
0	662.13	110	226	1.31	1325.00	1319	14	60.9		CS-137
0	726.97	242	128	1.35	1454.80	1450	11	22.3		BI-212
0	767.60	148	126	1.43	1536.16	1530	12	34.5		BI-214
0	785.48	74	133	1.48	1571.94	1565	11	64.8		BI-212
0	795.03	113	112	1.51	1591.06	1586	12	42.2		AC-228
0	837.23	139	107	2.93	1675.54	1667	18	38.8		
0	860.72	127	100	1.49	1722.58	1715	12	36.0		TL-208
1	910.82*	707	84	1.78	1822.87	1816	20	9.1	4.82E+00	AC-228
1	915.71	51	46	1.84	1832.66	1816	20	49.7		
0	933.92	101	88	1.32	1869.10	1862	14	43.9		BI-214
4	964.71	95	123	2.08	1930.74	1924	28	48.7	1.04E+00	AC-228
4	968.59*	416	88	1.85	1938.51	1924	28	13.4		AC-228
0	1120.08*	216	107	1.33	2241.76	2235	15	25.3		BI-214
0	1237.69	86	120	0.83	2477.19	2471	12	55.3		BI-214
0	1376.89*	68	51	1.80	2755.83	2747	19	56.4		BI-214
0	1460.16*	1328	72	2.07	2922.50	2915	16	6.2		K-40
5	1587.21	87	24	2.75	3176.77	3171	32	32.0	9.43E-01	AC-228
5	1591.59	46	32	3.23	3185.54	3171	32	75.5		
0	1728.97	43	38	1.45	3460.49	3454	15	69.9		BI-214
0	1763.94*	202	28	2.49	3530.48	3524	15	18.7		BI-214

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	1846.83	27	11	0.59	3696.37	3690	11	61.2		

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
4	89.99	321	721	1.11	179.44	161	31	2.97E-02	30.1	2.33E+00	
0	154.16	211	864	1.27	307.93	304	10	1.95E-02	54.0	3.17E+00	
0	186.01	442	898	1.30	371.69	367	10	4.09E-02	27.5	3.03E+00	
3	241.13	218	202	1.02	482.07	481	7	2.01E-02	19.9	2.64E+00	
1	299.62	126	226	1.35	599.19	596	8	1.16E-02	44.3	2.26E+00	
0	327.97	171	468	0.99	655.95	650	12	1.58E-02	53.0	2.11E+00	
0	562.75	39	165	1.50	1126.03	1120	9	3.57E-03	****	1.37E+00	
0	837.23	139	107	2.93	1675.54	1667	18	1.29E-02	38.8	1.03E+00	
1	915.71	51	46	1.84	1832.66	1816	20	4.71E-03	49.7	9.69E-01	
5	1591.59	46	32	3.23	3185.54	3171	32	4.26E-03	75.5	6.63E-01	
0	1846.83	27	11	0.59	3696.37	3690	11	2.50E-03	61.2	5.86E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	8.659E+00	8.003E-01	1.973E-01	1.346E-02	43.898
CS-137	5.260E-02	3.253E-02	2.749E-02	2.953E-03	1.914
TL-208	4.126E-01	5.560E-02	2.556E-02	2.565E-03	16.141
BI-212	8.889E-01	2.157E-01	1.986E-01	1.911E-02	4.475
PB-212	1.027E+00	9.966E-02	5.785E-02	4.465E-03	17.761
BI-214	9.744E-01	1.289E-01	4.994E-02	5.086E-03	19.512
PB-214	1.042E+00	1.148E-01	5.159E-02	4.071E-03	20.204
RA-223	3.678E-01	1.453E-01	1.381E-01	1.271E-02	2.663
AC-228	1.385E+00	1.478E-01	9.976E-02	5.513E-03	13.885
NP-237	7.711E-01	2.119E-01	2.182E-01	3.155E-02	3.534
AM-243	2.492E-01	6.988E-02	5.398E-02	1.133E-02	4.617

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	1.460E-02		1.638E-02	2.622E-02	1.711E-03	0.557
RH-101	-2.572E-03		1.673E-02	2.730E-02	4.235E-03	-0.094
SB-125	3.702E-03		4.195E-02	7.188E-02	5.895E-03	0.052
EU-155	4.093E-02		6.253E-02	1.071E-01	1.063E-02	0.382
PO-209	5.899E-01		2.934E+00	5.180E+00	9.271E-01	0.114
BI-211	8.260E-02		4.706E-01	7.258E-01	5.288E-02	0.114
PA-233	-3.330E-03		2.769E-02	4.769E-02	4.004E-03	-0.070
PA-234M	5.690E-01		1.822E+00	3.236E+00	1.860E-01	0.176
TH-234✓	1.329E+00✓		3.530E-01	5.914E-01✓	6.900E-02	2.248
U-235	9.433E-02		1.082E-01	1.828E-01	1.276E-02	0.516
NP-236	4.856E-02		3.901E-02	6.120E-02	6.723E-03	0.794
NP-239	1.092E-03		1.103E-01	1.794E-01	2.420E-02	0.006
AM-241	-8.677E-02		9.712E-02	1.634E-01	1.299E-02	-0.531
CM-243	4.915E-02		5.648E-02	9.712E-02	1.107E-02	0.506
AM-246	-7.278E-03		5.381E-02	9.174E-02	1.129E-02	-0.079
CF-249	4.810E-03		1.800E-02	3.115E-02	3.005E-03	0.154

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 5-DEC-2007 18:38:15

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795104_GAMMA2_400MLSAN_17414.CNF

----- Sample Information -----
Sample ID : OH207-7951-04 ✓
Sample Title : SB-CZ-SS-2273-SD ✓
Sample Quantity : 4.97900E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17414

----- Sample Decay/Count Information -----
Collection Date : 27-SEP-2007 00:00:00 Acquisition date : 5-DEC-2007 15:37:57.
Decay time : 69 15:37:57.73 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:01.89

----- Detector Parameters -----
Energy cal. time : 1-MAY-2007 11:12:10. Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA2 Counting geometry: 400 ml sand
Effic. cal. time : 1-MAY-2007 11:13:44. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a_2 + a_3 \cdot x + a_4 \cdot x^2 + a_5 \cdot x^3 + a_6 \cdot x^4 + a_7 \cdot x^5)$$

where:

$x = \ln(a_1/\text{energy})$

a1=9.47750E+02 a2=-4.68491E+00 a3=7.34327E-01 a4=7.12916E-02
a5=8.21331E-02 a6=-7.02143E-02 a7=0.00000E+00

----- Processing Parameters -----
Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA2_17242.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

Tim Malone

Date:

12/7/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
3	74.70*	671	1039	1.31	148.98	143	16	18.7	2.53E+00	AM-243 PB-214 PB-212
3	77.07*	968	798	0.98	153.70	143	16	11.4		PB-214 PB-212
5	87.22	534	1087	1.45	173.92	163	29	24.0	7.09E-01	NP-237 PB-214 PB-212
5	89.92	244	820	1.16	179.29	163	29	41.6		
5	92.84*	543	1014	1.54	185.11	163	29	23.8		
0	129.02	112	926	1.12	257.15	254	8	95.8		AC-228
0	154.13	128	825	1.60	307.15	303	8	79.7		
0	186.03*	434	954	1.26	370.68	365	11	29.7		
0	209.41	294	798	1.06	417.24	413	10	37.9		AC-228
0	238.67*	2468	1002	1.17	475.53	471	9	6.2		PB-212
0	241.85*	420	497	1.79	481.86	480	6	20.2		PB-214
0	270.03	375	523	1.58	537.99	532	12	26.5		RA-223 AC-228
0	277.78	107	491	1.13	553.44	549	9	77.3		TL-208
3	295.41*	788	350	1.26	588.55	584	19	10.9	1.38E+00	PB-214
3	300.20	209	319	1.30	598.09	584	19	33.2		PB-212
0	328.49	194	380	1.21	654.46	650	11	41.5		
0	338.56*	571	479	1.17	674.54	670	11	17.1		AC-228
0	352.15*	1286	352	1.26	701.61	697	9	7.8		PB-214
0	410.28	55	304	1.12	817.46	812	10	122.2		AC-228
0	463.30	192	278	1.42	923.14	918	13	38.6		AC-228
0	511.01*	338	347	1.71	1018.25	1011	16	28.6		TL-208
0	583.37*	872	238	1.38	1162.51	1157	13	10.1		TL-208
0	609.42*	961	215	1.51	1214.46	1208	13	9.1		BI-214
0	661.30	71	131	1.15	1317.94	1313	9	62.4		CS-137
0	727.32	174	148	1.71	1449.63	1445	11	30.9		BI-212
0	769.30*	98	213	0.88	1533.39	1526	17	71.1		BI-214
0	785.33	82	169	1.70	1565.36	1557	15	72.2		BI-212
0	794.46*	74	204	1.72	1583.59	1578	16	89.6		AC-228
0	860.49*	116	64	1.76	1715.35	1710	10	32.4		TL-208
0	911.18*	640	163	1.58	1816.53	1809	15	11.9		AC-228
0	935.34	47	101	1.66	1864.75	1856	13	94.1		BI-214
2	964.85	115	105	1.85	1923.68	1918	21	37.1	1.85E+00	AC-228
2	968.79*	397	77	1.80	1931.54	1918	21	13.6		AC-228
0	1119.91*	235	87	1.68	2233.31	2227	13	21.3		BI-214
0	1237.54*	85	99	1.26	2468.30	2462	12	51.9		BI-214
0	1376.77	64	41	2.12	2746.57	2740	14	49.7		BI-214
0	1459.68*	1262	53	1.87	2912.31	2903	19	6.3		K-40
0	1588.38	100	43	4.91	3169.70	3161	20	38.3		AC-228
0	1728.59*	39	30	1.51	3450.22	3442	16	72.3		BI-214
0	1762.59*	177	21	1.92	3518.27	3511	15	19.6		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
5	89.92	244	820	1.16	179.29	163	29	2.26E-02	41.6	2.61E+00	
5	92.84	543	1014	1.54	185.11	163	29	5.03E-02	23.8	2.71E+00	T
0	154.13	128	825	1.60	307.15	303	8	1.19E-02	79.7	3.38E+00	
0	186.03	434	954	1.26	370.68	365	11	4.02E-02	29.7	3.21E+00	
0	328.49	194	380	1.21	654.46	650	11	1.79E-02	41.5	2.20E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	8.817E+00	7.962E-01	1.964E-01	1.264E-02	44.892
CS-137	3.478E-02	2.207E-02	3.302E-02	3.756E-03	1.053
TL-208	3.846E-01	5.573E-02	2.694E-02	2.805E-03	14.277
BI-212	6.564E-01	2.153E-01	2.097E-01	2.292E-02	3.131
PB-212	1.023E+00	1.005E-01	5.242E-02	4.005E-03	19.511
BI-214	8.053E-01	1.130E-01	5.206E-02	5.544E-03	15.468
PB-214	8.286E-01	9.057E-02	5.244E-02	4.021E-03	15.801
RA-223	5.355E-01	1.495E-01	1.381E-01	1.229E-02	3.878
AC-228	1.312E+00	1.929E-01	1.027E-01	8.927E-03	12.769
NP-237	8.730E-01	2.362E-01	2.032E-01	2.554E-02	4.296
AM-243	2.538E-01	6.944E-02	5.082E-02	1.013E-02	4.994

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	1.980E-02		1.619E-02	2.717E-02	1.580E-03	0.729
RH-101	-3.470E-03		1.739E-02	2.789E-02	4.355E-03	-0.124
SB-125	-1.853E-02		4.426E-02	7.321E-02	6.003E-03	-0.253
EU-155	6.187E-02		6.166E-02	1.049E-01	9.820E-03	0.590
PO-209	5.110E-01		3.047E+00	5.340E+00	1.024E+00	0.096
BI-211	-3.523E-01		4.962E-01	8.179E-01	8.006E-02	-0.431
PA-233	1.713E-03		2.870E-02	4.922E-02	3.964E-03	0.035
PA-234M	7.611E-01		1.807E+00	3.248E+00	2.536E-01	0.234
TH-234 ✓	1.870E+00 ✓	+	4.830E-01	5.903E-01 ✓	5.904E-02	3.169
U-235	1.108E-01		1.063E-01	1.779E-01	1.299E-02	0.623
NP-236	1.913E-02		3.961E-02	6.000E-02	5.964E-03	0.319
NP-239	-2.670E-02		1.048E-01	1.798E-01	2.426E-02	-0.149
AM-241	-6.473E-02		9.045E-02	1.510E-01	9.905E-03	-0.429
CM-243	-5.728E-03		5.537E-02	9.201E-02	9.947E-03	-0.062
AM-246	1.584E-02		5.464E-02	9.590E-02	1.227E-02	0.165
CF-249	1.041E-02		1.805E-02	3.133E-02	3.002E-03	0.332

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 5-DEC-2007 18:39:22

Configuration :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795105_GAMMA3_400MLSAN_17415.CNF

---- Sample Information ----

Sample ID : OH207-7951-05 ✓
Sample Title : SB-CZ-SS-2274-SD ✓
Sample Quantity : 5.21100E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17415

---- Sample Decay/Count Information ----

Collection Date : 27-SEP-2007 00:00:00 Acquisition date : 5-DEC-2007 15:39:05.
Decay time : 69 15:39:05.91 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:01.02

---- Detector Parameters ----

Energy cal. time : 30-OCT-2006 16:06:41 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA3 Counting geometry: 400 ml sand
Effic. cal. time : 7-FEB-2007 13:40:24. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a_2 + a_3 \cdot x + a_4 \cdot x^{**2} + a_5 \cdot x^{**3} + a_6 \cdot x^{**4} + a_7 \cdot x^{**5})$$

where:

$x = \ln(a_1/\text{energy})$

a1=9.47750E+02 a2=-4.85663E+00 a3=8.12782E-01 a4=8.53513E-02
a5=-4.88423E-02 a6=-7.49502E-03 a7=0.00000E+00

---- Processing Parameters ----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA3_17240.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

T. M. Moore

Date:

12/7/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.40*	238	823	1.21	140.83	136	12	52.1		TH-234
2	74.84*	578	844	1.39	166.20	160	18	20.7	7.94E-01	AM-243
										PB-214
										PB-212
2	77.13*	991	794	1.36	171.28	160	18	12.7		PB-214
										PB-212
2	87.11	427	862	1.61	193.40	183	31	28.6	1.28E+00	NP-237
										PB-214
										PB-212
2	90.05	220	624	1.18	199.91	183	31	42.4		
2	92.73*	374	775	1.58	205.86	183	31	32.0		TH-234
0	128.83	113	559	0.89	285.87	283	8	75.0		AC-228
0	185.85*	323	777	1.47	412.26	405	14	39.2		
0	208.93	114	504	1.36	463.43	459	10	76.0		AC-228
4	238.65*	1687	486	1.45	529.30	524	19	7.0	1.62E+00	PB-212
4	241.62	404	493	1.87	535.87	524	19	28.5		PB-214
0	270.48	197	376	2.07	599.84	594	13	43.3		RA-223
										AC-228
0	277.58	93	267	1.46	615.59	612	10	70.1		TL-208
0	295.16*	636	267	1.51	654.55	649	12	13.0		PB-214
0	299.99	135	254	1.39	665.26	661	10	47.6		PB-212
0	338.24*	343	278	1.22	750.04	745	12	22.2		AC-228
0	352.04*	1065	339	1.51	780.61	772	18	10.3		PB-214
0	409.13	78	235	1.42	907.17	898	14	85.9		AC-228
0	462.86	109	138	1.25	1026.26	1019	12	47.2		AC-228
0	510.96*	183	174	2.22	1132.86	1125	18	40.9		TL-208
0	583.13*	545	129	1.71	1292.82	1286	16	12.9		TL-208
0	609.15*	713	203	1.67	1350.48	1344	16	11.8		BI-214
0	664.48	102	192	4.87	1473.11	1462	23	74.0		
0	727.05*	122	77	1.12	1611.78	1606	12	34.7		BI-212
0	861.65	65	100	2.19	1910.10	1898	20	79.1	0.00E+00	TL-208
0	910.97*	359	92	1.55	2019.41	2012	16	16.1		AC-228
0	964.12	99	49	1.66	2137.18	2129	14	36.1		AC-228
0	968.83*	195	63	1.53	2147.63	2142	11	21.7		AC-228
0	1120.15*	186	21	1.57	2482.98	2476	14	18.4		BI-214
0	1460.41*	326	29	2.33	3237.01	3226	23	14.5		K-40
0	1728.81*	27	8	4.23	3831.75	3823	16	63.5		BI-214
0	1764.18*	137	21	1.76	3910.13	3900	21	24.3		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
2	90.05	220	624	1.18	199.91	183	31	2.04E-02	42.4	3.55E+00	
0	185.85	323	777	1.47	412.26	405	14	2.99E-02	39.2	2.82E+00	
0	664.48	102	192	4.87	1473.11	1462	23	9.42E-03	74.0	1.05E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	2.633E+00	4.113E-01	2.302E-01	1.355E-02	11.435
TL-208	2.646E-01	4.007E-02	2.559E-02	2.036E-03	10.341
BI-212	5.117E-01	1.814E-01	2.110E-01	1.531E-02	2.426
PB-212	7.789E-01	7.956E-02	4.608E-02	3.444E-03	16.903
BI-214	6.585E-01	9.245E-02	4.951E-02	3.772E-03	13.302
PB-214	7.594E-01	9.867E-02	5.207E-02	4.142E-03	14.585
RA-223	3.128E-01	1.381E-01	1.347E-01	1.192E-02	2.323
AC-228	8.316E-01	1.461E-01	1.022E-01	7.187E-03	8.136
TH-234✓	9.359E-01✓	3.112E-01	3.172E-01✓	2.840E-02	2.951
NP-237	4.662E-01	1.431E-01	1.378E-01	1.536E-02	3.382
AM-243	1.164E-01	3.292E-02	2.741E-02	5.271E-03	4.248

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	1.424E-03		1.577E-02	2.465E-02	1.307E-03	0.058
RH-101	7.094E-03		1.627E-02	2.770E-02	4.275E-03	0.256
SB-125	9.030E-03		4.211E-02	7.409E-02	6.126E-03	0.122
CS-137	1.587E-02		2.072E-02	3.242E-02	2.334E-03	0.490
EU-155	4.006E-02		4.632E-02	8.127E-02	7.642E-03	0.493
PO-209	1.037E+00		3.289E+00	5.944E+00	1.095E+00	0.175
BI-211	8.444E-02		4.908E-01	8.471E-01	6.101E-02	0.100
PA-233	1.490E-02		3.058E-02	5.224E-02	4.263E-03	0.285
PA-234M	-7.036E-01		1.830E+00	3.128E+00	2.136E-01	-0.225
U-235	1.019E-01		9.894E-02	1.721E-01	1.277E-02	0.592
NP-236	3.547E-02		3.046E-02	4.500E-02	4.294E-03	0.788
NP-239	-5.793E-03		1.048E-01	1.765E-01	2.362E-02	-0.033
AM-241	3.587E-02		3.146E-02	4.767E-02	3.017E-03	0.753
CM-243	-3.136E-02		4.211E-02	7.094E-02	7.644E-03	-0.442
AM-246	1.915E-02		4.967E-02	9.161E-02	1.156E-02	0.209
CF-249	-9.149E-03		1.831E-02	3.120E-02	3.108E-03	-0.293

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 5-DEC-2007 21:38:08

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795106_GAMMA1_400MLSAN_17416.CNF

----- Sample Information -----

Sample ID : OH207-7951-06 ✓
Sample Title : SB-CZ-SS-2275-SD ✓
Sample Quantity : 3.17800E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17416

----- Sample Decay/Count Information -----

Collection Date : 27-SEP-2007 00:00:00 Acquisition date : 5-DEC-2007 18:37:46.
Decay time : 69 18:37:46.32 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:02.24

----- Detector Parameters -----

Energy cal. time : 23-MAR-2006 15:15:18 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA1 Counting geometry: 400 ml sand
Effic. cal. time : 23-MAR-2006 15:18:11 Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$x = \ln(a1/\text{energy})$

a1=9.47750E+02 a2=-4.65904E+00 a3=6.59172E-01 a4=3.93115E-02
a5=1.38137E-01 a6=-8.70295E-02 a7=0.00000E+00

----- Processing Parameters -----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA1_17241.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

T. M. Moore

Date:

12/7/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.52*	101	554	1.05	126.42	122	9	87.9		TH-234
3	74.95*	423	427	1.07	149.31	143	16	18.3	1.93E+00	AM-243
										PB-214
										PB-212
3	77.18*	717	408	0.99	153.77	143	16	12.0		PB-214
										PB-212
1	87.25	215	398	0.88	173.93	165	13	30.8	2.19E+00	NP-237
										PB-214
										PB-212
4	90.00	174	269	1.06	179.45	177	13	30.1	2.34E+00	
4	93.23*	205	391	1.08	185.92	177	13	37.8		TH-234
0	129.51	103	503	1.16	258.57	252	9	81.0		AC-228
0	185.82*	287	613	1.27	371.32	365	13	38.1		
0	209.17	281	477	1.11	418.08	412	11	32.4		AC-228
3	238.59*	2288	273	1.04	476.99	472	16	4.8	3.33E+00	PB-212
3	240.85*	213	244	1.13	481.51	472	16	39.5		
3	241.97*	164	266	1.26	483.75	472	16	44.8		PB-214
0	270.14	239	343	1.30	540.16	534	14	35.3		RA-223
										AC-228
0	276.97	161	294	1.01	553.83	548	12	45.4		TL-208
0	295.28*	252	260	1.02	590.50	585	10	27.4		PB-214
0	299.98*	124	284	1.24	599.91	596	10	54.5		PB-212
0	327.89	148	205	1.42	655.79	652	9	38.7		
0	338.19	523	245	1.24	676.41	671	10	14.2		AC-228
0	351.73*	473	294	1.16	703.52	698	12	17.4		PB-214
0	409.41	109	133	0.96	819.02	814	10	43.9		AC-228
0	462.92	163	176	1.23	926.14	920	13	37.0		AC-228
0	510.46*	288	203	1.41	1021.34	1014	15	26.9		TL-208
0	582.98*	797	120	1.37	1166.52	1159	14	9.3		TL-208
0	609.07*	358	168	1.61	1218.76	1211	14	19.1		BI-214
0	727.03	178	117	1.65	1454.92	1448	16	31.0		BI-212
0	794.40	105	60	1.71	1589.80	1583	14	36.8		AC-228
0	835.13	39	30	1.16	1671.33	1668	7	57.0		
0	860.76	63	81	1.67	1722.64	1715	12	62.5		TL-208
0	910.73*	550	55	1.83	1822.68	1815	13	10.3		AC-228
0	932.96	38	36	1.98	1867.18	1861	11	68.8		BI-214
1	964.17	101	19	1.87	1929.67	1922	24	28.5	1.07E+00	AC-228
1	968.50*	325	27	1.81	1938.34	1922	24	12.9		AC-228
0	1120.00*	98	35	1.48	2241.61	2236	14	34.4		BI-214
0	1238.23	75	15	5.37	2478.27	2470	20	36.9		BI-214
0	1460.20*	117	24	2.25	2922.57	2916	15	28.5		K-40
0	1590.30	84	41	5.18	3182.96	3171	27	49.9		AC-228
0	1619.71*	28	13	1.64	3241.83	3236	15	69.4		BI-212
0	1763.52*	85	12	2.40	3529.64	3522	16	30.1		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
4	90.00	174	269	1.06	179.45	177	13	1.61E-02	30.1	2.33E+00	
0	185.82	287	613	1.27	371.32	365	13	2.66E-02	38.1	3.03E+00	
3	240.85	213	244	1.13	481.51	472	16	1.97E-02	39.5	2.64E+00	
0	327.89	148	205	1.42	655.79	652	9	1.37E-02	38.7	2.11E+00	
0	835.13	39	30	1.16	1671.33	1668	7	3.57E-03	57.0	1.03E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	1.219E+00	3.576E-01	2.679E-01	1.828E-02	4.550
TL-208	5.576E-01	7.617E-02	3.530E-02	3.543E-03	15.795
BI-212	1.046E+00	3.396E-01	2.782E-01	2.676E-02	3.760
PB-212	1.566E+00	1.423E-01	5.493E-02	4.239E-03	28.504
BI-214	4.741E-01	1.024E-01	6.209E-02	6.324E-03	7.636
PB-214	4.980E-01	9.508E-02	6.678E-02	5.270E-03	7.457
RA-223	5.617E-01	2.051E-01	1.569E-01	1.444E-02	3.580
AC-228	1.726E+00	2.015E-01	1.029E-01	5.684E-03	16.780
TH-234✓	1.235E+00✓	4.886E-01	5.578E-01✓	6.508E-02	2.214
NP-237	6.236E-01	2.122E-01	2.996E-01	4.332E-02	2.082
AM-243	2.926E-01	8.152E-02	6.770E-02	1.420E-02	4.322

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	6.815E-03		1.538E-02	2.541E-02	1.658E-03	0.268
RH-101	1.101E-02		2.128E-02	3.574E-02	5.543E-03	0.308
SB-125	7.222E-03		5.033E-02	8.774E-02	7.196E-03	0.082
CS-137	-2.334E-02		2.073E-02	3.390E-02	3.643E-03	-0.688
EU-155	9.926E-02		7.636E-02	1.344E-01	1.334E-02	0.739
PO-209	-1.292E-01		3.362E+00	5.969E+00	1.068E+00	-0.022
BI-211	6.224E-01		5.526E-01	9.661E-01	7.038E-02	0.644
PA-233	1.392E-02		3.564E-02	6.325E-02	5.312E-03	0.220
PA-234M	3.328E-01		1.977E+00	3.617E+00	2.079E-01	0.092
U-235	4.861E-02		1.267E-01	2.132E-01	1.488E-02	0.228
NP-236	8.707E-03		4.467E-02	7.609E-02	8.359E-03	0.114
NP-239	3.879E-02		1.369E-01	2.267E-01	3.059E-02	0.171
AM-241	-1.013E-03		1.351E-01	2.116E-01	1.682E-02	-0.005
CM-243	-2.334E-02		6.877E-02	1.155E-01	1.316E-02	-0.202
AM-246	2.564E-02		6.354E-02	1.161E-01	1.428E-02	0.221
CF-249	-5.463E-04		2.192E-02	3.789E-02	3.655E-03	-0.014

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 5-DEC-2007 21:39:28

Configuration :
SYSSYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795107_GAMMA2_400MLSAN_17417.CNF

----- Sample Information -----

Sample ID : OH207-7951-07 ✓
Sample Title : SB-CZ-SS-2276-SD ✓
Sample Quantity : 5.09900E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17417

----- Sample Decay/Count Information -----

Collection Date : 27-SEP-2007 00:00:00 Acquisition date : 5-DEC-2007 18:38:59.
Decay time : 69 18:38:59.67 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:01.26

----- Detector Parameters -----

Energy cal. time : 1-MAY-2007 11:12:10. Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA2 Counting geometry: 400 ml sand
Effic. cal. time : 1-MAY-2007 11:13:44. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$x = \ln(a1/\text{energy})$

a1=9.47750E+02 a2=-4.68491E+00 a3=7.34327E-01 a4=7.12916E-02
a5=8.21331E-02 a6=-7.02143E-02 a7=0.00000E+00

----- Processing Parameters -----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYSSYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA2_17242.CNF;1
Nuclide Lib File : SYSSYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYSSYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

Tm Moore

Date:

12/7/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
3	74.85*	312	497	0.92	149.28	143	16	25.9	9.70E-01	AM-243 PB-214 PB-212
3	77.06*	560	457	1.03	153.69	143	16	15.2		PB-214 PB-212
0	87.03	158	505	1.04	173.53	171	6	47.5		NP-237 PB-214 PB-212
0	93.87	151	901	1.23	187.15	180	9	74.1		
0	185.83*	262	517	1.22	370.27	365	10	35.8		
0	209.43	134	409	1.17	417.29	413	8	55.3		AC-228
5	238.76*	1386	296	1.15	475.70	471	16	6.8	1.39E+00	PB-212
5	241.74*	345	329	1.75	481.64	471	16	29.1		PB-214
0	270.29	172	301	1.29	538.51	534	10	40.7		RA-223 AC-228
0	295.46*	402	277	1.14	588.66	583	11	19.1		PB-214
0	299.95	111	215	0.66	597.60	594	9	51.1		PB-212
0	328.49	71	256	1.10	654.47	649	10	88.8		
0	338.42*	280	310	1.23	674.26	668	13	28.7		AC-228
0	352.08*	678	286	1.38	701.47	696	12	12.8		PB-214
0	463.07	80	166	1.01	922.68	917	12	67.9		AC-228
0	511.08*	130	183	1.40	1018.38	1012	13	52.6		TL-208
0	583.27*	421	145	1.44	1162.31	1156	14	15.8		TL-208
0	609.42*	476	123	1.37	1214.47	1209	11	13.2		BI-214
0	661.48	69	85	1.12	1318.29	1313	11	57.5		CS-137
0	727.54	91	65	1.42	1450.07	1445	9	38.1		BI-212
0	769.85*	53	111	1.40	1534.48	1529	14	91.3		BI-214
0	795.18*	73	65	1.24	1585.01	1579	13	52.2		AC-228
0	860.09*	71	43	1.10	1714.55	1709	12	44.4		TL-208
0	911.17*	351	63	1.93	1816.51	1810	18	15.3		AC-228
2	964.66	73	50	1.99	1923.28	1917	20	47.0	8.52E-01	AC-228
2	968.71*	183	42	1.59	1931.36	1917	20	20.0		AC-228
0	1119.49*	128	45	1.98	2232.47	2225	16	29.8		BI-214
0	1238.30*	34	42	1.56	2469.81	2462	13	88.0		BI-214
0	1377.76	33	43	1.84	2748.54	2742	18	100.5		BI-214
0	1459.71*	428	51	1.99	2912.38	2904	19	13.1		K-40
0	1590.35	66	33	5.89	3173.65	3157	29	57.9		AC-228
0	1618.10	38	0	1.13	3229.16	3220	17	32.4		
0	1728.10*	18	5	1.94	3449.24	3445	10	71.3		BI-214
0	1762.63*	88	6	2.51	3518.35	3512	13	26.4		BI-214
0	1844.72	19	16	0.91	3682.67	3673	16	102.3		

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	93.87	151	901	1.23	187.15	180	9	1.40E-02	74.1	2.74E+00	
0	185.83	262	517	1.22	370.27	365	10	2.42E-02	35.8	3.21E+00	
0	328.49	71	256	1.10	654.47	649	10	6.54E-03	88.8	2.20E+00	
0	1618.10	38	0	1.13	3229.16	3220	17	3.52E-03	32.4	6.25E-01	
0	1844.72	19	16	0.91	3682.67	3673	16	1.80E-03	****	5.63E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	2.923E+00	4.261E-01	1.798E-01	1.157E-02	16.256
CS-137	3.266E-02	1.913E-02	2.241E-02	2.549E-03	1.457
TL-208	1.813E-01	3.431E-02	2.125E-02	2.212E-03	8.532
BI-212	3.365E-01	1.334E-01	1.623E-01	1.775E-02	2.073
PB-212	5.608E-01	5.750E-02	3.379E-02	2.582E-03	16.597
BI-214	3.897E-01	6.622E-02	4.518E-02	4.811E-03	8.626
PB-214	4.268E-01	6.380E-02	4.138E-02	3.173E-03	10.314
RA-223	2.392E-01	9.975E-02	1.064E-01	9.470E-03	2.247
AC-228	7.019E-01	1.233E-01	6.805E-02	5.913E-03	10.315
NP-237	2.526E-01	1.242E-01	1.819E-01	2.286E-02	1.388
AM-243	1.152E-01	3.761E-02	3.827E-02	7.628E-03	3.010

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	-8.612E-03		1.185E-02	1.853E-02	1.078E-03	-0.465
RH-101	-6.226E-03		1.316E-02	2.092E-02	3.267E-03	-0.298
SB-125	7.745E-03		3.226E-02	5.592E-02	4.585E-03	0.139
EU-155	7.454E-02		4.775E-02	8.314E-02	7.785E-03	0.897
PO-209	2.980E+00		2.291E+00	4.379E+00	8.395E-01	0.680
BI-211	-1.787E-01		3.314E-01	5.567E-01	5.450E-02	-0.321
PA-233	-6.702E-03		2.283E-02	3.881E-02	3.126E-03	-0.173
PA-234M	1.187E-01		1.356E+00	2.451E+00	1.914E-01	0.048
TH-234✓	3.722E-01✓		2.555E-01	4.477E-01✓	4.478E-02	0.831
U-235	4.799E-02		8.415E-02	1.402E-01	1.023E-02	0.342
NP-236	1.649E-02		2.585E-02	4.432E-02	4.406E-03	0.372
NP-239	2.289E-02		7.679E-02	1.351E-01	1.823E-02	0.169
AM-241	-2.496E-02		6.810E-02	1.153E-01	7.561E-03	-0.217
CM-243	3.381E-02		4.277E-02	7.329E-02	7.923E-03	0.461
AM-246	1.046E-02		3.803E-02	6.887E-02	8.808E-03	0.152
CF-249	-4.902E-03		1.451E-02	2.434E-02	2.332E-03	-0.201

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 7-DEC-2007 07:59:24

Configuration :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795108_GAMMA1_400MLSAN_17420.CNF

----- Sample Information -----

Sample ID : OH207-7951-08 ✓
Sample Title : SB-CZ-SS-2277-SD ✓
Sample Quantity : 4.52700E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17420

----- Sample Decay/Count Information -----

Collection Date : 27-SEP-2007 00:00:00 Acquisition date : 6-DEC-2007 09:33:05.
Decay time : 70 09:33:05.66 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:01.96

----- Detector Parameters -----

Energy cal. time : 23-MAR-2006 15:15:18 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA1 Counting geometry: 400 ml sand
Effic. cal. time : 23-MAR-2006 15:18:11 Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$x = \ln(a1/\text{energy})$

a1=9.47750E+02 a2=-4.65904E+00 a3=6.59172E-01 a4=3.93115E-02
a5=1.38137E-01 a6=-8.70295E-02 a7=0.00000E+00

----- Processing Parameters -----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA1_17241.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

T M Moore

Date:

12/7/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
2	74.87*	287	399	1.05	149.15	144	15	25.4	1.27E+00	AM-243 PB-214 PB-212
2	77.18*	404	403	1.05	153.78	144	15	18.9		PB-214 PB-212
0	87.40	163	437	1.12	174.25	171	7	45.3		NP-237 PB-214 PB-212
0	90.06	95	374	1.01	179.57	177	6	67.4		
2	93.19*	85	437	1.17	185.84	182	8	92.0	3.87E+00	
0	185.80*	181	499	1.20	371.29	366	11	51.1		
0	209.15	159	435	1.51	418.03	412	11	53.1		AC-228
5	238.60*	1100	259	1.10	477.01	472	17	7.8	1.58E+00	PB-212
5	241.67*	287	315	1.88	483.14	472	17	34.9		PB-214
0	270.12	149	257	1.04	540.13	535	11	44.6		RA-223 AC-228
0	294.85*	335	372	1.20	589.64	583	14	26.9		PB-214
0	299.70*	104	188	2.16	599.34	596	9	51.8		PB-212
0	327.29	128	190	1.40	654.58	649	11	45.4		
0	338.22	243	234	1.14	676.47	672	10	26.9		AC-228
0	351.90*	586	198	1.28	703.87	699	9	12.2		PB-214
0	462.78	73	146	1.77	925.87	922	10	66.7		AC-228
0	510.41*	113	183	2.32	1021.24	1015	15	61.7		TL-208
0	583.09*	387	132	1.50	1166.76	1161	14	16.6		TL-208
0	609.12*	499	148	1.41	1218.87	1211	16	14.4		BI-214
0	661.47	436	162	1.56	1323.68	1316	17	16.5		CS-137
0	727.12	84	68	1.20	1455.11	1449	13	46.8		BI-212
0	795.11	66	40	2.18	1591.22	1586	12	46.2		AC-228
0	860.25	51	46	1.97	1721.63	1717	9	55.4		TL-208
0	910.61*	287	70	1.93	1822.45	1813	16	17.9		AC-228
0	967.38*	216	116	1.97	1936.10	1925	22	28.9		AC-228
0	1120.11*	123	42	1.48	2241.83	2235	15	30.2		BI-214
0	1378.69*	31	34	4.91	2759.43	2746	20	101.4		BI-214
0	1459.97*	414	31	2.09	2922.11	2915	14	11.6		K-40
0	1763.31*	100	12	2.00	3529.23	3520	16	26.6		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	90.06	95	374	1.01	179.57	177	6	8.83E-03	67.4	2.33E+00	
2	93.19	85	437	1.17	185.84	182	8	7.86E-03	92.0	2.44E+00	T
0	185.80	181	499	1.20	371.29	366	11	1.68E-02	51.1	3.03E+00	
0	327.29	128	190	1.40	654.58	649	11	1.18E-02	45.4	2.11E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	3.038E+00	4.094E-01	1.847E-01	1.260E-02	16.451
CS-137	2.343E-01	4.605E-02	2.308E-02	2.480E-03	10.154
TL-208	1.901E-01	3.680E-02	2.417E-02	2.425E-03	7.866
BI-212	3.461E-01	1.654E-01	1.733E-01	1.667E-02	1.997
PB-212	5.283E-01	5.807E-02	3.672E-02	2.834E-03	14.387
BI-214	4.645E-01	8.180E-02	4.282E-02	4.362E-03	10.847
PB-214	4.333E-01	6.283E-02	4.602E-02	3.631E-03	9.416
RA-223	2.463E-01	1.122E-01	1.111E-01	1.022E-02	2.217
AC-228	6.326E-01	1.185E-01	8.434E-02	4.661E-03	7.500
NP-237	3.319E-01	1.578E-01	2.017E-01	2.917E-02	1.645
AM-243	1.395E-01	4.592E-02	4.623E-02	9.698E-03	3.019

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	5.393E-03		1.320E-02	2.328E-02	1.519E-03	0.232
RH-101	-7.731E-03		1.383E-02	2.229E-02	3.457E-03	-0.347
SB-125	1.175E-02		3.753E-02	6.582E-02	5.399E-03	0.178
EU-155	4.237E-02		4.888E-02	8.565E-02	8.503E-03	0.495
PO-209	-6.837E-01		2.303E+00	3.986E+00	7.135E-01	-0.172
BI-211	5.408E-02		3.758E-01	6.729E-01	4.902E-02	0.080
PA-233	2.057E-02		2.356E-02	4.283E-02	3.597E-03	0.480
PA-234M	1.293E+00		1.525E+00	2.912E+00	1.674E-01	0.444
TH-234 ✓	3.589E-01 ✓	+	3.329E-01	5.074E-01 ✓	5.920E-02	0.707
U-235	3.164E-02		8.748E-02	1.472E-01	1.027E-02	0.215
NP-236	8.223E-03		2.905E-02	4.972E-02	5.462E-03	0.165
NP-239	2.625E-02		8.922E-02	1.484E-01	2.002E-02	0.177
AM-241	2.882E-02		7.983E-02	1.412E-01	1.122E-02	0.204
CM-243	-3.806E-02		4.360E-02	7.145E-02	8.143E-03	-0.533
AM-246	1.602E-02		4.388E-02	8.001E-02	9.848E-03	0.200
CF-249	1.194E-02		1.451E-02	2.630E-02	2.537E-03	0.454

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 6-DEC-2007 12:36:33

Configuration :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795109_GAMMA3_400MLSAN_17421.CNF

---- Sample Information ----

Sample ID : OH207-7951-09 ✓
Sample Title : SB-CZ-SS-2278-SD ✓
Sample Quantity : 5.33400E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17421

---- Sample Decay/Count Information ----

Collection Date : 27-SEP-2007 00:00:00 ✓ Acquisition date : 6-DEC-2007 09:36:14.
Decay time : 70 09:36:14.00 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:00.93

---- Detector Parameters ----

Energy cal. time : 30-OCT-2006 16:06:41 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA3 Counting geometry: 400 ml sand
Effic. cal. time : 7-FEB-2007 13:40:24. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$x = \ln(a1/\text{energy})$

a1=9.47750E+02 a2=-4.85663E+00 a3=8.12782E-01 a4=8.53513E-02
a5=-4.88423E-02 a6=-7.49502E-03 a7=0.00000E+00

---- Processing Parameters ----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA3_17240.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal. Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

Tom Moore

Date:

12/7/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
2	74.79*	615	943	1.59	166.10	161	16	22.2	2.37E+00	AM-243 PB-214 PB-212
2	77.26*	833	667	1.20	171.57	161	16	13.3		PB-214 PB-212
2	87.05	404	688	1.61	193.26	182	30	27.5	5.51E+00	NP-237 PB-214 PB-212
2	89.83	237	688	1.62	199.42	182	30	47.1		
2	92.68*	449	625	1.53	205.74	182	30	24.8		
0	185.65*	280	566	1.63	411.81	405	13	38.2		
0	209.26	185	584	1.48	464.15	456	16	60.4		AC-228
2	238.63*	1340	311	1.49	529.25	520	23	7.5	1.47E+00	PB-212
2	241.60	349	355	1.85	535.83	520	23	28.1		PB-214
0	270.11	122	266	1.20	599.02	594	11	54.7		RA-223 AC-228 PB-214
0	295.03*	449	352	1.42	654.26	647	14	20.2		
0	328.05	74	212	1.32	727.45	722	11	79.2		
0	338.69*	196	356	1.55	751.04	741	14	43.3		AC-228
0	351.95*	709	254	1.32	780.43	774	14	12.4		PB-214
0	409.44	65	136	0.66	907.85	904	10	72.2		AC-228
0	510.96*	239	179	2.78	1132.85	1123	25	35.2		TL-208
0	582.80*	383	196	1.66	1292.09	1285	17	19.8		TL-208
0	609.09*	489	165	1.63	1350.36	1343	15	14.8		BI-214
0	661.26	137	147	1.73	1465.97	1455	18	45.2		CS-137
0	727.20*	109	100	1.83	1612.11	1603	16	46.0		BI-212
0	767.59*	70	51	2.23	1701.64	1695	12	48.8		BI-214
0	860.23	77	58	1.45	1906.94	1898	18	52.0		TL-208
0	910.76*	290	50	1.95	2018.94	2010	15	16.0		AC-228
0	968.96*	153	125	1.74	2147.92	2139	15	36.6		AC-228
0	1120.45*	87	102	2.00	2483.63	2472	18	59.7		BI-214
0	1377.47	23	28	0.87	3053.22	3045	14	106.1		BI-214
0	1460.44*	411	36	2.28	3237.07	3229	22	12.5		K-40
4	1763.49*	83	0	3.10	3908.61	3900	17	29.2	1.36E+00	
4	1764.55*	35	0	2.37	3910.96	3900	17	66.6		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
2	89.83	237	688	1.62	199.42	182	30	2.20E-02	47.1	3.55E+00	
2	92.68	449	625	1.53	205.74	182	30	4.16E-02	24.8	3.55E+00	T
0	185.65	280	566	1.63	411.81	405	13	2.59E-02	38.2	2.82E+00	
0	328.05	74	212	1.32	727.45	722	11	6.89E-03	79.2	1.89E+00	
4	1763.49	83	0	3.10	3908.61	3900	17	7.65E-03	29.2	4.90E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	3.240E+00	4.490E-01	1.946E-01	1.145E-02	16.649
CS-137	7.203E-02	3.295E-02	2.594E-02	1.867E-03	2.777
TL-208	1.818E-01	3.881E-02	2.437E-02	1.940E-03	7.459
BI-212	4.455E-01	2.073E-01	2.021E-01	1.467E-02	2.204
PB-212	6.041E-01	6.403E-02	3.894E-02	2.911E-03	15.514
BI-214	4.412E-01	7.340E-02	4.817E-02	3.670E-03	9.159
PB-214	4.940E-01	7.259E-02	4.837E-02	3.848E-03	10.215
RA-223	1.898E-01	1.051E-01	1.201E-01	1.063E-02	1.581
AC-228	6.561E-01	1.148E-01	8.266E-02	5.812E-03	7.938
NP-237	4.307E-01	1.276E-01	1.225E-01	1.366E-02	3.515
AM-243	1.210E-01	3.558E-02	2.518E-02	4.842E-03	4.807

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	-1.972E-03		1.509E-02	2.021E-02	1.071E-03	-0.098
RH-101	-3.324E-03		1.493E-02	2.497E-02	3.853E-03	-0.133
SB-125	1.299E-02		3.795E-02	6.746E-02	5.578E-03	0.193
EU-155	6.116E-02		4.304E-02	7.635E-02	7.180E-03	0.801
PO-209	9.915E-01		2.648E+00	4.884E+00	8.999E-01	0.203
BI-211	-1.800E-01		4.426E-01	7.345E-01	5.290E-02	-0.245
PA-233	-1.409E-02		2.784E-02	4.563E-02	3.724E-03	-0.309
PA-234M	2.073E+00		1.724E+00	3.313E+00	2.262E-01	0.626
TH-234 ✓	1.097E+00 ✓ +		2.892E-01	4.149E-01 ✓	2.761E-02	2.643
U-235	2.837E-02		9.057E-02	1.554E-01	1.153E-02	0.183
NP-236	2.636E-02		2.545E-02	3.960E-02	3.779E-03	0.666
NP-239	-1.958E-02		9.456E-02	1.587E-01	2.122E-02	-0.123
AM-241	-7.663E-02		3.036E-02	4.586E-02	2.902E-03	-1.671
CM-243	2.942E-02		3.831E-02	6.724E-02	7.246E-03	0.438
AM-246	1.270E-02		5.240E-02	9.486E-02	1.197E-02	0.134
CF-249	-2.115E-03		1.643E-02	2.856E-02	2.844E-03	-0.074

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 6-DEC-2007 15:34:21

Configuration :
SYSS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795110_GAMMA1_400MLSAN_17424.CNF

----- Sample Information -----

Sample ID : OH207-7951-10 ✓
Sample Title : SB-CZ-SS-2279-SD ✓
Sample Quantity : 5.04000E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17424

----- Sample Decay/Count Information -----

Collection Date : 27-SEP-2007 00:00:00 Acquisition date : 6-DEC-2007 12:34:01.
Decay time : 70 12:34:01.90 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:02.19

----- Detector Parameters -----

Energy cal. time : 23-MAR-2006 15:15:18 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA1 Counting geometry: 400 ml sand
Effic. cal. time : 23-MAR-2006 15:18:11 Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$x = \ln(a1/\text{energy})$

a1=9.47750E+02 a2=-4.65904E+00 a3=6.59172E-01 a4=3.93115E-02
a5=1.38137E-01 a6=-8.70295E-02 a7=0.00000E+00

----- Processing Parameters -----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :
SYSS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA1_17241.CNF;1
Nuclide Lib File : SYSS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYSS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature: Tim Moore

Date: 12/7/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
3	74.97*	293	483	0.96	149.34	144	14	26.3	1.17E+00	AM-243 PB-214 PB-212
3	77.22*	496	457	1.04	153.85	144	14	16.6		PB-214 PB-212
2	87.33	179	359	0.87	174.10	171	21	34.1	8.53E-01	NP-237 PB-214 PB-212
2	90.07	130	462	1.16	179.60	171	21	57.2		
2	92.66*	167	362	1.04	184.77	171	21	44.3		
0	185.95*	309	541	1.10	371.58	366	11	32.0		
0	209.29	100	460	0.76	418.32	413	10	82.4		AC-228
0	238.53*	1291	553	1.22	476.86	471	10	8.9		PB-212
0	241.69*	243	309	1.61	483.19	481	7	28.2		PB-214
2	269.81	111	168	1.45	539.50	536	10	46.0	2.27E+00	RA-223
2	270.31	109	213	1.45	540.50	536	10	55.1		AC-228
0	277.10	107	283	1.64	554.09	550	10	62.1		TL-208
0	295.22*	459	341	1.16	590.37	584	13	19.2		PB-214
0	299.74*	56	218	1.02	599.42	596	8	95.7		PB-212
0	328.20	89	203	0.76	656.42	653	8	59.4		
0	338.14	276	293	1.37	676.32	672	10	26.1		AC-228
0	351.83*	827	273	1.30	703.71	697	15	11.3		PB-214
0	463.00	133	158	2.05	926.31	921	14	43.6		AC-228
0	510.76*	165	232	2.10	1021.94	1016	17	49.5		TL-208
0	583.04*	478	143	1.50	1166.65	1161	12	13.8		TL-208
0	609.10*	648	90	1.40	1218.83	1213	12	10.0		BI-214
1	661.29	126	75	1.67	1323.30	1317	19	32.1	1.79E+00	CS-137
1	665.21	47	64	1.67	1331.17	1317	19	72.8		
0	726.96	112	66	1.99	1454.79	1449	11	33.8		BI-212
0	768.29	68	66	0.72	1537.53	1533	9	49.9		BI-214
0	795.07	86	84	1.71	1591.14	1584	16	52.1		AC-228
0	860.16	57	38	1.37	1721.45	1717	11	50.3		TL-208
0	910.77*	372	85	1.89	1822.77	1816	17	15.5		AC-228
0	934.16	26	49	1.62	1869.59	1863	10	109.5		BI-214
4	964.05	82	63	2.49	1929.42	1922	25	49.0	1.40E+00	AC-228
4	968.62*	214	39	1.81	1938.58	1922	25	18.4		AC-228
0	1119.93*	131	61	1.84	2241.47	2235	16	32.7		BI-214
0	1377.51*	42	20	2.63	2757.06	2752	13	54.9		BI-214
0	1460.11*	528	27	2.13	2922.39	2912	17	9.9		K-40
0	1587.73	23	40	1.19	3177.83	3172	13	119.7		AC-228
0	1722.23	13	12	1.00	3447.00	3440	12	120.2		
0	1729.03	27	12	0.62	3460.62	3454	15	65.9		BI-214
3	1762.88*	54	7	2.26	3528.37	3518	18	48.4	9.67E-01	
3	1764.50*	59	2	1.67	3531.61	3518	18	37.8		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
2	90.07	130	462	1.16	179.60	171	21	1.20E-02	57.2	2.33E+00	
2	92.66	167	362	1.04	184.77	171	21	1.55E-02	44.3	2.42E+00	T
0	185.95	309	541	1.10	371.58	366	11	2.86E-02	32.0	3.03E+00	
0	328.20	89	203	0.76	656.42	653	8	8.22E-03	59.4	2.10E+00	
1	665.21	47	64	1.67	1331.17	1317	19	4.34E-03	72.8	1.21E+00	
0	1722.23	13	12	1.00	3447.00	3440	12	1.20E-03	****	6.22E-01	
3	1762.88	54	7	2.26	3528.37	3518	18	5.00E-03	48.4	6.10E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	3.474E+00	4.188E-01	1.903E-01	1.299E-02	18.256
CS-137	6.089E-02	2.064E-02	2.232E-02	2.398E-03	2.728
TL-208	2.108E-01	3.602E-02	2.333E-02	2.341E-03	9.035
BI-212	4.165E-01	1.463E-01	1.625E-01	1.564E-02	2.563
PB-212	5.568E-01	6.567E-02	4.375E-02	3.377E-03	12.726
BI-214	5.418E-01	7.742E-02	4.005E-02	4.079E-03	13.529
PB-214	5.485E-01	7.545E-02	4.002E-02	3.158E-03	13.707
RA-223	1.643E-01	7.705E-02	1.104E-01	1.016E-02	1.488
AC-228	7.356E-01	1.213E-01	7.372E-02	4.074E-03	9.978
NP-237	3.271E-01	1.213E-01	1.971E-01	2.850E-02	1.660
AM-243	1.278E-01	4.299E-02	4.232E-02	8.879E-03	3.020

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	1.350E-02		1.289E-02	2.140E-02	1.397E-03	0.631
RH-101	-4.219E-03		1.369E-02	2.230E-02	3.459E-03	-0.189
SB-125	1.654E-02		3.384E-02	5.990E-02	4.913E-03	0.276
EU-155	3.466E-02		4.779E-02	8.302E-02	8.242E-03	0.418
PO-209	-1.690E+00		2.174E+00	3.542E+00	6.339E-01	-0.477
BI-211	1.215E-01		3.556E-01	6.431E-01	4.686E-02	0.189
PA-233	6.068E-03		2.194E-02	3.878E-02	3.257E-03	0.156
PA-234M	7.118E-02		1.492E+00	2.649E+00	1.523E-01	0.027
TH-234✓	6.343E-01✓	+	2.906E-01	4.881E-01✓	5.694E-02	1.299
U-235	1.291E-02		8.443E-02	1.408E-01	9.830E-03	0.092
NP-236	1.385E-02		3.021E-02	4.697E-02	5.160E-03	0.295
NP-239	-4.625E-02		8.499E-02	1.355E-01	1.828E-02	-0.341
AM-241	-1.498E-02		7.870E-02	1.361E-01	1.082E-02	-0.110
CM-243	2.935E-02		4.321E-02	7.500E-02	8.548E-03	0.391
AM-246	2.431E-02		3.912E-02	7.300E-02	8.984E-03	0.333
CF-249	-5.750E-03		1.403E-02	2.370E-02	2.286E-03	-0.243

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 6-DEC-2007 15:32:25

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795111_GAMMA2_400MLSAN_17423.CNF

----- Sample Information -----

Sample ID : OH207-7951-11✓
Sample Title : SB-CZ-SS-2280-SD✓
Sample Quantity : 4.21500E+02 GDRY✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17423

----- Sample Decay/Count Information -----

Collection Date : 27-SEP-2007 00:00:00 Acquisition date : 6-DEC-2007 12:32:06.
Decay time : 70 12:32:06.42 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00✓ Elapsed real time: 0 03:00:01.47

----- Detector Parameters -----

Energy cal. time : 1-MAY-2007 11:12:10. Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA2 Counting geometry: 400 ml sand
Effic. cal. time : 1-MAY-2007 11:13:44. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$x = \ln(a1/\text{energy})$

a1=9.47750E+02 a2=-4.68491E+00 a3=7.34327E-01 a4=7.12916E-02
a5=8.21331E-02 a6=-7.02143E-02 a7=0.00000E+00

----- Processing Parameters -----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA2_17242.CNF;1
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

T M Moore

Date:

12/7/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.07*	122	610	0.98	125.83	122	7	71.4		TH-234
3	74.86*	380	679	1.03	149.30	145	13	24.0	1.06E+00	AM-243
										PB-214
										PB-212
3	77.05*	796	714	1.10	153.66	145	13	13.8		PB-214
										PB-212
3	87.07	349	707	1.34	173.62	163	28	28.4	1.37E+00	NP-237
										PB-214
										PB-212
3	89.87	209	583	1.10	179.20	163	28	41.6		
3	92.97*	304	625	1.36	185.35	163	28	33.3		TH-234
0	104.86	122	632	1.75	209.04	206	9	76.2		CM-243
										EU-155
0	129.31	124	722	0.95	257.72	253	9	80.2		AC-228
0	186.09*	366	815	1.22	370.80	365	13	34.3		
0	209.38	231	723	1.14	417.19	411	13	50.0		AC-228
2	238.74*	1950	415	1.12	475.65	471	19	5.7	2.14E+00	PB-212
2	241.17*	186	415	1.45	480.51	471	19	60.2		
2	242.02*	280	355	1.29	482.19	471	19	29.9		PB-214
0	270.55	181	439	1.24	539.02	534	12	48.8		RA-223
										AC-228
0	295.45*	536	318	1.26	588.64	584	10	15.3		PB-214
0	300.21	148	325	1.49	598.12	594	11	50.0		PB-212
0	338.28*	333	400	1.28	673.97	669	12	26.4		AC-228
0	352.11*	925	357	1.24	701.53	696	12	10.7		PB-214
0	463.23	156	154	1.40	922.98	918	12	35.8		AC-228
0	511.15*	227	286	1.98	1018.53	1010	20	41.0		TL-208
0	583.36*	606	138	1.58	1162.50	1156	11	11.2		TL-208
0	609.37*	646	196	1.28	1214.36	1207	14	12.3		BI-214
0	661.62	141	102	1.71	1318.57	1313	11	32.3		CS-137
0	727.44	121	83	0.97	1449.87	1446	9	32.7		BI-212
0	769.07*	103	114	1.90	1532.92	1525	18	52.7		BI-214
0	795.23*	75	98	1.48	1585.11	1578	15	62.1		AC-228
0	860.48*	74	102	1.76	1715.33	1709	12	60.3		TL-208
0	911.03*	430	97	1.64	1816.22	1808	17	14.4		AC-228
0	933.97	52	43	1.33	1862.02	1856	11	57.0		BI-214
1	964.66	83	62	1.93	1923.29	1917	20	44.9	1.96E+00	AC-228
1	968.70*	274	50	1.89	1931.35	1917	20	16.1		AC-228
0	1119.89*	149	92	1.76	2233.26	2225	18	34.6		BI-214
0	1237.97*	62	53	1.17	2469.16	2464	11	53.9		BI-214
0	1376.80	55	32	0.92	2746.63	2740	14	51.3		BI-214
0	1459.64*	758	34	2.23	2912.23	2902	19	8.3		K-40
0	1507.64	26	21	0.92	3008.23	3004	10	75.0		BI-214
0	1586.36	36	8	1.45	3165.66	3160	11	45.7		AC-228
0	1708.49	17	5	1.33	3410.01	3405	12	72.5		
0	1727.50*	31	7	2.50	3448.04	3441	13	52.4		BI-214
0	1762.43*	124	19	2.26	3517.95	3511	15	24.5		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
3	89.87	209	583	1.10	179.20	163	28	1.94E-02	41.6	2.60E+00	
0	186.09	366	815	1.22	370.80	365	13	3.39E-02	34.3	3.21E+00	
2	241.17	186	415	1.45	480.51	471	19	1.72E-02	60.2	2.78E+00	
0	1708.49	17	5	1.33	3410.01	3405	12	1.62E-03	72.5	5.99E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	6.257E+00	6.560E-01	2.520E-01	1.622E-02	24.829
CS-137	8.145E-02	2.793E-02	3.022E-02	3.437E-03	2.696
EU-155	1.154E-01	8.860E-02	9.998E-02	9.362E-03	1.154
TL-208	3.155E-01	4.828E-02	2.649E-02	2.759E-03	11.910
BI-212	5.400E-01	1.860E-01	2.226E-01	2.434E-02	2.426
PB-212	9.543E-01	9.103E-02	4.634E-02	3.541E-03	20.595
BI-214	6.392E-01	1.041E-01	5.295E-02	5.638E-03	12.073
PB-214	7.043E-01	9.243E-02	5.295E-02	4.060E-03	13.299
RA-223	3.046E-01	1.511E-01	1.404E-01	1.249E-02	2.169
AC-228	1.040E+00	1.752E-01	9.649E-02	8.385E-03	10.781
TH-234✓	1.237E+00 ✓	4.302E-01	4.487E-01 ✓	4.487E-02	2.758
NP-237	6.738E-01	2.090E-01	2.120E-01	2.664E-02	3.178
AM-243	1.699E-01	5.300E-02	5.412E-02	1.079E-02	3.139
CM-243	1.052E-01	8.097E-02	8.746E-02	9.455E-03	1.203

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	4.633E-06		1.685E-02	2.793E-02	1.625E-03	0.000
RH-101	-1.615E-03		1.720E-02	2.779E-02	4.339E-03	-0.058
SB-125	1.903E-02		4.359E-02	7.582E-02	6.216E-03	0.251
PO-209	7.275E-01		3.165E+00	5.622E+00	1.078E+00	0.129
BI-211	1.387E-01		4.804E-01	8.534E-01	8.354E-02	0.162
PA-233	2.804E-03		2.927E-02	5.055E-02	4.071E-03	0.055
PA-234M	1.196E+00		1.774E+00	3.326E+00	2.596E-01	0.360
U-235	5.983E-02		1.105E-01	1.834E-01	1.339E-02	0.326
NP-236	3.233E-02		3.659E-02	6.006E-02	5.970E-03	0.538
NP-239	-1.264E-01		1.039E-01	1.706E-01	2.303E-02	-0.741
AM-241	8.267E-02		9.760E-02	1.547E-01	1.015E-02	0.534
AM-246	4.044E-02		5.894E-02	1.073E-01	1.373E-02	0.377
CF-249	-1.863E-04		1.810E-02	3.088E-02	2.959E-03	-0.006

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 6-DEC-2007 15:37:48

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795112_GAMMA3_400MLSAN_17425.CNF

----- Sample Information -----
Sample ID : OH207-7951-12 ✓
Sample Title : SB-CZ-SS-2281-SD ✓
Sample Quantity : 4.58700E+02 GDRY
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17425

----- Sample Decay/Count Information -----
Collection Date : 27-SEP-2007 00:00:00 ✓ Acquisition date : 6-DEC-2007 12:37:21.
Decay time : 70 12:37:21.75 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:01.06

----- Detector Parameters -----
Energy cal. time : 30-OCT-2006 16:06:41 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA3 Counting geometry: 400 ml sand
Effic. cal. time : 7-FEB-2007 13:40:24. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$x = \ln(a1/\text{energy})$

a1=9.47750E+02 a2=-4.85663E+00 a3=8.12782E-01 a4=8.53513E-02
a5=-4.88423E-02 a6=-7.49502E-03 a7=0.00000E+00

----- Processing Parameters -----
Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA3_17240.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

Tim Moore

Date:

12/7/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	46.53*	136	582	1.33	103.45	97	12	75.6		
0	63.32*	165	677	1.18	140.66	137	8	60.7		TH-234
1	74.88*	735	986	1.44	166.29	158	20	18.5	1.85E+00	AM-243
										PB-214
										PB-212
1	77.13*	1277	776	1.24	171.28	158	20	9.9		PB-214
										PB-212
0	86.82	294	1327	1.29	192.75	186	12	50.9		NP-237
										PB-214
										PB-212
4	89.90	177	616	0.92	199.58	197	14	46.1	1.63E+00	
4	92.82*	412	952	1.50	206.04	197	14	31.5		TH-234
0	128.95	121	568	0.87	286.14	283	8	70.5		AC-228
0	185.83*	359	622	1.44	412.22	407	11	29.9		
0	209.17	187	464	1.44	463.96	460	10	45.5		AC-228
3	238.61*	1870	348	1.45	529.20	520	22	6.1	1.96E+00	PB-212
3	241.62	503	403	1.93	535.88	520	22	24.2		PB-214
0	269.97	164	303	1.89	598.72	594	11	44.1		RA-223
										AC-228
0	277.38	123	412	1.55	615.13	608	14	72.1		TL-208
0	295.37*	514	400	1.32	655.01	647	13	18.4		PB-214
0	299.93	101	296	1.36	665.12	661	10	66.8		PB-212
0	338.43*	338	327	1.45	750.46	745	11	23.5		AC-228
0	351.94*	929	262	1.60	780.40	773	15	10.1		PB-214
0	462.70	132	222	1.42	1025.90	1020	15	52.0		AC-228
0	510.78*	254	172	1.82	1132.46	1125	17	29.7		TL-208
0	583.05*	663	141	1.54	1292.64	1285	18	11.5		TL-208
0	609.03*	652	150	1.73	1350.22	1344	16	11.5		BI-214
0	727.14*	156	88	2.01	1611.99	1605	13	29.9		BI-212
0	794.94	54	115	1.25	1762.25	1757	14	87.3		AC-228
0	860.69	86	63	1.46	1907.97	1900	14	44.6		TL-208
0	910.96*	380	74	1.90	2019.38	2010	16	14.5		AC-228
2	964.69	66	53	2.12	2138.45	2133	25	44.4	1.47E+00	AC-228
2	968.78*	238	53	1.86	2147.52	2133	25	17.9		AC-228
0	1119.88*	163	63	1.61	2482.38	2472	18	28.1		BI-214
0	1377.18	61	18	2.87	3052.58	3045	15	40.2		BI-214
0	1407.14	35	38	0.76	3118.97	3109	19	91.0		BI-214
0	1460.54*	613	38	2.32	3237.29	3224	24	9.8		K-40
0	1729.22*	29	10	1.02	3832.67	3826	13	59.6		BI-214
0	1764.18*	97	17	2.12	3910.14	3901	19	30.1		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	46.53	136	582	1.33	103.45	97	12	1.26E-02	75.6	2.77E+00	
4	89.90	177	616	0.92	199.58	197	14	1.64E-02	46.1	3.55E+00	
0	185.83	359	622	1.44	412.22	407	11	3.32E-02	29.9	2.82E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	5.618E+00	6.427E-01	2.263E-01	1.331E-02	24.829
TL-208	3.660E-01	5.128E-02	3.057E-02	2.433E-03	11.972
BI-212	7.431E-01	2.288E-01	2.559E-01	1.857E-02	2.904
PB-212	9.807E-01	9.455E-02	5.004E-02	3.741E-03	19.596
BI-214	6.848E-01	9.457E-02	5.801E-02	4.420E-03	11.805
PB-214	7.530E-01	9.709E-02	6.269E-02	4.987E-03	12.012
RA-223	2.955E-01	1.328E-01	1.488E-01	1.317E-02	1.986
AC-228	1.001E+00	1.611E-01	9.750E-02	6.855E-03	10.270
TH-234✓	1.170E+00✓	3.827E-01	3.704E-01✓	3.317E-02	3.159
NP-237	3.643E-01	1.898E-01	1.805E-01	2.012E-02	2.019
AM-243	1.682E-01	4.493E-02	3.150E-02	6.058E-03	5.341

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	5.545E-03		1.907E-02	3.140E-02	1.665E-03	0.177
RH-101	7.259E-03		1.857E-02	3.157E-02	4.873E-03	0.230
SB-125	8.235E-03		4.872E-02	8.547E-02	7.066E-03	0.096
CS-137	-1.191E-02		2.003E-02	3.312E-02	2.384E-03	-0.360
EU-155	3.407E-02		5.470E-02	9.542E-02	8.972E-03	0.357
PO-209	-7.315E-02		3.289E+00	5.867E+00	1.081E+00	-0.012
BI-211	-1.034E-01		5.702E-01	9.591E-01	6.908E-02	-0.108
PA-233	2.061E-02		3.236E-02	5.583E-02	4.556E-03	0.369
PA-234M	9.402E-01		2.058E+00	3.754E+00	2.564E-01	0.250
U-235	3.694E-04		1.135E-01	1.928E-01	1.431E-02	0.002
NP-236	6.108E-03		3.254E-02	5.122E-02	4.887E-03	0.119
NP-239	1.140E-02		1.208E-01	2.044E-01	2.735E-02	0.056
AM-241	6.441E-02		4.045E-02	6.164E-02	3.901E-03	1.045
CM-243	-5.144E-03		4.917E-02	8.443E-02	9.098E-03	-0.061
AM-246	6.588E-02		6.913E-02	1.293E-01	1.632E-02	0.510
CF-249	1.119E-02		2.066E-02	3.680E-02	3.665E-03	0.304

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 6-DEC-2007 18:35:46

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795113_GAMMA1_400MLSAN_17426.CNF

---- Sample Information ----

Sample ID : OH207-7951-13 ✓
Sample Title : SB-CZ-SS-2282-SD ✓
Sample Quantity : 4.21100E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17426

---- Sample Decay/Count Information ----

Collection Date : 27-SEP-2007 00:00:00 Acquisition date : 6-DEC-2007 15:35:26.
Decay time : 70 15:35:26.22 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:02.55

---- Detector Parameters ----

Energy cal. time : 23-MAR-2006 15:15:18 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA1 Counting geometry: 400 ml sand
Effic. cal. time : 23-MAR-2006 15:18:11 Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$x = \ln(a1/\text{energy})$

a1=9.47750E+02 a2=-4.65904E+00 a3=6.59172E-01 a4=3.93115E-02
a5=1.38137E-01 a6=-8.70295E-02 a7=0.00000E+00

---- Processing Parameters ----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA1_17241.CNF;1
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

T. Moore

Date:

12/7/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
2	74.96*	419	579	1.03	149.32	142	19	20.6	1.95E+00	AM-243 PB-214 PB-212
2	77.24*	768	542	1.08	153.89	142	19	12.2		PB-214 PB-212
5	87.34	355	537	1.21	174.13	164	27	24.2	1.73E+00	NP-237 PB-214 PB-212
5	89.95	254	532	1.17	179.35	164	27	33.0		
5	92.86*	358	676	1.55	185.18	164	27	29.5		
0	129.33	114	599	0.96	258.21	254	8	77.1		AC-228
0	185.84*	447	609	1.21	371.36	366	11	23.8		
0	205.68	102	354	1.21	411.09	408	7	64.8		
0	209.29	227	396	1.18	418.32	415	8	33.0		AC-228
0	238.57*	1863	588	1.09	476.94	473	8	6.5		PB-212
0	241.71*	291	434	1.30	483.24	481	7	27.2		PB-214
0	270.21	165	427	1.70	540.30	536	11	50.9		RA-223 AC-228
0	277.50	82	305	0.95	554.89	551	8	77.7		TL-208
1	295.10*	639	239	1.31	590.13	583	21	11.6	2.11E+00	PB-214
1	299.90*	144	227	1.35	599.75	583	21	41.2		PB-212
0	328.21	124	373	1.33	656.42	651	13	66.9		
0	338.31	478	301	1.26	676.65	671	11	16.8		AC-228
0	351.86*	984	223	1.28	703.77	699	9	8.5		PB-214
0	463.12	187	192	1.61	926.55	921	15	35.7		AC-228
0	510.72*	232	290	1.79	1021.85	1014	18	39.6		TL-208
0	582.90*	773	172	1.49	1166.36	1158	16	10.5		TL-208
0	609.02*	816	138	1.55	1218.67	1213	14	9.4		BI-214
0	661.61	89	114	1.69	1323.95	1320	9	48.2		CS-137
0	727.08	183	90	1.66	1455.04	1450	10	24.4		BI-212
0	768.05	83	104	1.04	1537.06	1532	10	51.0		BI-214
0	785.63	40	81	0.99	1572.23	1568	10	91.3		BI-212
0	794.58	89	98	1.17	1590.16	1583	14	51.7		AC-228
0	860.07	103	65	1.69	1721.26	1714	12	37.3		TL-208
0	910.81*	491	117	1.71	1822.84	1815	18	13.8		AC-228
2	964.12	90	92	2.06	1929.57	1922	23	45.7	7.82E-01	AC-228
2	968.56*	286	73	1.81	1938.45	1922	23	16.9		AC-228
0	1000.61*	29	39	0.70	2002.62	1999	8	86.8		PA-234M
0	1120.13*	145	82	1.78	2241.86	2235	13	31.7		BI-214
0	1376.70*	101	24	1.77	2755.45	2748	16	29.8		BI-214
0	1460.01*	877	38	1.89	2922.19	2913	19	7.6		K-40
0	1620.12*	32	13	1.46	3242.66	3238	9	57.6		BI-212
0	1763.66*	162	24	2.01	3529.92	3522	19	21.9		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
5	89.95	254	532	1.17	179.35	164	27	2.35E-02	33.0	2.33E+00	
5	92.86	358	676	1.55	185.18	164	27	3.31E-02	29.5	2.43E+00	T
0	185.84	447	609	1.21	371.36	366	11	4.14E-02	23.8	3.03E+00	
0	205.68	102	354	1.21	411.09	408	7	9.44E-03	64.8	2.90E+00	
0	328.21	124	373	1.33	656.42	651	13	1.15E-02	66.9	2.10E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	6.909E+00	7.073E-01	2.127E-01	1.452E-02	32.481
CS-137	5.154E-02	2.545E-02	3.226E-02	3.467E-03	1.598
TL-208	4.083E-01	5.945E-02	2.903E-02	2.913E-03	14.067
BI-212	8.119E-01	2.131E-01	2.017E-01	1.940E-02	4.025
PB-212	9.618E-01	9.716E-02	6.008E-02	4.637E-03	16.009
BI-214	8.161E-01	1.133E-01	5.345E-02	5.445E-03	15.268
PB-214	7.814E-01	9.067E-02	5.329E-02	4.205E-03	14.662
RA-223	2.931E-01	1.517E-01	1.418E-01	1.305E-02	2.067
AC-228	1.162E+00	1.730E-01	1.051E-01	5.808E-03	11.060
PA-234M	2.257E+00	1.964E+00	3.193E+00	1.836E-01	0.707
NP-237	7.747E-01	2.184E-01	2.201E-01	3.183E-02	3.520
AM-243	2.184E-01	6.429E-02	5.618E-02	1.179E-02	3.888

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	7.700E-03		1.821E-02	2.268E-02	1.480E-03	0.339
RH-101	6.349E-03		1.756E-02	2.924E-02	4.536E-03	0.217
SB-125	1.055E-02		4.648E-02	8.049E-02	6.601E-03	0.131
EU-155	4.093E-02		6.399E-02	1.103E-01	1.095E-02	0.371
PO-209	-1.247E+00		3.120E+00	5.294E+00	9.476E-01	-0.235
BI-211	2.425E-01		4.774E-01	8.642E-01	6.296E-02	0.281
PA-233	-9.648E-03		2.838E-02	4.862E-02	4.083E-03	-0.198
TH-234 ✓	1.625E+00 ✓ +		5.156E-01	6.511E-01 ✓	7.596E-02	2.496
U-235	1.004E-01		1.092E-01	1.858E-01	1.297E-02	0.540
NP-236	9.074E-03		3.822E-02	6.225E-02	6.839E-03	0.146
NP-239	1.967E-02		1.112E-01	1.829E-01	2.468E-02	0.108
AM-241	3.514E-02		1.025E-01	1.799E-01	1.430E-02	0.195
CM-243	2.098E-02		5.718E-02	9.800E-02	1.117E-02	0.214
AM-246	1.829E-02		5.403E-02	9.693E-02	1.193E-02	0.189
CF-249	1.798E-02		1.866E-02	3.350E-02	3.231E-03	0.537

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Montgomery, AL

Gamma Spectroscopy Report Generated 6-DEC-2007 18:36:39

Configuration :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795114_GAMMA2_400MLSAN_17427.CNF

---- Sample Information ----

Sample ID : OH207-7951-14 ✓
Sample Title : SB-CZ-SS-2283-SD ✓
Sample Quantity : 5.00300E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17427

---- Sample Decay/Count Information ----

Collection Date : 27-SEP-2007 00:00:00 Acquisition date : 6-DEC-2007 15:36:23.
Decay time : 70 15:36:23.30 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:01.61

---- Detector Parameters ----

Energy cal. time : 1-MAY-2007 11:12:10. Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA2 Counting geometry: 400 ml sand
Effic. cal. time : 1-MAY-2007 11:13:44. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$x = \ln(a1/\text{energy})$

a1=9.47750E+02 a2=-4.68491E+00 a3=7.34327E-01 a4=7.12916E-02
a5=8.21331E-02 a6=-7.02143E-02 a7=0.00000E+00

---- Processing Parameters ----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA2_17242.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

TM Moore

Date:

12/7/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.33*	118	964	1.39	126.34	122	101	101.1		TH-234
3	74.77*	603	892	1.31	149.13	144	14	19.3	1.82E+00	AM-243
										PB-214
										PB-212
3	77.05*	765	661	0.95	153.67	144	14	13.2		PB-214
										PB-212
4	86.75	205	674	1.25	172.98	161	30	46.3	3.05E+00	NP-237
4	87.54	180	572	0.97	174.54	161	30	46.6		PB-214
										PB-212
4	89.91	280	563	1.04	179.26	161	30	29.5		
4	92.74*	434	825	1.49	184.90	161	30	27.3		TH-234
0	185.98*	307	720	1.31	370.57	366	9	34.3		
0	209.21	270	653	1.25	416.85	412	10	37.6		AC-228
2	238.74*	2155	428	1.11	475.66	468	19	5.4	1.64E+00	PB-212
2	241.11*	200	446	1.32	480.38	468	19	56.1		
2	242.07*	311	437	1.28	482.30	468	19	28.5		PB-214
0	270.26	255	331	1.47	538.45	534	9	28.7		RA-223
										AC-228
0	278.64	112	653	1.62	555.14	546	161	103.7		TL-208
4	295.42*	735	279	1.36	588.57	582	21	10.8	1.26E+00	PB-214
4	300.14	218	288	1.58	597.98	582	21	31.7		PB-212
0	327.89	160	312	1.47	653.28	648	11	45.7		
0	338.21*	470	358	1.19	673.83	668	12	18.6		AC-228
0	352.12*	1119	353	1.32	701.54	695	12	9.1		PB-214
0	463.92	144	230	1.18	924.38	917	13	46.9		AC-228
0	511.04*	239	258	1.43	1018.31	1012	14	34.0		TL-208
0	583.31*	683	185	1.33	1162.40	1157	12	11.2		TL-208
0	609.46*	809	126	1.55	1214.55	1210	9	8.8		BI-214
0	661.72	210	165	1.50	1318.78	1311	13	28.9		CS-137
0	727.40	178	103	1.00	1449.79	1444	11	26.8		BI-212
0	768.14*	54	133	1.09	1531.07	1527	10	85.4		BI-214
0	785.39	68	105	1.75	1565.48	1557	14	68.6		BI-212
0	795.42*	85	121	1.57	1585.50	1579	16	62.9		AC-228
0	860.34*	128	65	1.54	1715.06	1708	13	31.8		TL-208
0	910.90*	509	79	1.75	1815.97	1807	16	12.0		AC-228
0	933.83	43	50	2.21	1861.74	1858	8	64.2		BI-214
4	964.36	104	72	2.57	1922.68	1915	28	42.0	5.84E-01	AC-228
4	968.83*	294	48	1.90	1931.62	1915	28	15.3		AC-228
0	1120.02*	171	90	2.01	2233.53	2225	15	29.0		BI-214
0	1238.05*	132	60	2.17	2469.33	2462	17	32.3		BI-214
0	1377.72	74	27	2.18	2748.46	2742	17	40.6		BI-214
0	1406.64	35	12	2.78	2806.27	2802	8	47.9		BI-214
0	1459.64*	931	54	1.86	2912.24	2903	18	7.6		K-40
0	1589.25	83	26	5.77	3171.43	3162	21	37.7		AC-228
0	1619.98	55	6	3.43	3232.92	3224	21	34.2		BI-212
0	1647.09	12	5	0.57	3287.16	3281	10	90.5		
0	1728.17*	41	10	2.00	3449.39	3444	12	46.7		BI-214
0	1762.62*	160	16	2.15	3518.34	3512	16	20.1		BI-214
0	1844.56	38	7	4.18	3682.35	3673	16	46.2		

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
4	89.91	280	563	1.04	179.26	161	30	2.59E-02	29.5	2.61E+00	
0	185.98	307	720	1.31	370.57	366	9	2.84E-02	34.3	3.21E+00	
2	241.11	200	446	1.32	480.38	468	19	1.85E-02	56.1	2.78E+00	
0	327.89	160	312	1.47	653.28	648	11	1.48E-02	45.7	2.20E+00	
0	1647.09	12	5	0.57	3287.16	3281	10	1.11E-03	90.5	6.16E-01	
0	1844.56	38	7	4.18	3682.35	3673	16	3.52E-03	46.2	5.63E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	6.471E+00	6.462E-01	1.980E-01	1.274E-02	32.687
CS-137	1.017E-01	3.154E-02	2.565E-02	2.918E-03	3.964
TL-208	3.000E-01	4.588E-02	2.545E-02	2.650E-03	11.786
BI-212	6.676E-01	1.934E-01	2.003E-01	2.190E-02	3.332
PB-212	8.886E-01	8.327E-02	4.101E-02	3.134E-03	21.666
BI-214	6.745E-01	9.327E-02	5.139E-02	5.472E-03	13.124
PB-214	7.178E-01	8.548E-02	4.856E-02	3.723E-03	14.783
RA-223	3.615E-01	1.085E-01	1.214E-01	1.080E-02	2.978
AC-228	1.037E+00	1.535E-01	9.267E-02	8.052E-03	11.193
TH-234✓	1.487E+00✓	4.327E-01	4.020E-01✓	4.021E-02	3.700
NP-237	3.338E-01	1.601E-01	1.900E-01	2.387E-02	1.757
AM-243	2.270E-01	6.297E-02	4.619E-02	9.208E-03	4.913

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	1.011E-02		1.616E-02	2.334E-02	1.358E-03	0.433
RH-101	9.830E-03		1.619E-02	2.658E-02	4.150E-03	0.370
SB-125	1.555E-02		3.952E-02	6.829E-02	5.599E-03	0.228
EU-155	9.367E-02		5.738E-02	9.891E-02	9.261E-03	0.947
PO-209	1.695E+00		2.826E+00	5.105E+00	9.788E-01	0.332
BI-211	-1.330E-01		4.398E-01	7.477E-01	7.319E-02	-0.178
PA-233	-7.828E-03		2.677E-02	4.537E-02	3.654E-03	-0.173
PA-234M	6.141E-01		1.660E+00	3.002E+00	2.344E-01	0.205
U-235	7.808E-02		9.878E-02	1.648E-01	1.203E-02	0.474
NP-236	3.063E-02		3.322E-02	5.435E-02	5.403E-03	0.563
NP-239	-1.698E-02		9.284E-02	1.600E-01	2.159E-02	-0.106
AM-241	-1.191E-02		9.003E-02	1.371E-01	8.994E-03	-0.087
CM-243	3.084E-02		5.012E-02	8.500E-02	9.189E-03	0.363
AM-246	5.299E-02		5.271E-02	9.724E-02	1.244E-02	0.545
CF-249	1.508E-02		1.759E-02	3.087E-02	2.958E-03	0.488

BENCH SHEET

Method:	Gamma Spec (DOE 4.5.2.3)	Project Name:	Cabrera Services-Oahu, HI
Analysis Type:	Gamma (DOE 21 day inq)	Project Location:	
Matrix:	Soil	Project Number:	FOAH2/L
Date Received:	10/1/2007	Client Project Manager:	Greg Miller
SC&A Project Manager:			
S7950 7953			

Prefix	Batch and Sample Number	Client ID	Collection Date	Date Submitted to Counting Room
SCAQC	7952-PB ✓		10/1/2007 9:15:00 AM	
SCAQC	7952-LD1 ✓ OH207-7952-01	SB-CZ-SS-2284-ST	9/27/2007	
SCAQC	7952-LC1 ✓		10/1/2007 9:15:00 AM	

Prefix	Batch and Sample Number	Client ID	Collection Date	Date Submitted to Counting Room
OH207	7952-01 ✓	SB-CZ-SS-2284-ST	9/27/2007	
OH207	7952-02 ✓	SB-CZ-SS-2285-ST	9/27/2007	
OH207	7952-03 ✓	SB-CZ-SS-2286-ST	9/27/2007	
OH207	7952-04 ✓	SB-CZ-SS-2287-ST	9/27/2007	
OH207	7952-05 ✓	SB-CZ-SS-2288-ST	9/27/2007	
OH207	7952-06 ✓	SB-CZ-SS-2289-ST	9/27/2007	
OH207	7952-07 ✓	SB-CZ-SS-2290-ST	9/27/2007	
OH207	7952-08 ✓	SB-CZ-SS-2291-ST	9/27/2007	
OH207	7952-09 ✓	SB-CZ-SS-2292-ST	9/27/2007	
OH207	7952-10 ✓	SB-CZ-SS-2293-ST	9/27/2007	
OH207	7952-11 ✓	SB-CZ-SS-2294-ST	9/27/2007	
OH207	7952-12	SB-CZ-SS-2295-ST	9/27/2007	

Radiochemistry Reviewer

Date

QA Reviewer

Date

Gamma Spectrometry Run Log

Count Date/Time Detector No.	Length of Count	Prefix	Batch No.	Sample No.	RIN No.	Collection Date	Field I.D.	Sample Type	Sample Size (w/units)	Geometry
12-6-07 1536 G2 14	180	OH207	7951	14	-	9/27/07	SB-CZ-SS-2283-50	Soil	500.3 gdry	400 mL Liquid ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐
12-5-07 1840 G3 1K	500	SCAGC	8107	PB1	-	11-27-07 0830	Prep BLK	LIQUID	1 Liter	400 mL Liquid ☒ 40 mL Sand ☐ 200 mL Sand ☐
12-6-07 0852 G2 1K	60			LC1	-		CTRL Samp S-146			400 mL Liquid ☐ 40 mL Sand ☒ 200 mL Sand ☐
12-6-07 1847 G3 1K	500			LD1	-	11-26-07 1430	Dup 8107-01			400 mL Liquid ☐ 40 mL Sand ☒ 200 mL Sand ☐
12-7-07 1852 G3 1K	500	VWU07		01	-		#07-08			400 mL Liquid ☐ 40 mL Sand ☒ 200 mL Sand ☐
12-6-07 1539 G3 1K	180	SCAGC	7952	PB1	-	10-1-07	Prep BLK	LIQUID	400g	400 mL Liquid ☐ 40 mL Sand ☐ 200 mL Sand ☐
12-6-07 0957 G2 af	60			LC1	-		Ctrl Samp S-142	Soil	640g	400 mL Liquid ☐ 40 mL Sand ☐ 200 mL Sand ☐
12-6-07 1839 G1 JD	180			LD1	-	9-27-07	Dup 7952-01		424.7 gdry	400 mL Liquid ☐ 40 mL Sand ☐ 200 mL Sand ☐
12-6-07 G2 JD		OH207		01	-		SB-CZ-SS-2284-5T		1.413.0 gdry 424.7 gdry	400 mL Liquid ☐ 40 mL Sand ☐ 200 mL Sand ☐
12-6-07 1845 G2 JD				02	-		2285-5T		1.452.0 gdry 43.0 gdry	400 mL Liquid ☐ 40 mL Sand ☐ 200 mL Sand ☐

Sample 1 = G1
Sample 2 = G2

Gamma Spectrometry Run Log

Count Date/Time Detector No.	Length of Count	Prefix	Batch No.	Sample No.	RIN No.	Collection Date	Field I.D.	Sample Type	Sample Size (w/units)	Geometry
12-6-07 2141 G-1 JD	180	04207	7952	03	-	9/27/07	SB-CZ-SS- 2286-ST	SOIL	452.0 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-7-07 1000 H-1 H.S.				04	-		2287-ST		481.6 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-7-07 1002 H-2 H.S.				05	-		2288-ST		481.1 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-7-07 1009 H-3 H.S.				06	-		2289-ST		473.0 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-7-07 1241 H-1 M.S.				07	-		2290-ST		456.2 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-7-07 1246 H-2 M.S.				08	-		2291-ST		527.4 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-7-07 1248 H-3 M.S.				09	-		2292-ST		500.1 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-7-07 1249 H-1 H.S.				10	-		2293-ST		449.0 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-7-07 1249 H-2 H.S.				11	-		2294-ST		392.5 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-7-07 1249 H-3 H.S.				12	-		2295-ST		428.6 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 6-DEC-2007 18:38:39

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_SCAQC7952PB1_GAMMA3_400MLSA_17428.CNF

----- Sample Information -----
Sample ID : SCAQC-7952-PB1 ✓
Sample Title : PREP BLK
Sample Quantity : 4.00000E+02 G ✓
Sample Type : LIQUID
Sample Geometry : 400 ml sand
Sample Seq No. : 17428

----- Sample Decay/Count Information -----
Collection Date : 1-OCT-2007 00:00:00. Acquisition date : 6-DEC-2007 15:38:21.
Decay time : 66 15:38:21.06 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:00.53

----- Detector Parameters -----
Energy cal. time : 30-OCT-2006 16:06:41 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA3 Counting geometry: 400 ml sand
Effic. cal. time : 7-FEB-2007 13:40:24. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$x = \ln(a1/\text{energy})$

a1=9.47750E+02 a2=-4.85663E+00 a3=8.12782E-01 a4=8.53513E-02
a5=-4.88423E-02 a6=-7.49502E-03 a7=0.00000E+00

----- Processing Parameters -----
Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA3_17240.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

Tim Moore

Date:

12/12/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	471.08	30	25	1.10	1044.46	1040	9	69.2		
0	510.72*	56	56	2.52	1132.34	1123	20	90.7		

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	471.08	30	25	1.10	1044.46	1040	9	2.82E-03	69.2	1.40E+00	
0	510.72	56	56	2.52	1132.34	1123	20	5.19E-03	90.7	1.31E+00	T

Flags: "T" = Tentatively associated

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	-1.112E-01		1.578E-01	3.086E-01	1.816E-02	-0.360
CO-60	-1.239E-03		1.218E-02	2.232E-02	1.358E-03	-0.056
RH-101	2.782E-03		1.220E-02	2.095E-02	3.234E-03	0.133
SB-125	-1.441E-02		3.509E-02	6.062E-02	5.012E-03	-0.238
CS-137	9.170E-03		1.333E-02	2.522E-02	1.816E-03	0.364
EU-155	-4.081E-03		3.256E-02	5.683E-02	5.344E-03	-0.072
TL-208	-3.592E-03		1.456E-02	2.586E-02	2.058E-03	-0.139
PO-209	-1.492E+00		2.668E+00	4.574E+00	8.427E-01	-0.326
BI-211	-3.561E-01		3.757E-01	5.866E-01	4.224E-02	-0.607
BI-212	-1.429E-03		9.143E-02	1.619E-01	1.175E-02	-0.009
PB-212	-1.096E-02		2.329E-02	3.933E-02	2.939E-03	-0.279
BI-214	2.082E-02		2.923E-02	5.478E-02	4.174E-03	0.380
PB-214	2.582E-02		2.794E-02	4.987E-02	3.967E-03	0.518
RA-223	1.222E-02		6.774E-02	1.173E-01	1.038E-02	0.104
AC-228	3.330E-02		5.078E-02	1.009E-01	7.094E-03	0.330
PA-233	-8.897E-03		2.494E-02	4.158E-02	3.393E-03	-0.214
PA-234M	9.957E-01		1.644E+00	3.153E+00	2.153E-01	0.316
TH-234✓	-3.002E-02✓		1.845E-01	3.438E-01✓	3.078E-02	-0.087
U-235	1.700E-02		7.317E-02	1.269E-01	9.416E-03	0.134
NP-236	-4.873E-04		1.935E-02	3.146E-02	3.002E-03	-0.015
NP-237	-4.164E-02		6.168E-02	9.885E-02	1.102E-02	-0.421
NP-239	-4.120E-02		8.094E-02	1.348E-01	1.804E-02	-0.306
AM-241	-9.234E-02		2.542E-02	3.380E-02	2.139E-03	-2.732
AM-243	-1.373E-02		1.227E-02	1.840E-02	3.538E-03	-0.746
CM-243	8.220E-03		2.928E-02	5.207E-02	5.611E-03	0.158
AM-246	-1.578E-02		4.703E-02	8.268E-02	1.044E-02	-0.191
CF-249	4.648E-03		1.465E-02	2.668E-02	2.657E-03	0.174

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 6-DEC-2007 10:57:51

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_SCAQC7952LC1_GAMMA2_400MLSA_17422.CNF

---- Sample Information ----

Sample ID : SCAQC-7952-LC1 ✓
Sample Title : CTRL SAMP S-142 ✓
Sample Quantity : 6.40000E+02 G ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17422

---- Sample Decay/Count Information ----

Collection Date : 1-OCT-2007 00:00:00. Acquisition date : 6-DEC-2007 09:57:26.
Decay time : 66 09:57:26.62 % dead time : 0.3%
Elapsed live time: 0 01:00:00.00 ✓ Elapsed real time: 0 01:00:09.43

---- Detector Parameters ----

Energy cal. time : 1-MAY-2007 11:12:10. Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA2 Counting geometry: 400 ml sand
Effic. cal. time : 1-MAY-2007 11:13:44. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$$x = \ln(a1/\text{energy})$$

a1=9.47750E+02 a2=-4.68491E+00 a3=7.34327E-01 a4=7.12916E-02
a5=8.21331E-02 a6=-7.02143E-02 a7=0.00000E+00

---- Processing Parameters ----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA2_17242.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

T M Moore

Date:

12/12/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
9	58.03	1555	6835	1.85	115.79	113	10	16.2	5.98E+00	
9	59.48	26072	4949	0.97	118.68	113	10	1.5		AM-241
0	87.98	10385	5325	1.10	175.43	170	11	3.4		
0	122.06	1428	3531	1.09	243.28	239	9	15.9		
0	136.22	205	2513	1.21	271.47	269	7	82.2		
0	238.85*	290	2202	1.41	475.89	472	7	55.1		
0	661.69	26929	1172	1.50	1318.70	1313	13	1.3		CS-137
0	1172.69	20420	692	1.83	2338.73	2331	17	1.5		CO-60
0	1331.64	18633	245	1.97	2656.34	2647	19	1.5		CO-60
0	1460.23*	35	50	1.66	2913.41	2906	11	87.4		K-40

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
9	58.03	1555	6835	1.85	115.79	113	10	4.32E-01	16.2	1.04E+00	
0	87.98	10385	5325	1.10	175.43	170	11	2.88E+00	3.4	2.53E+00	T
0	122.06	1428	3531	1.09	243.28	239	9	3.97E-01	15.9	3.30E+00	
0	136.22	205	2513	1.21	271.47	269	7	5.70E-02	82.2	3.38E+00	
0	238.85	290	2202	1.41	475.89	472	7	8.05E-02	55.1	2.80E+00	T

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	5.671E-01	4.968E-01	6.130E-01	3.946E-02	0.925
CO-60	3.101E+01 ✓	1.777E+00	9.156E-02	5.326E-03	338.664
CS-137	3.064E+01 ✓	3.510E+00	1.659E-01	1.887E-02	184.731
AM-241	7.552E+01 ✓	5.090E+00	9.838E-01	6.453E-02	76.763

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
RH-101	5.472E-02		7.790E-02	1.253E-01	1.956E-02	0.437
SB-125	1.257E-02		2.752E-01	4.542E-01	3.724E-02	0.028
EU-155	1.237E-01		2.507E-01	4.163E-01	3.898E-02	0.297
TL-208	4.582E-02		9.369E-02	1.621E-01	1.688E-02	0.283
PO-209	-3.524E+00		2.564E+01	4.247E+01	8.142E+00	-0.083
BI-211	-3.788E-01		3.132E+00	5.227E+00	5.116E-01	-0.072
BI-212	1.788E-01		7.122E-01	1.212E+00	1.325E-01	0.148
PB-212	2.804E-01	+	1.560E-01	2.318E-01	1.772E-02	1.209
BI-214	1.254E-01		1.761E-01	3.051E-01	3.248E-02	0.411
PB-214	2.542E-01		1.774E-01	3.016E-01	2.313E-02	0.843
RA-223	-2.915E-01		4.164E-01	6.963E-01	6.195E-02	-0.419
AC-228	4.136E-01		4.884E-01	8.217E-01	7.140E-02	0.503
PA-233	-7.746E-02		1.560E-01	2.599E-01	2.093E-02	-0.298
PA-234M	-2.847E+00		1.439E+01	2.365E+01	1.846E+00	-0.120
TH-234 ✓	1.705E+00 ✓		1.217E+00	1.845E+00 ✓	1.846E-01	0.924
U-235	8.445E-02		4.384E-01	7.151E-01	5.219E-02	0.118
NP-236	2.908E-02		1.456E-01	2.415E-01	2.401E-02	0.120
NP-237	1.894E+01		2.544E+00	1.647E+00	2.070E-01	11.501
NP-239	3.221E-01		5.197E-01	8.906E-01	1.202E-01	0.362
AM-243	4.482E-03		1.402E-01	2.341E-01	4.667E-02	0.019
CM-243	-1.262E-01		2.316E-01	3.784E-01	4.091E-02	-0.334
AM-246	8.652E-03		4.490E-01	7.371E-01	9.427E-02	0.012
CF-249	-3.926E-02		1.075E-01	1.772E-01	1.698E-02	-0.222

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 6-DEC-2007 21:39:49

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_SCAQC7952LD1_GAMMA1_400MLSA_17429.CNF

----- Sample Information -----

Sample ID : SCAQC-7952-LD1✓
Sample Title : DUP-7952-01✓
Sample Quantity : 4.24700E+02 GDRY✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17429

----- Sample Decay/Count Information -----

Collection Date : 27-SEP-2007 00:00:00 Acquisition date : 6-DEC-2007 18:39:32.
Decay time : 70 18:39:32.30 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00✓ Elapsed real time: 0 03:00:02.28

----- Detector Parameters -----

Energy cal. time : 23-MAR-2006 15:15:18 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA1 Counting geometry: 400 ml sand
Effic. cal. time : 23-MAR-2006 15:18:11 Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$x = \ln(a1/\text{energy})$

a1=9.47750E+02 a2=-4.65904E+00 a3=6.59172E-01 a4=3.93115E-02
a5=1.38137E-01 a6=-8.70295E-02 a7=0.00000E+00

----- Processing Parameters -----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA1_17241.CNF;1
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

T M Moore

Date:

12/12/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
2	74.95*	356	470	1.03	149.31	143	14	22.2	2.13E+00	AM-243 PB-214 PB-212
2	77.20*	535	489	0.93	153.82	143	14	15.8		PB-214 PB-212
2	84.15*	118	360	1.15	167.74	165	13	53.0	7.00E-01	
2	87.22	240	518	1.15	173.87	165	13	34.0		NP-237 PB-214 PB-212
4	90.02	134	309	1.02	179.48	177	12	39.8	2.56E+00	
4	92.92*	221	512	1.23	185.29	177	12	38.0		
0	186.12*	355	615	1.16	371.92	366	12	30.5		
0	209.38	265	523	1.33	418.50	413	13	37.5		AC-228
1	238.57*	1501	297	1.09	476.95	472	19	6.5	8.43E-01	PB-212
1	241.11*	216	274	1.17	482.02	472	19	36.4		
1	242.03*	169	307	1.28	483.88	472	19	44.1		PB-214
3	268.79	33	114	1.33	537.46	535	11	95.7	1.38E+00	RA-223
3	270.27	178	259	1.59	540.42	535	11	37.7		AC-228
0	277.25	81	217	1.35	554.40	551	7	64.3		TL-208
0	295.10*	466	287	1.22	590.14	585	10	16.6		PB-214
1	299.65*	67	185	1.35	599.25	596	9	70.0	7.80E+00	
1	300.49*	86	219	1.33	600.93	596	9	65.9		PB-212
0	337.98	360	318	1.12	676.00	670	13	22.9		AC-228
0	351.79*	842	231	1.32	703.64	698	11	9.9		PB-214
0	463.42	60	219	1.59	927.15	922	13	105.6		AC-228
0	510.65*	263	156	2.27	1021.72	1014	17	27.9		TL-208
0	582.88*	458	113	1.60	1166.34	1161	10	13.0		TL-208
0	609.04*	626	176	1.46	1218.71	1212	15	12.4		BI-214
0	661.40	554	162	1.31	1323.53	1318	14	12.8		CS-137
0	727.25	108	95	1.70	1455.36	1450	10	39.3		BI-212
0	767.70	88	55	1.84	1536.34	1531	10	38.1		BI-214
0	794.60	87	44	1.48	1590.20	1585	11	36.6		AC-228
0	860.37	52	72	1.16	1721.86	1716	11	70.0		TL-208
0	910.82*	352	72	1.36	1822.87	1817	12	14.5		AC-228
0	934.32	73	67	2.71	1869.90	1860	22	61.4		BI-214
2	964.19	50	57	2.06	1929.71	1924	23	67.4	1.27E+00	AC-228
2	968.48*	221	44	1.89	1938.30	1924	23	18.3		AC-228
0	1120.10*	109	64	1.40	2241.81	2236	14	38.1		BI-214
0	1237.99	57	77	1.97	2477.80	2472	17	75.8		BI-214
0	1459.98*	688	17	1.97	2922.13	2915	17	8.2		K-40
0	1728.94	34	10	2.07	3460.44	3454	13	51.6		BI-214
0	1763.55*	101	17	1.76	3529.70	3522	17	28.5		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
2	84.15	118	360	1.15	167.74	165	13	1.09E-02	53.0	2.10E+00	
4	90.02	134	309	1.02	179.48	177	12	1.24E-02	39.8	2.33E+00	
4	92.92	221	512	1.23	185.29	177	12	2.05E-02	38.0	2.43E+00	T
0	186.12	355	615	1.16	371.92	366	12	3.28E-02	30.5	3.03E+00	
1	241.11	216	274	1.17	482.02	472	19	2.00E-02	36.4	2.64E+00	
1	299.65	67	185	1.35	599.25	596	9	6.21E-03	70.0	2.26E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	5.374E+00	5.746E-01	2.005E-01	1.368E-02	26.810
CS-137	3.180E-01	5.324E-02	2.885E-02	3.100E-03	11.023
TL-208	2.396E-01	3.929E-02	2.764E-02	2.774E-03	8.668
BI-212	4.735E-01	1.917E-01	1.911E-01	1.838E-02	2.478
PB-212	7.684E-01	7.758E-02	4.209E-02	3.248E-03	18.258
BI-214	6.211E-01	9.972E-02	4.909E-02	5.000E-03	12.653
PB-214	6.634E-01	8.417E-02	5.195E-02	4.099E-03	12.771
RA-223	5.833E-02	5.609E-02	1.307E-01	1.203E-02	0.446
AC-228	8.278E-01	1.287E-01	9.455E-02	5.225E-03	8.755
NP-237	5.205E-01	1.923E-01	2.232E-01	3.227E-02	2.332
AM-243	1.843E-01	5.634E-02	5.399E-02	1.133E-02	3.413

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	-6.178E-04		1.410E-02	2.256E-02	1.472E-03	-0.027
RH-101	1.762E-03		1.611E-02	2.671E-02	4.142E-03	0.066
SB-125	-4.244E-02		4.262E-02	6.881E-02	5.644E-03	-0.617
EU-155	5.706E-02		5.949E-02	1.037E-01	1.029E-02	0.551
PO-209	5.963E-01		2.734E+00	4.929E+00	8.822E-01	0.121
BI-211	-1.159E-01		4.279E-01	7.390E-01	5.384E-02	-0.157
PA-233	-1.562E-02		2.684E-02	4.545E-02	3.817E-03	-0.344
PA-234M	6.228E-01		1.659E+00	3.047E+00	1.751E-01	0.204
TH-234 ✓	9.977E-01 ✓	+	3.966E-01	5.798E-01 ✓	6.765E-02	1.721
U-235	-3.346E-02		9.855E-02	1.615E-01	1.128E-02	-0.207
NP-236	-4.351E-03		3.344E-02	5.634E-02	6.190E-03	-0.077
NP-239	4.945E-02		1.014E-01	1.693E-01	2.284E-02	0.292
AM-241	4.551E-02		9.325E-02	1.649E-01	1.311E-02	0.276
CM-243	4.791E-02		5.288E-02	9.212E-02	1.050E-02	0.520
AM-246	2.255E-02		5.105E-02	9.280E-02	1.142E-02	0.243
CF-249	1.828E-02		1.887E-02	3.383E-02	3.263E-03	0.540

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 7-DEC-2007 00:45:30

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795201_GAMMA2_400MLSAN_17433.CNF

---- Sample Information ----

Sample ID : OH207-7952-01 ✓
Sample Title : SB-CZ-SS-2284-ST ✓
Sample Quantity : 4.24700E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17433

---- Sample Decay/Count Information ----

Collection Date : 27-SEP-2007 00:00:00 ✓ Acquisition date : 6-DEC-2007 21:45:14.
Decay time : 70 21:45:14.22 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:01.33

---- Detector Parameters ----

Energy cal. time : 1-MAY-2007 11:12:10. Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA2 Counting geometry: 400 ml sand
Effic. cal. time : 1-MAY-2007 11:13:44. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$x = \ln(a1/\text{energy})$

a1=9.47750E+02 a2=-4.68491E+00 a3=7.34327E-01 a4=7.12916E-02
a5=8.21331E-02 a6=-7.02143E-02 a7=0.00000E+00

---- Processing Parameters ----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA2_17242.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

T. M. Moore

Date:

12/12/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
3	74.83*	389	496	1.04	149.24	143	14	20.9	3.26E+00	AM-243 PB-214 PB-212
3	77.09*	656	455	1.01	153.74	143	14	13.3		PB-214 PB-212
0	84.05*	107	434	1.31	167.60	165	6	65.8		
0	86.97	225	562	1.15	173.42	171	7	37.2		NP-237 PB-214 PB-212
6	90.02	146	336	1.05	179.48	177	14	37.8	1.17E+00	
6	92.88*	299	769	1.63	185.19	177	14	38.3		
0	185.98*	178	682	1.24	370.58	367	11	60.6		
0	209.47	167	549	1.19	417.37	412	10	54.8		AC-228
4	238.78*	1543	331	1.13	475.75	471	16	6.4	1.22E+00	PB-212
4	241.85*	449	295	1.79	481.86	471	16	18.3		PB-214
2	270.27	112	330	1.52	538.48	532	13	62.2	1.56E+00	RA-223 AC-228
2	271.78	40	250	1.18	541.47	532	13	141.6		
0	295.46*	595	337	1.23	588.65	583	12	14.9		PB-214
0	300.33	77	245	1.09	598.36	595	8	73.7		PB-212
0	328.02	90	215	1.63	653.53	649	8	60.6		
0	338.31*	315	270	1.08	674.03	669	10	22.8		AC-228
0	352.19*	803	273	1.30	701.69	697	11	11.0		PB-214
0	409.32	59	167	1.09	815.54	811	9	83.2		AC-228
0	463.26	49	208	0.85	923.05	919	10	115.1		AC-228
0	511.00*	132	216	1.62	1018.22	1011	14	55.7		TL-208
0	583.10*	441	171	1.21	1161.97	1156	13	15.7		TL-208
0	609.53*	642	122	1.57	1214.69	1209	15	11.1		BI-214
0	661.62	526	152	1.25	1318.58	1312	13	13.0		CS-137
0	727.58	98	136	1.67	1450.15	1443	16	56.3		BI-212
0	768.32*	71	72	1.65	1531.43	1526	11	52.5		BI-214
0	795.15*	89	74	2.30	1584.96	1579	18	50.3		AC-228
0	838.35	111	84	5.64	1671.17	1661	22	46.8		
0	860.92*	80	81	1.57	1716.21	1707	18	58.6		TL-208
0	911.11*	330	61	1.67	1816.38	1810	13	15.0		AC-228
2	964.57	79	24	1.98	1923.10	1919	18	31.2	1.65E+00	AC-228
2	968.78*	205	33	1.86	1931.51	1919	18	18.2		AC-228
0	1120.08*	120	61	1.54	2233.64	2228	15	34.2		BI-214
0	1237.71*	71	27	2.11	2468.64	2463	11	38.1		BI-214
0	1376.70	54	47	1.15	2746.42	2738	16	63.8		BI-214
0	1459.69*	643	45	2.10	2912.33	2903	20	9.6		K-40
1	1586.73	31	14	2.26	3166.41	3161	21	64.5	2.74E+00	AC-228
1	1591.18	37	17	2.26	3175.31	3161	21	50.3		
0	1618.45	31	6	1.30	3229.85	3224	12	47.6		BI-212
0	1727.94*	21	11	1.80	3448.93	3444	9	74.7		BI-214
0	1762.52*	111	5	2.22	3518.13	3511	17	22.3		BI-214
0	1845.59	11	10	0.72	3684.40	3680		8119.5		

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	84.05	107	434	1.31	167.60	165	6	9.95E-03	65.8	2.38E+00	
6	90.02	146	336	1.05	179.48	177	14	1.36E-02	37.8	2.61E+00	
6	92.88	299	769	1.63	185.19	177	14	2.77E-02	38.3	2.71E+00	T
0	185.98	178	682	1.24	370.58	367	11	1.65E-02	60.6	3.21E+00	
2	271.78	40	250	1.18	541.47	532	13	3.74E-03	****	2.55E+00	
0	328.02	90	215	1.63	653.53	649	8	8.34E-03	60.6	2.20E+00	
0	838.35	111	84	5.64	1671.17	1661	22	1.03E-02	46.8	1.01E+00	
1	1591.18	37	17	2.26	3175.31	3161	21	3.42E-03	50.3	6.33E-01	
0	1845.59	11	10	0.72	3684.40	3680	8	9.92E-04	****	5.62E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	5.270E+00	6.079E-01	1.921E-01	1.236E-02	27.438
CS-137	3.005E-01	5.200E-02	3.057E-02	3.477E-03	9.831
TL-208	2.278E-01	4.296E-02	2.594E-02	2.701E-03	8.782
BI-212	4.342E-01	2.489E-01	2.025E-01	2.214E-02	2.144
PB-212	7.497E-01	7.494E-02	4.408E-02	3.368E-03	17.010
BI-214	6.306E-01	9.698E-02	4.663E-02	4.965E-03	13.524
PB-214	6.063E-01	8.125E-02	5.352E-02	4.104E-03	11.330
RA-223	1.866E-01	1.171E-01	1.339E-01	1.191E-02	1.393
AC-228	7.934E-01	1.373E-01	9.432E-02	8.196E-03	8.412
NP-237	4.313E-01	1.693E-01	1.836E-01	2.307E-02	2.349
AM-243	1.724E-01	4.983E-02	4.888E-02	9.743E-03	3.528

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	9.031E-03		1.497E-02	2.449E-02	1.424E-03	0.369
RH-101	3.024E-03		1.644E-02	2.686E-02	4.193E-03	0.113
SB-125	-1.513E-02		4.236E-02	7.061E-02	5.789E-03	-0.214
EU-155	2.467E-02		5.634E-02	9.565E-02	8.956E-03	0.258
PO-209	-6.076E-01		2.810E+00	4.844E+00	9.287E-01	-0.125
BI-211	7.200E-02		4.968E-01	7.662E-01	7.500E-02	0.094
PA-233	-8.009E-03		2.784E-02	4.732E-02	3.812E-03	-0.169
PA-234M	9.488E-01		1.845E+00	3.397E+00	2.652E-01	0.279
TH-234✓	1.209E+00✓+		4.784E-01	5.608E-01✓	5.609E-02	2.155
U-235	-7.445E-02		1.008E-01	1.605E-01	1.171E-02	-0.464
NP-236	2.347E-02		3.413E-02	5.590E-02	5.557E-03	0.420
NP-239	-4.109E-02		9.465E-02	1.619E-01	2.186E-02	-0.254
AM-241	-3.117E-02		8.611E-02	1.456E-01	9.553E-03	-0.214
CM-243	-3.423E-02		5.102E-02	8.332E-02	9.008E-03	-0.411
AM-246	-3.374E-04		4.911E-02	8.584E-02	1.098E-02	-0.004
CF-249	9.322E-04		1.752E-02	3.002E-02	2.876E-03	0.031

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 14-DEC-2007 10:52:00

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795202_GAMMA2_400MLSAN_17430.CNF

---- Sample Information ----

Sample ID : OH207-7952-02 ✓
Sample Title : SB-CZ-SS-2285-ST ✓
Sample Quantity : 4.13000E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17430

---- Sample Decay/Count Information ----

Collection Date : 27-SEP-2007 00:00:00 ✓ Acquisition date : 6-DEC-2007 18:43:53.
Decay time : 70 18:43:53.33 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:01.54

---- Detector Parameters ----

Energy cal. time : 1-MAY-2007 11:12:10. Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA2 Counting geometry: 400 ml sand
Effic. cal. time : 1-MAY-2007 11:13:44. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a_2 + a_3 \cdot x + a_4 \cdot x^2 + a_5 \cdot x^3 + a_6 \cdot x^4 + a_7 \cdot x^5)$$

where:

$x = \ln(a_1/\text{energy})$

$a_1 = 9.47750\text{E}+02$ $a_2 = -4.68491\text{E}+00$ $a_3 = 7.34327\text{E}-01$ $a_4 = 7.12916\text{E}-02$
 $a_5 = 8.21331\text{E}-02$ $a_6 = -7.02143\text{E}-02$ $a_7 = 0.00000\text{E}+00$

---- Processing Parameters ----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA2_17242.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

T. M. M. M. M.

Date:

12/14/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.16*	100	667	1.30	126.01	123	7	89.7		
2	74.79*	414	753	0.94	149.16	145	13	23.1	1.45E+00	AM-243 PB-214 PB-212
2	77.07*	850	712	0.98	153.71	145	13	12.3		PB-214 PB-212
1	87.16	345	708	1.11	173.80	170	22	27.1	4.21E+00	NP-237 PB-214 PB-212
1	89.88	253	649	1.11	179.20	170	22	35.8		
1	94.40	91	559	1.12	188.20	170	22	99.2		
0	154.06	86	632	1.24	307.01	304		8103.9		
0	186.20*	545	829	1.45	371.01	365	13	23.8		
0	209.29	153	601	1.33	417.00	413	9	60.0		AC-228
2	238.73*	2126	354	1.12	475.65	468	23	5.3	1.34E+00	PB-212
2	241.15*	244	310	1.20	480.46	468	23	34.5		
2	242.19*	269	303	1.10	482.54	468	23	28.0		PB-214
0	270.25	190	423	1.40	538.43	533	10	43.0		RA-223 AC-228
0	277.66	62	332	0.88	553.19	549		8104.6		TL-208
2	295.38*	607	245	1.20	588.51	582	27	11.8	1.65E+00	PB-214
2	300.41	112	304	1.51	598.53	582	27	59.5		PB-212
0	328.13	85	321	1.06	653.75	649	9	78.8		
0	338.42*	384	360	1.06	674.26	669	11	21.8		AC-228
0	352.19*	1124	355	1.29	701.68	696	13	9.3		PB-214
0	463.26	152	154	1.38	923.05	919	9	33.9		AC-228
0	510.98*	207	235	1.59	1018.19	1012	13	36.8		TL-208
0	583.34*	673	229	1.59	1162.46	1156	14	12.4		TL-208
0	609.54*	803	169	1.60	1214.70	1209	15	10.2		BI-214
0	661.66	155	99	1.25	1318.66	1315	8	27.3		CS-137
0	728.21	158	149	2.05	1451.40	1444	18	39.8		BI-212
0	768.06*	99	83	1.90	1530.90	1525	11	41.3		BI-214
0	771.88	37	66	1.22	1538.53	1536	7	79.1		
0	794.85*	49	120	1.56	1584.36	1578	12	94.0		AC-228
0	860.82*	81	61	1.67	1716.01	1709	10	42.8		TL-208
0	910.95*	496	78	1.66	1816.06	1809	13	11.7		AC-228
0	934.57	32	86	1.49	1863.21	1856	12	120.0		BI-214
3	964.64	111	63	2.33	1923.25	1916	21	37.6	1.14E+00	AC-228
3	968.82*	281	50	1.77	1931.60	1916	21	15.8		AC-228
0	1120.07*	156	72	1.39	2233.62	2228	10	26.5		BI-214
0	1237.54*	83	100	0.77	2468.30	2461	17	59.7		BI-214
0	1377.46	33	51	2.10	2747.95	2743	14	100.6		BI-214
0	1407.44	25	27	1.08	2807.87	2803	10	88.4		BI-214
0	1459.70*	929	46	2.07	2912.37	2902	18	7.5		K-40
0	1508.80	43	28	1.43	3010.53	3003	16	62.3		BI-214
0	1762.73*	139	31	2.10	3518.55	3511	14	24.9		BI-214
0	1845.77	21	26	1.43	3684.77	3677	15	113.6		

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	63.16	100	667	1.30	126.01	123	7	9.30E-03	89.7	1.33E+00	T
1	89.88	253	649	1.11	179.20	170	22	2.34E-02	35.8	2.60E+00	
1	94.40	91	559	1.12	188.20	170	22	8.46E-03	99.2	2.76E+00	
0	154.06	86	632	1.24	307.01	304	8	7.93E-03	****	3.38E+00	
0	186.20	545	829	1.45	371.01	365	13	5.05E-02	23.8	3.21E+00	
2	241.15	244	310	1.20	480.46	468	23	2.26E-02	34.5	2.78E+00	
0	328.13	85	321	1.06	653.75	649	9	7.88E-03	78.8	2.20E+00	
0	771.88	37	66	1.22	1538.53	1536	7	3.44E-03	79.1	1.08E+00	
0	1845.77	21	26	1.43	3684.77	3677	15	1.97E-03	****	5.62E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	7.821E+00	7.728E-01	2.458E-01	1.582E-02	31.823
CS-137	9.139E-02	2.702E-02	3.348E-02	3.808E-03	2.730
TL-208	3.576E-01	5.800E-02	3.016E-02	3.141E-03	11.857
BI-212	7.207E-01	2.978E-01	2.252E-01	2.462E-02	3.201
PB-212	1.062E+00	9.881E-02	4.713E-02	3.601E-03	22.539
BI-214	8.112E-01	1.198E-01	5.344E-02	5.690E-03	15.179
PB-214	8.728E-01	1.052E-01	5.648E-02	4.331E-03	15.453
RA-223	3.266E-01	1.435E-01	1.501E-01	1.336E-02	2.175
AC-228	1.226E+00	1.789E-01	1.042E-01	9.056E-03	11.762
NP-237	6.806E-01	2.034E-01	2.614E-01	3.284E-02	2.604
AM-243	1.890E-01	5.765E-02	5.576E-02	1.111E-02	3.389

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	-8.653E-03		1.830E-02	2.999E-02	1.745E-03	-0.289
RH-101	-4.090E-03		1.825E-02	2.931E-02	4.577E-03	-0.140
SB-125	1.354E-03		4.894E-02	8.299E-02	6.805E-03	0.016
EU-155	2.699E-02		6.441E-02	1.088E-01	1.019E-02	0.248
PO-209	-8.998E-01		3.347E+00	5.702E+00	1.093E+00	-0.158
BI-211	-1.300E-01		5.200E-01	8.879E-01	8.692E-02	-0.146
PA-233	-1.028E-02		3.064E-02	5.190E-02	4.180E-03	-0.198
PA-234M	1.390E+00		2.175E+00	3.967E+00	3.097E-01	0.351
TH-234 ✓	8.246E-01 ✓		3.595E-01	6.252E-01 ✓	6.253E-02	1.319
U-235	6.257E-02		1.146E-01	1.903E-01	1.389E-02	0.329
NP-236	5.175E-02		4.104E-02	6.403E-02	6.365E-03	0.808
NP-239	1.454E-02		1.082E-01	1.886E-01	2.545E-02	0.077
AM-241	-1.853E-03		1.061E-01	1.624E-01	1.065E-02	-0.011
CM-243	-1.604E-03		5.669E-02	9.473E-02	1.024E-02	-0.017
AM-246	-3.796E-02		5.725E-02	9.264E-02	1.185E-02	-0.410
CF-249	1.130E-02		1.939E-02	3.390E-02	3.248E-03	0.333

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 7-DEC-2007 00:42:01

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795203_GAMMA1_400MLSAN_17432.CNF

----- Sample Information -----
Sample ID : OH207-7952-03 ✓
Sample Title : SB-CZ-SS-2286-ST ✓
Sample Quantity : 4.52000E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17432

----- Sample Decay/Count Information -----
Collection Date : 27-SEP-2007 00:00:00 ✓ Acquisition date : 6-DEC-2007 21:41:42.
Decay time : 70 21:41:42.20 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:02.42

----- Detector Parameters -----
Energy cal. time : 23-MAR-2006 15:15:18 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA1 Counting geometry: 400 ml sand
Effic. cal. time : 23-MAR-2006 15:18:11 Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$$x = \ln(a1/\text{energy})$$

a1=9.47750E+02 a2=-4.65904E+00 a3=6.59172E-01 a4=3.93115E-02
a5=1.38137E-01 a6=-8.70295E-02 a7=0.00000E+00

----- Processing Parameters -----
Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA1_17241.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

T. M. W. L. L. L.

Date:

12/14/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
2	74.93*	421	556	1.12	149.28	142	19	21.3	1.54E+00	AM-243 PB-214 PB-212
2	77.23*	713	488	1.09	153.87	142	19	13.3		PB-214 PB-212
0	84.34*	89	425	1.25	168.11	166	5	73.4		
6	87.35	274	586	1.20	174.15	171	22	30.6	5.81E+00	NP-237 PB-214 PB-212
6	89.90	196	458	1.03	179.25	171	22	37.5		
6	90.87	75	441	1.05	181.19	171	22	97.5		
6	92.90*	301	533	1.39	185.26	171	22	31.5		
0	129.21	99	516	0.76	257.96	255	7	78.7		AC-228
0	185.89*	320	610	1.39	371.46	366	11	32.6		
0	209.15	202	481	1.18	418.04	414	10	43.0		AC-228
3	238.61*	1674	311	1.06	477.02	472	17	6.0	2.69E+00	PB-212
3	240.94*	153	295	1.22	481.69	472	17	54.4		
3	241.91*	254	283	1.18	483.63	472	17	28.3		PB-214
0	270.27	218	369	1.58	540.41	535	12	37.9		RA-223 AC-228
0	276.66	107	282	0.86	553.22	549	9	59.3		TL-208
0	295.08*	554	366	1.04	590.09	584	12	16.3		PB-214
0	299.93*	81	214	1.13	599.80	597	8	67.4		PB-212
0	328.14	91	260	1.04	656.29	652	9	67.4		
0	338.17	383	212	1.27	676.37	672	9	17.1		AC-228
0	351.81*	942	283	1.34	703.69	698	12	9.8		PB-214
0	463.47	89	263	1.56	927.26	920	16	85.5		AC-228
0	510.63*	166	279	1.77	1021.67	1014	18	53.3		TL-208
0	583.16*	612	188	1.52	1166.89	1160	16	13.2		TL-208
0	609.09*	765	115	1.56	1218.80	1214	12	9.4		BI-214
0	661.24	367	153	1.79	1323.21	1317	14	17.6		CS-137
0	726.95	112	123	1.47	1454.76	1449	12	44.1		BI-212
0	770.02	65	130	3.93	1540.99	1535	15	83.5		BI-214
0	794.48	80	61	1.15	1589.96	1584	12	44.5		AC-228
0	860.17	99	40	0.93	1721.47	1717	8	29.9		TL-208
0	910.82*	412	56	1.84	1822.88	1816	13	12.5		AC-228
5	963.87	87	42	2.74	1929.07	1923	34	37.9	1.06E+00	AC-228
5	968.56*	263	39	1.84	1938.45	1923	34	15.8		AC-228
0	1119.74*	180	68	1.49	2241.09	2234	15	25.2		BI-214
0	1237.78	73	41	1.93	2477.37	2473	11	41.2		BI-214
0	1460.00*	801	26	2.14	2922.18	2913	16	7.7		K-40
0	1629.81	30	12	1.53	3262.04	3257	11	55.8		
0	1729.51	25	14	1.90	3461.57	3452	14	76.4		BI-214
0	1763.75*	109	39	1.61	3530.11	3524	15	32.1		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	84.34	89	425	1.25	168.11	166	5	8.28E-03	73.4	2.11E+00	
6	89.90	196	458	1.03	179.25	171	22	1.82E-02	37.5	2.32E+00	
6	90.87	75	441	1.05	181.19	171	22	6.95E-03	97.5	2.36E+00	
6	92.90	301	533	1.39	185.26	171	22	2.79E-02	31.5	2.43E+00	T
0	185.89	320	610	1.39	371.46	366	11	2.96E-02	32.6	3.03E+00	
3	240.94	153	295	1.22	481.69	472	17	1.42E-02	54.4	2.64E+00	
0	328.14	91	260	1.04	656.29	652	9	8.42E-03	67.4	2.10E+00	
0	1629.81	30	12	1.53	3262.04	3257	11	2.82E-03	55.8	6.51E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	5.878E+00	6.042E-01	1.789E-01	1.221E-02	32.851
CS-137	1.978E-01	4.083E-02	2.798E-02	3.007E-03	7.070
TL-208	3.011E-01	4.991E-02	2.494E-02	2.503E-03	12.070
BI-212	4.616E-01	2.082E-01	1.879E-01	1.808E-02	2.456
PB-212	8.055E-01	7.863E-02	4.227E-02	3.262E-03	19.058
BI-214	7.128E-01	9.870E-02	4.777E-02	4.865E-03	14.923
PB-214	6.967E-01	8.746E-02	4.989E-02	3.937E-03	13.965
RA-223	3.594E-01	1.403E-01	1.237E-01	1.138E-02	2.906
AC-228	9.095E-01	1.242E-01	8.447E-02	4.668E-03	10.767
NP-237	5.567E-01	1.884E-01	2.201E-01	3.183E-02	2.530
AM-243	2.047E-01	6.114E-02	4.917E-02	1.031E-02	4.163

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	1.603E-02		1.630E-02	2.447E-02	1.597E-03	0.655
RH-101	1.195E-02		1.593E-02	2.679E-02	4.156E-03	0.446
SB-125	5.265E-03		4.076E-02	7.046E-02	5.779E-03	0.075
EU-155	6.888E-02		5.754E-02	1.006E-01	9.988E-03	0.685
PO-209	-1.441E+00		2.572E+00	4.305E+00	7.705E-01	-0.335
BI-211	-1.353E-01		4.075E-01	7.000E-01	5.100E-02	-0.193
PA-233	7.896E-03		2.669E-02	4.702E-02	3.948E-03	0.168
PA-234M	2.981E-01		1.588E+00	2.866E+00	1.648E-01	0.104
TH-234✓	1.275E+00✓+		4.280E-01	5.699E-01✓	6.649E-02	2.237
U-235	2.773E-02		9.754E-02	1.633E-01	1.140E-02	0.170
NP-236	-3.506E-03		3.576E-02	5.418E-02	5.952E-03	-0.065
NP-239	-5.854E-02		1.005E-01	1.598E-01	2.156E-02	-0.366
AM-241	6.064E-04		9.219E-02	1.602E-01	1.274E-02	0.004
CM-243	-1.130E-02		5.220E-02	8.793E-02	1.002E-02	-0.129
AM-246	2.516E-02		4.694E-02	8.618E-02	1.061E-02	0.292
CF-249	9.403E-03		1.778E-02	3.133E-02	3.022E-03	0.300

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 7-DEC-2007 12:01:19

Configuration :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795204_GAMMA1_400MLSAN_17434.CNF

---- Sample Information ----

Sample ID : OH207-7952-04 ✓
Sample Title : SB-CZ-SS (2286) ST 2287 Tm 12/14/2007
Sample Quantity : 4.81600E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17434

---- Sample Decay/Count Information ----

Collection Date : 27-SEP-2007 00:00:00 ✓ Acquisition date : 7-DEC-2007 09:00:51.
Decay time : 71 09:00:51.21 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:02.62

---- Detector Parameters ----

Energy cal. time : 23-MAR-2006 15:15:18 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA1 Counting geometry: 400 ml sand
Effic. cal. time : 23-MAR-2006 15:18:11 Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$x = \ln(a1/\text{energy})$

a1=9.47750E+02 a2=-4.65904E+00 a3=6.59172E-01 a4=3.93115E-02
a5=1.38137E-01 a6=-8.70295E-02 a7=0.00000E+00

---- Processing Parameters ----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA1_17241.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

Tm Wkane

Date:

12/14/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
3	74.98*	408	655	0.99	149.37	146	12	21.8	2.59E+00	AM-243 PB-214 PB-212
3	77.17*	634	505	0.87	153.77	146	12	13.6		PB-214 PB-212
0	87.25	249	674	1.06	173.94	171	7	36.7		NP-237 PB-214 PB-212
6	89.95	153	387	1.03	179.35	177	13	38.9	1.22E+00	
6	92.93*	325	783	1.49	185.32	177	13	34.1		
0	128.95	95	518	0.97	257.44	254	7	81.9		AC-228
0	185.90*	339	573	1.17	371.47	367	9	28.3		
0	209.32	169	543	1.03	418.37	415	9	51.9		AC-228
2	238.60*	1992	287	1.07	477.00	471	17	5.3	1.89E+00	PB-212
2	241.05*	261	311	1.36	481.90	471	17	35.5		
2	241.89*	294	264	1.11	483.60	471	17	25.1		PB-214
0	269.57	188	418	1.55	539.02	533	12	45.9		RA-223 AC-228
0	295.16*	608	360	1.09	590.26	585	11	14.7		PB-214
1	299.65*	85	194	1.35	599.25	596	13	57.8	5.09E+00	PB-212
0	328.33	66	282	0.90	656.68	652	9	95.1		
0	338.12	374	310	1.18	676.26	672	10	20.4		AC-228
0	351.76*	1176	277	1.22	703.59	697	14	8.5		PB-214
0	408.95	56	183	1.43	818.09	814	9	91.4		AC-228
0	462.66	139	180	1.20	925.63	921	11	41.2		AC-228
0	510.24*	227	299	1.51	1020.90	1013	17	39.9		TL-208
0	582.87*	686	158	1.34	1166.31	1160	14	11.0		TL-208
0	608.99*	769	176	1.37	1218.61	1213	13	10.3		BI-214
0	661.55	411	146	1.50	1323.82	1318	15	16.1		CS-137
0	727.01	152	103	1.65	1454.89	1449	10	29.8		BI-212
0	769.11	112	188	1.87	1539.16	1529	20	63.1		BI-214
0	794.83	94	70	1.84	1590.66	1586	11	39.9		AC-228
0	860.38	98	75	1.67	1721.89	1714	13	41.6		TL-208
0	910.79*	508	68	1.82	1822.81	1817	16	11.7		AC-228
0	934.18	54	55	1.79	1869.64	1864	12	62.5		BI-214
1	964.17	97	54	1.87	1929.66	1923	23	36.3	1.16E+00	AC-228
1	968.49*	281	47	1.74	1938.31	1923	23	15.2		AC-228
0	1119.40*	175	66	1.80	2240.42	2231	15	26.1		BI-214
0	1155.69	24	48	1.23	2313.05	2308	9	111.3		BI-214
0	1237.39	83	59	2.14	2476.59	2470	14	45.2		BI-214
0	1377.33*	63	30	0.70	2756.69	2751	14	47.2		BI-214
0	1459.96*	776	56	2.10	2922.10	2915	16	8.5		K-40
0	1763.41*	136	21	2.13	3529.42	3522	14	23.2		BI-214
0	1846.86	17	20	0.71	3696.44	3688	16	129.7		
0	1924.71	12	6	3.22	3852.24	3846	12	102.4		

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
6	89.95	153	387	1.03	179.35	177	13	1.41E-02	38.9	2.33E+00	
6	92.93	325	783	1.49	185.32	177	13	3.01E-02	34.1	2.43E+00	T
0	185.90	339	573	1.17	371.47	367	9	3.13E-02	28.3	3.03E+00	
2	241.05	261	311	1.36	481.90	471	17	2.42E-02	35.5	2.64E+00	
0	328.33	66	282	0.90	656.68	652	9	6.13E-03	95.1	2.10E+00	
0	1846.86	17	20	0.71	3696.44	3688	16	1.54E-03	****	5.86E-01	
0	1924.71	12	6	3.22	3852.24	3846	12	1.09E-03	****	5.64E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	5.345E+00	5.815E-01	2.161E-01	1.475E-02	24.730
CS-137	2.077E-01	4.018E-02	2.512E-02	2.700E-03	8.269
TL-208	3.166E-01	4.717E-02	2.283E-02	2.291E-03	13.867
BI-212	5.903E-01	1.846E-01	1.809E-01	1.740E-02	3.263
PB-212	8.993E-01	8.407E-02	4.026E-02	3.107E-03	22.336
BI-214	6.731E-01	9.737E-02	5.146E-02	5.242E-03	13.080
PB-214	8.165E-01	9.449E-02	4.570E-02	3.606E-03	17.868
RA-223	2.914E-01	1.363E-01	1.212E-01	1.115E-02	2.405
AC-228	1.052E+00	1.359E-01	8.095E-02	4.473E-03	12.995
NP-237	4.764E-01	1.877E-01	2.258E-01	3.265E-02	2.110
AM-243	1.862E-01	5.636E-02	5.270E-02	1.106E-02	3.532

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	-1.550E-02		1.417E-02	2.133E-02	1.392E-03	-0.727
RH-101	-6.459E-03		1.539E-02	2.490E-02	3.863E-03	-0.259
SB-125	5.225E-03		3.703E-02	6.416E-02	5.262E-03	0.081
EU-155	9.800E-02		5.503E-02	9.700E-02	9.631E-03	1.010
PO-209	-8.811E-01		2.451E+00	4.191E+00	7.501E-01	-0.210
BI-211	-5.672E-01		4.327E-01	6.857E-01	4.995E-02	-0.827
PA-233	-8.990E-03		2.623E-02	4.487E-02	3.768E-03	-0.200
PA-234M	1.365E+00		1.636E+00	3.063E+00	1.760E-01	0.446
TH-234 ✓	1.291E+00 ✓ +		4.656E-01	5.651E-01 ✓	6.593E-02	2.284
U-235	-2.274E-02		9.815E-02	1.614E-01	1.127E-02	-0.141
NP-236	2.163E-02		3.273E-02	5.628E-02	6.182E-03	0.384
NP-239	3.709E-02		9.629E-02	1.596E-01	2.154E-02	0.232
AM-241	1.745E-02		8.936E-02	1.561E-01	1.241E-02	0.112
CM-243	-3.244E-02		5.017E-02	8.309E-02	9.469E-03	-0.390
AM-246	-3.511E-02		4.527E-02	7.284E-02	8.965E-03	-0.482
CF-249	1.288E-03		1.726E-02	2.975E-02	2.870E-03	0.043

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 7-DEC-2007 12:02:49

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795205_GAMMA2_400MLSAN_17435.CNF

----- Sample Information -----
Sample ID : OH207-7952-05 ✓
Sample Title : SB-CZ-SS-2288-ST ✓
Sample Quantity : 4.81100E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17435

----- Sample Decay/Count Information -----
Collection Date : 27-SEP-2007 ✓ 00:00:00 Acquisition date : 7-DEC-2007 09:02:33.
Decay time : 71 09:02:33.39 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:01.43

----- Detector Parameters -----
Energy cal. time : 1-MAY-2007 11:12:10. Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA2 Counting geometry: 400 ml sand
Effic. cal. time : 1-MAY-2007 11:13:44. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$x = \ln(a1/\text{energy})$

a1=9.47750E+02 a2=-4.68491E+00 a3=7.34327E-01 a4=7.12916E-02
a5=8.21331E-02 a6=-7.02143E-02 a7=0.00000E+00

----- Processing Parameters -----
Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA2_17242.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

T. Moore

Date:

12/14/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
3	74.81*	339	663	0.96	149.21	146	11	26.1	1.48E+00	AM-243 PB-214 PB-212
3	77.06*	602	576	0.97	153.69	146	11	15.5		PB-214 PB-212
0	83.98*	141	471	1.72	167.46	165	6	52.2		
0	87.04	245	550	1.32	173.56	171	6	32.7		NP-237 PB-214 PB-212
2	89.79	177	478	1.09	179.03	177	16	39.3	3.59E+00	
0	128.73	138	649	0.69	256.57	253	8	66.1		AC-228
0	185.90*	370	671	1.27	370.42	365	11	29.6		
0	209.49	176	692	1.48	417.41	411	11	59.8		AC-228
0	238.71*	1596	590	1.16	475.61	471	8	7.4		PB-212
0	241.85*	256	482	1.51	481.85	480	7	32.3		PB-214
0	270.34	208	426	1.22	538.61	534	12	41.8		RA-223 AC-228
0	295.24*	565	343	1.20	588.22	583	10	15.0		PB-214
0	300.49	146	268	1.30	598.68	594	9	43.9		PB-212
0	328.09	82	356	1.07	653.68	648	11	92.3		
0	338.44*	333	292	1.17	674.29	669	10	22.3		AC-228
0	352.14*	1012	351	1.26	701.59	695	14	10.2		PB-214
0	410.01	128	289	1.51	816.92	810	16	62.0		AC-228
0	463.03	109	157	1.95	922.59	917	10	47.5		AC-228
0	510.89*	241	222	1.51	1018.00	1010	17	33.6		TL-208
0	583.15*	559	173	1.50	1162.08	1155	15	13.5		TL-208
0	609.46*	815	142	1.40	1214.55	1208	14	9.5		BI-214
1	661.68	391	70	1.73	1318.69	1310	21	12.9	1.67E+00	CS-137
1	665.69	50	63	1.73	1326.69	1310	21	58.6		
0	727.90	122	103	1.07	1450.78	1445	11	37.7		BI-212
0	769.31*	124	131	4.64	1533.40	1526	18	46.9		BI-214
0	795.22*	52	69	1.69	1585.10	1581	9	65.1		AC-228
0	860.48*	61	75	1.71	1715.33	1711	10	60.6		TL-208
0	911.10*	401	99	1.49	1816.37	1808	16	15.1		AC-228
0	934.72	52	72	1.60	1863.51	1856	15	76.9		BI-214
2	964.66	62	91	2.03	1923.28	1917	21	64.5	9.16E-01	AC-228
2	968.77*	230	75	1.94	1931.50	1917	21	20.7		AC-228
0	1120.22*	131	125	2.14	2233.93	2227	19	45.4		BI-214
0	1237.65*	78	79	1.76	2468.53	2462	17	56.9		BI-214
0	1377.70	42	41	1.03	2748.43	2737	16	73.8		BI-214
0	1459.70*	791	38	2.28	2912.35	2903	19	8.2		K-40
0	1589.05	59	15	4.12	3171.05	3160	23	44.6		AC-228
0	1727.69*	33	18	1.58	3448.44	3442	14	65.3		BI-214
0	1762.58*	99	19	2.14	3518.26	3511	15	29.0		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	83.98	141	471	1.72	167.46	165	6	1.31E-02	52.2	2.38E+00	
2	89.79	177	478	1.09	179.03	177	16	1.64E-02	39.3	2.60E+00	
0	185.90	370	671	1.27	370.42	365	11	3.43E-02	29.6	3.21E+00	
0	328.09	82	356	1.07	653.68	648	11	7.59E-03	92.3	2.20E+00	
1	665.69	50	63	1.73	1326.69	1310	21	4.60E-03	58.6	1.21E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	5.719E+00	5.948E-01	1.938E-01	1.248E-02	29.507
CS-137	1.971E-01	3.393E-02	2.387E-02	2.715E-03	8.258
TL-208	2.549E-01	4.342E-02	2.280E-02	2.374E-03	11.180
BI-212	4.754E-01	1.868E-01	1.907E-01	2.085E-02	2.493
PB-212	6.846E-01	7.263E-02	5.628E-02	4.300E-03	12.164
BI-214	7.068E-01	1.011E-01	4.622E-02	4.921E-03	15.293
PB-214	6.750E-01	8.612E-02	4.618E-02	3.541E-03	14.617
RA-223	3.079E-01	1.317E-01	1.194E-01	1.062E-02	2.578
AC-228	8.511E-01	1.484E-01	8.887E-02	7.722E-03	9.577
NP-237	4.155E-01	1.456E-01	1.800E-01	2.262E-02	2.308
AM-243	1.328E-01	4.358E-02	4.745E-02	9.458E-03	2.799

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	3.857E-03		1.468E-02	2.186E-02	1.272E-03	0.176
RH-101	-2.855E-03		1.538E-02	2.474E-02	3.863E-03	-0.115
SB-125	-3.526E-03		3.997E-02	6.751E-02	5.536E-03	-0.052
EU-155	5.007E-02		5.357E-02	9.179E-02	8.594E-03	0.546
PO-209	-1.734E+00		2.964E+00	4.891E+00	9.376E-01	-0.355
BI-211	-7.204E-02		4.133E-01	7.119E-01	6.969E-02	-0.101
PA-233	1.200E-02		2.491E-02	4.376E-02	3.524E-03	0.274
PA-234M	1.300E+00		1.770E+00	3.270E+00	2.553E-01	0.398
TH-234✓	9.012E-01✓		3.095E-01	5.029E-01✓	5.030E-02	1.792
U-235	5.602E-02		9.689E-02	1.611E-01	1.176E-02	0.348
NP-236	3.649E-02		3.427E-02	5.327E-02	5.295E-03	0.685
NP-239	8.569E-03		9.329E-02	1.623E-01	2.191E-02	0.053
AM-241	2.799E-02		7.732E-02	1.337E-01	8.769E-03	0.209
CM-243	3.212E-03		4.876E-02	8.172E-02	8.835E-03	0.039
AM-246	2.109E-02		4.797E-02	8.650E-02	1.106E-02	0.244
CF-249	5.008E-03		1.710E-02	2.949E-02	2.826E-03	0.170

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 7-DEC-2007 12:04:15

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795206_GAMMA3_400MLSAN_17436.CNF

----- Sample Information -----
Sample ID : OH207-7952-06 ✓
Sample Title : SB-CZ-SS-2289-ST ✓
Sample Quantity : 4.73000E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17436

----- Sample Decay/Count Information -----
Collection Date : 27-SEP-2007 00:00:00 ✓ Acquisition date : 7-DEC-2007 09:03:58.
Decay time : 71 09:03:58.70 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:00.95

----- Detector Parameters -----
Energy cal. time : 30-OCT-2006 16:06:41 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA3 Counting geometry: 400 ml sand
Effic. cal. time : 7-FEB-2007 13:40:24. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$$x = \ln(a1/\text{energy})$$

a1=9.47750E+02 a2=-4.85663E+00 a3=8.12782E-01 a4=8.53513E-02
a5=-4.88423E-02 a6=-7.49502E-03 a7=0.00000E+00

----- Processing Parameters -----
Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA3_17240.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature: Tim Moore Date: 12/14/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	46.54*	97	394	1.44	103.47	99	10	83.9		
2	74.84*	604	899	1.59	166.19	158	19	22.2	1.04E+00	AM-243
										PB-214
										PB-212
2	77.22*	845	643	1.16	171.48	158	19	13.0		PB-214
										PB-212
0	87.10	198	824	1.37	193.37	189	9	54.3		NP-237
										PB-214
										PB-212
2	90.04	207	486	1.21	199.89	197	16	35.5	2.13E+00	
2	92.86*	329	763	1.63	206.15	197	16	37.2		
0	186.03*	256	457	1.25	412.66	408	10	35.5		
0	209.34	181	442	1.02	464.33	460	11	47.3		AC-228
3	238.62*	1648	295	1.48	529.22	522	22	6.4	2.22E+00	PB-212
3	241.51	384	357	2.03	535.62	522	22	30.1		PB-214
0	270.37	196	338	1.27	599.60	592	14	42.3		RA-223
										AC-228
0	295.16*	400	295	1.38	654.54	649	12	20.0		PB-214
0	300.06	84	284	0.68	665.41	661	10	78.3		PB-212
0	328.94	145	352	1.91	729.42	722	16	60.3		
0	338.44*	369	216	1.32	750.48	745	13	19.5		AC-228
0	351.94*	701	283	1.46	780.39	772	16	13.3		PB-214
0	462.62	125	143	1.37	1025.72	1020	14	43.9		AC-228
0	511.09*	223	147	1.60	1133.16	1124	19	32.6		TL-208
0	582.94*	505	152	1.63	1292.39	1283	19	14.9		TL-208
0	609.23*	438	135	1.78	1350.66	1343	15	15.2		BI-214
0	661.55	223	147	1.26	1466.61	1460	15	27.1		CS-137
0	727.15*	93	96	2.20	1612.00	1606	12	47.7		BI-212
0	767.82*	56	69	1.85	1702.14	1695	12	66.8		BI-214
0	861.01	55	57	1.95	1908.67	1903	12	62.2		TL-208
0	910.88*	386	39	1.92	2019.20	2009	17	12.7		AC-228
0	969.36*	143	127	1.87	2148.81	2140	18	42.7		AC-228
0	1120.45*	83	73	1.58	2483.63	2480	11	46.5		BI-214
0	1238.71	35	60	1.28	2745.71	2738	15	102.2		BI-214
0	1460.61*	434	23	2.04	3237.44	3229	19	11.3		K-40
0	1764.37*	73	19	1.73	3910.55	3903	19	37.9		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	46.54	97	394	1.44	103.47	99	10	9.00E-03	83.9	2.77E+00	
2	90.04	207	486	1.21	199.89	197	16	1.92E-02	35.5	3.55E+00	
2	92.86	329	763	1.63	206.15	197	16	3.05E-02	37.2	3.55E+00	T
0	186.03	256	457	1.25	412.66	408	10	2.37E-02	35.5	2.81E+00	
0	328.94	145	352	1.91	729.42	722	16	1.35E-02	60.3	1.89E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	3.863E+00	4.935E-01	2.497E-01	1.469E-02	15.472
CS-137	1.328E-01	3.728E-02	3.250E-02	2.340E-03	4.085
TL-208	2.700E-01	4.555E-02	2.615E-02	2.081E-03	10.326
BI-212	4.298E-01	2.074E-01	2.200E-01	1.597E-02	1.954
PB-212	8.383E-01	8.250E-02	4.378E-02	3.273E-03	19.147
BI-214	4.462E-01	7.594E-02	5.791E-02	4.413E-03	7.704
PB-214	5.510E-01	8.530E-02	5.454E-02	4.339E-03	10.103
RA-223	3.437E-01	1.486E-01	1.415E-01	1.253E-02	2.430
AC-228	9.859E-01	1.433E-01	1.022E-01	7.185E-03	9.648
NP-237	2.373E-01	1.315E-01	1.691E-01	1.885E-02	1.403
AM-243	1.342E-01	3.945E-02	2.822E-02	5.428E-03	4.754

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	-1.822E-02		1.759E-02	2.768E-02	1.468E-03	-0.658
RH-101	4.144E-03		1.733E-02	2.940E-02	4.538E-03	0.141
SB-125	9.751E-03		4.549E-02	8.013E-02	6.625E-03	0.122
EU-155	2.414E-02		4.922E-02	8.585E-02	8.073E-03	0.281
PO-209	-8.713E-01		2.963E+00	5.183E+00	9.550E-01	-0.168
BI-211	-2.123E-01		5.455E-01	9.043E-01	6.513E-02	-0.235
PA-233	-2.090E-02		3.180E-02	5.171E-02	4.220E-03	-0.404
PA-234M	-5.890E-01		1.818E+00	3.133E+00	2.139E-01	-0.188
TH-234✓	9.074E-01✓	+	3.470E-01	4.659E-01✓	4.171E-02	1.948
U-235	5.856E-02		1.036E-01	1.787E-01	1.326E-02	0.328
NP-236	2.251E-02		3.177E-02	4.640E-02	4.428E-03	0.485
NP-239	-6.855E-02		1.103E-01	1.816E-01	2.429E-02	-0.378
AM-241	-1.156E-01		3.505E-02	5.110E-02	3.234E-03	-2.261
CM-243	2.216E-02		4.402E-02	7.683E-02	8.279E-03	0.288
AM-246	5.031E-02		5.931E-02	1.119E-01	1.413E-02	0.449
CF-249	-1.679E-03		1.943E-02	3.380E-02	3.366E-03	-0.050

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 7-DEC-2007 15:11:36

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795207_GAMMA1_400MLSAN_17437.CNF

----- Sample Information -----
Sample ID : OH207-7952-07 ✓
Sample Title : SB-CZ-SS-2290-ST ✓
Sample Quantity : 4.56200E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17437

----- Sample Decay/Count Information -----
Collection Date : 27-SEP-2007 00:00:00 Acquisition date : 7-DEC-2007 12:11:16.
Decay time : 71 12:11:16.91 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:02.46

----- Detector Parameters -----
Energy cal. time : 23-MAR-2006 15:15:18 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA1 Counting geometry: 400 ml sand
Effic. cal. time : 23-MAR-2006 15:18:11 Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$x = \ln(a1/\text{energy})$

a1=9.47750E+02 a2=-4.65904E+00 a3=6.59172E-01 a4=3.93115E-02
a5=1.38137E-01 a6=-8.70295E-02 a7=0.00000E+00

----- Processing Parameters -----
Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA1_17241.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

T. M. Moore

Date:

12/14/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
2	74.87*	351	509	1.06	149.15	144	15	23.1	1.13E+00	AM-243 PB-214 PB-212
2	77.13*	579	502	0.94	153.67	144	15	15.1		PB-214 PB-212
0	87.27	246	567	1.19	173.98	171	7	34.5		NP-237 PB-214 PB-212
0	92.98*	278	719	1.33	185.42	182	9	38.1		
0	186.01*	329	609	1.06	371.70	367	10	30.8		
0	209.38	159	530	0.87	418.50	413	10	56.8		AC-228
1	238.61*	1873	309	1.11	477.02	470	23	5.6	1.31E+00	PB-212
1	241.05*	245	271	1.18	481.91	470	23	34.5		
1	242.07*	217	299	1.28	483.96	470	23	35.4		PB-214
0	270.26	191	337	1.59	540.40	537	9	37.7		RA-223 AC-228
0	295.15*	550	378	1.24	590.24	584	12	16.6		PB-214
0	299.99*	84	239	1.25	599.92	596	8	67.9		PB-212
0	327.99	81	300	1.09	656.00	651	10	83.0		
0	337.98	418	347	1.11	675.98	669	13	20.8		AC-228
0	351.75*	1074	265	1.21	703.57	697	12	8.7		PB-214
0	409.21	89	175	1.06	818.61	814	9	57.5		AC-228
0	462.95	151	201	1.23	926.20	919	13	42.1		AC-228
0	510.79*	174	291	1.91	1021.99	1015	18	52.1		TL-208
0	583.06*	628	150	1.30	1166.69	1159	16	12.0		TL-208
0	609.09*	777	148	1.54	1218.80	1213	14	10.0		BI-214
0	661.33	483	94	1.49	1323.40	1318	11	12.0		CS-137
0	726.90	154	68	1.79	1454.66	1450	9	25.2		BI-212
0	767.65	95	64	1.47	1536.25	1531	11	38.5		BI-214
0	795.05	68	69	1.19	1591.10	1585	11	53.7		AC-228
0	910.72*	479	77	1.74	1822.67	1815	17	12.5		AC-228
0	933.98	65	68	1.96	1869.22	1860	17	62.9		BI-214
1	964.37	120	37	1.87	1930.08	1921	37	26.4	1.92E+00	AC-228
1	968.50*	318	32	1.75	1938.34	1921	37	13.5		AC-228
0	1120.03*	165	66	2.19	2241.67	2233	18	28.4		BI-214
0	1237.75	70	56	1.33	2477.31	2472	13	49.8		BI-214
0	1279.69	46	15	3.83	2561.26	2554	15	47.1		BI-214
0	1377.04*	47	21	1.41	2756.11	2749	12	49.8		BI-214
0	1407.53	26	18	0.89	2817.15	2812	10	71.3		BI-214
0	1460.21*	426	26	1.87	2922.60	2915	18	11.7		K-40
0	1588.05	36	49	1.72	3178.46	3172	16	93.3		AC-228
0	1729.64	24	24	2.54	3461.85	3452	16	99.6		BI-214
0	1763.53*	146	13	2.30	3529.66	3523	14	20.5		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	92.98	278	719	1.33	185.42	182	9	2.58E-02	38.1	2.43E+00	T
0	186.01	329	609	1.06	371.70	367	10	3.04E-02	30.8	3.03E+00	
1	241.05	245	271	1.18	481.91	470	23	2.27E-02	34.5	2.64E+00	
0	327.99	81	300	1.09	656.00	651	10	7.54E-03	83.0	2.11E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	3.099E+00	4.188E-01	1.866E-01	1.274E-02	16.607
CS-137	2.580E-01	4.146E-02	2.998E-02	3.221E-03	8.605
TL-208	3.063E-01	4.786E-02	2.373E-02	2.381E-03	12.906
BI-212	6.294E-01	1.695E-01	1.957E-01	1.882E-02	3.217
PB-212	8.927E-01	8.535E-02	4.166E-02	3.215E-03	21.426
BI-214	7.176E-01	1.024E-01	4.956E-02	5.048E-03	14.479
PB-214	7.870E-01	9.235E-02	4.776E-02	3.768E-03	16.480
RA-223	3.126E-01	1.212E-01	1.364E-01	1.255E-02	2.292
AC-228	1.048E+00	1.431E-01	8.610E-02	4.758E-03	12.168
NP-237	4.964E-01	1.855E-01	2.298E-01	3.324E-02	2.160
AM-243	1.693E-01	5.281E-02	5.083E-02	1.066E-02	3.330

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	-1.543E-02		1.504E-02	2.262E-02	1.476E-03	-0.682
RH-101	-3.941E-03		1.601E-02	2.612E-02	4.050E-03	-0.151
SB-125	-1.390E-02		3.986E-02	6.710E-02	5.504E-03	-0.207
EU-155	3.517E-02		5.880E-02	1.013E-01	1.006E-02	0.347
PO-209	-5.938E-01		2.636E+00	4.565E+00	8.170E-01	-0.130
BI-211	-1.348E-01		4.182E-01	7.181E-01	5.232E-02	-0.188
PA-233	-1.369E-03		2.751E-02	4.769E-02	4.004E-03	-0.029
PA-234M	1.475E+00		1.503E+00	2.902E+00	1.668E-01	0.508
TH-234 ✓	1.167E+00 ✓ +		4.645E-01	5.751E-01 ✓	6.710E-02	2.029
U-235	2.688E-03		9.855E-02	1.635E-01	1.142E-02	0.016
NP-236	2.261E-02		3.424E-02	5.655E-02	6.212E-03	0.400
NP-239	6.396E-02		1.014E-01	1.695E-01	2.286E-02	0.377
AM-241	-1.033E-02		9.017E-02	1.562E-01	1.242E-02	-0.066
CM-243	5.888E-02		5.306E-02	9.238E-02	1.053E-02	0.637
AM-246	2.542E-03		4.758E-02	8.364E-02	1.029E-02	0.030
CF-249	3.080E-03		1.700E-02	2.954E-02	2.850E-03	0.104

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 7-DEC-2007 15:13:06

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795208_GAMMA2_400MLSAN_17438.CNF

----- Sample Information -----

Sample ID : OH207-7952-08 ✓
Sample Title : SB-CZ-SS-2291-ST ✓
Sample Quantity : 5.27400E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17438

----- Sample Decay/Count Information -----

Collection Date : 27-SEP-2007 00:00:00 ✓ Acquisition date : 7-DEC-2007 12:12:51.
Decay time : 71 12:12:51.45 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:01.51

----- Detector Parameters -----

Energy cal. time : 1-MAY-2007 11:12:10. Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA2 Counting geometry: 400 ml sand
Effic. cal. time : 1-MAY-2007 11:13:44. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$x = \ln(a1/\text{energy})$

a1=9.47750E+02 a2=-4.68491E+00 a3=7.34327E-01 a4=7.12916E-02
a5=8.21331E-02 a6=-7.02143E-02 a7=0.00000E+00

----- Processing Parameters -----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA2_17242.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

T. M. Moore

Date:

12/14/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	62.91*	147	768	1.42	125.51	121	10	73.5		TH-234
1	74.74*	432	608	1.08	149.07	142	15	20.8	2.65E+00	AM-243
										PB-214
										PB-212
1	77.12*	693	613	1.02	153.80	142	15	13.8		PB-214
										PB-212
0	84.31*	93	781	1.55	168.12	163		8106.6		
2	87.26	273	515	1.18	174.00	171	11	27.5	3.63E-01	NP-237
										PB-214
										PB-212
2	89.88	158	624	0.96	179.21	171	11	52.8		
0	93.06*	398	760	1.86	185.54	182	9	28.1		TH-234
0	128.94	211	787	1.50	256.99	252	10	51.7		AC-228
0	185.96*	430	726	1.30	370.54	366	10	25.9		
0	209.39	150	452	1.01	417.20	414	7	49.7		AC-228
2	238.75*	1875	426	1.12	475.69	470	21	5.9	2.07E+00	PB-212
2	241.15*	229	363	1.20	480.46	470	21	38.2		
2	242.19*	310	304	1.05	482.53	470	21	23.7		PB-214
4	270.34	215	430	1.83	538.61	533	13	40.3	2.05E+00	RA-223
										AC-228
4	271.99	72	345	1.58	541.91	533		13102.7		
0	295.36*	700	356	1.16	588.45	584	10	12.7		PB-214
0	300.27	154	311	1.04	598.24	594	9	44.4		PB-212
0	328.17	142	275	0.89	653.83	650	9	45.1		
0	338.41*	451	365	1.15	674.24	667	12	19.5		AC-228
0	352.04*	1262	321	1.29	701.39	694	14	8.4		PB-214
0	410.12	71	239	0.92	817.13	811	11	87.7		AC-228
0	463.32	192	241	1.76	923.17	915	18	40.8		AC-228
0	510.82*	156	314	1.60	1017.87	1009	15	55.5		TL-208
0	583.32*	560	182	1.36	1162.42	1158	11	12.8		TL-208
0	609.44*	913	151	1.40	1214.51	1207	14	8.9		BI-214
0	661.59	265	134	1.47	1318.52	1313	12	21.2		CS-137
0	727.91	139	140	1.55	1450.80	1444	16	42.2		BI-212
0	767.07*	58	169	1.36	1528.93	1525		15100.0		BI-214
0	800.66	214	161	13.26	1595.95	1579	38	40.8		
0	860.13*	93	58	1.83	1714.64	1707	12	39.0		TL-208
0	911.17*	449	96	1.54	1816.51	1810	16	14.0		AC-228
4	964.23	131	41	2.40	1922.43	1917	32	24.2	1.96E+00	AC-228
4	968.85*	275	33	1.83	1931.65	1917	32	15.1		AC-228
0	1119.95*	204	58	1.51	2233.38	2227	14	21.6		BI-214
0	1237.94*	87	34	1.79	2469.10	2462	15	37.0		BI-214
0	1377.51	52	44	1.45	2748.04	2741	15	64.4		BI-214
0	1459.64*	311	18	2.18	2912.24	2906	12	13.1		K-40
0	1762.67*	172	20	1.75	3518.44	3511	16	19.8		BI-214
0	1845.16	36	9	1.31	3683.55	3676	13	49.3		

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	84.31	93	781	1.55	168.12	163	8	8.64E-03	****	2.39E+00	
2	89.88	158	624	0.96	179.21	171	11	1.46E-02	52.8	2.60E+00	
0	185.96	430	726	1.30	370.54	366	10	3.98E-02	25.9	3.21E+00	
2	241.15	229	363	1.20	480.46	470	21	2.12E-02	38.2	2.78E+00	
4	271.99	72	345	1.58	541.91	533	13	6.70E-03	****	2.55E+00	
0	328.17	142	275	0.89	653.83	650	9	1.32E-02	45.1	2.20E+00	
0	800.66	214	161	13.26	1595.95	1579	38	1.98E-02	40.8	1.05E+00	
0	1845.16	36	9	1.31	3683.55	3676	13	3.29E-03	49.3	5.62E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	2.051E+00	3.001E-01	1.623E-01	1.045E-02	12.641
CS-137	1.222E-01	2.945E-02	2.630E-02	2.992E-03	4.647
TL-208	2.333E-01	3.845E-02	2.384E-02	2.483E-03	9.785
BI-212	4.938E-01	2.153E-01	1.640E-01	1.793E-02	3.011
PB-212	7.335E-01	7.085E-02	3.818E-02	2.918E-03	19.210
BI-214	7.224E-01	1.000E-01	4.338E-02	4.619E-03	16.652
PB-214	7.677E-01	8.711E-02	4.300E-02	3.297E-03	17.854
RA-223	2.894E-01	1.195E-01	1.193E-01	1.062E-02	2.425
AC-228	8.683E-01	1.427E-01	7.827E-02	6.801E-03	11.094
TH-234✓	1.295E+00✓	3.859E-01	3.674E-01✓	3.675E-02	3.524
NP-237	4.219E-01	1.274E-01	1.825E-01	2.294E-02	2.311
AM-243	1.544E-01	4.454E-02	4.218E-02	8.408E-03	3.661

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	1.353E-03		1.245E-02	2.053E-02	1.194E-03	0.066
RH-101	-1.093E-02		1.511E-02	2.371E-02	3.701E-03	-0.461
SB-125	3.422E-03		3.628E-02	6.188E-02	5.074E-03	0.055
EU-155	2.228E-02		5.068E-02	8.568E-02	8.022E-03	0.260
PO-209	-5.652E-02		2.473E+00	4.317E+00	8.277E-01	-0.013
BI-211	-3.335E-01		3.774E-01	6.133E-01	6.003E-02	-0.544
PA-233	-1.884E-02		2.401E-02	3.980E-02	3.206E-03	-0.473
PA-234M	1.176E-02		1.573E+00	2.770E+00	2.162E-01	0.004
U-235	-1.288E-02		9.205E-02	1.497E-01	1.093E-02	-0.086
NP-236	2.756E-02		3.025E-02	4.959E-02	4.929E-03	0.556
NP-239	-1.582E-02		8.917E-02	1.536E-01	2.073E-02	-0.103
AM-241	1.158E-03		7.943E-02	1.219E-01	7.995E-03	0.009
CM-243	-2.943E-02		4.542E-02	7.422E-02	8.024E-03	-0.396
AM-246	1.446E-02		3.969E-02	7.187E-02	9.193E-03	0.201
CF-249	2.404E-02		1.595E-02	2.870E-02	2.749E-03	0.838

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 7-DEC-2007 15:14:57

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795209_GAMMA3_400MLSAN_17439.CNF

---- Sample Information ----

Sample ID : OH207-7952-09 ✓
Sample Title : SB-CZ-SS-2292-ST ✓
Sample Quantity : 5.60100E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17439

---- Sample Decay/Count Information ----

Collection Date : 27-SEP-2007 00:00:00 Acquisition date : 7-DEC-2007 12:14:28.
Decay time : 71 12:14:28.00 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:00.98

---- Detector Parameters ----

Energy cal. time : 30-OCT-2006 16:06:41 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA3 Counting geometry: 400 ml sand
Effic. cal. time : 7-FEB-2007 13:40:24. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$x = \ln(a1/\text{energy})$

a1=9.47750E+02 a2=-4.85663E+00 a3=8.12782E-01 a4=8.53513E-02
a5=-4.88423E-02 a6=-7.49502E-03 a7=0.00000E+00

---- Processing Parameters ----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA3_17240.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

Tim Moore

Date:

12/14/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
1	74.88*	534	680	1.44	166.29	157	19	21.7	3.24E+00	AM-243 PB-214 PB-212
1	77.14*	808	586	1.24	171.29	157	19	13.3		PB-214 PB-212
3	87.28	354	748	1.48	193.77	181	32	30.8	1.25E+00	NP-237 PB-214 PB-212
3	89.81	183	521	1.09	199.39	181	32	44.1		
3	92.73*	309	739	1.55	205.84	181	32	37.6		
0	185.72*	424	641	1.42	411.97	406	13	27.2		
0	209.21	147	449	1.43	464.04	460	10	56.7		AC-228
2	238.61*	1417	379	1.41	529.21	521	21	7.4	1.90E+00	PB-212
2	241.81	458	431	1.78	536.30	521	21	23.7		PB-214
0	270.33	159	348	1.70	599.51	594	13	50.6		RA-223 AC-228
0	295.14*	688	361	1.50	654.50	648	14	14.0		PB-214
0	300.22	95	236	0.94	665.76	662	9	61.8		PB-212
0	327.90	68	296	1.19	727.12	722	11	100.9		
0	338.11*	309	296	1.67	749.74	741	15	27.0		AC-228
0	351.94*	1144	359	1.74	780.39	772	16	9.6		PB-214
0	463.48	146	167	2.15	1027.61	1020	16	43.1		AC-228
0	510.37*	149	212	2.06	1131.54	1123	18	53.1		TL-208
0	583.18*	394	153	1.61	1292.93	1286	13	16.6		TL-208
0	609.20*	813	140	1.78	1350.59	1342	16	9.7		BI-214
0	661.47	281	110	1.27	1466.45	1461	13	19.7		CS-137
0	726.95*	98	72	1.79	1611.57	1606	11	39.8		BI-212
0	860.82	35	69	1.39	1908.26	1900	12	100.3		TL-208
0	911.17*	284	98	1.92	2019.84	2008	19	20.5		AC-228
0	934.28	53	39	1.21	2071.07	2064	12	48.3		BI-214
1	964.23	76	43	2.21	2137.45	2126	29	47.2	1.54E+00	AC-228
1	968.80*	171	53	2.22	2147.55	2126	29	24.1		AC-228
0	1120.13*	183	39	1.53	2482.92	2475	17	21.8		BI-214
0	1378.30	62	39	1.33	3055.05	3048	21	57.6		BI-214
0	1460.86*	161	29	2.65	3238.01	3229	18	23.8		K-40
0	1764.17*	156	4	2.01	3910.11	3902	16	17.4		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
3	89.81	183	521	1.09	199.39	181	32	1.70E-02	44.1	3.55E+00	
3	92.73	309	739	1.55	205.84	181	32	2.86E-02	37.6	3.55E+00	T
0	185.72	424	641	1.42	411.97	406	13	3.92E-02	27.2	2.82E+00	
0	327.90	68	296	1.19	727.12	722	11	6.28E-03	****	1.90E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	1.211E+00	2.970E-01	2.142E-01	1.260E-02	5.655
CS-137	1.413E-01	2.968E-02	2.818E-02	2.029E-03	5.014
TL-208	1.779E-01	3.282E-02	2.531E-02	2.015E-03	7.028
BI-212	3.827E-01	1.549E-01	1.906E-01	1.383E-02	2.008
PB-212	6.086E-01	6.391E-02	4.233E-02	3.164E-03	14.377
BI-214	6.991E-01	8.608E-02	4.513E-02	3.439E-03	15.491
PB-214	7.590E-01	9.441E-02	4.732E-02	3.765E-03	16.038
RA-223	2.360E-01	1.212E-01	1.212E-01	1.073E-02	1.948
AC-228	6.135E-01	1.329E-01	9.510E-02	6.687E-03	6.451
NP-237	3.593E-01	1.178E-01	1.250E-01	1.394E-02	2.873
AM-243	1.002E-01	2.907E-02	2.331E-02	4.483E-03	4.297

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	6.928E-04		1.321E-02	2.370E-02	1.443E-03	0.029
RH-101	-3.160E-03		1.539E-02	2.574E-02	3.974E-03	-0.123
SB-125	-4.169E-02		3.960E-02	6.520E-02	5.390E-03	-0.639
EU-155	5.225E-02		4.256E-02	7.514E-02	7.066E-03	0.695
PO-209	1.463E+00		2.746E+00	5.071E+00	9.343E-01	0.288
BI-211	1.528E-01		4.400E-01	7.704E-01	5.548E-02	0.198
PA-233	8.256E-03		2.744E-02	4.663E-02	3.805E-03	0.177
PA-234M	2.064E+00		1.731E+00	3.302E+00	2.255E-01	0.625
TH-234 ✓	7.194E-01 ✓	+	2.777E-01	3.896E-01 ✓	2.592E-02	1.847
U-235	-1.696E-02		9.109E-02	1.541E-01	1.144E-02	-0.110
NP-236	2.683E-02		2.785E-02	4.094E-02	3.907E-03	0.655
NP-239	-1.218E-02		9.765E-02	1.641E-01	2.195E-02	-0.074
AM-241	-1.049E-01		2.848E-02	4.049E-02	2.562E-03	-2.592
CM-243	1.819E-02		3.793E-02	6.611E-02	7.124E-03	0.275
AM-246	-8.876E-03		4.297E-02	7.556E-02	9.538E-03	-0.117
CF-249	1.536E-02		1.649E-02	2.982E-02	2.970E-03	0.515

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 7-DEC-2007 18:18:12

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795210_GAMMA1_400MLSAN_17440.CNF

---- Sample Information ----

Sample ID : OH207-7952-10 ✓
Sample Title : SB-CZ-SS-2293-ST ✓
Sample Quantity : 4.49000E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17440

---- Sample Decay/Count Information ----

Collection Date : 27-SEP-2007 00:00:00 Acquisition date : 7-DEC-2007 15:17:51.
Decay time : 71 15:17:51.91 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:01.93

---- Detector Parameters ----

Energy cal. time : 23-MAR-2006 15:15:18 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA1 Counting geometry: 400 ml sand
Effic. cal. time : 23-MAR-2006 15:18:11 Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$x = \ln(a1/\text{energy})$

a1=9.47750E+02 a2=-4.65904E+00 a3=6.59172E-01 a4=3.93115E-02
a5=1.38137E-01 a6=-8.70295E-02 a7=0.00000E+00

---- Processing Parameters ----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA1_17241.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

T. M. Mear

Date:

12/14/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
1	72.20	62	184	1.02	143.82	142	17	68.4	1.22E+00	
1	73.39	67	281	1.02	146.19	142	17	88.8		
1	74.89*	241	291	1.02	149.19	142	17	27.1		AM-243
										PB-214
										PB-212
1	77.20*	365	312	1.03	153.81	142	17	19.0		PB-214
										PB-212
0	87.15	155	428	1.06	173.74	171	7	47.1		NP-237
										PB-214
										PB-212
2	92.89*	140	350	1.16	185.23	182	9	51.8	2.82E+00	
0	128.86	136	424	1.73	257.27	253	10	59.4		AC-228
0	185.72*	301	492	1.22	371.13	365	13	33.1		
0	209.42	52	327	0.78	418.57	415	8	124.5		AC-228
1	238.63*	1135	223	1.08	477.05	472	16	7.3	3.42E+00	PB-212
1	240.98*	112	229	1.28	481.77	472	16	67.5		
1	242.11*	154	219	1.28	484.03	472	16	42.4		PB-214
0	270.35	171	215	2.04	540.57	536	11	36.8		RA-223
										AC-228
0	295.21*	258	232	1.26	590.35	586	10	25.8		PB-214
0	299.95*	52	165	1.45	599.84	596	8	91.9		PB-212
0	327.57	57	140	0.79	655.14	652	7	73.0		
0	338.35	244	235	1.28	676.73	671	12	28.3		AC-228
0	351.87*	525	256	1.22	703.80	697	13	15.5		PB-214
0	462.51	77	122	1.05	925.33	920	11	59.5		AC-228
0	510.52*	157	190	2.03	1021.46	1013	18	48.6		TL-208
0	582.91*	363	102	1.59	1166.39	1159	14	16.0		TL-208
0	609.06*	425	129	1.51	1218.75	1211	17	16.0		BI-214
0	661.11	108	164	1.81	1322.95	1315	19	59.8		CS-137
0	727.69	71	128	1.58	1456.25	1449	16	74.6		BI-212
0	910.60*	216	84	1.56	1822.44	1815	14	22.9		AC-228
0	934.30	42	46	0.88	1869.88	1863	14	74.4		BI-214
3	963.77*	64	34	2.26	1928.87	1922	24	48.2	1.55E+00	AC-228
3	968.39*	147	22	1.64	1938.12	1922	24	21.1		AC-228
0	1119.67*	126	36	1.53	2240.95	2235	14	27.3		BI-214
0	1460.09*	423	44	2.42	2922.36	2914	16	12.2		K-40
0	1587.14	23	12	1.81	3176.64	3172	11	70.3		AC-228
0	1763.91*	80	17	2.15	3530.42	3522	18	35.0		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
1	72.20	62	184	1.02	143.82	142	17	5.79E-03	68.4	1.55E+00	
1	73.39	67	281	1.02	146.19	142	17	6.25E-03	88.8	1.61E+00	
2	92.89	140	350	1.16	185.23	182	9	1.30E-02	51.8	2.43E+00	T
0	185.72	301	492	1.22	371.13	365	13	2.79E-02	33.1	3.03E+00	
1	240.98	112	229	1.28	481.77	472	16	1.04E-02	67.5	2.64E+00	
0	327.57	57	140	0.79	655.14	652	7	5.32E-03	73.0	2.11E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	3.125E+00	4.372E-01	1.532E-01	1.046E-02	20.397
CS-137	5.848E-02	3.553E-02	2.300E-02	2.472E-03	2.542
TL-208	1.800E-01	3.406E-02	2.124E-02	2.132E-03	8.475
BI-212	2.943E-01	2.215E-01	1.758E-01	1.691E-02	1.674
PB-212	5.499E-01	5.845E-02	3.593E-02	2.773E-03	15.303
BI-214	3.992E-01	7.576E-02	4.395E-02	4.476E-03	9.083
PB-214	3.912E-01	6.807E-02	4.438E-02	3.502E-03	8.814
RA-223	2.839E-01	1.075E-01	1.177E-01	1.083E-02	2.412
AC-228	4.798E-01	1.128E-01	8.835E-02	4.883E-03	5.430
NP-237	3.172E-01	1.561E-01	1.950E-01	2.820E-02	1.627
AM-243	1.181E-01	4.043E-02	4.237E-02	8.889E-03	2.786

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	2.700E-03		1.160E-02	2.023E-02	1.320E-03	0.134
RH-101	6.211E-03		1.348E-02	2.275E-02	3.528E-03	0.273
SB-125	-2.727E-02		3.259E-02	5.314E-02	4.359E-03	-0.513
EU-155	2.365E-02		4.726E-02	8.208E-02	8.149E-03	0.288
PO-209	1.416E+00		2.631E+00	4.843E+00	8.668E-01	0.292
BI-211	-1.244E-01		3.661E-01	6.313E-01	4.599E-02	-0.197
PA-233	1.988E-03		2.297E-02	4.039E-02	3.392E-03	0.049
PA-234M	-4.725E-01		1.437E+00	2.499E+00	1.437E-01	-0.189
TH-234✓	5.966E-01✓	+	3.166E-01	4.920E-01✓	5.740E-02	1.212
U-235	1.130E-02		8.117E-02	1.357E-01	9.472E-03	0.083
NP-236	2.807E-02		2.945E-02	4.947E-02	5.434E-03	0.567
NP-239	2.718E-02		8.426E-02	1.407E-01	1.899E-02	0.193
AM-241	4.474E-02		7.578E-02	1.355E-01	1.077E-02	0.330
CM-243	1.322E-04		4.204E-02	7.182E-02	8.184E-03	0.002
AM-246	2.918E-02		4.567E-02	8.491E-02	1.045E-02	0.344
CF-249	-2.518E-03		1.463E-02	2.513E-02	2.424E-03	-0.100

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 7-DEC-2007 18:20:02

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795211_GAMMA2_400MLSAN_17441.CNF

---- Sample Information ----

Sample ID : OH207-7952-11 ✓
Sample Title : SB-CZ-SS-2294-ST ✓
Sample Quantity : 3.92500E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17441

---- Sample Decay/Count Information ----

Collection Date : 27-SEP-2007 00:00:00 Acquisition date : 7-DEC-2007 15:19:45.
Decay time : 71 15:19:45.99 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:01.13

---- Detector Parameters ----

Energy cal. time : 1-MAY-2007 11:12:10. Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA2 Counting geometry: 400 ml sand
Effic. cal. time : 1-MAY-2007 11:13:44. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$x = \ln(a1/\text{energy})$

a1=9.47750E+02 a2=-4.68491E+00 a3=7.34327E-01 a4=7.12916E-02
a5=8.21331E-02 a6=-7.02143E-02 a7=0.00000E+00

---- Processing Parameters ----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA2_17242.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

TM Moore

Date: 12/14/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
3	74.79*	304	506	1.22	149.16	144	14	27.4	1.20E+00	AM-243 PB-214 PB-212
3	77.07*	386	397	0.97	153.70	144	14	20.0		PB-214 PB-212
6	87.01	199	362	1.42	173.50	170	23	32.6	3.20E+00	NP-237 PB-214 PB-212
6	89.94	167	393	1.16	179.33	170	23	41.8		
0	128.90	82	457	1.48	256.91	253	9	96.1		AC-228
0	185.48*	155	519	1.29	369.59	364	11	60.7		
0	209.36	57	354	0.71	417.14	414	8	117.5		AC-228
4	238.76*	977	247	1.08	475.70	470	17	8.3	1.28E+00	PB-212
4	242.19*	111	293	1.36	482.54	470	17	61.4		PB-214
0	295.26*	349	262	1.36	588.26	581	12	21.7		PB-214
0	299.99	65	244	1.33	597.69	594	10	93.8		PB-212
0	338.41*	263	244	1.35	674.24	668	14	28.2		AC-228
0	352.01*	526	224	1.30	701.34	696	12	14.7		PB-214
0	463.33	105	118	1.63	923.19	918	10	43.5		AC-228
0	510.73*	98	159	2.14	1017.67	1010	17	69.6		TL-208
0	583.06*	322	115	1.45	1161.91	1156	13	18.0		TL-208
0	609.41*	406	84	1.29	1214.44	1208	12	13.9		BI-214
0	661.71	573	70	1.49	1318.75	1312	12	10.2		CS-137
0	727.35	74	56	1.09	1449.70	1445	10	44.3		BI-212
0	795.46*	54	55	0.81	1585.57	1578	15	66.9		AC-228
0	911.15*	225	66	1.66	1816.47	1809	16	21.2		AC-228
0	934.97	32	39	0.81	1864.01	1857	13	89.4		BI-214
0	968.83*	129	36	1.68	1931.60	1927	12	26.0		AC-228
0	1120.08*	101	63	1.86	2233.64	2226	15	40.7		BI-214
0	1237.93*	53	40	1.66	2469.09	2460	16	61.5		BI-214
0	1376.70	55	12	1.27	2746.41	2740	13	38.3		BI-214
0	1459.72*	577	12	2.10	2912.40	2904	16	9.0		K-40
0	1727.43*	23	3	1.52	3447.90	3441	12	56.1		BI-214
1	1762.17*	45	11	2.34	3517.42	3511	16	52.0	1.81E+00	BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
6	89.94	167	393	1.16	179.33	170	23	1.55E-02	41.8	2.61E+00	
0	185.48	155	519	1.29	369.59	364	11	1.44E-02	60.7	3.21E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	5.113E+00	5.650E-01	2.180E-01	1.404E-02	23.452
CS-137	3.545E-01	5.423E-02	2.691E-02	3.061E-03	13.174
TL-208	1.803E-01	3.757E-02	2.526E-02	2.631E-03	7.138
BI-212	3.532E-01	1.613E-01	1.932E-01	2.112E-02	1.828
PB-212	5.133E-01	5.784E-02	4.325E-02	3.305E-03	11.868
BI-214	4.313E-01	7.554E-02	4.974E-02	5.297E-03	8.670
PB-214	4.299E-01	7.122E-02	5.059E-02	3.879E-03	8.496
AC-228	5.845E-01	1.337E-01	8.558E-02	7.436E-03	6.830
NP-237	4.130E-01	1.443E-01	2.061E-01	2.590E-02	2.004
AM-243	1.457E-01	4.940E-02	4.533E-02	9.035E-03	3.215

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	-2.253E-03		1.540E-02	2.764E-02	1.527E-03	-0.082
RH-101	1.409E-03		1.608E-02	2.626E-02	4.100E-03	0.054
SB-125	1.490E-02		4.126E-02	7.210E-02	5.911E-03	0.207
EU-155	3.661E-02		5.436E-02	9.343E-02	8.748E-03	0.392
PO-209	-2.157E-01		2.826E+00	4.963E+00	9.515E-01	-0.043
BI-211	3.764E-03		4.273E-01	7.539E-01	7.380E-02	0.005
RA-223	2.214E-01		8.289E-02	1.542E-01	1.372E-02	1.436
PA-233	-8.454E-03		2.781E-02	4.734E-02	3.813E-03	-0.179
PA-234M	5.153E-01		1.760E+00	3.240E+00	2.529E-01	0.159
TH-234 ✓	6.222E-01 ✓		2.944E-01	5.257E-01 ✓	5.258E-02	1.184
U-235	2.530E-02		9.841E-02	1.627E-01	1.187E-02	0.156
NP-236	5.218E-03		3.365E-02	5.110E-02	5.080E-03	0.102
NP-239	-1.934E-03		9.354E-02	1.632E-01	2.202E-02	-0.012
AM-241	-2.309E-02		8.125E-02	1.381E-01	9.061E-03	-0.167
CM-243	4.105E-03		4.801E-02	8.106E-02	8.764E-03	0.051
AM-246	7.661E-05		5.381E-02	9.405E-02	1.203E-02	0.001
CF-249	2.721E-03		1.725E-02	2.987E-02	2.861E-03	0.091

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 7-DEC-2007 18:21:24

Configuration :

SYSSYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795212_GAMMA3_400MLSAN_17442.CNF

---- Sample Information ----

Sample ID : OH207-7952-12 ✓
Sample Title : SB-CZ-SS-2295-ST ✓
Sample Quantity : 4.28600E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17442

---- Sample Decay/Count Information ----

Collection Date : 27-SEP-2007 00:00:00 Acquisition date : 7-DEC-2007 15:21:04.
Decay time : 71 15:21:04.55 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:00.83

---- Detector Parameters ----

Energy cal. time : 30-OCT-2006 16:06:41 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA3 Counting geometry: 400 ml sand
Effic. cal. time : 7-FEB-2007 13:40:24. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$$x = \ln(a1/\text{energy})$$

a1=9.47750E+02 a2=-4.85663E+00 a3=8.12782E-01 a4=8.53513E-02
a5=-4.88423E-02 a6=-7.49502E-03 a7=0.00000E+00

---- Processing Parameters ----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYSSYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA3_17240.CNF;1 ✓

Nuclide Lib File : SYSSYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;

Inter Lib File : SYSSYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB

Anal Seq Title : SCHOFIELD BARRACKS

Use Variable Tol : Yes

Variable Tol : 1.1000

Reviewer's Signature:

T. M. Moore

Date:

12/14/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	46.60*	78	347	1.54	103.59	98	10	98.9		
0	63.44*	140	561	1.59	140.93	136	11	72.3		TH-234
3	74.87*	521	635	1.75	166.27	161	16	20.9	1.25E+00	AM-243
										PB-214
										PB-212
3	77.21*	601	497	1.24	171.45	161	16	16.4		PB-214
										PB-212
4	87.18	295	635	1.60	193.55	180	34	34.6	3.53E+00	NP-237
										PB-214
										PB-212
4	89.73	138	389	1.12	199.21	180	34	51.3		
4	92.69*	317	469	1.38	205.77	180	34	30.4		TH-234
0	185.87*	187	473	1.63	412.32	406	12	51.0		
4	238.65*	959	293	1.37	529.29	523	19	9.3	1.08E+00	PB-212
4	241.57	219	373	1.93	535.77	523	19	47.1		PB-214
0	295.15*	284	232	1.57	654.52	649	12	24.8		PB-214
0	338.33*	173	247	1.73	750.24	743	13	40.6		AC-228
0	351.85*	469	238	1.39	780.19	773	16	17.7		PB-214
0	510.70*	88	241	1.98	1132.28	1124	21	97.3		TL-208
0	583.09*	293	79	1.59	1292.73	1287	12	17.2		TL-208
0	609.28*	344	135	1.62	1350.77	1343	15	18.6		BI-214
0	661.60	608	108	1.80	1466.72	1459	19	11.6		CS-137
0	727.24*	102	100	2.20	1612.21	1600	21	53.2		BI-212
0	910.93*	212	70	1.63	2019.32	2009	20	24.0		AC-228
0	968.89*	101	72	2.32	2147.77	2141	13	41.2		AC-228
0	1119.75*	78	30	2.04	2482.08	2473	15	39.2		BI-214
0	1377.70	14	11	1.30	3053.71	3047	11	106.2		BI-214
0	1460.73*	274	19	2.28	3237.71	3230	15	14.6		K-40
0	1587.68	24	9	1.23	3519.02	3511	12	65.7		AC-228
0	1764.20*	72	0	1.89	3910.18	3899	22	25.1		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	46.60	78	347	1.54	103.59	98	10	7.19E-03	98.9	2.77E+00	
4	89.73	138	389	1.12	199.21	180	34	1.28E-02	51.3	3.55E+00	
0	185.87	187	473	1.63	412.32	406	12	1.73E-02	51.0	2.82E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	2.687E+00	4.228E-01	2.571E-01	1.512E-02	10.452
CS-137	3.986E-01	5.432E-02	3.201E-02	2.305E-03	12.452
TL-208	1.730E-01	3.281E-02	2.858E-02	2.275E-03	6.053
BI-212	5.226E-01	2.805E-01	2.197E-01	1.595E-02	2.378
PB-212	5.384E-01	6.437E-02	4.682E-02	3.499E-03	11.500
BI-214	3.864E-01	7.751E-02	5.329E-02	4.060E-03	7.250
PB-214	4.064E-01	7.877E-02	5.526E-02	4.396E-03	7.354
AC-228	5.982E-01	1.495E-01	1.078E-01	7.583E-03	5.547
TH-234✓	9.648E-01✓	3.057E-01	3.371E-01✓	3.018E-02	2.862
NP-237	3.917E-01	1.425E-01	1.465E-01	1.633E-02	2.674
AM-243	1.276E-01	3.622E-02	2.810E-02	5.404E-03	4.541

---- Non-Identified Nuclides ----

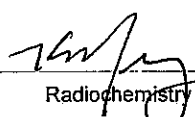
Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	3.885E-03		1.795E-02	2.873E-02	1.524E-03	0.135
RH-101	-7.411E-03		1.694E-02	2.809E-02	4.336E-03	-0.264
SB-125	9.834E-03		4.703E-02	8.310E-02	6.871E-03	0.118
EU-155	-5.949E-03		4.722E-02	8.138E-02	7.652E-03	-0.073
PO-209	-6.748E-02		3.218E+00	5.775E+00	1.064E+00	-0.012
BI-211	-1.413E-01		5.003E-01	8.417E-01	6.062E-02	-0.168
RA-223	1.487E-01		9.377E-02	1.667E-01	1.476E-02	0.892
PA-233	1.208E-02		3.181E-02	5.457E-02	4.453E-03	0.221
PA-234M	1.466E+00		2.104E+00	3.921E+00	2.677E-01	0.374
U-235	-2.383E-02		1.016E-01	1.718E-01	1.275E-02	-0.139
NP-236	5.262E-02		3.126E-02	4.750E-02	4.533E-03	1.108
NP-239	-6.702E-02		1.113E-01	1.835E-01	2.455E-02	-0.365
AM-241	-4.384E-03		3.519E-02	5.077E-02	3.213E-03	-0.086
CM-243	-2.108E-02		4.256E-02	7.244E-02	7.806E-03	-0.291
AM-246	-3.491E-02		5.814E-02	9.777E-02	1.234E-02	-0.357
CF-249	1.969E-03		2.004E-02	3.524E-02	3.510E-03	0.056

BENCH SHEET

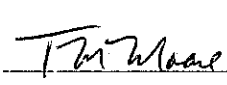
Method: Gamma Spec (DOE 4.5.2.3)	Project Name: Cabrera Services-Oahu, HI
Analysis Type: Gamma (DOE 21 day ing)	Project Location:
Matrix: Soil	Project Number: FOAH2/L
Date Received: 10/1/2007	Client Project Manager: Greg Miller
SC&A Project Manager:	
S7950 7953	

Prefix	Batch and Sample Number	Client ID	Collection Date	Date Submitted to Counting Room
SCAQC	7953-PB ✓		10/1/2007 9:15:00 AM	
SCAQC	7953-LD1 ✓ OH207-7953-01	SB-CZ-SS-2284-SD	9/27/2007	
SCAQC	7953-LC1 ✓		10/1/2007 9:15:00 AM	

Prefix	Batch and Sample Number	Client ID	Collection Date	Date Submitted to Counting Room
OH207	7953-01 ✓	SB-CZ-SS-2284-SD	9/27/2007	
OH207	7953-02 ✓	SB-CZ-SS-2285-SD	9/27/2007	
OH207	7953-03 ✓	SB-CZ-SS-2286-SD	9/27/2007	
OH207	7953-04 ✓	SB-CZ-SS-2287-SD	9/27/2007	
OH207	7953-05 ✓	SB-CZ-SS-2288-SD	9/27/2007	
OH207	7953-06 ✓	SB-CZ-SS-2289-SD	9/27/2007	
OH207	7953-07 ✓	SB-CZ-SS-2290-SD	9/27/2007	
OH207	7953-08 ✓	SB-CZ-SS-2291-SD	9/27/2007	
OH207	7953-09 ✓	SB-CZ-SS-2292-SD	9/27/2007	
OH207	7953-10 ✓	SB-CZ-SS-2293-SD	9/27/2007	
OH207	7953-11 ✓	SB-CZ-SS-2294-SD	9/27/2007	
OH207	7953-12 ✓	SB-CZ-SS-2295-SD	9/27/2007	


Radiochemistry Reviewer

12/12/07
Date


QA Reviewer

12/14/2007
Date

SC&A - Southeastern Environmental Laboratory
SCA-Form 301-5 Rev. 0

Gamma Spectrometry Run Log

Count Date/Time Detector No.	Length of Count	Prefix	Batch No.	Sample No.	RIN No.	Collection Date	Field I.D.	Sample Type	Sample Size (w/units)	Geometry
12-10-07 1045 G3K	180	WST07	8120	09	—	10/2/07 1050	WS-2007-027	SOIL	572.8 gdw	400 mL Liquid ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐
12-10-07 2145 G1 JD	2153-2011-10-07			10	—	10/2/07 1555	WS-2007-028		559.8 gdw	400 mL Liquid ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐
12-10-07 2149 G2 JD				11	—	10/3/07 0811	WS-2007-029		575.0 gdw	400 mL Liquid ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐
12-10-07 2151 G3 JD				12	—	10/3/07 1145	WS-2007-030		591.0 gdw	400 mL Liquid ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐
12-11-07 0056 G1 CW				13	—	10/4/07 1015	WS-2007-031		571.1 gdw	400 mL Liquid ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐
12-11-07 0055 G2 CW				14	—	10/9/07 0905	WS-2007-032		581.8 gdw	400 mL Liquid ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐
12-11-07 0055 G3 CW				15	—	10/9/07 1240	WS-2007-033		550.2 gdw	400 mL Liquid ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐
12-11-07 0358 G1 CW				16	—	10/9/07 1635	WS-2007-034		538.7 gdw	400 mL Liquid ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐
12-11-07 0357 G3 CW				PB1	—	10/11/07 0915	PACB BULK	LIQUID	400g	400 mL Liquid ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐
12-12-07 0650 G3 K				LC1	—	↓	CTOL SAMP S-142	SOIL	640g	400 mL Liquid ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐

Gamma Spectrometry Run Log

Count Date/Time Detector No.	Length of Count	Prefix	Batch No.	Sample No.	RIN No.	Collection Date	Field I.D.	Sample Type	Sample Size (w/units)	Geometry
12-11-07 0335 G2 CW	180	SCAQC	7953	LD1	-	9/27/07	DUP 7953-01	SOIL	494.6 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-11-07 0844 G2 K		0H207		01	-		SB-CZ-SS- 2284-SO		494.6 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-11-07 0845 G3 K				02	-		2285-SO		435.7 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-11-07 1143 G1 K				03	-		2286-SO		487.7 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-11-07 1145 G2 K				04	-		2287-SO		396.5 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-11-07 1146 G3 K				05	-		2288-SO		406.8 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-11-07 1449 G1 K				06	-		2289-SO		409.8 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-11-07 1451 G2 K				07	-		2290-SO		414.2 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-11-07 1452 G3 K				08	-		2291-SO		576.7 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-11-07 1755 G3 K				09	-		2292-SO		660.2 gdry	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐

Gamma Spectrometry Run Log

Count Date/Time Detector No.	Length of Count	Prefix	Batch No.	Sample No.	RIN No.	Collection Date	Field I.D.	Sample Type	Sample Size (w/units)	Geometry
12-11-07 22:37 G3 NW	180	04207	7953	10	-	9/21/07	SB-CZ-SS- 2293-SA	SOIL	344.6 gdw	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-12-07 02:27 G3 NW	✓	✓	✓	11	-	✓	2294-SA	✓	415.9 gdw	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-12-07 13:22 G1 K	✓	✓	✓	12	-	✓	2295-SA	✓	396.2 gdw	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-11-07 17:53 G1 K	500	SCAQC	B136	PB1	-	12/4/07 1215	PREP BLK	AIR FILTER	Composite	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-14-07 11:23 G3 K	60	✓	✓	LC1	-	✓	CTRL SAMP S-150	✓	✓	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-11-07 17:54 G2 K	500	✓	✓	LD1	-	12/3/07 0908	DUP B136-01	✓	✓	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-12-07 12:28 G4 NW	✓	INL07	✓	01	-	✓	SDA 1.3	✓	✓	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-12-07 02:30 G2 NW	✓	✓	✓	02	-	12/03/07 0857	SDA 2.3	✓	✓	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-12-07 16:29 G1 K	✓	✓	✓	03	-	12/03/07 0928	SDA 4.3	✓	✓	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐
12-12-07 16:30 G2 K	✓	✓	✓	04	-	12/03/07 0930	SDA 4.2	✓	✓	400 mL Liquid ☐ 1 Liter Liquid ☐ 10 mL Sand ☐ 20 mL Sand ☐ 40 mL Sand ☐ 200 mL Sand ☐ 400 mL Sand ☐

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 11-DEC-2007 06:57:54

Configuration :

SYSSYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_SCAQC7953PB1_GAMMA3_400MLSA_17503.CNF

----- Sample Information -----

Sample ID : SCAQC-7953-PB1 ✓
Sample Title : PREP BLK
Sample Quantity : 4.00000E+02 G ✓
Sample Type : LIQUID
Sample Geometry : 400 ml sand
Sample Seq No. : 17503

----- Sample Decay/Count Information -----

Collection Date : 1-OCT-2007 09:15:00. Acquisition date : 11-DEC-2007 03:57:33
Decay time : 70 18:42:33.85 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:00.53

----- Detector Parameters -----

Energy cal. time : 30-OCT-2006 16:06:41 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA3 Counting geometry: 400 ml sand
Effic. cal. time : 7-FEB-2007 13:40:24. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$x = \ln(a1/\text{energy})$

a1=9.47750E+02 a2=-4.85663E+00 a3=8.12782E-01 a4=8.53513E-02
a5=-4.88423E-02 a6=-7.49502E-03 a7=0.00000E+00

----- Processing Parameters -----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYSSYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA3_17240.CNF;1 ✓

Nuclide Lib File : SYSSYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;

Inter Lib File : SYSSYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB

Anal Seq Title : SCHOFIELD BARRACKS

Use Variable Tol : Yes

Variable Tol : 1.1000

Reviewer's Signature:

T. Moore

Date:

12/14/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.73*	81	254	1.44	141.58	135	15	99.6		

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	63.73	81	254	1.44	141.58	135	15	7.52E-03	99.6	3.34E+00	T

Flags: "T" = Tentatively associated

----- Non-Identified Nuclides -----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	-1.013E-01		1.621E-01	3.170E-01	1.865E-02	-0.320
CO-60	-1.970E-03		1.143E-02	2.085E-02	1.269E-03	-0.094
RH-101	-8.828E-03		1.219E-02	1.977E-02	3.052E-03	-0.447
SB-125	6.965E-03		3.345E-02	6.072E-02	5.020E-03	0.115
CS-137	-9.730E-03		1.465E-02	2.420E-02	1.742E-03	-0.402
EU-155	5.786E-03		3.112E-02	5.522E-02	5.192E-03	0.105
TL-208	2.402E-03		1.485E-02	2.716E-02	2.162E-03	0.088
PO-209	5.814E-02		2.264E+00	4.235E+00	7.803E-01	0.014
BI-211	-4.002E-02		3.659E-01	6.410E-01	4.616E-02	-0.062
BI-212	-1.312E-01		1.036E-01	1.555E-01	1.129E-02	-0.843
PB-212	-3.620E-04		2.201E-02	3.819E-02	2.855E-03	-0.009
BI-214	1.995E-02		2.995E-02	5.577E-02	4.250E-03	0.358
PB-214	2.430E-02		2.986E-02	5.267E-02	4.190E-03	0.461
RA-223	8.241E-02		6.432E-02	1.184E-01	1.048E-02	0.696
AC-228	8.485E-03		4.975E-02	9.497E-02	6.678E-03	0.089
PA-233	-3.961E-03		2.502E-02	4.230E-02	3.452E-03	-0.094
PA-234M	-2.147E-01		1.635E+00	2.905E+00	1.984E-01	-0.074
TH-234✓	8.195E-02✓		1.891E-01	3.561E-01✓	3.188E-02	0.230
U-235	4.295E-02		7.634E-02	1.339E-01	9.942E-03	0.321
NP-236	-1.268E-03		1.920E-02	3.115E-02	2.973E-03	-0.041
NP-237	-3.006E-02		6.059E-02	9.818E-02	1.094E-02	-0.306
NP-239	1.972E-02		7.591E-02	1.328E-01	1.777E-02	0.148
AM-241	4.092E-03		2.387E-02	3.562E-02	2.254E-03	0.115
AM-243	-9.981E-03		1.252E-02	1.939E-02	3.728E-03	-0.515
CM-243	-5.611E-05		2.750E-02	4.842E-02	5.218E-03	-0.001
AM-246	6.679E-02		4.532E-02	9.645E-02	1.217E-02	0.693
CF-249	-4.895E-03		1.421E-02	2.477E-02	2.467E-03	-0.198

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 12-DEC-2007 09:58:56

Configuration :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_SCAQC7953LC1_GAMMA3_400MLSA_17521.CNF

---- Sample Information ----

Sample ID : SCAQC-7953-LC1✓
Sample Title : CTRL SAMP S-142✓
Sample Quantity : 6.40000E+02 G✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17521

---- Sample Decay/Count Information ----

Collection Date : 1-OCT-2007 09:15:00. Acquisition date : 12-DEC-2007 08:58:37
Decay time : 71 23:43:37.32 % dead time : 0.2%
Elapsed live time: 0 01:00:00.00✓ Elapsed real time: 0 01:00:05.54

---- Detector Parameters ----

Energy cal. time : 30-OCT-2006 16:06:41 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA3 Counting geometry: 400 ml sand
Effic. cal. time : 7-FEB-2007 13:40:24. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$x = \ln(a1/\text{energy})$

a1=9.47750E+02 a2=-4.85663E+00 a3=8.12782E-01 a4=8.53513E-02
a5=-4.88423E-02 a6=-7.49502E-03 a7=0.00000E+00

---- Processing Parameters ----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA3_17240.CNF;1
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

Tim Wood

Date:

12/14/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
10	51.50	8360	15773	3.27	114.46	102	38	7.8	3.24E+02	
10	59.50	76583	5080	1.56	132.19	102	38	0.8		AM-241
0	88.06	13799	4317	1.35	195.51	190	12	2.6		
0	122.10	1804	3412	1.41	270.95	265	12	13.8		
0	136.56	242	2197	1.11	303.02	300	8	68.2		
0	351.89*	125	1050	1.38	780.30	777	7	88.1		
0	661.58	23070	1309	1.73	1466.68	1457	18	1.5		CS-137
0	1173.21	17457	696	2.08	2600.57	2590	20	1.7		CO-60
0	1332.49	15839	168	2.11	2953.53	2943	21	1.6		CO-60

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
10	51.50	8360	15773	3.27	114.46	102	38	2.32E+00	7.8	2.99E+00	
0	88.06	13799	4317	1.35	195.51	190	12	3.83E+00	2.6	3.55E+00	T
0	122.10	1804	3412	1.41	270.95	265	12	5.01E-01	13.8	3.39E+00	
0	136.56	242	2197	1.11	303.02	300	8	6.73E-02	68.2	3.26E+00	
0	351.89	125	1050	1.38	780.30	777	7	3.46E-02	88.1	1.79E+00	T

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/G)	Act error	MDA (pCi/G)	MDA error	Act/MDA
CO-60	3.200E+01✓	2.021E+00	1.006E-01	5.332E-03	318.279
CS-137	3.041E+01✓	2.237E+00	1.863E-01	1.341E-02	163.274
AM-241	7.717E+01✓	4.923E+00	3.308E-01	2.093E-02	233.293

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/G)	K.L. Ided	Act error	MDA (pCi/G)	MDA error	Act/MDA
K-40	7.606E-01		4.812E-01	9.513E-01	5.597E-02	0.799
RH-101	8.087E-03		8.963E-02	1.498E-01	2.311E-02	0.054
SB-125	-1.014E-01		3.183E-01	5.362E-01	4.433E-02	-0.189
EU-155	1.756E-01		2.301E-01	3.945E-01	3.710E-02	0.445
TL-208	1.395E-01		1.093E-01	1.872E-01	1.490E-02	0.745
PO-209	5.010E+00		2.965E+01	5.047E+01	9.299E+00	0.099
BI-211	-2.289E+00		3.625E+00	5.862E+00	4.222E-01	-0.390
BI-212	9.843E-01		8.593E-01	1.460E+00	1.060E-01	0.674
PB-212	4.358E-01		1.695E-01	2.855E-01	2.134E-02	1.527
BI-214	1.779E-01		2.002E-01	3.411E-01	2.599E-02	0.522
PB-214	2.171E-01	+	1.921E-01	3.469E-01	2.760E-02	0.626
RA-223	1.528E-01		5.098E-01	8.451E-01	7.481E-02	0.181
AC-228	3.922E-01		5.715E-01	9.800E-01	6.890E-02	0.400
PA-233	5.617E-02		1.934E-01	3.189E-01	2.602E-02	0.176
PA-234M	5.665E+00		1.681E+01	2.859E+01	1.952E+00	0.198
TH-234✓	-6.062E-02✓		1.042E+00	1.482E+00✓	1.327E-01	-0.041
U-235	1.466E-01		4.730E-01	8.016E-01	5.950E-02	0.183
NP-236	4.752E-02		1.287E-01	2.087E-01	1.992E-02	0.228
NP-237	2.712E+01		3.125E+00	1.498E+00	1.670E-01	18.104
NP-239	2.363E-01		6.467E-01	1.077E+00	1.441E-01	0.219
AM-243	-7.556E-02		9.210E-02	1.461E-01	2.811E-02	-0.517
CM-243	1.846E-01		2.058E-01	3.529E-01	3.803E-02	0.523
AM-246	5.688E-01		5.280E-01	9.009E-01	1.137E-01	0.631
CF-249	-3.406E-02		1.242E-01	2.103E-01	2.095E-02	-0.162

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 11-DEC-2007 06:56:12

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_SCAQC7953LD1_GAMMA2_400MLSA_17502.CNF

----- Sample Information -----

Sample ID : SCAQC-7953-LD1 ✓
Sample Title : DUP 7953-01 ✓
Sample Quantity : 4.94600E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17502

----- Sample Decay/Count Information -----

Collection Date : 27-SEP-2007 00:00:00 ✓ Acquisition date : 11-DEC-2007 03:55:52
Decay time : 75 03:55:52.97 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:01.62

----- Detector Parameters -----

Energy cal. time : 1-MAY-2007 11:12:10. Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA2 Counting geometry: 400 ml sand
Effic. cal. time : 1-MAY-2007 11:13:44. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$x = \ln(a1/\text{energy})$

a1=9.47750E+02 a2=-4.68491E+00 a3=7.34327E-01 a4=7.12916E-02
a5=8.21331E-02 a6=-7.02143E-02 a7=0.00000E+00

----- Processing Parameters -----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA2_17242.CNF;1
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

Tom Moore

Date:

12/14/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
2	74.81*	528	778	1.19	149.21	143	16	20.1	1.83E+00	AM-243 PB-214 PB-212
2	77.03*	762	656	1.04	153.63	143	16	13.2		PB-214 PB-212
0	87.01	262	945	1.06	173.50	170	8	42.5		NP-237 PB-214 PB-212
6	92.64*	119	726	1.02	184.71	180	10	79.8	8.49E+00	
0	129.51	132	701	1.52	258.12	255	8	71.7		AC-228
0	185.69*	391	1179	1.39	370.00	363	15	40.0		
0	209.09	200	617	1.04	416.60	413	9	46.8		AC-228
4	238.75*	2178	365	1.11	475.68	468	20	5.2	1.91E+00	PB-212
4	241.69*	598	475	1.79	481.53	468	20	20.9		PB-214
0	270.19	191	406	1.27	538.32	534	10	42.0		RA-223 AC-228
0	277.54	83	356	0.79	552.96	549	8	82.3		TL-208
0	295.45*	750	428	1.26	588.65	583	11	13.0		PB-214
0	300.65	157	390	1.48	599.01	594	11	51.3		PB-212
0	328.12	184	300	1.43	653.73	649	10	38.1		
0	338.68*	435	356	1.27	674.76	669	10	19.0		AC-228
0	352.08*	1203	341	1.24	701.47	695	13	8.7		PB-214
0	409.96	77	230	1.01	816.81	813	10	76.4		AC-228
0	463.38	149	178	1.44	923.30	918	11	38.3		AC-228
0	511.11*	193	323	1.83	1018.45	1011	16	46.9		TL-208
0	583.33*	693	217	1.30	1162.43	1155	14	11.9		TL-208
0	609.49*	854	162	1.47	1214.61	1209	12	9.3		BI-214
0	661.57	148	110	1.47	1318.47	1312	11	32.0		CS-137
0	727.31	151	163	1.25	1449.60	1443	13	38.5		BI-212
0	767.73*	57	79	1.00	1530.25	1526	8	60.9		BI-214
0	785.75	71	76	1.30	1566.20	1562	10	52.6		BI-212
0	795.80*	120	90	1.74	1586.26	1580	16	40.5		AC-228
0	835.71	37	66	1.53	1665.89	1663	8	82.6		
0	860.13*	63	68	1.55	1714.63	1709	11	57.3		TL-208
0	911.06*	543	90	1.72	1816.29	1807	17	11.8		AC-228
1	964.51	110	47	1.93	1922.98	1917	31	31.7	1.49E+00	AC-228
1	968.87*	320	37	1.72	1931.69	1917	31	13.5		AC-228
0	1120.09*	191	74	1.71	2233.66	2227	16	25.4		BI-214
0	1237.77*	94	85	2.04	2468.76	2459	20	52.6		BI-214
0	1377.37	55	48	1.18	2747.76	2742	11	56.0		BI-214
0	1459.78*	859	41	2.06	2912.52	2904	18	7.8		K-40
0	1590.34	92	48	5.21	3173.61	3162	31	51.7		AC-228
0	1728.10*	23	18	1.60	3449.26	3443	12	88.9		BI-214
0	1762.73*	174	18	2.39	3518.56	3511	15	19.3		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
6	92.64	119	726	1.02	184.71	180	10	1.10E-02	79.8	2.70E+00	T
0	185.69	391	1179	1.39	370.00	363	15	3.62E-02	40.0	3.21E+00	
0	328.12	184	300	1.43	653.73	649	10	1.71E-02	38.1	2.20E+00	
0	835.71	37	66	1.53	1665.89	1663	8	3.41E-03	82.6	1.01E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	6.042E+00	6.100E-01	2.175E-01	1.400E-02	27.781
CS-137	7.268E-02	2.468E-02	2.750E-02	3.128E-03	2.643
TL-208	3.079E-01	4.873E-02	2.445E-02	2.546E-03	12.592
BI-212	5.719E-01	2.291E-01	2.073E-01	2.266E-02	2.759
PB-212	9.085E-01	8.420E-02	3.993E-02	3.051E-03	22.751
BI-214	7.203E-01	1.017E-01	4.906E-02	5.224E-03	14.683
PB-214	7.806E-01	9.041E-02	4.697E-02	3.601E-03	16.620
RA-223	2.743E-01	1.178E-01	1.267E-01	1.127E-02	2.166
AC-228	1.120E+00	1.644E-01	8.761E-02	7.613E-03	12.781
NP-237	4.308E-01	1.911E-01	2.191E-01	2.753E-02	1.967
AM-243	2.013E-01	5.691E-02	4.809E-02	9.585E-03	4.186

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	1.967E-03		1.559E-02	2.317E-02	1.348E-03	0.085
RH-101	3.167E-03		1.611E-02	2.622E-02	4.094E-03	0.121
SB-125	3.749E-03		4.079E-02	6.942E-02	5.692E-03	0.054
EU-155	5.645E-03		5.530E-02	9.257E-02	8.667E-03	0.061
PO-209	-1.086E+00		2.772E+00	4.670E+00	8.953E-01	-0.233
BI-211	4.260E-01		4.398E-01	7.299E-01	7.145E-02	0.584
PA-233	-1.086E-02		2.668E-02	4.501E-02	3.625E-03	-0.241
PA-234M	-4.939E-01		1.835E+00	3.139E+00	2.450E-01	-0.157
TH-234 ✓	4.123E-01 ✓	+	3.315E-01	5.366E-01 ✓	5.367E-02	0.768
U-235	5.679E-02		1.006E-01	1.669E-01	1.218E-02	0.340
NP-236	3.720E-02		3.140E-02	5.403E-02	5.371E-03	0.689
NP-239	5.683E-02		9.453E-02	1.663E-01	2.244E-02	0.342
AM-241	-7.570E-02		8.064E-02	1.337E-01	8.768E-03	-0.566
CM-243	4.266E-02		4.915E-02	8.390E-02	9.071E-03	0.509
AM-246	1.105E-02		4.842E-02	8.551E-02	1.094E-02	0.129
CF-249	4.308E-03		1.665E-02	2.866E-02	2.746E-03	0.150

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 11-DEC-2007 11:45:06

Configuration :

SYSSYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795301_GAMMA2_400MLSAN_17505.CNF

---- Sample Information ----

Sample ID : OH207-7953-01 ✓
Sample Title : SB-CZ-SS-2284-SD ✓
Sample Quantity : 4.94600E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17505

---- Sample Decay/Count Information ----

Collection Date : 27-SEP-2007 00:00:00 ✓ Acquisition date : 11-DEC-2007 08:44:39
Decay time : 75 08:44:39.70 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:01.59

---- Detector Parameters ----

Energy cal. time : 1-MAY-2007 11:12:10. Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA2 Counting geometry: 400 ml sand
Effic. cal. time : 1-MAY-2007 11:13:44. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$$x = \ln(a1/\text{energy})$$

a1=9.47750E+02 a2=-4.68491E+00 a3=7.34327E-01 a4=7.12916E-02
a5=8.21331E-02 a6=-7.02143E-02 a7=0.00000E+00

---- Processing Parameters ----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYSSYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG LNGBKG112107_GAMMA2_17242.CNF;1 ✓

Nuclide Lib File : SYSSYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;

Inter Lib File : SYSSYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB

Anal Seq Title : SCHOFIELD BARRACKS

Use Variable Tol : Yes

Variable Tol : 1.1000

Reviewer's Signature:

T. M. Moore

Date:

12/14/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
2	74.81*	568	760	1.11	149.21	144	14	18.4	1.90E+00	AM-243 PB-214 PB-212
2	77.08*	791	600	1.07	153.73	144	14	12.5		PB-214 PB-212
1	84.25*	137	732	1.10	168.00	165	13	68.8	1.05E+00	
1	87.16	331	749	1.11	173.80	165	13	29.8		NP-237 PB-214 PB-212
2	89.95	150	423	0.96	179.36	177	12	41.6	2.32E+00	
0	185.97*	346	884	1.36	370.56	365	12	36.7		
0	209.47	246	581	0.83	417.36	413	9	37.6		AC-228
2	238.78*	2151	400	1.17	475.75	470	18	5.3	1.76E+00	PB-212
2	241.14*	219	415	1.48	480.45	470	18	53.6		
2	242.13*	371	356	1.36	482.42	470	18	23.3		PB-214
0	270.39	214	502	1.30	538.71	533	12	43.9		RA-223 AC-228
4	295.37*	723	204	1.33	588.49	581	26	10.2	3.10E+00	PB-214
4	300.40	211	281	1.88	598.49	581	26	34.5		PB-212
0	328.32	103	389	1.10	654.12	649	11	77.2		
0	338.66*	377	414	1.14	674.72	670	11	23.5		AC-228
0	352.15*	1158	297	1.21	701.62	696	11	8.4		PB-214
0	409.52	88	206	0.87	815.95	812	9	63.0		AC-228
0	463.03	144	221	1.92	922.60	916	13	45.6		AC-228
0	511.15*	327	221	1.69	1018.51	1012	16	25.0		TL-208
0	583.34*	603	141	1.55	1162.46	1157	10	11.2		TL-208
0	609.48*	844	195	1.42	1214.58	1208	14	10.0		BI-214
0	661.96	118	154	1.74	1319.26	1311	12	45.8		CS-137
0	727.27	136	114	1.25	1449.53	1445	12	35.5		BI-212
0	795.12*	65	96	1.16	1584.90	1578	11	63.9		AC-228
0	840.69*	55	59	4.08	1675.83	1671	12	63.2		
0	860.63*	86	72	1.57	1715.63	1709	11	44.4		TL-208
0	911.06*	467	67	1.69	1816.28	1809	13	11.9		AC-228
0	934.23	59	74	1.23	1862.55	1856	14	66.7		BI-214
0	964.73	96	63	1.32	1923.43	1917	11	38.1		AC-228
0	968.89*	245	60	1.82	1931.73	1927	10	17.8		AC-228
0	1120.15*	203	66	1.75	2233.78	2228	13	21.9		BI-214
0	1238.20*	110	110	2.16	2469.62	2460	22	52.7		BI-214
0	1376.96	81	30	1.39	2746.95	2739	15	36.7		BI-214
0	1459.74*	867	22	2.08	2912.43	2903	17	7.3		K-40
2	1586.61	45	14	2.30	3166.17	3161	20	42.9	9.93E-01	AC-228
2	1591.24	46	14	2.33	3175.43	3161	20	45.5		
0	1762.78*	121	23	1.86	3518.64	3512	15	25.9		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
1	84.25	137	732	1.10	168.00	165	13	1.27E-02	68.8	2.39E+00	
2	89.95	150	423	0.96	179.36	177	12	1.39E-02	41.6	2.61E+00	
0	185.97	346	884	1.36	370.56	365	12	3.20E-02	36.7	3.21E+00	
2	241.14	219	415	1.48	480.45	470	18	2.02E-02	53.6	2.78E+00	
0	328.32	103	389	1.10	654.12	649	11	9.51E-03	77.2	2.20E+00	
0	840.69	55	59	4.08	1675.83	1671	12	5.11E-03	63.2	1.01E+00	
2	1591.24	46	14	2.33	3175.43	3161	20	4.29E-03	45.5	6.33E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	6.098E+00	5.955E-01	1.730E-01	1.114E-02	35.244
CS-137	5.798E-02	2.736E-02	2.931E-02	3.334E-03	1.978
TL-208	2.678E-01	4.087E-02	2.593E-02	2.700E-03	10.331
BI-212	5.172E-01	1.920E-01	1.673E-01	1.830E-02	3.090
PB-212	8.973E-01	8.364E-02	3.984E-02	3.045E-03	22.522
BI-214	7.124E-01	1.040E-01	4.626E-02	4.926E-03	15.401
PB-214	7.508E-01	8.522E-02	4.931E-02	3.781E-03	15.228
RA-223	3.080E-01	1.381E-01	1.212E-01	1.078E-02	2.542
AC-228	9.637E-01	1.421E-01	8.894E-02	7.729E-03	10.835
NP-237	5.452E-01	1.762E-01	2.039E-01	2.563E-02	2.673
AM-243	2.162E-01	5.867E-02	4.540E-02	9.049E-03	4.763

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	-6.017E-03		1.416E-02	2.106E-02	1.225E-03	-0.286
RH-101	-1.588E-02		1.614E-02	2.493E-02	3.893E-03	-0.637
SB-125	4.338E-03		3.939E-02	6.720E-02	5.510E-03	0.065
EU-155	1.442E-02		5.457E-02	9.181E-02	8.596E-03	0.157
PO-209	-6.140E-01		2.985E+00	5.099E+00	9.775E-01	-0.120
BI-211	-2.236E-01		4.113E-01	6.881E-01	6.736E-02	-0.325
PA-233	2.460E-03		2.705E-02	4.656E-02	3.750E-03	0.053
PA-234M	1.865E+00		1.749E+00	3.291E+00	2.569E-01	0.567
TH-234 ✓	1.143E+00 ✓		3.295E-01	5.281E-01 ✓	5.282E-02	2.164
U-235	7.060E-02		9.949E-02	1.657E-01	1.209E-02	0.426
NP-236	3.324E-02		3.169E-02	5.437E-02	5.405E-03	0.611
NP-239	3.661E-02		9.765E-02	1.707E-01	2.304E-02	0.214
AM-241	-9.638E-03		8.017E-02	1.364E-01	8.949E-03	-0.071
CM-243	5.122E-03		4.892E-02	8.201E-02	8.866E-03	0.062
AM-246	-2.134E-02		4.994E-02	8.285E-02	1.060E-02	-0.258
CF-249	2.519E-03		1.672E-02	2.864E-02	2.744E-03	0.088

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 11-DEC-2007 11:46:21

Configuration :

SYSSYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795302_GAMMA3_400MLSAN_17506.CNF

---- Sample Information ----

Sample ID : OH207-7953-02 ✓
Sample Title : SB-CZ-SS-2285-SD ✓
Sample Quantity : 4.35700E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17506

---- Sample Decay/Count Information ----

Collection Date : 27-SEP-2007 00:00:00 Acquisition date : 11-DEC-2007 08:45:44
Decay time : 75 08:45:44.03 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:01.18

---- Detector Parameters ----

Energy cal. time : 30-OCT-2006 16:06:41 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA3 Counting geometry: 400 ml sand
Effic. cal. time : 7-FEB-2007 13:40:24. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$x = \ln(a1/\text{energy})$

a1=9.47750E+02 a2=-4.85663E+00 a3=8.12782E-01 a4=8.53513E-02
a5=-4.88423E-02 a6=-7.49502E-03 a7=0.00000E+00

---- Processing Parameters ----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYSSYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA3_17240.CNF;1 ✓

Nuclide Lib File : SYSSYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;

Inter Lib File : SYSSYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB

Anal Seq Title : SCHOFIELD BARRACKS

Use Variable Tol : Yes

Variable Tol : 1.1000

Reviewer's Signature:

T. M. Moore

Date:

12/14/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	46.56*	105	525	1.65	103.52	99	9	84.9		
0	63.18*	172	992	1.18	140.35	135	10	72.9		TH-234
1	74.88*	977	1161	1.44	166.29	159	19	15.2	4.01E+00	AM-243
										PB-214
										PB-212
1	77.10*	1588	1091	1.45	171.22	159	19	10.0		PB-214
										PB-212
3	87.19	569	902	1.43	193.57	182	32	20.6	1.47E+00	NP-237
										PB-214
										PB-212
3	89.91	377	945	1.51	199.61	182	32	33.5		
3	92.79*	624	969	1.59	205.99	182	32	22.8		TH-234
0	129.53	169	939	1.74	287.42	280	12	74.3		AC-228
0	186.06*	433	603	1.54	412.72	408	11	24.8		
0	209.16	223	534	1.36	463.92	459	10	41.1		AC-228
4	238.68*	2352	387	1.41	529.36	520	26	5.2	1.52E+00	PB-212
4	241.59	614	546	2.16	535.81	520	26	23.1		PB-214
0	270.34	220	522	1.33	599.54	592	15	47.3		RA-223
										AC-228
0	277.90	115	383	1.30	616.30	611	11	69.0		TL-208
3	295.33*	805	277	1.48	654.93	645	31	10.5	1.21E+00	PB-214
3	300.54	176	352	2.11	666.47	645	31	49.4		PB-212
0	328.23	141	189	1.55	727.85	724	8	37.7		
0	338.36*	428	313	1.23	750.31	745	12	19.2		AC-228
0	352.11*	1101	406	1.47	780.77	774	13	9.7		PB-214
0	463.04	160	262	1.64	1026.65	1018	15	47.0		AC-228
0	510.67*	275	243	1.83	1132.22	1124	16	30.5		TL-208
0	583.20*	672	306	1.58	1292.97	1284	19	14.8		TL-208
0	609.19*	927	133	1.67	1350.58	1344	13	8.4		BI-214
0	661.62	179	92	1.80	1466.78	1462	10	25.1		CS-137
0	727.27*	147	144	1.38	1612.28	1606	14	38.7		BI-212
0	794.89	120	77	1.66	1762.15	1756	14	36.0		AC-228
0	860.89	110	83	1.78	1908.42	1897	17	42.2		TL-208
0	911.33*	542	115	2.15	2020.21	2010	20	13.0		AC-228
0	934.45	36	85	1.68	2071.44	2066	14	112.3		BI-214
0	969.28*	228	146	1.69	2148.63	2143	16	28.3		AC-228
0	1120.08*	196	100	1.49	2482.82	2474	18	28.0		BI-214
0	1377.68	72	26	1.78	3053.67	3045	15	39.2		BI-214
0	1460.95*	808	37	2.08	3238.20	3228	23	8.3		K-40
0	1729.90*	48	15	1.91	3834.17	3827	19	48.9		BI-214
0	1764.43*	150	15	1.79	3910.69	3902	19	20.7		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	46.56	105	525	1.65	103.52	99	9	9.75E-03	84.9	2.77E+00	
3	89.91	377	945	1.51	199.61	182	32	3.49E-02	33.5	3.55E+00	
0	186.06	433	603	1.54	412.72	408	11	4.01E-02	24.8	2.81E+00	
0	328.23	141	189	1.55	727.85	724	8	1.31E-02	37.7	1.89E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	7.801E+00	7.908E-01	2.481E-01	1.460E-02	31.444
CS-137	1.154E-01	3.010E-02	4.146E-02	2.985E-03	2.783
TL-208	3.904E-01	6.562E-02	3.534E-02	2.813E-03	11.047
BI-212	7.366E-01	2.903E-01	2.783E-01	2.020E-02	2.647
PB-212	1.299E+00	1.184E-01	5.683E-02	4.248E-03	22.853
BI-214	1.024E+00	1.164E-01	6.979E-02	5.318E-03	14.678
PB-214	9.395E-01	1.181E-01	6.951E-02	5.530E-03	13.515
RA-223	4.187E-01	2.016E-01	1.749E-01	1.548E-02	2.395
AC-228	1.504E+00	2.226E-01	1.394E-01	9.802E-03	10.786
TH-234 ✓	1.866E+00 ✓	4.570E-01	4.125E-01 ✓	3.693E-02	4.525
NP-237	7.421E-01	1.739E-01	1.792E-01	1.998E-02	4.140
AM-243	2.356E-01	5.767E-02	3.662E-02	7.043E-03	6.432

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	-1.289E-02		2.377E-02	3.819E-02	2.025E-03	-0.337
RH-101	2.011E-03		2.147E-02	3.618E-02	5.585E-03	0.056
SB-125	3.406E-02		5.915E-02	1.047E-01	8.657E-03	0.325
EU-155	4.308E-02		6.125E-02	1.068E-01	1.004E-02	0.404
PO-209	9.724E-01		3.804E+00	6.869E+00	1.266E+00	0.142
BI-211	-3.766E-01		6.246E-01	1.018E+00	7.330E-02	-0.370
PA-233	1.885E-02		3.802E-02	6.485E-02	5.292E-03	0.291
PA-234M	3.604E+00		2.509E+00	4.780E+00	3.264E-01	0.754
U-235	1.547E-01		1.308E-01	2.273E-01	1.687E-02	0.681
NP-236	4.171E-02		3.997E-02	5.854E-02	5.587E-03	0.713
NP-239	-4.532E-03		1.411E-01	2.371E-01	3.172E-02	-0.019
AM-241	6.253E-02		4.430E-02	6.697E-02	4.238E-03	0.934
CM-243	-2.348E-02		5.456E-02	9.280E-02	1.000E-02	-0.253
AM-246	1.461E-02		7.790E-02	1.383E-01	1.746E-02	0.106
CF-249	2.027E-02		2.427E-02	4.336E-02	4.319E-03	0.467

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 11-DEC-2007 14:43:51

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795303_GAMMA1_400MLSAN_17507.CNF

----- Sample Information -----

Sample ID : OH207-7953-03 ✓
Sample Title : SB-CZ-SS-2286-SD ✓
Sample Quantity : 4.87700E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17507

----- Sample Decay/Count Information -----

Collection Date : 27-SEP-2007 00:00:00 Acquisition date : 11-DEC-2007 11:43:32
Decay time : 75 11:43:32.82 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:02.59

----- Detector Parameters -----

Energy cal. time : 23-MAR-2006 15:15:18 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA1 Counting geometry: 400 ml sand
Effic. cal. time : 23-MAR-2006 15:18:11 Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a_2 + a_3 \cdot x + a_4 \cdot x^2 + a_5 \cdot x^3 + a_6 \cdot x^4 + a_7 \cdot x^5)$$

where:

$x = \ln(a_1/\text{energy})$

a1=9.47750E+02 a2=-4.65904E+00 a3=6.59172E-01 a4=3.93115E-02
a5=1.38137E-01 a6=-8.70295E-02 a7=0.00000E+00

----- Processing Parameters -----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA1_17241.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

Tm Moad

Date:

12/14/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.32*	101	579	1.33	126.02	123	8	85.9		TH-234
2	74.98*	465	623	1.12	149.36	143	16	20.2	2.00E+00	AM-243
										PB-214
										PB-212
2	77.20*	664	428	0.91	153.82	143	16	12.5		PB-214
										PB-212
0	84.23*	85	444	0.98	167.89	166	5	79.1		
0	87.20	274	641	1.31	173.85	171	7	32.9		NP-237
										PB-214
										PB-212
4	90.02	148	576	0.99	179.50	177	12	52.8	2.90E+00	
4	92.98*	312	626	1.24	185.41	177	12	29.9		TH-234
0	128.78	124	746	1.04	257.10	253	10	84.4		AC-228
0	185.97*	324	692	1.20	371.62	367	11	33.9		
0	209.38	265	419	1.51	418.49	414	9	30.5		AC-228
5	238.65*	2007	357	1.11	477.11	472	17	5.5	1.02E+00	PB-212
5	241.68*	482	429	1.68	483.17	472	17	22.2		PB-214
1	269.06	54	169	1.20	538.00	535	15	79.3	2.25E+00	RA-223
1	270.18	220	269	1.32	540.24	535	15	29.5		AC-228
0	277.44	79	322	1.56	554.76	550	10	87.7		TL-208
0	295.14*	608	397	1.33	590.22	583	13	15.8		PB-214
0	300.20*	142	257	1.50	600.35	596	10	46.1		PB-212
0	328.03	101	273	1.50	656.07	651	9	62.1		
0	338.36	476	311	1.21	676.76	672	12	17.4		AC-228
0	351.77*	1052	355	1.39	703.60	696	14	9.9		PB-214
0	463.29	156	202	1.89	926.89	921	15	43.4		AC-228
0	510.66*	229	196	1.62	1021.73	1016	13	31.7		TL-208
0	582.97*	615	141	1.54	1166.51	1161	13	11.4		TL-208
0	609.12*	857	147	1.44	1218.86	1213	13	9.1		BI-214
0	727.17	188	117	1.20	1455.20	1449	13	27.8		BI-212
0	767.91	81	81	1.38	1536.77	1532	10	47.1		BI-214
0	794.87	105	90	1.57	1590.73	1585	15	44.0		AC-228
0	836.00	33	63	1.44	1673.09	1667	9	93.5		
0	860.93	68	122	1.49	1722.99	1717	15	73.9		TL-208
0	911.04*	466	117	1.78	1823.31	1815	18	14.5		AC-228
0	935.50	94	96	4.34	1872.28	1863	24	58.9		BI-214
2	964.51	115	68	2.06	1930.34	1922	27	32.9	1.74E+00	AC-228
2	968.71*	296	57	2.06	1938.76	1922	27	16.0		AC-228
0	1120.04*	183	74	1.74	2241.69	2233	19	27.4		BI-214
0	1154.91	49	36	2.21	2311.49	2307	10	53.3		BI-214
0	1238.20	59	60	0.77	2478.20	2473	10	55.2		BI-214
0	1460.29*	832	29	2.05	2922.75	2915	17	7.6		K-40
0	1587.66	22	36	1.76	3177.68	3173	10	108.2		AC-228
0	1764.10*	133	8	1.79	3530.80	3523	17	20.9		BI-214
0	1847.10	38	8	3.26	3696.91	3688	16	46.5		

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	84.23	85	444	0.98	167.89	166	5	7.84E-03	79.1	2.10E+00	
4	90.02	148	576	0.99	179.50	177	12	1.37E-02	52.8	2.33E+00	
0	185.97	324	692	1.20	371.62	367	11	3.00E-02	33.9	3.03E+00	
0	328.03	101	273	1.50	656.07	651	9	9.40E-03	62.1	2.11E+00	
0	836.00	33	63	1.44	1673.09	1667	9	3.05E-03	93.5	1.03E+00	
0	1847.10	38	8	3.26	3696.91	3688	16	3.52E-03	46.5	5.86E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	5.657E+00	5.799E-01	1.951E-01	1.331E-02	28.999
TL-208	2.805E-01	4.270E-02	2.485E-02	2.494E-03	11.284
BI-212	7.230E-01	2.125E-01	1.804E-01	1.735E-02	4.007
PB-212	8.948E-01	8.480E-02	4.053E-02	3.128E-03	22.077
BI-214	7.402E-01	1.012E-01	4.656E-02	4.743E-03	15.897
PB-214	7.216E-01	9.122E-02	4.580E-02	3.614E-03	15.757
RA-223	8.270E-02	6.601E-02	1.221E-01	1.124E-02	0.677
AC-228	9.524E-01	1.481E-01	8.351E-02	4.615E-03	11.406
TH-234✓	1.224E+00✓	3.935E-01	4.161E-01✓	4.855E-02	2.942
NP-237	5.167E-01	1.856E-01	2.006E-01	2.901E-02	2.575
AM-243	2.094E-01	6.095E-02	4.612E-02	9.675E-03	4.540

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	-3.171E-03		1.493E-02	2.118E-02	1.382E-03	-0.150
RH-101	-3.803E-03		1.481E-02	2.416E-02	3.747E-03	-0.157
SB-125	5.738E-03		3.915E-02	6.762E-02	5.546E-03	0.085
CS-137	-2.291E-04		1.513E-02	2.677E-02	2.877E-03	-0.009
EU-155	4.142E-02		5.345E-02	9.260E-02	9.194E-03	0.447
PO-209	-1.571E+00		2.752E+00	4.589E+00	8.213E-01	-0.342
BI-211	-2.104E-02		4.202E-01	6.400E-01	4.663E-02	-0.033
PA-233	-5.922E-03		2.499E-02	4.300E-02	3.611E-03	-0.138
PA-234M	5.596E-01		1.535E+00	2.796E+00	1.608E-01	0.200
U-235	3.786E-02		9.334E-02	1.567E-01	1.094E-02	0.242
NP-236	6.073E-02		3.281E-02	5.737E-02	6.302E-03	1.059
NP-239	-1.626E-02		9.367E-02	1.520E-01	2.051E-02	-0.107
AM-241	1.498E-02		9.163E-02	1.444E-01	1.148E-02	0.104
CM-243	-3.104E-02		4.803E-02	7.956E-02	9.067E-03	-0.390
AM-246	2.744E-02		4.654E-02	8.513E-02	1.048E-02	0.322
CF-249	-9.077E-03		1.612E-02	2.692E-02	2.597E-03	-0.337

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 11-DEC-2007 14:45:57

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795304_GAMMA2_400MLSAN_17508.CNF

---- Sample Information ----

Sample ID : OH207-7953-04 ✓
Sample Title : SB-CZ-SS-2287-SD ✓
Sample Quantity : 3.96500E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17508

---- Sample Decay/Count Information ----

Collection Date : 27-SEP-2007 00:00:00 Acquisition date : 11-DEC-2007 11:45:38
Decay time : 75 11:45:38.16 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:01.48

---- Detector Parameters ----

Energy cal. time : 1-MAY-2007 11:12:10. Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA2 Counting geometry: 400 ml sand
Effic. cal. time : 1-MAY-2007 11:13:44. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$$x = \ln(a1/\text{energy})$$

a1=9.47750E+02 a2=-4.68491E+00 a3=7.34327E-01 a4=7.12916E-02
a5=8.21331E-02 a6=-7.02143E-02 a7=0.00000E+00

---- Processing Parameters ----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA2_17242.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

T. M. Moore

Date:

12/14/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	62.66*	116	676	0.87	125.02	121	8	81.7		
3	74.70*	556	764	1.19	148.98	144	15	18.4	7.24E-01	AM-243 PB-214 PB-212
3	77.07*	836	597	0.97	153.71	144	15	11.8		PB-214 PB-212
1	87.16	327	659	1.11	173.80	164	26	28.3	1.98E+00	NP-237 PB-214 PB-212
1	89.74	182	546	0.95	178.94	164	26	43.7		
1	104.74	106	391	0.94	208.79	206	9	62.9	4.11E+00	CM-243 EU-155
1	105.95	108	379	1.02	211.21	206	9	62.1		
0	128.43	110	649	0.77	255.96	253	8	82.0		AC-228
0	185.98*	395	605	1.27	370.58	366	10	26.0		
0	209.07	259	597	1.18	416.56	413	10	37.2		AC-228
4	238.76*	2117	386	1.13	475.70	471	17	5.4	1.94E+00	PB-212
4	241.15*	253	369	1.38	480.47	471	17	43.0		
4	242.13*	289	355	1.41	482.42	471	17	29.1		PB-214
0	270.53	204	401	1.11	539.00	533	11	40.7		RA-223 AC-228
0	277.67	141	383	1.45	553.21	548	11	56.4		TL-208
0	295.40*	592	340	1.23	588.53	584	10	14.4		PB-214
0	300.18	138	351	1.59	598.07	594	11	55.4		PB-212
0	327.80	114	254	1.31	653.09	649	9	53.8		
0	338.50*	443	279	1.34	674.40	670	9	16.7		AC-228
0	352.20*	1041	327	1.26	701.72	695	12	9.4		PB-214
0	410.02	122	145	1.41	816.94	812	10	41.7		AC-228
0	463.28	124	147	1.17	923.09	919	9	39.7		AC-228
0	511.01*	216	247	1.93	1018.23	1012	14	36.5		TL-208
0	583.36*	688	181	1.27	1162.50	1156	13	11.3		TL-208
0	609.45*	744	150	1.52	1214.52	1208	11	9.9		BI-214
0	727.69	147	134	1.44	1450.37	1443	15	38.1		BI-212
0	768.08*	85	77	1.67	1530.94	1526	10	44.8		BI-214
0	795.34*	123	88	1.76	1585.34	1579	14	37.7		AC-228
0	860.79*	67	115	1.32	1715.95	1710	14	71.7		TL-208
0	911.04*	440	138	1.41	1816.24	1810	14	14.9		AC-228
0	934.05	62	41	0.98	1862.18	1856	11	47.6		BI-214
5	964.46	120	65	2.83	1922.89	1913	30	39.6	1.07E+00	AC-228
5	968.95*	280	45	1.73	1931.85	1913	30	15.2		AC-228
0	1119.91*	166	64	1.60	2233.30	2225	15	26.5		BI-214
0	1237.53*	66	57	2.00	2468.28	2461	12	52.5		BI-214
0	1376.62	74	14	2.14	2746.26	2740	11	30.1		BI-214
0	1459.73*	767	43	1.97	2912.42	2906	14	8.2		K-40
0	1588.08	75	36	0.81	3169.11	3161	18	44.1		AC-228
0	1660.62	14	18	1.49	3314.22	3307	10	128.1		
0	1762.92*	101	48	2.18	3518.92	3512	19	39.1		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	62.66	116	676	0.87	125.02	121	8	1.07E-02	81.7	1.30E+00	T
1	89.74	182	546	0.95	178.94	164	26	1.68E-02	43.7	2.60E+00	
1	105.95	108	379	1.02	211.21	206	9	1.00E-02	62.1	3.06E+00	
0	185.98	395	605	1.27	370.58	366	10	3.66E-02	26.0	3.21E+00	
4	241.15	253	369	1.38	480.47	471	17	2.34E-02	43.0	2.78E+00	
0	327.80	114	254	1.31	653.09	649	9	1.06E-02	53.8	2.20E+00	
0	1660.62	14	18	1.49	3314.22	3307	10	1.25E-03	****	6.12E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	6.725E+00	7.018E-01	3.006E-01	1.935E-02	22.373
EU-155	1.070E-01	6.808E-02	1.059E-01	9.920E-03	1.010
TL-208	3.809E-01	5.841E-02	3.060E-02	3.187E-03	12.448
BI-212	6.977E-01	2.767E-01	2.215E-01	2.422E-02	3.150
PB-212	1.101E+00	1.028E-01	4.744E-02	3.625E-03	23.216
BI-214	7.835E-01	1.139E-01	6.057E-02	6.449E-03	12.936
PB-214	8.422E-01	1.024E-01	5.629E-02	4.316E-03	14.960
RA-223	3.647E-01	1.520E-01	1.466E-01	1.305E-02	2.487
AC-228	1.132E+00	1.953E-01	1.114E-01	9.682E-03	10.156
NP-237	6.728E-01	2.084E-01	2.350E-01	2.953E-02	2.864
AM-243	2.641E-01	7.170E-02	5.787E-02	1.153E-02	4.563
CM-243	9.738E-02	6.219E-02	9.829E-02	1.063E-02	0.991

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	-9.087E-03		1.765E-02	3.042E-02	1.681E-03	-0.299
RH-101	9.195E-03		1.848E-02	3.040E-02	4.747E-03	0.302
SB-125	-1.147E-02		4.940E-02	8.275E-02	6.785E-03	-0.139
CS-137	-6.847E-03		1.934E-02	3.325E-02	3.782E-03	-0.206
PO-209	-6.719E-02		3.340E+00	5.825E+00	1.117E+00	-0.012
BI-211	2.617E-02		5.181E-01	9.053E-01	8.862E-02	0.029
PA-233	-1.773E-02		3.088E-02	5.174E-02	4.167E-03	-0.343
PA-234M	-1.813E+00		1.976E+00	3.213E+00	2.508E-01	-0.564
TH-234 ✓	1.453E+00 ✓		3.849E-01	6.609E-01 ✓	6.610E-02	2.198
U-235	2.668E-02		1.155E-01	1.901E-01	1.388E-02	0.140
NP-236	2.495E-02		3.848E-02	6.556E-02	6.517E-03	0.381
NP-239	-1.387E-02		1.091E-01	1.887E-01	2.547E-02	-0.073
AM-241	5.848E-02		1.083E-01	1.695E-01	1.112E-02	0.345
AM-246	1.729E-02		6.019E-02	1.068E-01	1.366E-02	0.162
CF-249	8.742E-03		2.079E-02	3.604E-02	3.453E-03	0.243

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 11-DEC-2007 14:47:21

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795305_GAMMA3_400MLSAN_17509.CNF

---- Sample Information ----

Sample ID : OH207-7953-05 ✓
Sample Title : SB-CZ-SS-2288-SD ✓
Sample Quantity : 4.06800E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17509

---- Sample Decay/Count Information ----

Collection Date : 27-SEP-2007 00:00:00 ✓ Acquisition date : 11-DEC-2007 11:46:55
Decay time : 75 11:46:55.94 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:01.18

---- Detector Parameters ----

Energy cal. time : 30-OCT-2006 16:06:41 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA3 Counting geometry: 400 ml sand
Effic. cal. time : 7-FEB-2007 13:40:24. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a_2 + a_3 \cdot x + a_4 \cdot x^2 + a_5 \cdot x^3 + a_6 \cdot x^4 + a_7 \cdot x^5)$$

where:

$$x = \ln(a_1 / \text{energy})$$

a1=9.47750E+02 a2=-4.85663E+00 a3=8.12782E-01 a4=8.53513E-02
a5=-4.88423E-02 a6=-7.49502E-03 a7=0.00000E+00

---- Processing Parameters ----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA3_17240.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

T. W. Moore

Date:

12/14/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	46.44*	101	495	1.41	103.24	98	12	93.9		
0	63.32*	161	768	1.53	140.66	135	12	73.8		TH-234
1	74.88*	687	778	1.44	166.29	159	19	18.1	4.12E+00	AM-243
										PB-214
										PB-212
1	77.14*	1133	777	1.45	171.29	159	19	11.8		PB-214
										PB-212
3	87.30	400	828	1.78	193.82	178	37	30.6	3.40E+00	NP-237
										PB-214
										PB-212
3	89.95	194	654	1.47	199.70	178	37	54.1		
3	92.96*	540	731	1.79	206.36	178	37	23.8		TH-234
0	185.98*	316	696	1.60	412.55	406	15	39.1		
0	209.32	235	287	1.30	464.28	460	9	29.1		AC-228
3	238.68*	1560	319	1.37	529.37	523	21	6.6	7.69E-01	PB-212
3	241.82	404	375	2.04	536.32	523	21	27.9		PB-214
0	270.18	210	346	2.13	599.17	592	14	40.2		RA-223
										AC-228
1	295.38*	460	235	1.63	655.03	647	23	16.0	1.05E+00	PB-214
1	300.03	137	152	1.74	665.35	647	23	36.3		PB-212
0	328.46	105	338	1.45	728.35	723	15	78.4		
0	338.25*	325	228	1.69	750.05	744	12	21.8		AC-228
0	352.08*	786	193	1.43	780.71	775	12	10.2		PB-214
0	463.06	44	144	1.38	1026.69	1022	10	106.4		AC-228
0	511.01*	158	206	1.63	1132.96	1124	18	49.8		TL-208
0	583.36*	485	171	1.52	1293.32	1284	17	15.5		TL-208
0	609.38*	567	140	1.89	1350.98	1343	14	12.4		BI-214
0	661.82	76	79	1.02	1467.22	1461	11	50.9		CS-137
0	726.92*	102	101	1.76	1611.50	1604	15	47.7		BI-212
0	800.49	214	155	14.49	1774.55	1752	51	45.0		
0	860.42	53	50	1.28	1907.36	1901	14	62.3		TL-208
0	911.31*	365	42	1.96	2020.15	2012	19	13.7		AC-228
2	964.51	82	40	2.37	2138.06	2131	35	38.8	1.94E+00	AC-228
2	968.98*	175	39	2.44	2147.96	2131	35	23.4		AC-228
0	1120.24*	141	52	2.23	2483.17	2473	19	30.2		BI-214
0	1244.97	75	137	8.95	2759.59	2738	42	111.8		
0	1378.01	38	16	1.27	3054.41	3049	11	52.3		BI-214
0	1460.82*	551	17	2.13	3237.91	3227	23	9.6		K-40
0	1764.91*	103	0	2.30	3911.75	3904	17	20.6		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	46.44	101	495	1.41	103.24	98	12	9.37E-03	93.9	2.76E+00	
3	89.95	194	654	1.47	199.70	178	37	1.80E-02	54.1	3.55E+00	
0	185.98	316	696	1.60	412.55	406	15	2.93E-02	39.1	2.81E+00	
0	328.46	105	338	1.45	728.35	723	15	9.73E-03	78.4	1.89E+00	
0	800.49	214	155	14.49	1774.55	1752	51	1.98E-02	45.0	8.94E-01	
0	1244.97	75	137	8.95	2759.59	2738	42	6.94E-03	****	6.28E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	5.694E+00	6.426E-01	2.552E-01	1.501E-02	22.317
CS-137	5.255E-02	2.702E-02	3.735E-02	2.689E-03	1.407
TL-208	3.015E-01	5.250E-02	3.291E-02	2.619E-03	9.162
BI-212	5.508E-01	2.660E-01	2.605E-01	1.891E-02	2.114
PB-212	9.223E-01	9.205E-02	5.075E-02	3.793E-03	18.173
BI-214	6.711E-01	9.751E-02	6.785E-02	5.169E-03	9.892
PB-214	7.180E-01	9.298E-02	6.326E-02	5.032E-03	11.351
RA-223	4.282E-01	1.762E-01	1.648E-01	1.459E-02	2.598
AC-228	1.084E+00	1.669E-01	1.210E-01	8.509E-03	8.954
TH-234✓	1.729E+00✓	4.403E-01	3.796E-01✓	3.398E-02	4.554
NP-237	5.592E-01	1.821E-01	1.649E-01	1.838E-02	3.390
AM-243	1.775E-01	4.686E-02	3.412E-02	6.562E-03	5.201

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	-2.050E-02		2.229E-02	3.011E-02	1.597E-03	-0.681
RH-101	-1.384E-02		1.955E-02	3.199E-02	4.938E-03	-0.433
SB-125	2.341E-02		4.897E-02	8.773E-02	7.253E-03	0.267
EU-155	-1.255E-02		5.707E-02	9.779E-02	9.196E-03	-0.128
PO-209	1.502E+00		3.975E+00	7.244E+00	1.335E+00	0.207
BI-211	-6.746E-01		5.674E-01	8.759E-01	6.308E-02	-0.770
PA-233	-1.692E-02		3.529E-02	5.796E-02	4.730E-03	-0.292
PA-234M	-9.913E-01		2.384E+00	4.062E+00	2.774E-01	-0.244
U-235	1.609E-02		1.231E-01	2.100E-01	1.559E-02	0.077
NP-236	2.752E-02		3.726E-02	5.446E-02	5.197E-03	0.505
NP-239	-9.710E-02		1.270E-01	2.075E-01	2.776E-02	-0.468
AM-241	4.417E-02		3.914E-02	5.940E-02	3.759E-03	0.744
CM-243	1.793E-02		5.077E-02	8.834E-02	9.520E-03	0.203
AM-246	6.521E-02		6.565E-02	1.259E-01	1.589E-02	0.518
CF-249	-5.793E-03		2.310E-02	3.984E-02	3.968E-03	-0.145

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 11-DEC-2007 17:50:11

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795306_GAMMA1_400MLSAN_17510.CNF

---- Sample Information ----

Sample ID : OH207-7953-06 ✓
Sample Title : SB-CZ-SS-2289-SD ✓
Sample Quantity : 4.09800E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17510

---- Sample Decay/Count Information ----

Collection Date : 27-SEP-2007 00:00:00 ✓ Acquisition date : 11-DEC-2007 14:49:51
Decay time : 75 14:49:51.89 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:02.29

---- Detector Parameters ----

Energy cal. time : 23-MAR-2006 15:15:18 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA1 Counting geometry: 400 ml sand
Effic. cal. time : 23-MAR-2006 15:18:11 Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$x = \ln(a1/\text{energy})$

a1=9.47750E+02 a2=-4.65904E+00 a3=6.59172E-01 a4=3.93115E-02
a5=1.38137E-01 a6=-8.70295E-02 a7=0.00000E+00

---- Processing Parameters ----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA1_17241.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

Tim Moore

Date:

12/14/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
2	74.99*	379	491	1.00	149.39	144	14	21.2	1.64E+00	AM-243 PB-214 PB-212
2	77.19*	552	480	0.93	153.79	144	14	15.5		PB-214 PB-212
5	87.43	152	550	1.03	174.30	165	14	50.1	3.25E+00	NP-237 PB-214 PB-212
0	93.10*	299	668	1.55	185.66	182	9	34.3		
0	128.67	168	503	1.08	256.87	252	9	50.7		AC-228
0	185.98*	249	597	1.48	371.65	366	11	40.8		
0	209.09	199	371	1.53	417.92	414	8	36.5		AC-228
0	232.81	47	206	1.27	465.41	464	5	96.4		
5	238.65*	1983	289	1.19	477.11	470	18	5.4	3.43E+00	PB-212
5	241.47*	325	363	1.63	482.74	470	18	30.3		PB-214
1	269.68	119	217	1.32	539.24	535	11	49.4	3.05E+00	RA-223
1	270.52	146	211	1.32	540.92	535	11	40.5		AC-228
0	277.74	94	307	1.20	555.37	550	10	73.1		TL-208
2	295.31*	346	207	1.20	590.55	585	19	17.3	1.75E+00	PB-214
2	300.00*	159	210	1.49	599.94	585	19	38.8		PB-212
0	328.06	134	276	1.02	656.13	651	11	50.9		
0	338.45	397	341	1.16	676.93	671	13	21.6		AC-228
0	351.82*	742	270	1.31	703.70	696	14	12.0		PB-214
0	462.85	154	197	1.47	926.02	920	14	42.2		AC-228
0	510.66*	184	183	1.75	1021.74	1015	14	38.5		TL-208
0	583.06*	660	134	1.40	1166.68	1160	14	10.9		TL-208
0	609.06*	503	122	1.47	1218.75	1211	13	12.9		BI-214
2	661.16	58	95	1.83	1323.04	1315	30	71.2	1.25E+00	CS-137
2	665.45	42	86	1.84	1331.64	1315	30	91.4		
0	727.04	176	75	1.56	1454.95	1450	11	24.2		BI-212
0	794.91	93	67	1.56	1590.81	1585	13	41.4		AC-228
0	860.53	74	76	1.16	1722.19	1718	12	51.5		TL-208
0	911.09*	507	74	1.77	1823.41	1816	16	11.8		AC-228
4	964.68	93	45	2.49	1930.68	1925	23	32.8	1.68E+00	AC-228
4	968.82*	261	29	1.61	1938.97	1925	23	15.3		AC-228
0	1120.22*	86	47	1.18	2242.05	2236	11	38.7		BI-214
0	1237.47	60	52	1.46	2476.75	2469	16	59.3		BI-214
0	1460.52*	494	16	2.35	2923.22	2915	20	10.2		K-40
0	1588.78	80	21	5.95	3179.93	3169	21	36.3		AC-228
0	1630.56*	24	11	0.84	3263.53	3256	16	78.1		
0	1764.07*	101	12	2.14	3530.75	3522	16	26.5		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	93.10	299	668	1.55	185.66	182	9	2.77E-02	34.3	2.44E+00	T
0	185.98	249	597	1.48	371.65	366	11	2.31E-02	40.8	3.03E+00	
0	232.81	47	206	1.27	465.41	464	5	4.31E-03	96.4	2.70E+00	
0	328.06	134	276	1.02	656.13	651	11	1.24E-02	50.9	2.11E+00	
2	665.45	42	86	1.84	1331.64	1315	30	3.87E-03	91.4	1.21E+00	
0	1630.56	24	11	0.84	3263.53	3256	16	2.22E-03	78.1	6.51E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	3.997E+00	4.906E-01	2.040E-01	1.392E-02	19.597
CS-137	3.458E-02	2.489E-02	2.799E-02	3.008E-03	1.235
TL-208	3.579E-01	5.298E-02	2.642E-02	2.651E-03	13.548
BI-212	8.051E-01	2.096E-01	2.094E-01	2.014E-02	3.845
PB-212	1.052E+00	9.887E-02	4.420E-02	3.411E-03	23.803
BI-214	5.176E-01	8.527E-02	5.134E-02	5.230E-03	10.081
PB-214	6.057E-01	8.723E-02	5.289E-02	4.174E-03	11.452
RA-223	2.174E-01	1.093E-01	1.301E-01	1.198E-02	1.671
AC-228	1.233E+00	1.612E-01	9.292E-02	5.135E-03	13.268
NP-237	3.418E-01	1.783E-01	2.505E-01	3.623E-02	1.364
AM-243	2.033E-01	6.065E-02	5.362E-02	1.125E-02	3.792

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	1.780E-03		1.489E-02	2.427E-02	1.584E-03	0.073
RH-101	1.015E-02		1.708E-02	2.869E-02	4.449E-03	0.354
SB-125	-1.666E-03		4.258E-02	7.312E-02	5.997E-03	-0.023
EU-155	1.081E-01		6.121E-02	1.084E-01	1.076E-02	0.998
PO-209	2.267E-01		3.035E+00	5.381E+00	9.631E-01	0.042
BI-211	-3.999E-01		4.495E-01	7.369E-01	5.369E-02	-0.543
PA-233	-1.609E-02		2.754E-02	4.665E-02	3.917E-03	-0.345
PA-234M	1.404E-01		1.555E+00	2.821E+00	1.621E-01	0.050
TH-234✓	1.396E+00✓+		5.054E-01	6.272E-01✓	7.317E-02	2.225
U-235	6.029E-02		1.038E-01	1.755E-01	1.225E-02	0.344
NP-236	2.534E-02		3.720E-02	6.154E-02	6.760E-03	0.412
NP-239	2.123E-02		1.047E-01	1.730E-01	2.335E-02	0.123
AM-241	9.682E-03		9.862E-02	1.721E-01	1.368E-02	0.056
CM-243	-1.506E-02		5.489E-02	9.234E-02	1.052E-02	-0.163
AM-246	8.149E-03		5.027E-02	8.966E-02	1.103E-02	0.091
CF-249	-3.012E-03		1.793E-02	3.068E-02	2.959E-03	-0.098

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 11-DEC-2007 17:51:57

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795307_GAMMA2_400MLSAN_17512.CNF

----- Sample Information -----

Sample ID : OH207-7953-07 ✓
Sample Title : SB-CZ-SS-2290-SD ✓
Sample Quantity : 4.14200E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17512

----- Sample Decay/Count Information -----

Collection Date : 27-SEP-2007 00:00:00 ✓ Acquisition date : 11-DEC-2007 14:51:25
Decay time : 75 14:51:25.47 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:01.20

----- Detector Parameters -----

Energy cal. time : 1-MAY-2007 11:12:10. Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA2 Counting geometry: 400 ml sand
Effic. cal. time : 1-MAY-2007 11:13:44. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$x = \ln(a1/\text{energy})$

a1=9.47750E+02 a2=-4.68491E+00 a3=7.34327E-01 a4=7.12916E-02
a5=8.21331E-02 a6=-7.02143E-02 a7=0.00000E+00

----- Processing Parameters -----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG LNGBKG112107_GAMMA2_17242.CNF;1
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

Tom Moore

Date:

12/14/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
3	74.81*	263	478	0.83	149.20	145	21	27.8	4.94E-01	AM-243 PB-214 PB-212
3	77.04*	500	531	1.04	153.65	145	21	17.4		PB-214 PB-212
3	84.08*	123	456	1.26	167.66	165	13	59.0	2.34E+00	NP-237
3	87.26	223	568	1.15	174.00	165	13	37.2		PB-214 PB-212 AC-228
0	128.51	163	659	3.27	256.14	252	11	62.9		
0	154.45	74	476	1.37	307.78	304		8104.5		
0	186.14*	273	670	1.05	370.90	365	12	40.7		
0	209.08	109	470	0.86	416.58	413	9	74.1		AC-228
2	238.76*	1451	299	1.12	475.70	469	17	6.7	2.05E+00	PB-212
2	242.02*	233	283	1.21	482.20	469	17	29.1		PB-214
2	269.82	116	190	1.25	537.58	532	14	45.3	1.40E+00	RA-223 AC-228
2	270.91	86	209	1.38	539.75	532	14	67.2		
0	295.36*	489	246	1.12	588.47	584	9	14.9		PB-214
0	300.04	52	293	0.99	597.79	594		9120.4		PB-212
0	327.88	103	282	1.06	653.26	647	10	64.2		
0	338.67*	334	342	1.31	674.75	668	15	26.7		AC-228
0	352.24*	774	275	1.25	701.78	696	12	11.4		PB-214
0	463.05	87	219	1.31	922.64	916	15	77.7		AC-228
0	511.08*	171	152	1.69	1018.38	1012	15	39.4		TL-208
0	583.40*	451	184	1.40	1162.58	1156	15	16.4		TL-208
0	609.46*	583	140	1.41	1214.55	1209	13	12.0		BI-214
0	661.83	289	131	1.47	1318.99	1314	13	20.0		CS-137
0	727.65	88	109	1.91	1450.29	1442	15	55.8		BI-212
0	769.53*	96	87	1.56	1533.85	1525	18	50.7		BI-214
0	795.17*	55	48	1.88	1585.00	1580	9	54.3		AC-228
0	860.63*	70	62	2.15	1715.63	1709	14	54.6		TL-208
0	911.08*	324	101	1.82	1816.33	1808	18	18.4		AC-228
0	934.74	32	45	1.95	1863.56	1857	10	84.7		BI-214
0	964.13	69	61	2.38	1922.22	1918	9	47.7		AC-228
0	968.93*	154	58	1.84	1931.81	1927	11	26.1		AC-228
0	1120.07*	138	44	2.04	2233.62	2227	15	27.8		BI-214
0	1237.92*	72	34	1.08	2469.07	2463	12	41.5		BI-214
0	1408.08	32	26	2.05	2809.14	2803	17	81.6		BI-214
0	1459.71*	457	23	1.56	2912.38	2905	16	10.8		K-40
0	1619.41	30	19	1.35	3231.77	3224	15	71.9		BI-212
0	1728.00*	17	11	1.45	3449.04	3442	11	92.7		BI-214
0	1762.49*	112	26	2.53	3518.08	3511	15	28.5		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
3	84.08	123	456	1.26	167.66	165	13	1.14E-02	59.0	2.38E+00	
0	154.45	74	476	1.37	307.78	304	8	6.88E-03	****	3.38E+00	
0	186.14	273	670	1.05	370.90	365	12	2.53E-02	40.7	3.21E+00	
2	270.91	86	209	1.38	539.75	532	14	7.98E-03	67.2	2.56E+00	
0	327.88	103	282	1.06	653.26	647	10	9.52E-03	64.2	2.20E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	3.842E+00	4.833E-01	1.757E-01	1.131E-02	21.862
CS-137	1.693E-01	3.893E-02	2.719E-02	3.094E-03	6.226
TL-208	2.392E-01	4.656E-02	2.478E-02	2.580E-03	9.652
BI-212	4.002E-01	2.274E-01	2.077E-01	2.271E-02	1.927
PB-212	7.227E-01	7.341E-02	4.273E-02	3.265E-03	16.912
BI-214	5.876E-01	9.443E-02	4.999E-02	5.323E-03	11.754
PB-214	5.996E-01	8.259E-02	4.947E-02	3.793E-03	12.122
RA-223	1.992E-01	9.201E-02	1.253E-01	1.115E-02	1.590
AC-228	7.971E-01	1.625E-01	9.365E-02	8.138E-03	8.511
NP-237	4.380E-01	1.720E-01	2.357E-01	2.962E-02	1.858
AM-243	1.196E-01	4.093E-02	5.043E-02	1.005E-02	2.372

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	9.849E-03		1.440E-02	2.637E-02	1.534E-03	0.373
RH-101	-9.316E-03		1.624E-02	2.569E-02	4.011E-03	-0.363
SB-125	-2.707E-02		4.326E-02	7.091E-02	5.814E-03	-0.382
EU-155	2.617E-02		5.534E-02	9.423E-02	8.823E-03	0.278
PO-209	1.774E+00		3.015E+00	5.515E+00	1.057E+00	0.322
BI-211	-6.135E-01		4.276E-01	6.524E-01	6.386E-02	-0.940
PA-233	1.069E-02		2.840E-02	4.972E-02	4.005E-03	0.215
PA-234M	1.590E+00		1.871E+00	3.533E+00	2.758E-01	0.450
TH-234✓	5.241E-01✓		3.157E-01	5.541E-01✓	5.542E-02	0.946
U-235	-3.401E-02		9.985E-02	1.614E-01	1.178E-02	-0.211
NP-236	7.706E-03		3.216E-02	5.448E-02	5.416E-03	0.141
NP-239	1.181E-01		9.951E-02	1.779E-01	2.400E-02	0.664
AM-241	4.585E-02		8.569E-02	1.492E-01	9.785E-03	0.307
CM-243	-1.090E-02		5.032E-02	8.375E-02	9.055E-03	-0.130
AM-246	-3.486E-02		5.572E-02	9.058E-02	1.159E-02	-0.385
CF-249	8.812E-03		1.788E-02	3.130E-02	2.999E-03	0.282

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 11-DEC-2007 17:52:32

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795308_GAMMA3_400MLSAN_17513.CNF

---- Sample Information ----

Sample ID : OH207-7953-08 ✓
Sample Title : SB-CZ-SS-2291-SD ✓
Sample Quantity : 5.76700E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17513

---- Sample Decay/Count Information ----

Collection Date : 27-SEP-2007 00:00:00 ✓ Acquisition date : 11-DEC-2007 14:52:10
Decay time : 75 14:52:10.40 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:01.13

---- Detector Parameters ----

Energy cal. time : 30-OCT-2006 16:06:41 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA3 Counting geometry: 400 ml sand
Effic. cal. time : 7-FEB-2007 13:40:24. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$$x = \ln(a1/\text{energy})$$

a1=9.47750E+02 a2=-4.85663E+00 a3=8.12782E-01 a4=8.53513E-02
a5=-4.88423E-02 a6=-7.49502E-03 a7=0.00000E+00

---- Processing Parameters ----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA3_17240.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

TW Moore

Date:

12/14/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
3	74.85*	836	1104	1.64	166.21	160	17	18.0	1.49E+00	AM-243 PB-214 PB-212
3	77.16*	1120	797	1.26	171.34	160	17	11.3		PB-214 PB-212
3	87.26	480	1022	1.64	193.74	181	34	27.2	1.45E+00	NP-237 PB-214 PB-212
3	89.81	250	893	1.48	199.39	181	34	48.4		
3	92.79*	571	930	1.72	205.99	181	34	24.0		
0	128.99	118	738	0.93	286.22	282	9	85.3		AC-228
0	185.88*	424	783	1.43	412.32	407	13	29.6		
0	209.64	134	508	1.30	464.98	461	9	63.1		AC-228
3	238.67*	2213	466	1.45	529.34	523	21	5.7	1.82E+00	PB-212
3	241.69	619	479	2.00	536.04	523	21	22.0		PB-214
5	269.99	134	381	1.69	598.76	591	13	59.6	5.17E+00	RA-223 AC-228
5	270.90	59	233	1.04	600.77	591	13	98.7		
0	295.18*	741	463	1.53	654.60	649	15	14.6		PB-214
0	300.28	113	258	1.61	665.90	663	9	54.2		PB-212
0	327.70	159	283	1.43	726.68	722	11	43.9		
0	338.53*	500	347	1.30	750.68	743	16	19.0		AC-228
0	352.18*	1206	506	1.72	780.94	772	20	11.0		PB-214
0	463.25	140	189	1.30	1027.12	1020	13	44.0		AC-228
0	510.76*	268	204	2.21	1132.40	1122	19	30.7		TL-208
0	583.26*	715	176	1.79	1293.10	1286	18	11.6		TL-208
0	609.33*	903	127	1.86	1350.88	1344	15	8.7		BI-214
0	727.65*	183	115	1.80	1613.11	1605	16	31.1		BI-212
0	768.32*	80	85	1.23	1703.25	1698	11	51.9		BI-214
0	794.72	82	63	1.68	1761.77	1755	14	46.6		AC-228
0	860.83	61	97	0.89	1908.29	1900	15	75.2		TL-208
0	911.14*	428	97	1.70	2019.77	2012	16	14.2		AC-228
1	964.41	96	68	2.21	2137.84	2127	34	41.4	1.83E+00	AC-228
1	968.98*	284	50	2.22	2147.96	2127	34	16.8		AC-228
0	1120.51*	223	60	2.00	2483.77	2475	16	20.8		BI-214
0	1238.31	102	40	1.45	2744.84	2738	15	33.7		BI-214
0	1381.41	80	41	7.96	3061.95	3050	27	52.2		
0	1460.88*	416	45	2.09	3238.05	3229	18	12.7		K-40
0	1631.66	23	8	2.12	3616.49	3610	11	64.1		
0	1764.64*	145	8	1.90	3911.14	3903	15	19.1		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
3	89.81	250	893	1.48	199.39	181	34	2.31E-02	48.4	3.55E+00	
3	92.79	571	930	1.72	205.99	181	34	5.29E-02	24.0	3.55E+00	T
0	185.88	424	783	1.43	412.32	407	13	3.93E-02	29.6	2.82E+00	
5	270.90	59	233	1.04	600.77	591	13	5.49E-03	98.7	2.19E+00	
0	327.70	159	283	1.43	726.68	722	11	1.47E-02	43.9	1.90E+00	
0	1381.41	80	41	7.96	3061.95	3050	27	7.43E-03	52.2	5.81E-01	
0	1631.66	23	8	2.12	3616.49	3610	11	2.12E-03	64.1	5.17E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	3.032E+00	4.250E-01	2.236E-01	1.316E-02	13.560
TL-208	3.139E-01	4.408E-02	2.629E-02	2.093E-03	11.939
BI-212	6.929E-01	2.215E-01	1.924E-01	1.397E-02	3.601
PB-212	9.231E-01	8.694E-02	4.257E-02	3.182E-03	21.685
BI-214	7.541E-01	8.718E-02	4.579E-02	3.489E-03	16.469
PB-214	7.769E-01	1.052E-01	5.036E-02	4.007E-03	15.426
RA-223	1.932E-01	1.164E-01	1.342E-01	1.188E-02	1.440
AC-228	8.973E-01	1.421E-01	9.133E-02	6.421E-03	9.826
NP-237	4.733E-01	1.390E-01	1.351E-01	1.506E-02	3.502
AM-243	1.522E-01	4.015E-02	2.584E-02	4.969E-03	5.893

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	8.080E-03		1.517E-02	2.351E-02	1.247E-03	0.344
RH-101	-6.058E-04		1.603E-02	2.693E-02	4.157E-03	-0.022
SB-125	-1.079E-03		4.169E-02	7.231E-02	5.978E-03	-0.015
CS-137	7.932E-03		1.714E-02	3.006E-02	2.164E-03	0.264
EU-155	1.317E-02		4.547E-02	7.868E-02	7.399E-03	0.167
PO-209	-5.272E-01		2.855E+00	5.003E+00	9.218E-01	-0.105
BI-211	-8.511E-02		4.323E-01	7.279E-01	5.242E-02	-0.117
PA-233	1.121E-02		2.899E-02	4.923E-02	4.017E-03	0.228
PA-234M	1.648E+00		1.768E+00	3.301E+00	2.254E-01	0.499
TH-234✓	1.291E+00✓	+	3.307E-01	4.145E-01✓	2.758E-02	3.114
U-235	2.726E-02		9.622E-02	1.644E-01	1.220E-02	0.166
NP-236	3.075E-02		2.947E-02	4.322E-02	4.124E-03	0.712
NP-239	2.643E-03		1.028E-01	1.732E-01	2.317E-02	0.015
AM-241	-9.873E-02		3.010E-02	4.409E-02	2.790E-03	-2.239
CM-243	-1.051E-02		4.082E-02	6.977E-02	7.518E-03	-0.151
AM-246	9.932E-03		4.829E-02	8.720E-02	1.101E-02	0.114
CF-249	1.343E-02		1.784E-02	3.185E-02	3.172E-03	0.422

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 11-DEC-2007 20:56:04

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795309_GAMMA3_400MLSAN_17516.CNF

---- Sample Information ----

Sample ID : OH207-7953-09 ✓
Sample Title : SB-CZ-SS-2292-SD ✓
Sample Quantity : 6.60200E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17516

---- Sample Decay/Count Information ----

Collection Date : 27-SEP-2007 00:00:00 Acquisition date : 11-DEC-2007 17:55:45
Decay time : 75 17:55:45.30 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:01.14

---- Detector Parameters ----

Energy cal. time : 30-OCT-2006 16:06:41 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA3 Counting geometry: 400 ml sand
Effic. cal. time : 7-FEB-2007 13:40:24. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$$x = \ln(a1/\text{energy})$$

a1=9.47750E+02 a2=-4.85663E+00 a3=8.12782E-01 a4=8.53513E-02
a5=-4.88423E-02 a6=-7.49502E-03 a7=0.00000E+00

---- Processing Parameters ----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA3_17240.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

T M Moore

Date:

12/14/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
1	74.88*	698	843	1.44	166.29	159	19	18.3	3.03E+00	AM-243 PB-214 PB-212
1	77.12*	1033	847	1.45	171.26	159	19	13.1		PB-214 PB-212
2	87.21	338	829	1.48	193.62	178	36	34.4	1.70E+00	NP-237 PB-214 PB-212
2	89.87	284	655	1.17	199.52	178	36	34.1		
2	92.79*	500	887	1.63	205.98	178	36	26.4		
0	185.86*	349	768	1.64	412.29	407	11	33.5		
0	209.22	213	555	1.39	464.07	459	10	43.6		AC-228
4	238.68*	1933	421	1.39	529.35	521	22	6.1	1.10E+00	PB-212
4	241.70	520	529	1.78	536.05	521	22	23.1		PB-214
0	270.43	248	480	1.71	599.73	593	15	40.5		RA-223 AC-228
0	277.34	160	393	1.89	615.05	609	12	52.0		TL-208
2	295.33*	676	283	1.51	654.93	646	27	12.2	1.60E+00	PB-214
2	300.14	144	365	1.92	665.58	646	27	57.4		PB-212
0	328.19	134	375	1.87	727.75	722	13	62.0		
0	338.40*	356	383	1.51	750.38	745	13	25.1		AC-228
0	352.04*	1221	338	1.41	780.63	774	14	8.7		PB-214
0	463.46	110	288	1.87	1027.57	1018	18	74.9		AC-228
0	510.78*	198	303	1.63	1132.45	1124	18	46.5		TL-208
0	583.35*	590	236	1.69	1293.30	1285	18	15.0		TL-208
9	609.33*	820	119	1.71	1350.89	1345	22	8.7	1.60E+00	BI-214
9	614.05	47	89	2.78	1361.34	1345	22	97.7		
0	726.96*	129	157	1.16	1611.58	1606	15	45.9		BI-212
0	767.70*	90	79	2.56	1701.89	1696	13	46.6		BI-214
0	795.10	114	59	1.47	1762.60	1757	14	33.6		AC-228
0	860.53	84	115	2.08	1907.62	1896	22	68.5		TL-208
0	911.25*	425	82	1.58	2020.03	2012	18	14.0		AC-228
0	969.12*	213	127	1.37	2148.26	2141	14	26.6		AC-228
3	1119.65*	92	31	1.96	2481.87	2477	13	36.9	4.24E+00	BI-214
3	1120.97*	99	40	1.76	2484.80	2477	13	37.8		
0	1238.88	47	71	1.41	2746.09	2739	13	73.9		BI-214
0	1460.85*	342	25	2.28	3237.99	3228	20	13.4		K-40
1	1588.54	59	17	2.52	3520.92	3512	27	41.1	2.08E+00	AC-228
1	1593.31	57	5	2.52	3531.51	3512	27	36.7		
0	1764.95*	169	12	2.27	3911.85	3903	23	19.0		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
2	89.87	284	655	1.17	199.52	178	36	2.63E-02	34.1	3.55E+00	
2	92.79	500	887	1.63	205.98	178	36	4.63E-02	26.4	3.55E+00	T
0	185.86	349	768	1.64	412.29	407	11	3.23E-02	33.5	2.82E+00	
0	328.19	134	375	1.87	727.75	722	13	1.24E-02	62.0	1.89E+00	
9	614.05	47	89	2.78	1361.34	1345	22	4.35E-03	97.7	1.12E+00	
3	1120.97	99	40	1.76	2484.80	2477	13	9.15E-03	37.8	6.80E-01	
1	1593.31	57	5	2.52	3531.51	3512	27	5.30E-03	36.7	5.25E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	2.179E+00	3.196E-01	1.760E-01	1.035E-02	12.381
TL-208	2.263E-01	3.835E-02	2.246E-02	1.787E-03	10.076
BI-212	4.275E-01	1.988E-01	1.794E-01	1.302E-02	2.383
PB-212	7.042E-01	6.781E-02	3.849E-02	2.877E-03	18.296
BI-214	5.979E-01	6.928E-02	4.459E-02	3.398E-03	13.408
PB-214	6.872E-01	8.092E-02	4.537E-02	3.609E-03	15.148
RA-223	3.115E-01	1.293E-01	1.137E-01	1.007E-02	2.739
AC-228	7.780E-01	1.219E-01	7.506E-02	5.278E-03	10.364
NP-237	2.907E-01	1.052E-01	1.111E-01	1.238E-02	2.617
AM-243	1.110E-01	2.944E-02	2.056E-02	3.953E-03	5.400

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	6.375E-03		1.264E-02	1.805E-02	9.572E-04	0.353
RH-101	-3.318E-03		1.475E-02	2.463E-02	3.801E-03	-0.135
SB-125	-1.879E-03		3.528E-02	6.118E-02	5.059E-03	-0.031
CS-137	-1.311E-02		1.429E-02	2.310E-02	1.663E-03	-0.567
EU-155	2.275E-02		4.001E-02	6.960E-02	6.544E-03	0.327
PO-209	1.293E+00		2.396E+00	4.414E+00	8.133E-01	0.293
BI-211	-2.051E-01		3.994E-01	6.555E-01	4.721E-02	-0.313
PA-233	-6.612E-03		2.514E-02	4.161E-02	3.395E-03	-0.159
PA-234M	1.640E+00		1.579E+00	2.960E+00	2.021E-01	0.554
TH-234✓	9.868E-01✓	+	2.754E-01	3.485E-01✓	2.319E-02	2.831
U-235	-3.992E-02		8.752E-02	1.469E-01	1.090E-02	-0.272
NP-236	4.345E-02		2.569E-02	3.828E-02	3.653E-03	1.135
NP-239	1.455E-02		9.155E-02	1.548E-01	2.071E-02	0.094
AM-241	-6.212E-02		2.530E-02	3.840E-02	2.430E-03	-1.618
CM-243	-2.528E-02		3.562E-02	6.007E-02	6.473E-03	-0.421
AM-246	1.830E-02		4.311E-02	7.897E-02	9.968E-03	0.232
CF-249	8.432E-04		1.510E-02	2.635E-02	2.624E-03	0.032

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 12-DEC-2007 01:37:42

Configuration :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795310_GAMMA3_400MLSAN_17517.CNF

---- Sample Information ----

Sample ID : OH207-7953-10 ✓
Sample Title : SB-CZ-SS-2293-SD ✓
Sample Quantity : 3.44600E+02 GDRY ✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17517

---- Sample Decay/Count Information ----

Collection Date : 27-SEP-2007 00:00:00 ✓ Acquisition date : 11-DEC-2007 22:37:25
Decay time : 75 22:37:25.07 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:00.75

---- Detector Parameters ----

Energy cal. time : 30-OCT-2006 16:06:41 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA3 Counting geometry: 400 ml sand
Effic. cal. time : 7-FEB-2007 13:40:24. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a2 + a3*x + a4*x**2 + a5*x**3 + a6*x**4 + a7*x**5)$$

where:

$x = \ln(a1/\text{energy})$

a1=9.47750E+02 a2=-4.85663E+00 a3=8.12782E-01 a4=8.53513E-02
a5=-4.88423E-02 a6=-7.49502E-03 a7=0.00000E+00

---- Processing Parameters ----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA3_17240.CNF;1 ✓
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

T. Moore

Date:

12/14/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
0	63.35*	117	482	1.15	140.72	136	10	78.4		TH-234
2	74.89*	437	592	1.59	166.32	159	23	25.4	1.23E+00	AM-243
										PB-214
										PB-212
2	77.18*	641	524	1.48	171.39	159	23	16.8		PB-214
										PB-212
0	87.09	185	374	1.46	193.36	191	7	37.7		NP-237
										PB-214
										PB-212
2	90.01	164	255	1.08	199.82	197	15	32.1	1.59E+00	
2	92.81*	222	488	1.63	206.02	197	15	45.5		TH-234
0	185.92*	168	370	1.25	412.41	407	13	52.5		
2	238.73*	953	187	1.42	529.46	523	20	8.5	1.19E+00	PB-212
2	241.59	203	216	1.84	535.82	523	20	39.8		PB-214
0	270.07	68	171	0.94	598.93	595	10	75.7		RA-223
										AC-228
0	295.20*	296	157	1.30	654.65	649	12	20.8		PB-214
0	338.40*	173	160	1.74	750.40	745	11	32.6		AC-228
0	352.03*	493	132	1.56	780.59	774	15	13.9		PB-214
3	510.68*	70	103	2.55	1132.23	1124	25	87.1	2.36E+00	TL-208
0	583.20*	275	80	1.53	1292.97	1284	16	19.3		TL-208
0	609.44*	294	114	1.75	1351.12	1341	19	21.3		
0	728.95*	69	97	2.38	1616.01	1606	24	83.4		BI-212
0	861.44	49	40	1.73	1909.64	1901	15	64.3		TL-208
0	910.97*	178	46	1.69	2019.39	2010	17	23.5		AC-228
0	969.00*	123	33	1.75	2148.02	2143	15	28.1		AC-228
0	1121.06*	45	40	2.12	2485.01	2476	15	70.6		
0	1460.74*	223	0	2.31	3237.74	3228	19	14.4		K-40
0	1593.21	15	6	0.61	3531.28	3528	8	78.0		

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
2	90.01	164	255	1.08	199.82	197	15	1.52E-02	32.1	3.55E+00	
0	185.92	168	370	1.25	412.41	407	13	1.55E-02	52.5	2.82E+00	
0	609.44	294	114	1.75	1351.12	1341	19	2.72E-02	21.3	1.13E+00	T
0	1121.06	45	40	2.12	2485.01	2476	15	4.18E-03	70.6	6.80E-01	T
0	1593.21	15	6	0.61	3531.28	3528	8	1.34E-03	78.0	5.25E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	2.729E+00	4.249E-01	2.671E-01	1.572E-02	10.216
TL-208	2.021E-01	4.222E-02	3.247E-02	2.584E-03	6.225
BI-212	4.382E-01	3.670E-01	2.529E-01	1.836E-02	1.733
PB-212	6.653E-01	7.522E-02	5.136E-02	3.839E-03	12.953
PB-214	5.318E-01	8.531E-02	6.243E-02	4.967E-03	8.519
RA-223	1.646E-01	1.254E-01	1.674E-01	1.482E-02	0.983
AC-228	6.253E-01	1.532E-01	1.334E-01	9.378E-03	4.688
TH-234✓	8.407E-01✓	3.900E-01	3.484E-01✓	3.119E-02	2.413
NP-237	3.045E-01	1.196E-01	1.897E-01	2.115E-02	1.605
AM-243	1.333E-01	4.250E-02	3.319E-02	6.383E-03	4.016

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	1.696E-02		1.894E-02	3.733E-02	2.272E-03	0.454
RH-101	2.857E-04		1.960E-02	3.314E-02	5.115E-03	0.009
SB-125	-8.864E-03		5.077E-02	8.846E-02	7.314E-03	-0.100
CS-137	2.185E-03		2.118E-02	3.711E-02	2.672E-03	0.059
EU-155	3.370E-02		5.520E-02	9.737E-02	9.156E-03	0.346
PO-209	-4.873E-02		3.872E+00	6.970E+00	1.284E+00	-0.007
BI-211	-9.795E-02		5.603E-01	9.569E-01	6.891E-02	-0.102
BI-214	4.104E-01	+	9.302E-02	1.302E-01	9.921E-03	3.152
PA-233	-3.540E-02		3.595E-02	5.728E-02	4.674E-03	-0.618
PA-234M	1.238E+00		2.397E+00	4.446E+00	3.036E-01	0.278
U-235	1.187E-02		1.143E-01	1.958E-01	1.453E-02	0.061
NP-236	1.441E-02		3.336E-02	5.121E-02	4.887E-03	0.281
NP-239	1.870E-02		1.219E-01	2.087E-01	2.793E-02	0.090
AM-241	1.043E-02		4.039E-02	5.952E-02	3.767E-03	0.175
CM-243	4.917E-02		5.027E-02	8.932E-02	9.625E-03	0.551
AM-246	1.327E-02		7.046E-02	1.286E-01	1.624E-02	0.103
CF-249	1.020E-02		2.098E-02	3.795E-02	3.779E-03	0.269

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 12-DEC-2007 05:27:57

Configuration :
SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795311_GAMMA3_400MLSAN_17518.CNF

---- Sample Information ----

Sample ID : OH207-7953-11✓
Sample Title : SB-CZ-SS-2294-SD✓
Sample Quantity : 4.15900E+02 GDRY✓
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17518

---- Sample Decay/Count Information ----

Collection Date : 27-SEP-2007 00:00:00 Acquisition date : 12-DEC-2007 02:27:37
Decay time : 76 02:27:37.80 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00✓ Elapsed real time: 0 03:00:00.90

---- Detector Parameters ----

Energy cal. time : 30-OCT-2006 16:06:41 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA3 Counting geometry: 400 ml sand
Effic. cal. time : 7-FEB-2007 13:40:24. Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a_2 + a_3x + a_4x^2 + a_5x^3 + a_6x^4 + a_7x^5)$$

where:

$$x = \ln(a_1/\text{energy})$$

a1=9.47750E+02 a2=-4.85663E+00 a3=8.12782E-01 a4=8.53513E-02
a5=-4.88423E-02 a6=-7.49502E-03 a7=0.00000E+00

---- Processing Parameters ----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :

SYS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA3_17240.CNF;1
Nuclide Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

T. M. Moore

Date:

12/14/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
1	74.88*	582	710	1.44	166.29	159	18	19.7	2.65E+00	AM-243 PB-214 PB-212
1	77.12*	923	651	1.45	171.25	159	18	13.4		PB-214 PB-212
1	87.39	294	654	1.34	194.02	190	23	32.1	3.87E+00	NP-237 PB-214 PB-212
1	90.09	171	576	1.34	200.00	190	23	53.8		
1	92.74*	237	500	1.32	205.89	190	23	42.3		
0	185.89*	289	496	1.25	412.35	406	13	35.2		
0	209.13	134	380	1.82	463.86	459	11	58.9		AC-228
3	238.69*	1212	254	1.41	529.38	524	19	7.6	4.66E-01	PB-212
3	241.69	364	340	2.03	536.03	524	19	30.0		PB-214
0	295.30*	517	250	1.49	654.86	647	14	15.8		PB-214
0	299.78	100	155	0.78	664.80	661	9	48.9		PB-212
0	327.96	51	186	1.24	727.24	724		9100.5		
0	338.42*	255	165	1.43	750.43	745	11	23.4		AC-228
0	352.17*	703	239	1.67	780.91	773	17	12.9		PB-214
0	410.20	105	212	4.33	909.54	901	18	68.6		AC-228
0	464.04	67	190	3.09	1028.87	1018	15	93.3		AC-228
0	510.75*	160	132	2.76	1132.40	1124	16	41.1		TL-208
0	583.23*	421	107	1.45	1293.03	1287	15	14.7		TL-208
0	609.32*	500	144	1.60	1350.85	1345	16	14.2		BI-214
0	662.01	67	123	1.68	1467.65	1461	13	72.4		CS-137
0	727.47*	107	133	1.73	1612.71	1603	19	55.7		BI-212
0	768.03*	66	57	1.72	1702.61	1697	12	54.0		BI-214
0	860.75	65	54	1.80	1908.11	1900	15	56.2		TL-208
0	911.24*	267	66	2.01	2019.99	2012	20	19.4		AC-228
1	964.73	40	36	1.90	2138.55	2134	20	61.1	2.36E+00	AC-228
1	968.94*	122	52	1.94	2147.87	2134	20	31.5		AC-228
0	1120.33*	135	52	1.88	2483.38	2476	16	30.0		BI-214
0	1238.62	71	69	3.43	2745.53	2736	20	62.3		BI-214
0	1460.79*	629	32	2.04	3237.85	3229	18	9.2		K-40
0	1764.25*	94	4	2.67	3910.28	3901	18	24.1		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
1	90.09	171	576	1.34	200.00	190	23	1.58E-02	53.8	3.55E+00	
1	92.74	237	500	1.32	205.89	190	23	2.20E-02	42.3	3.55E+00	T
0	185.89	289	496	1.25	412.35	406	13	2.68E-02	35.2	2.82E+00	
0	327.96	51	186	1.24	727.24	724	9	4.70E-03	****	1.90E+00	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	6.361E+00	6.951E-01	2.885E-01	1.697E-02	22.050
CS-137	4.545E-02	3.306E-02	3.609E-02	2.599E-03	1.259
TL-208	2.564E-01	4.275E-02	2.690E-02	2.141E-03	9.530
BI-212	5.626E-01	3.158E-01	2.337E-01	1.696E-02	2.408
PB-212	7.007E-01	7.482E-02	4.902E-02	3.665E-03	14.294
BI-214	5.788E-01	9.308E-02	6.374E-02	4.856E-03	9.082
PB-214	6.278E-01	9.517E-02	5.847E-02	4.652E-03	10.737
AC-228	7.759E-01	1.603E-01	1.136E-01	7.988E-03	6.830
NP-237	4.014E-01	1.364E-01	1.840E-01	2.051E-02	2.181
AM-243	1.471E-01	4.053E-02	3.120E-02	6.000E-03	4.714

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	8.697E-03		2.010E-02	2.887E-02	1.531E-03	0.301
RH-101	-2.263E-03		1.836E-02	3.084E-02	4.760E-03	-0.073
SB-125	8.986E-03		4.840E-02	8.545E-02	7.065E-03	0.105
EU-155	4.086E-02		5.170E-02	9.105E-02	8.562E-03	0.449
PO-209	3.688E+00		3.570E+00	6.775E+00	1.248E+00	0.544
BI-211	7.901E-02		5.028E-01	8.794E-01	6.333E-02	0.090
RA-223	1.508E-01		9.788E-02	1.736E-01	1.537E-02	0.869
PA-233	7.082E-03		3.318E-02	5.645E-02	4.607E-03	0.125
PA-234M	1.335E-01		2.493E+00	4.391E+00	2.999E-01	0.030
TH-234✓	7.430E-01✓+		3.213E-01	4.989E-01✓	4.467E-02	1.489
U-235	-4.994E-02		1.097E-01	1.843E-01	1.368E-02	-0.271
NP-236	5.612E-02		3.322E-02	5.035E-02	4.805E-03	1.115
NP-239	-6.903E-02		1.156E-01	1.906E-01	2.550E-02	-0.362
AM-241	-1.234E-01		3.874E-02	5.666E-02	3.585E-03	-2.179
CM-243	3.759E-03		4.633E-02	8.025E-02	8.648E-03	0.047
AM-246	1.798E-02		7.419E-02	1.332E-01	1.681E-02	0.135
CF-249	9.875E-03		2.015E-02	3.610E-02	3.595E-03	0.274

SANFORD COHEN & ASSOCIATES, INC.
Montgomery, AL

Gamma Spectroscopy Report Generated 12-DEC-2007 16:22:42

Configuration :
SYSS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] SMP_OH207795312_GAMMA1_400MLSAN_17523.CNF

---- Sample Information ----

Sample ID : OH207-7953-12 ✓
Sample Title : SB-CZ-SS-2295-SD ✓
Sample Quantity : 3.69200E+02 GDRY
Sample Type : SOIL
Sample Geometry : 400 ml sand
Sample Seq No. : 17523

---- Sample Decay/Count Information ----

Collection Date : 27-SEP-2007 00:00:00 Acquisition date : 12-DEC-2007 13:22:07
Decay time : 76 13:22:07.95 % dead time : 0.0%
Elapsed live time: 0 03:00:00.00 ✓ Elapsed real time: 0 03:00:02.17

---- Detector Parameters ----

Energy cal. time : 23-MAR-2006 15:15:18 Energy cal. oper.: PROCOUNT USER
Detector name : GAMMA1 Counting geometry: 400 ml sand
Effic. cal. time : 23-MAR-2006 15:18:11 Effic. cal. oper.: PROCOUNT USER

Efficiency Equation:

$$\text{Eff} = \exp(a_2 + a_3*x + a_4*x**2 + a_5*x**3 + a_6*x**4 + a_7*x**5)$$

where:

$x = \ln(a_1/\text{energy})$

$a_1 = 9.47750E+02$ $a_2 = -4.65904E+00$ $a_3 = 6.59172E-01$ $a_4 = 3.93115E-02$
 $a_5 = 1.38137E-01$ $a_6 = -8.70295E-02$ $a_7 = 0.00000E+00$

---- Processing Parameters ----

Start channel : 80 End channel : 4096
Sensitivity : 5.00000 Gaussian Sens. : 10.00000
Critical level? : Yes Propagate Errors?: Yes
Empirical Eff? : No Library-based eff: Yes
Energy tolerance : 1.00000 Half life ratio : 8.00000
Abundance limit : 68.00000 WTM error limit : 3.00000
MDA Width (FWHM) : 3.00000 MDA Confid Level : 5.00000 %

Background File :
SYSS\$SYSDEVICE: [GAMMA.SCUSR.ARCHIVE] BKG_LNGBKG112107_GAMMA1_17241.CNF;1
Nuclide Lib File : SYSS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB;
Inter Lib File : SYSS\$SYSDEVICE: [GAMMA.SCUSR.LIB] SCHOFIELD.NLB
Anal Seq Title : SCHOFIELD BARRACKS
Use Variable Tol : Yes
Variable Tol : 1.1000

Reviewer's Signature:

Tim Moore

Date:

12/14/2007

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	%Err	Fit	Nuclides
1	74.89*	281	401	1.02	149.19	143	16	26.0	5.62E-01	AM-243 PB-214 PB-212
1	77.20*	444	336	0.85	153.81	143	16	15.9		PB-214 PB-212
0	84.22*	140	397	1.90	167.88	165	7	50.7		
0	87.32	186	296	1.17	174.08	172	5	31.3		NP-237 PB-214 PB-212
0	92.97*	250	504	1.63	185.40	182	9	36.4		
0	129.53	113	471	1.03	258.60	254	9	72.1		AC-228
0	185.96*	173	527	1.23	371.60	366	11	54.9		
0	209.33	110	375	1.16	418.39	415	9	66.6		AC-228
1	238.63*	1372	232	1.09	477.06	470	21	6.6	1.47E+00	PB-212
1	241.16*	166	208	1.15	482.13	470	21	38.0		
1	242.11*	154	206	1.25	484.03	470	21	39.9		PB-214
0	270.60	161	343	2.32	541.07	535	13	50.3		RA-223 AC-228 PB-214
0	295.14*	401	280	1.12	590.22	584	12	19.7		
5	298.38	29	60	0.76	596.70	595	11	78.0	5.45E+00	
5	300.54*	59	200	1.64	601.03	595	11	99.0		PB-212
0	327.70	116	234	1.50	655.40	649	12	56.0		
0	338.38	234	312	1.18	676.80	670	14	34.6		AC-228
0	351.84*	768	242	1.28	703.75	697	14	11.3		PB-214
0	462.86	70	162	1.03	926.03	920	12	76.9		AC-228
0	510.74*	175	205	1.90	1021.89	1013	19	45.8		TL-208
0	583.14*	434	107	1.47	1166.86	1161	12	13.8		TL-208
0	609.18*	464	144	1.37	1218.98	1213	11	13.9		BI-214
0	661.32	169	134	1.27	1323.37	1317	14	32.8		CS-137
0	727.26	114	91	1.19	1455.39	1448	14	40.1		BI-212
0	794.94	64	78	1.55	1590.87	1583	12	61.0		AC-228
0	861.39	42	87	1.32	1723.91	1719	13	99.0		TL-208
0	911.01*	279	78	1.76	1823.25	1817	11	16.3		AC-228
0	969.13*	185	77	1.77	1939.60	1933	17	27.1		AC-228
0	1120.30*	114	49	1.63	2242.21	2234	15	33.4		BI-214
0	1460.40*	454	29	1.95	2922.98	2914	20	11.3		K-40
0	1508.81	43	4	5.09	3019.86	3012	16	36.9		BI-214
0	1620.31*	24	3	1.52	3243.03	3238	11	54.9		BI-212
0	1630.27*	27	9	1.68	3262.95	3256	13	63.8		
0	1763.84*	98	5	2.11	3530.29	3521	16	23.7		BI-214

Interference Report

No interference correction performed

Unidentified Energy Lines

It	Energy	Area	Bkgnd	FWHM	Channel	Left	Pw	Cts/Sec	%Err	%Eff	Flags
0	84.22	140	397	1.90	167.88	165	7	1.30E-02	50.7	2.10E+00	
0	92.97	250	504	1.63	185.40	182	9	2.31E-02	36.4	2.43E+00	T
0	185.96	173	527	1.23	371.60	366	11	1.60E-02	54.9	3.03E+00	
1	241.16	166	208	1.15	482.13	470	21	1.54E-02	38.0	2.64E+00	
5	298.38	29	60	0.76	596.70	595	11	2.66E-03	78.0	2.27E+00	
0	327.70	116	234	1.50	655.40	649	12	1.07E-02	56.0	2.11E+00	
0	1630.27	27	9	1.68	3262.95	3256	13	2.46E-03	63.8	6.51E-01	

Flags: "T" = Tentatively associated

---- Identified Nuclides ----

Nuclide	Activity (pCi/GDRY)	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
K-40	4.080E+00	5.383E-01	2.577E-01	1.759E-02	15.832
CS-137	1.114E-01	3.849E-02	2.879E-02	3.093E-03	3.870
TL-208	2.615E-01	4.472E-02	3.054E-02	3.065E-03	8.563
BI-212	5.784E-01	2.384E-01	2.031E-01	1.954E-02	2.848
PB-212	8.083E-01	8.215E-02	4.472E-02	3.451E-03	18.075
BI-214	5.298E-01	9.149E-02	6.145E-02	6.259E-03	8.622
PB-214	6.953E-01	9.612E-02	5.143E-02	4.058E-03	13.519
RA-223	3.249E-01	1.663E-01	1.383E-01	1.273E-02	2.349
AC-228	7.548E-01	1.297E-01	1.088E-01	6.010E-03	6.940
NP-237	4.645E-01	1.602E-01	2.212E-01	3.199E-02	2.100
AM-243	1.670E-01	5.580E-02	5.571E-02	1.169E-02	2.997

---- Non-Identified Nuclides ----

Nuclide	Key-Line Activity (pCi/GDRY)	K.L. Ided	Act error	MDA (pCi/GDRY)	MDA error	Act/MDA
CO-60	2.032E-02		1.629E-02	2.474E-02	1.614E-03	0.821
RH-101	5.946E-03		1.794E-02	3.001E-02	4.655E-03	0.198
SB-125	-3.549E-03		4.527E-02	7.771E-02	6.373E-03	-0.046
EU-155	-1.638E-02		6.191E-02	1.043E-01	1.035E-02	-0.157
PO-209	6.006E-01		2.879E+00	5.229E+00	9.359E-01	0.115
BI-211	-1.318E-02		4.572E-01	8.081E-01	5.888E-02	-0.016
PA-233	-1.234E-03		2.997E-02	5.221E-02	4.384E-03	-0.024
PA-234M	2.016E+00		1.996E+00	3.817E+00	2.194E-01	0.528
TH-234 ✓	1.293E+00 ✓	+	4.949E-01	6.358E-01 ✓	7.418E-02	2.034
U-235	2.700E-02		1.104E-01	1.849E-01	1.291E-02	0.146
NP-236	1.732E-02		3.845E-02	6.334E-02	6.958E-03	0.274
NP-239	-7.235E-02		1.085E-01	1.717E-01	2.316E-02	-0.421
AM-241	-6.002E-03		9.929E-02	1.729E-01	1.374E-02	-0.035
CM-243	3.557E-02		5.547E-02	9.648E-02	1.100E-02	0.369
AM-246	-2.310E-02		4.630E-02	7.750E-02	9.538E-03	-0.298
CF-249	1.269E-03		1.878E-02	3.264E-02	3.148E-03	0.039

Analytical Report For 710156

for

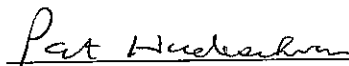
SC&A, Inc.

Project Manager: Cynthia White

Project Name: Cabrera-Schofield CZ

GPL
Laboratories

GPL Laboratories, LLLP certifies that the test results meet all requirements of the
NELAC Standards unless otherwise noted.



Reviewed By,
Project Manager



Approved By,
Laboratory Director



Case Narrative
SC&A, Inc.
Cabrera-Schofield CZ
Work Order: 710156

Reviewed By

The Case Narrative, Chain of Custody, Sample Receipt Checklist, and the cover page of the Sample Analysis Report, are integral parts of GPL Laboratories' report package. If you did not receive all of these documents, please contact GPL immediately.

Sample Receipt

Fifty-two soil samples were received on 10/22/2007. The samples were delivered by Federal Express. Sample receipt conditions and temperatures are documented on the Sample Receipt checklist.

The samples were received pre-dried and homogenized by SC&A. The Pb results presented in this report are not corrected for percent solids.

Sample Analysis

Samples were prepared and analyzed by GPL using the analytical methodologies indicated on the Sample Analysis Summary Report. In some chromatographic analyses, manual integration is used instead of automated integration because it produces more accurate results. All manual integrations are denoted on the sample quantitation report. Analysis results and limits for soil are reported on a dry weight basis unless otherwise specified on the report.

Metals

Fifty-two soil samples were analyzed for lead only by EPA SW846 method.

The samples were assumed 100 percent solid.

The matrix spike, matrix spike duplicate, and serial dilutions were performed on soil samples SB-CZ-SS-2270-ST, SB-CZ-SS-2276-SD, and SB-CZ-SS-2284-ST for lead. The matrix spike was outside of the control limits for lead; all associated data were flagged with an "N". A post digestion analytical spike was performed with a recovery of 104% for lead.

Calibration standards are verified against independent check standards purchased from a commercial vendor of environmental standards.

All GPL QA/QC criteria were met with the exceptions of those mentioned above.

Reviewed By,
Project Manager

Approved By,
Laboratory Director

GPL Laboratories, LLLP

Sample Summary Report

SC&A, Inc.

Work Order: 710156

Client Sample ID	Lab Sample ID	Analytical Method	Matrix	Date Sampled	Date Recieved
SB-CZ-SS-2270-SD	710156-015-015-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2270-ST	710156-001-001-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2271-SD	710156-016-016-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2271-ST	710156-002-002-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2272-SD	710156-017-017-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2272-ST	710156-003-003-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2273-SD	710156-018-018-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2273-ST	710156-004-004-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2274-SD	710156-019-019-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2274-ST	710156-005-005-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2275-SD	710156-020-020-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2275-ST	710156-006-006-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2276-SD	710156-021-021-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2276-ST	710156-007-007-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2277-SD	710156-022-022-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2277-ST	710156-008-008-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2278-SD	710156-023-023-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2278-ST	710156-009-009-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2279-SD	710156-024-024-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2279-ST	710156-010-010-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2280-SD	710156-025-025-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2280-ST	710156-011-011-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2281-SD	710156-026-026-1/1	SW6010C	SOIL	09/27/2007	10/22/2007

GPL Laboratories, LLLP

Sample Summary Report

SC&A, Inc.

Work Order: 710156

Client Sample ID	Lab Sample ID	Analytical Method	Matrix	Date Sampled	Date Recieved
SB-CZ-SS-2281-ST	710156-012-012-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2282-SD	710156-027-027-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2282-ST	710156-013-013-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2283-SD	710156-028-028-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2283-ST	710156-014-014-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2284-SD	710156-029-029-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2284-ST	710156-041-041-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2285-SD	710156-030-030-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2285-ST	710156-042-042-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2286-SD	710156-031-031-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2286-ST	710156-043-043-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2287-SD	710156-032-032-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2287-ST	710156-044-044-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2288-SD	710156-033-033-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2288-ST	710156-045-045-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2289-SD	710156-034-034-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2289-ST	710156-046-046-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2290-SD	710156-035-035-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2290-ST	710156-047-047-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2291-SD	710156-036-036-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2291-ST	710156-048-048-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2292-SD	710156-037-037-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2292-ST	710156-049-049-1/1	SW6010C	SOIL	09/27/2007	10/22/2007

GPL Laboratories, LLLP

Sample Summary Report

SC&A, Inc.

Work Order: 710156

Client Sample ID	Lab Sample ID	Analytical Method	Matrix	Date Sampled	Date Recieved
SB-CZ-SS-2293-SD	710156-038-038-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2293-ST	710156-050-050-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2294-SD	710156-039-039-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2294-ST	710156-051-051-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2295-SD	710156-040-040-1/1	SW6010C	SOIL	09/27/2007	10/22/2007
SB-CZ-SS-2295-ST	710156-052-052-1/1	SW6010C	SOIL	09/27/2007	10/22/2007

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2270-ST	Lab Sample ID:	710156-001-001-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

# Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1) Lead	39.5	D	8.8	10	mg/kg	12/03/07 14:08

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2271-ST	Lab Sample ID:	710156-002-002-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	32.7	D	8.8	10	mg/kg	12/03/07 14:32

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2272-ST	Lab Sample ID:	710156-003-003-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

# Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1) Lead	153	D	8.5	10	mg/kg	12/03/07 14:35

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2273-ST	Lab Sample ID:	710156-004-004-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

# Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1) Lead	53.2	D	8.1	10	mg/kg	12/03/07 14:39

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2274-ST	Lab Sample ID:	710156-005-005-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	46.2	D	8.7	10	mg/kg	12/03/07 14:42

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2275-ST	Lab Sample ID:	710156-006-006-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	48.9	D	8.6	10	mg/kg	12/03/07 14:45

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2276-ST	Lab Sample ID:	710156-007-007-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	54.5	D	8.5	10	mg/kg	12/03/07 14:48

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2277-ST	Lab Sample ID:	710156-008-008-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

# Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1) Lead	115	D	8.6	10	mg/kg	12/03/07 14:59

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2278-ST	Lab Sample ID:	710156-009-009-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	69.8	D	8.3	10	mg/kg	12/03/07 15:02

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2279-ST	Lab Sample ID:	710156-010-010-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

# Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1) Lead	116	D	8.6	10	mg/kg	12/03/07 15:05

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2280-ST	Lab Sample ID:	710156-011-011-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	114	D	8.4	10	mg/kg	12/03/07 15:09

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2281-ST	Lab Sample ID:	710156-012-012-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

# Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1) Lead	57.9	D	8.5	10	mg/kg	12/03/07 15:12

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2282-ST	Lab Sample ID:	710156-013-013-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

# Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1) Lead	81.7	D	8.1	10	mg/kg	12/03/07 15:15

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2283-ST	Lab Sample ID:	710156-014-014-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	54.5	D	8.4	10	mg/kg	12/03/07 15:19

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2270-SD	Lab Sample ID:	710156-015-015-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	22.5	D	8.4	10	mg/kg	12/03/07 15:22

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2271-SD	Lab Sample ID:	710156-016-016-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	15.4	D	8.3	10	mg/kg	12/03/07 15:25

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2272-SD	Lab Sample ID:	710156-017-017-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

# Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1) Lead	19.7	D	8.6	10	mg/kg	12/03/07 15:29

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2273-SD	Lab Sample ID:	710156-018-018-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	30.4	D	8.3	10	mg/kg	12/03/07 15:39

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2274-SD	Lab Sample ID:	710156-019-019-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	22.6	D	8.7	10	mg/kg	12/03/07 15:42

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2275-SD	Lab Sample ID:	710156-020-020-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	29.9	D	8.2	10	mg/kg	12/03/07 15:45

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2276-SD	Lab Sample ID:	710156-021-021-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	12.6	D	8.6	10	mg/kg	12/03/07 15:55

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2277-SD	Lab Sample ID:	710156-022-022-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	68.8	D	8.3	10	mg/kg	12/03/07 16:19

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2278-SD	Lab Sample ID:	710156-023-023-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	18.0	D	8.7	10	mg/kg	12/03/07 16:22

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2279-SD	Lab Sample ID:	710156-024-024-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	40.3	D	8.2	10	mg/kg	12/03/07 16:25

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2280-SD	Lab Sample ID:	710156-025-025-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	35.6	D	8.1	10	mg/kg	12/03/07 16:29

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2281-SD	Lab Sample ID:	710156-026-026-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

# Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1) Lead	13.1	D	8.2	10	mg/kg	12/03/07 16:32

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2282-SD	Lab Sample ID:	710156-027-027-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	34.3	D	8.4	10	mg/kg	12/03/07 16:35

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2283-SD	Lab Sample ID:	710156-028-028-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	54.5	D	8.5	10	mg/kg	12/03/07 16:39

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2284-SD	Lab Sample ID:	710156-029-029-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	17.4	D	7.9	10	mg/kg	12/03/07 16:42

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2285-SD	Lab Sample ID:	710156-030-030-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	28.1	D	8	10	mg/kg	12/03/07 16:45

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2286-SD	Lab Sample ID:	710156-031-031-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	19.4	D	8.1	10	mg/kg	12/03/07 16:49

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2287-SD	Lab Sample ID:	710156-032-032-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	15.0	D	8.2	10	mg/kg	12/03/07 16:59

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2288-SD	Lab Sample ID:	710156-033-033-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	14.4	D	8.3	10	mg/kg	12/03/07 17:02

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2289-SD	Lab Sample ID:	710156-034-034-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	22.3	D	8.1	10	mg/kg	12/03/07 17:06

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2290-SD	Lab Sample ID:	710156-035-035-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	44.6	D	8.5	10	mg/kg	12/03/07 17:09

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2291-SD	Lab Sample ID:	710156-036-036-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	26.6	D	8.1	10	mg/kg	12/03/07 17:12

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2292-SD	Lab Sample ID:	710156-037-037-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	22.1	D	8.6	10	mg/kg	12/03/07 17:16

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2293-SD	Lab Sample ID:	710156-038-038-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	12.3	D	8.1	10	mg/kg	12/03/07 17:19

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2294-SD	Lab Sample ID:	710156-039-039-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	23.0	D	7.9	10	mg/kg	12/03/07 17:22

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2295-SD	Lab Sample ID:	710156-040-040-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	22.1	D	8.4	10	mg/kg	12/03/07 17:26

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2284-ST	Lab Sample ID:	710156-041-041-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	10/24/2007 12:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	42.7	ND	8.7	10	mg/kg	11/07/07 04:28

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2285-ST	Lab Sample ID:	710156-042-042-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	12/10/2007 00:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	20.2	ND	8.6	10	mg/kg	11/07/07 05:29

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2286-ST	Lab Sample ID:	710156-043-043-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	12/10/2007 00:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	25.9	ND	8.3	10	mg/kg	11/07/07 05:37

Alytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2287-ST	Lab Sample ID:	710156-044-044-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	12/10/2007 00:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	23.0	ND	8.1	10	mg/kg	11/07/07 05:46

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2288-ST	Lab Sample ID:	710156-045-045-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	12/10/2007 00:00	Analytical Method:	SW6010C

# Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1) Lead	28.0	ND	8.1	10	mg/kg	11/07/07 05:54

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2289-ST	Lab Sample ID:	710156-046-046-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	12/10/2007 00:00	Analytical Method:	SW6010C

# Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1) Lead	51.8	ND	8.4	10	mg/kg	11/07/07 06:02

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2290-ST	Lab Sample ID:	710156-047-047-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	12/10/2007 00:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	97.1	ND	8.2	10	mg/kg	11/07/07 06:11

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2291-ST	Lab Sample ID:	710156-048-048-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	12/10/2007 00:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	85.5	ND	8.1	10	mg/kg	11/07/07 06:19

Alytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2292-ST	Lab Sample ID:	710156-049-049-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	12/10/2007 00:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	33.2	ND	8.1	10	mg/kg	11/07/07 06:28

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2293-ST	Lab Sample ID:	710156-050-050-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	12/10/2007 00:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	28.9	ND	8.2	10	mg/kg	11/07/07 06:36

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2294-ST	Lab Sample ID:	710156-051-051-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	12/10/2007 00:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	113	ND	8.6	10	mg/kg	11/07/07 06:44

Analytical Summary Report

Client Name:	SC&A, Inc.	Sample Matrix:	SOIL
Client Sample ID:	SB-CZ-SS-2295-ST	Lab Sample ID:	710156-052-052-1/1
Sample Date/Time:	09/27/2007 14:36	Percent Moisture:	NA
Receipt Date/Time:	10/22/2007 14:03	Preparation Method:	SW3050B
Prepared Date/Time:	12/10/2007 00:00	Analytical Method:	SW6010C

#	Parameter	Reported Result	Q	Reporting Limit	Dil Fact	Units	Analysis Date/Time
1)	Lead	226	ND	8.3	10	mg/kg	11/07/07 07:12

Qualifier Definitions

SC&A, Inc.

Work Order: 710156

All Departments

- U Indicates that the compound was analyzed for but not detected
- BQL Below Quantitation Limit

Organics

- B Indicates that the analyte was found in the associated blank as well as in the sample
- D Indicates that the analyte was reported from a diluted analysis
- E Indicates that the concentration detected exceeded the calibration range of the instrument
- J Value is less than the reporting limit but greater than the MDL
- P Indicates that there is greater than 25% difference for detected pesticide/Arochlor results between the two GC columns

Metals

- J Indicates that the reported value was less than the reporting limit but greater than or equal to the IDL/MDL
- E Indicates that the reported value is estimated because of the possible presence of interference (i.e. the serial dilution not within control limits)
- H Indicates that the element was found in the associated blank as well as in the sample and the value is greater than or equal to the reporting limit
- D Indicates that the analyte was reported from a diluted analysis
- N Spiked sample recovery not within control limits
- * Duplicate analysis not within control limits

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Chain of Custody

SC&A, Inc.

SDG: 710156

SC & A CHIEF OF CHEMISTRY 10330104		AND NEWFIELD COURT MONTGOMERY, A. 58-17 10330104		FEDERAL BUREAU OF INVESTIGATION 10330104		LABORATORY USE 10330104	
RECEIVED BY: <i>W. B. B...</i>		RECEIVED BY: <i>W. B. B...</i>		RECEIVED BY: <i>W. B. B...</i>		RECEIVED BY: <i>W. B. B...</i>	
DATE: 12/14/07		DATE: 12/14/07		DATE: 12/14/07		DATE: 12/14/07	
TIME: 10:00 AM		TIME: 10:00 AM		TIME: 10:00 AM		TIME: 10:00 AM	
LOCATION: 10330104		LOCATION: 10330104		LOCATION: 10330104		LOCATION: 10330104	
ANALYST: <i>W. B. B...</i>		ANALYST: <i>W. B. B...</i>		ANALYST: <i>W. B. B...</i>		ANALYST: <i>W. B. B...</i>	
REMARKS: <i>See T.A.T.</i>		REMARKS: <i>See T.A.T.</i>		REMARKS: <i>See T.A.T.</i>		REMARKS: <i>See T.A.T.</i>	
SAMPLE NO.		SAMPLE NO.		SAMPLE NO.		SAMPLE NO.	
1		1		1		1	
2		2		2		2	
3		3		3		3	
4		4		4		4	
5		5		5		5	
6		6		6		6	
7		7		7		7	
8		8		8		8	
9		9		9		9	
10		10		10		10	
11		11		11		11	
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99		99		99		99	
100		100		100		100	

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[illegible]

FedEx Ship Manager | Label 792440682446
 From: Origin: LAGAK 13M272-22H
 Angela Lewis
 800A, Inc.
 100 Kennedy Ct.
 Montgomery, AL 36117
 Ship To: 60064-5010
 Pat Hueschmann
 GPL Laboratories
 770A Corporate Court
 Frederick, MD 21703
 Bill Seaborn
 0201
 7924 4068 2446
 MON - 220CT
 PRIORITY OVERNIGHT
 A2
 IAD
 MD-US
 21703
 FE-FDKA
 Ship Date: 10/07/17
 No. of Pieces: 5/18
 Service: 0000221M17094
 Estimated Delivery Date: 10/08/17
 Delivery Address: BRF Code
 Ref # FCAH2L
 Invo Co #
 PO #
 Dept #
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GPL Laboratories, LLLP

Chain of Custody

SC&A, Inc.

SDG: 710156

GPL Laboratories, LLLP

SAMPLE RECEIPT CHECKLIST

W.C. No: 710156
 Client Name: SC&A
 Case Received: 10-22-07
 Time Received: 1015
 Received By: Walter

Case Name: Fed - EX
 Prepared (Logged In) By: LTJ 10-22-07
 Project: Initials DEB
 Site: _____
 VOA Holding Blank LQ. No: _____

Initial Manifest Present?
 No. 7924 4068-2446
 Shipping Container in Good Condition? ☒
 Custody Seal's Present on Shipping Container?
 Condition: Seal not dated or signed
intact dated and signed ☒

YES	NO	YES	NO
☐	☐	☐	☒
☐	☐	☐	☒
☐	☐	☐	☒
☐	☐	☐	☒
☐	☐	☐	☒

• Usage of Tamper Evident Type _____
 Chain-of-Custody Present? ☒
 Chain-of-Custody Agrees with Sample Labels? ☒
 Chain-of-Custody Signed? ☒
 Packing Present in Shipping Container? ☒
 Type of Packing: Ziploc

VOA Vials Have Zero Headspace?
 if not, smaller or greater than a Green Seal (see comments) ☒
 Preservatives Added to Sample?
 pH Check Required? ☐
 Performed By? _____
 Ice Present in Shipping Container? ☒

Custody seals on Sample Bottles?
 Condition: Good Broken _____
 Total Number of Sample Bottles: 52
 Total Number of Samples: 52
 Samples intact? ☒
 Sufficient Sample Volume for Indicated Test? ☒

Container #	Temp.	Container #	Temp.
<u>1</u>	<u>5</u>		

Project Manager Contacted?
 Name: Pat
 Date Contacted: 10-22-07

Any NO response must be detailed in the comments section below. If items are not applicable to particular samples or containers they should be marked "N/A"

COMMENTS: _____

Checklist Completed By: L.T. Paul
 Date: 10-22-07

ICP Ver: F2V1B

TRACE METALS

GPL Laboratories

USEPA - CLP

COVER PAGE

Lab Name: GPL LABORATORIES, LLLP

Contract: _____

Lab Code: _____

Case No.: _____

NRAS No.: _____

SDG No.: 710156

SOW No.: _____

SW6010C

EPA Sample No.	Lab Sample ID
SB-CZ-SS-2270-SD	S 710156-015-015-1/1
SB-CZ-SS-2270-ST	S 710156-001-001-1/1
SB-CZ-SS-2270-ST MS	SP710156-001-001-1/1
SB-CZ-SS-2270-ST MSD	SD710156-001-001-1/1
SB-CZ-SS-2271-SD	S 710156-016-016-1/1
SB-CZ-SS-2271-ST	S 710156-002-002-1/1
SB-CZ-SS-2272-SD	S 710156-017-017-1/1
SB-CZ-SS-2272-ST	S 710156-003-003-1/1
SB-CZ-SS-2273-SD	S 710156-018-018-1/1
SB-CZ-SS-2273-ST	S 710156-004-004-1/1
SB-CZ-SS-2274-SD	S 710156-019-019-1/1
SB-CZ-SS-2274-ST	S 710156-005-005-1/1
SB-CZ-SS-2275-SD	S 710156-020-020-1/1
SB-CZ-SS-2275-ST	S 710156-006-006-1/1
SB-CZ-SS-2276-SD	S 710156-021-021-1/1
SB-CZ-SS-2276-SD MS	SP710156-021-021-1/1
SB-CZ-SS-2276-SD MSD	SD710156-021-021-1/1
SB-CZ-SS-2276-ST	S 710156-007-007-1/1
SB-CZ-SS-2277-SD	S 710156-022-022-1/1
SB-CZ-SS-2277-ST	S 710156-008-008-1/1
SB-CZ-SS-2278-SD	S 710156-023-023-1/1
SB-CZ-SS-2278-ST	S 710156-009-009-1/1
SB-CZ-SS-2279-SD	S 710156-024-024-1/1
SB-CZ-SS-2279-ST	S 710156-010-010-1/1
SB-CZ-SS-2280-SD	S 710156-025-025-1/1
SB-CZ-SS-2280-ST	S 710156-011-011-1/1
SB-CZ-SS-2281-SD	S 710156-026-026-1/1
SB-CZ-SS-2281-ST	S 710156-012-012-1/1
SB-CZ-SS-2282-SD	S 710156-027-027-1/1
SB-CZ-SS-2282-ST	S 710156-013-013-1/1
SB-CZ-SS-2283-SD	S 710156-028-028-1/1
SB-CZ-SS-2283-ST	S 710156-014-014-1/1
SB-CZ-SS-2284-SD	S 710156-029-029-1/1
SB-CZ-SS-2284-ST	S 710156-041-041-1/1
SB-CZ-SS-2284-ST MS	SP710156-041-041-1/1

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EPA Sample No.	Lab Sample ID
SB-CZ-SS-2284-ST MSD	SD710156-041-041-1/1
SB-CZ-SS-2285-SD	S 710156-030-030-1/1
SB-CZ-SS-2285-ST	S 710156-042-042-1/1
SB-CZ-SS-2286-SD	S 710156-031-031-1/1
SB-CZ-SS-2286-ST	S 710156-043-043-1/1
SB-CZ-SS-2287-SD	S 710156-032-032-1/1
SB-CZ-SS-2287-ST	S 710156-044-044-1/1
SB-CZ-SS-2288-SD	S 710156-033-033-1/1
SB-CZ-SS-2288-ST	S 710156-045-045-1/1
SB-CZ-SS-2289-SD	S 710156-034-034-1/1
SB-CZ-SS-2289-ST	S 710156-046-046-1/1
SB-CZ-SS-2290-SD	S 710156-035-035-1/1
SB-CZ-SS-2290-ST	S 710156-047-047-1/1
SB-CZ-SS-2291-SD	S 710156-036-036-1/1
SB-CZ-SS-2291-ST	S 710156-048-048-1/1
SB-CZ-SS-2292-SD	S 710156-037-037-1/1
SB-CZ-SS-2292-ST	S 710156-049-049-1/1
SB-CZ-SS-2293-SD	S 710156-038-038-1/1
SB-CZ-SS-2293-ST	S 710156-050-050-1/1
SB-CZ-SS-2294-SD	S 710156-039-039-1/1
SB-CZ-SS-2294-ST	S 710156-051-051-1/1
SB-CZ-SS-2295-SD	S 710156-040-040-1/1
SB-CZ-SS-2295-ST	S 710156-052-052-1/1

	ICP-AES	ICP-MS
Were ICP-AES and ICP-MS interelement corrections applied?	(Yes/No) <u>YES</u>	<u>YES</u>
Were ICP-AES and ICP-MS background corrections applied?	(Yes/No) <u>YES</u>	<u>YES</u>
If yes, were raw data generated before application of background corrections?	(Yes/No) <u>NO</u>	<u>YES</u>

Comments:

I certify that this Sample Data Package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy Sample Data Package and in the computer-readable data submitted on diskette (or via an alternate means of electronic transmission, if approved in advance by USEPA) has been authorized by the Laboratory Manager or the Manager's designee, as referred by the following signature.

Signature:



Name:

Richard T. Turner

Date:

12/12/2007

Title:

Asst Lab Director

EPA Sample No.

Lab Sample ID

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GPL Laboratories, LLLP

Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-001-001-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2270-ST	Prep Batch:	101635
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.88	8.8	39.5	D	10	12/03/07 14:08

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

URIT Version 4.6.0

SW6010C

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GPL Laboratories, LLLP

Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-002-002-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2271-ST	Prep Batch:	101635
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.88	8.8	32.7	D	10	12/03/07 14:32

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

URIT Version 4.6.0

SW6010C

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GPL Laboratories, LLLP

Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-003-003-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2272-ST	Prep Batch:	101635
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.85	8.5	153	D	10	12/03/07 14:35

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-004-004-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2273-ST	Prep Batch:	101635
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.81	8.1	53.2	D	10	12/03/07 14:39

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

URIT Version 4.6.0

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GPL Laboratories, LLLP

Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-005-005-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2274-ST	Prep Batch:	101635
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.87	8.7	46.2	D	10	12/03/07 14:42

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

URIT Version 4.6.0

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GPL Laboratories, LLLP

Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-006-006-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2275-ST	Prep Batch:	101635
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.86	8.6	48.9	D	10	12/03/07 14:45

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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GPL Laboratories, LLLP

Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-007-007-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2276-ST	Prep Batch:	101635
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.85	8.5	54.5	D	10	12/03/07 14:48

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-008-008-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2277-ST	Prep Batch:	101635
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.86	8.6	115	D	10	12/03/07 14:59

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-009-009-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2278-ST	Prep Batch:	101635
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.83	8.3	69.8	D	10	12/03/07 15:02

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-010-010-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2279-ST	Prep Batch:	101635
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.86	8.6	116	D	10	12/03/07 15:05

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-011-011-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2280-ST	Prep Batch:	101635
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.84	8.4	114	D	10	12/03/07 15:09

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-012-012-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2281-ST	Prep Batch:	101635
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.85	8.5	57.9	D	10	12/03/07 15:12

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-013-013-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2282-ST	Prep Batch:	101635
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.81	8.1	81.7	D	10	12/03/07 15:15

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-014-014-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2283-ST	Prep Batch:	101635
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.84	8.4	54.5	D	10	12/03/07 15:19

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-015-015-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2270-SD	Prep Batch:	101635
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.84	8.4	22.5	D	10	12/03/07 15:22

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-016-016-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2271-SD	Prep Batch:	101635
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.83	8.3	15.4	D	10	12/03/07 15:25

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-017-017-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2272-SD	Prep Batch:	101635
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.86	8.6	19.7	D	10	12/03/07 15:29

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-018-018-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2273-SD	Prep Batch:	101635
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.83	8.3	30.4	D	10	12/03/07 15:39

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-019-019-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2274-SD	Prep Batch:	101635
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.87	8.7	22.6	D	10	12/03/07 15:42

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-020-020-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2275-SD	Prep Batch:	101635
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.82	8.2	29.9	D	10	12/03/07 15:45

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-021-021-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2276-SD	Prep Batch:	101637
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.86	8.6	12.6	D	10	12/03/07 15:55

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-022-022-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2277-SD	Prep Batch:	101637
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.83	8.3	68.8	D	10	12/03/07 16:19

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-023-023-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2278-SD	Prep Batch:	101637
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.87	8.7	18.0	D	10	12/03/07 16:22

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-024-024-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2279-SD	Prep Batch:	101637
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.82	8.2	40.3	D	10	12/03/07 16:25

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-025-025-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2280-SD	Prep Batch:	101637
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.81	8.1	35.6	D	10	12/03/07 16:29

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-026-026-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2281-SD	Prep Batch:	101637
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.82	8.2	13.1	D	10	12/03/07 16:32

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-027-027-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2282-SD	Prep Batch:	101637
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.84	8.4	34.3	D	10	12/03/07 16:35

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-028-028-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2283-SD	Prep Batch:	101637
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.85	8.5	54.5	D	10	12/03/07 16:39

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-029-029-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2284-SD	Prep Batch:	101637
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.79	7.9	17.4	D	10	12/03/07 16:42

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-030-030-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2285-SD	Prep Batch:	101637
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.80	8.0	28.1	D	10	12/03/07 16:45

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-031-031-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2286-SD	Prep Batch:	101637
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.81	8.1	19.4	D	10	12/03/07 16:49

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-032-032-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2287-SD	Prep Batch:	101637
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.82	8.2	15.0	D	10	12/03/07 16:59

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-033-033-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2288-SD	Prep Batch:	101637
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.83	8.3	14.4	D	10	12/03/07 17:02

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-034-034-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2289-SD	Prep Batch:	101637
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.81	8.1	22.3	D	10	12/03/07 17:06

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-035-035-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2290-SD	Prep Batch:	101637
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.85	8.5	44.6	D	10	12/03/07 17:09

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-036-036-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2291-SD	Prep Batch:	101637
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.81	8.1	26.6	D	10	12/03/07 17:12

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-037-037-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2292-SD	Prep Batch:	101637
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.86	8.6	22.1	D	10	12/03/07 17:16

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-038-038-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2293-SD	Prep Batch:	101637
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.81	8.1	12.3	D	10	12/03/07 17:19

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-039-039-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2294-SD	Prep Batch:	101637
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.79	7.9	23.0	D	10	12/03/07 17:22

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-040-040-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2295-SD	Prep Batch:	101637
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.84	8.4	22.1	D	10	12/03/07 17:26

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-041-041-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2284-ST	Prep Batch:	101636
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	1.4	8.7	42.7	ND	10	11/07/07 4:28

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-042-042-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2285-ST	Prep Batch:	101636
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	1.4	8.6	20.2	ND	10	11/07/07 5:29

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-043-043-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2286-ST	Prep Batch:	101636
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	1.3	8.3	25.9	ND	10	11/07/07 5:37

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

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GPL Laboratories, LLLP

Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-044-044-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2287-ST	Prep Batch:	101636
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	1.3	8.1	23.0	ND	10	11/07/07 5:46

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

URIT Version 4.6.0

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GPL Laboratories, LLLP

Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-045-045-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2288-ST	Prep Batch:	101636
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	1.3	8.1	28.0	ND	10	11/07/07 5:54

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP

Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-046-046-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2289-ST	Prep Batch:	101636
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	1.3	8.4	51.8	ND	10	11/07/07 6:02

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

URIT Version 4.6.0

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GPL Laboratories, LLLP

Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-047-047-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2290-ST	Prep Batch:	101636
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	1.3	8.2	97.1	ND	10	11/07/07 6:11

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

URIT Version 4.6.0

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GPL Laboratories, LLLP

Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-048-048-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2291-ST	Prep Batch:	101636
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	1.3	8.1	85.5	ND	10	11/07/07 6:19

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

URIT Version 4.6.0

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GPL Laboratories, LLLP

Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-049-049-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2292-ST	Prep Batch:	101636
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	1.3	8.1	33.2	ND	10	11/07/07 6:28

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

URIT Version 4.6.0

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GPL Laboratories, LLLP

Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-050-050-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2293-ST	Prep Batch:	101636
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	1.3	8.2	28.9	ND	10	11/07/07 6:36

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

URIT Version 4.6.0

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GPL Laboratories, LLLP

Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-051-051-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2294-ST	Prep Batch:	101636
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	1.4	8.6	113	ND	10	11/07/07 6:44

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

URIT Version 4.6.0

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GPL Laboratories, LLLP

Sample Results

Project:	710156	Matrix:	Soil
Lab Sample ID:	S 710156-052-052-1/1	Percent Moisture:	0.0
Client Sample ID:	SB-CZ-SS-2295-ST	Prep Batch:	101636
Analysis Method:	6010 ICP Analysis	Reporting Units:	mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	1.3	8.3	226	ND	10	11/07/07 7:12

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

URIT Version 4.6.0

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GPL Laboratories, LLLP
Preparation Blank Results

Project: 710156	Matrix: Soil
Lab Sample ID: BLK101635	Percent Moisture: 0.0
Client Sample ID: NA	Prep Batch: 101635
Analysis Method: 6010 ICP Analysis	Reporting Units: mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.10	1.0	0.10	U	1	12/03/07 14:02

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP
Preparation Blank Results

Project: 710156	Matrix: Soil
Lab Sample ID: BLK101636	Percent Moisture: 0.0
Client Sample ID: NA	Prep Batch: 101636
Analysis Method: 6010 ICP Analysis	Reporting Units: mg/kg

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.16	1.0	0.16	UN	1	11/07/07 4:11

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

URIT Version 4.6.0

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GPL Laboratories, LLLP
Preparation Blank Results

Project: <u>710156</u>	Matrix: <u>Soil</u>
Lab Sample ID: <u>BLK101637</u>	Percent Moisture: <u>0.0</u>
Client Sample ID: <u>NA</u>	Prep Batch: <u>101637</u>
Analysis Method: <u>6010 ICP Analysis</u>	Reporting Units: <u>mg/kg</u>

Analyte	WL/ Mass	Method Detection Limit	Reporting Limit	Reported Result	Q	Dilution Factor	Analysis Date/Time
Lead	220.353	0.10	1.0	0.10	U	1	12/03/07 15:49

U = The analyte concentration was less than the MDL

J = Reported value was less than the CRQL but greater than or equal to the MDL

GPL Laboratories, LLLP
Initial Calibration Verification

Project:	710156	Instrument:	ITEVA-Soil
Units:	ug/L	Data File Name:	071203.txt
Standard Source:	AB.ST.	Standard ID:	

Analyte	True	ICV 12/3/2007 1:02:12 PM							
		Found	%R	Found	%R	Found	%R	Found	%R
Lead	400.0	422.36	106						

GPL Laboratories, LLLP
Continuing Calibration Verification

Project:	710156	Instrument:	ITEVA-Soil
Units:	ug/L	Data File Name:	071203.txt
Standard Source:		Standard ID:	

Analyte	True	CCV1		CCV2		CCV3		CCV4	
		12/3/2007		12/3/2007		12/3/2007		12/3/2007	
		1:08:45 PM		1:32:29 PM		2:12:19 PM		2:52:22 PM	
		Found	%R	Found	%R	Found	%R	Found	%R
Lead	500.0	490.49	98	495.19	99	495.88	99	511.62	102

GPL Laboratories, LLLP
Continuing Calibration Verification

Project:	710156	Instrument:	ITEVA-Soil
Units:	ug/L	Data File Name:	071203.txt
Standard Source:		Standard ID:	

Analyte	True	CCV5		CCV6		CCV7		CCV8	
		12/3/2007		12/3/2007		12/3/2007		12/3/2007	
		3:32:30 PM		4:12:18 PM		4:52:37 PM		5:32:47 PM	
		Found	%R	Found	%R	Found	%R	Found	%R
Lead	500.0	507.46	101	512.21	102	515.81	103	516.35	103

GPL Laboratories, LLLP
Continuing Calibration Verification

Project: <u>710156</u>	Instrument: <u>ITEVA-Soil</u>
Units: <u>ug/L</u>	Data File Name: <u>071203.txt</u>
Standard Source: _____	Standard ID: _____

Analyte	True	CCV9 12/3/2007 6:13:14 PM		CCV10 12/3/2007 6:53:20 PM		CCV11 12/3/2007 7:33:23 PM		CCV12 12/3/2007 8:13:46 PM	
		Found	%R	Found	%R	Found	%R	Found	%R
Lead	500.0	523.69	105	1.00		518.11	104	517.71	104

GPL Laboratories, LLLP
Continuing Calibration Verification

Project:	710156	Instrument:	ITEVA-Soil
Units:	ug/L	Data File Name:	071203.txt
Standard Source:		Standard ID:	

Analyte	True	CCV13		CCV14		CCV15		CCV16	
		12/3/2007		12/3/2007		12/3/2007		12/3/2007	
		8:53:51 PM		9:33:52 PM		10:15:00 PM		10:56:03 PM	
		Found	%R	Found	%R	Found	%R	Found	%R
Lead	500.0	517.23	103	527.11	105	523.73	105	524.26	105

GPL Laboratories, LLLP
Continuing Calibration Verification

Project:	710156	Instrument:	ITEVA-Soil
Units:	ug/L	Data File Name:	071203.txt
Standard Source:		Standard ID:	

Analyte	True	CCV17 12/3/2007 11:37:04 PM		CCV18 12/4/2007 12:18:05 AM		CCV19 12/4/2007 12:48:44 AM			
		Found	%R	Found	%R	Found	%R	Found	%R
Lead	500.0	521.45	104	524.30	105	517.98	104		

GPL Laboratories, LLLP
Initial Calibration Verification

Project: 710156	Instrument: V3050
Units: ug/L	Data File Name: 071106V.ARC
Standard Source: ABSOLUTE	Standard ID:

Analyte	True	IVCV 11/6/2007 7:12:00 PM							
		Found	%R	Found	%R	Found	%R	Found	%R
Lead	400.0	418.82	105						

GPL Laboratories, LLLP
Continuing Calibration Verification

Project:	710156	Instrument:	V3050
Units:	ug/L	Data File Name:	071106V.ARC
Standard Source:	HIGH P	Standard ID:	

Analyte	True	CVCCV1		CVCCV2		CVCCV3		CVCCV4	
		11/6/2007		11/6/2007		11/6/2007		11/7/2007	
		7:29:00 PM		8:36:00 PM		10:22:00 PM		12:05:00 AM	
		Found	%R	Found	%R	Found	%R	Found	%R
Lead	500.0	491.66	98	497.21	99	510.25	102	506.75	101

GPL Laboratories, LLLP
Continuing Calibration Verification

Project:	710156	Instrument:	V3050
Units:	ug/L	Data File Name:	071106V.ARC
Standard Source:	HIGH P	Standard ID:	

Analyte	True	CVCCV5		CVCCV6		CVCCV7		CVCCV8	
		11/7/2007		11/7/2007		11/7/2007		11/7/2007	
		1:51:00 AM		3:35:00 AM		5:12:00 AM		6:55:00 AM	
		Found	%R	Found	%R	Found	%R	Found	%R
Lead	500.0	514.00	103	522.60	105	515.34	103	532.94	107

GPL Laboratories, LLLP
Continuing Calibration Verification

Project:	710156	Instrument:	V3050
Units:	ug/L	Data File Name:	071106V.ARC
Standard Source:	HIGH P	Standard ID:	

Analyte	True	CVCCV9 11/7/2007 7:54:00 AM							
		Found	%R	Found	%R	Found	%R	Found	%R
Lead	500.0	525.41	105						

GPL Laboratories, LLLP
Low Level Check Standard

Project:	710156	Instrument:	ITEVA-Soil
Units:	ug/L	Data File Name:	071203.txt
Standard Source:	H.P.	Standard ID:	

Analyte	True	PQL 12/3/2007 1:15:32 PM							
		Found	%R	Found	%R	Found	%R	Found	%R
Lead	10.0	10.18	102						

GPL Laboratories, LLLP
Low Level Check Standard

Project:	710156	Instrument:	V3050
Units:	ug/L	Data File Name:	071106V.ARC
Standard Source:	HIGH P	Standard ID:	

Analyte	True	REPORT LMT 11/6/2007 7:49:00 PM							
		Found	%R	Found	%R	Found	%R	Found	%R
Lead	10.0	9.49	95						

GPL Laboratories, LLLP

Initial Calibration Blanks

Project:	710156	Instrument:	ITEVA-Soil
Units:	ug/L	Data File Name:	071203.txt
Standard Source:		Standard ID:	

Analyte	RL	ICB 12/3/2007 1:05:30 PM							
		Found	Flag	Found	Flag	Found	Flag	Found	Flag
Lead	10.00	1.00	U						

GPL Laboratories, LLLP
Continuing Calibration Blanks

Project:	710156	Instrument:	ITEVA-Soil
Units:	ug/L	Data File Name:	071203.txt
Standard Source:		Standard ID:	

Analyte	RL	CCB1 12/3/2007 1:12:14 PM		CCB2 12/3/2007 1:35:58 PM		CCB3 12/3/2007 2:15:48 PM		CCB4 12/3/2007 2:55:52 PM	
		Found	Flag	Found	Flag	Found	Flag	Found	Flag
Lead	10.00	1.00	U	1.00	U	1.00	U	1.00	U

GPL Laboratories, LLLP
Continuing Calibration Blanks

Project:	710156	Instrument:	ITEVA-Soil
Units:	ug/L	Data File Name:	071203.txt
Standard Source:		Standard ID:	

Analyte	RL	CCB5		CCB6		CCB7		CCB8	
		12/3/2007		12/3/2007		12/3/2007		12/3/2007	
		3:36:00 PM		4:15:47 PM		4:56:06 PM		5:36:16 PM	
		Found	Flag	Found	Flag	Found	Flag	Found	Flag
Lead	10.00	1.00	U	1.00	U	1.06	J	1.00	U

GPL Laboratories, LLLP
Continuing Calibration Blanks

Project:	710156	Instrument:	iTEVA-Soil
Units:	ug/L	Data File Name:	071203.txt
Standard Source:		Standard ID:	

Analyte	RL	CCB9		CCB10		CCB11		CCB12	
		12/3/2007		12/3/2007		12/3/2007		12/3/2007	
		6:16:43 PM		6:56:40 PM		7:36:52 PM		8:17:14 PM	
		Found	Flag	Found	Flag	Found	Flag	Found	Flag
Lead	10.00	1.00	U	1.00	U	1.00	U	1.00	U

GPL Laboratories, LLLP
Continuing Calibration Blanks

Project:	710156	Instrument:	ITEVA-Soil
Units:	ug/L	Data File Name:	071203.txt
Standard Source:		Standard ID:	

Analyte	RL	CCB13		CCB14		CCB15		CCB16	
		12/3/2007		12/3/2007		12/3/2007		12/3/2007	
		8:57:19 PM		9:37:20 PM		10:18:28 PM		10:59:31 PM	
		Found	Flag	Found	Flag	Found	Flag	Found	Flag
Lead	10.00	1.26	J	1.00	U	1.00	U	1.00	U

GPL Laboratories, LLLP
Continuing Calibration Blanks

Project:	710156	Instrument:	ITEVA-Soil
Units:	ug/L	Data File Name:	071203.bxt
Standard Source:		Standard ID:	

Analyte	RL	CCB17 12/3/2007 11:40:32 PM		CCB18 12/4/2007 12:21:36 AM		CCB19 12/4/2007 12:52:12 AM			
		Found	Flag	Found	Flag	Found	Flag	Found	Flag
Lead	10.00	1.00	U	1.00	U	1.00	U		

GPL Laboratories, LLLP

Initial Calibration Blanks

Project:	710156	Instrument:	V3050
Units:	ug/L	Data File Name:	071106V.ARC
Standard Source:		Standard ID:	

Analyte	RL	BIICB 11/6/2007 7:21:00 PM							
		Found	Flag	Found	Flag	Found	Flag	Found	Flag
Lead	10.00	1.60	U						

GPL Laboratories, LLLP
Continuing Calibration Blanks

Project:	710156	Instrument:	V3050
Units:	ug/L	Data File Name:	071106V.ARC
Standard Source:		Standard ID:	

Analyte	RL	BCCCB1		BCCCB2		BCCCB3		BCCCB4	
		11/6/2007		11/6/2007		11/6/2007		11/7/2007	
		7:38:00 PM		8:48:00 PM		10:31:00 PM		12:14:00 AM	
		Found	Flag	Found	Flag	Found	Flag	Found	Flag
Lead	10.00	1.60	U	1.60	U	1.60	U	1.60	U

GPL Laboratories, LLLP
Continuing Calibration Blanks

Project:	710156	Instrument:	V3050
Units:	ug/L	Data File Name:	071106V.ARC
Standard Source:		Standard ID:	

Analyte	RL	BCCCB5		BCCCB6		BCCCB7		BCCCB8	
		11/7/2007		11/7/2007		11/7/2007		11/7/2007	
		2:00:00 AM		3:43:00 AM		5:21:00 AM		7:04:00 AM	
		Found	Flag	Found	Flag	Found	Flag	Found	Flag
Lead	10.00	1.60	U	1.60	U	1.60	U	1.60	U

GPL Laboratories, LLLP
Continuing Calibration Blanks

Project:	710156	Instrument:	V3050
Units:	ug/L	Data File Name:	071106V.ARC
Standard Source:		Standard ID:	

Analyte	RL	BCCCB9 11/7/2007 8:03:00 AM							
		Found	Flag	Found	Flag	Found	Flag	Found	Flag
Lead	10.00	1.60	U						

GPL Laboratories, LLLP
Interference Check Standards

Project:	710156	Instrument:	V3050
Units:	ug/L	Data File Name:	071106V.ARC
Standard Source:	H.P./ AB.ST.	Standard ID:	

Analyte	RL	True		Initial Found				Final Found			
		Sol. A	Sol. B	IAICSA 11/06/07 20:06	%R	IBICSAB 11/06/07 20:14	%R		%R		%R
Lead	10		50	-1.5		45.2	90				

GPL Laboratories, LLLP
Interference Check Standards

Project:	710156	Instrument:	ITEVA
Units:	ug/L	Data File Name:	071203.txt
Standard Source:	H.P./AB.ST.	Standard ID:	

Analyte	RL	True		Initial Found				Final Found			
		Sol. A	Sol. B		%R	ICSAB 12/03/07 13:22	%R		%R		%R
Lead	10		50			46.7	93				

GPL Laboratories, LLLP

Matrix Spike Recovery

Client ID:	SB-CZ-SS-2270-ST MS	Lab Sample ID:	SP710156-001-001-1/1
Project:	710156	Instrument:	ITEVA-Soil
Units:	mg/kg	Data File Name:	071203.txt
Standard Source:	H.P.	Standard ID:	

Analyte	Spiked Sample Result	Sample Result	Spike Added	%R
	12/03/07 14:19	12/03/07 14:08		
Lead	130.07	39.46	86.21	105

GPL Laboratories, LLLP

Matrix Spike Recovery

Client ID:	SB-CZ-SS-2276-SD MS	Lab Sample ID:	SP710156-021-021-1/1
Project:	710156	Instrument:	ITEVA-Soil
Units:	mg/kg	Data File Name:	071203.txt
Standard Source:	H.P.	Standard ID:	

Analyte	Spiked Sample Result	Sample Result	Spike Added	%R
	12/03/07 15:59	12/03/07 15:55		
Lead	105.46	12.64	84.03	110

GPL Laboratories, LLLP

Matrix Spike Recovery

Client ID:	SB-CZ-SS-2284-ST MS	Lab Sample ID:	SP710156-041-041-1/1
Project:	710156	Instrument:	V3050
Units:	mg/kg	Data File Name:	071106V.ARC
Standard Source:	H.P.	Standard ID:	

Analyte	Spiked Sample Result	Sample Result	Spike Added	%R
	11/07/07 04:36	11/07/07 04:28		
Lead	148.08	42.66	84.03	125

GPL Laboratories, LLLP
Matrix Spike Duplicate Recovery

Client ID:	SB-CZ-SS-2270-ST MSD	Lab Sample ID:	SD710156-001-001-1/1
Project:	710156	Instrument:	iTEVA-Soil
Units:	mg/kg	Data File Name:	071203.txt
Standard Source:	H.P.	Standard ID:	

Analyte	Spiked Sample Result	Sample Result	Spike Added	%R
	12/03/07 14:22	12/03/07 14:08		
Lead	130.63	39.46	81.97	111

GPL Laboratories, LLLP
Matrix Spike Duplicate Recovery

Client ID:	SB-CZ-SS-2276-SD MSD	Lab Sample ID:	SD710156-021-021-1/1
Project:	710156	Instrument:	ITEVA-Soil
Units:	mg/kg	Data File Name:	071203.txt
Standard Source:	H.P.	Standard ID:	

Analyte	Spiked Sample Result	Sample Result	Spike Added	%R
	12/03/07 16:02	12/03/07 15:55		
Lead	105.70	12.64	81.97	114

GPL Laboratories, LLLP
Matrix Spike Duplicate Recovery

Client ID:	SB-CZ-SS-2284-ST MSD	Lab Sample ID:	SD710156-041-041-1/1
Project:	710156	Instrument:	V3050
Units:	mg/kg	Data File Name:	071106V.ARC
Standard Source:	H.P.	Standard ID:	

Analyte	Spiked Sample Result	Sample Result	Spike Added	%R
	11/07/07 04:44	11/07/07 04:28		
Lead	125.27	42.66	79.37	104

GPL Laboratories, LLLP
Post Digestion Spike Recovery

Client ID:	SB-CZ-SS-2284-ST	Lab Sample ID:	PS710156-041-041-1/1
Project:	710156	Instrument:	V3050
Units:	ug/L	Data File Name:	071106V.ARC
Standard Source:	H.P.	Standard ID:	

Analyte	Spiked Sample Result	Sample Result	Spike Added	%R
	11/07/07 04:53	11/07/07 04:28		
Lead	132.02	49.06	80	104

GPL Laboratories, LLLP

Duplicates

Client ID:	SB-CZ-SS-2270-ST MSD	Lab Sample ID:	SD710156-001-001-1/1
Project:	710156	Instrument:	ITEVA-Soil
Units:	mg/kg	Data File Name:	071203.txt

Analyte	Original Sample Results	Duplicate Sample Results	RPD	Control Limit	Q
Lead	130.07	130.63	0	20	D

GPL Laboratories, LLLP

Duplicates

Client ID:	SB-CZ-SS-2276-SD MSD	Lab Sample ID:	SD710156-021-021-1/1
Project:	710156	Instrument:	ITEVA-Soil
Units:	mg/kg	Data File Name:	071203.txt

Analyte	Original Sample Results	Duplicate Sample Results	RPD	Control Limit	Q
Lead	105.46	105.70	0	20	D

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Duplicates

Client ID:	SB-CZ-SS-2284-ST MSD	Lab Sample ID:	SD710156-041-041-1/1
Project:	710156	Instrument:	V3050
Units:	mg/kg	Data File Name:	071106V.ARC

Analyte	Original Sample Results	Duplicate Sample Results	RPD	Control Limit	Q
Lead	148.08	125.27	17	20	ND

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Laboratory Control Sample

Project:	710156	Lab Sample ID:	BKS101635
Units:	mg/kg	Instrument:	ITEVA-Soil
		Data File Name:	071203.txt
Standard Source:	H.P.	Standard ID:	

Analyte	Spiked Sample Result 12/03/07 14:05	Spike Added	%R
Lead	105.15	100.00	105

GPL Laboratories, LLLP
Laboratory Control Sample

Project:	710156	Lab Sample ID:	BKS101637
Units:	mg/kg	Instrument:	ITEVA-Soil
		Data File Name:	071203.txt
Standard Source:	H.P.	Standard ID:	

Analyte	Spiked Sample Result	Spike Added	%R
	12/03/07 15:52		
Lead	108.43	100.00	108

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Laboratory Control Sample

Project: 710156 Lab Sample ID: BKS101636
Units: mg/kg Instrument: V3050
Data File Name: 071106V.ARC
Standard Source: HIGH P Standard ID:

Analyte	Spiked Sample Result	Spike Added	%R
	11/07/07 04:19		
Lead	102.22	100.00	102

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Serial Dilutions

Client ID:	SB-CZ-SS-2270-ST	Lab Sample ID:	SE710156-001-001-1/1
Project:	710156	Instrument:	iTEVA-Soil
Units:	ug/L	Data File Name:	071203.txt

Analyte	Sample Result	Serial Dilution Result	Percent Difference	Flag
	12/03/07 14:08	12/03/07 14:29		
Lead	44.59	45.67 J	2	

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Serial Dilutions

Client ID:	<u>SB-CZ-SS-2276-SD</u>	Lab Sample ID:	<u>SE710156-021-021-1/1</u>
Project:	<u>710156</u>	Instrument:	<u>iTEVA-Soil</u>
Units:	<u>ug/L</u>	Data File Name:	<u>071203.txt</u>

Analyte	Sample Result	Serial Dilution Result	Percent Difference	Flag
	12/03/07 15:55	12/03/07 16:09		
Lead	14.67	13.45 J	8	

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Serial Dilutions

Client ID:	SB-CZ-SS-2284-ST	Lab Sample ID:	SE710156-041-041-1/1
Project:	710156	Instrument:	V3050
Units:	ug/L	Data File Name:	071106V.ARC

Analyte	Sample Result	Serial Dilution Result	Percent Difference	Flag
	11/07/07 04:28	11/07/07 05:01		
Lead	49.06	45.65 J	7	

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Detection Limits

Project: 710156 Instrument: ITEVA
 Units: ug/L

Analyte	Wavelength/Mass	Reporting Limit	Method Detection Limit	Date of MDL
Lead	220.353	10.0	1.0	11/30/07

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Detection Limits

Project: 710156 Instrument: V3050
 Units: ug/L

Analyte	Wavelength/Mass	Reporting Limit	Method Detection Limit	Date of MDL
Lead	220.353	10.0	1.6	12/22/06

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 (103)	☐	4	Fe	-0.000015	0.000000	No
			Mn	0.000084	0.000000	No
			Cu	0.000068	0.000000	No
			Ti	-0.000115	0.000000	No
Al 396.152 (85)	☐	5	Mo	0.051689	0.000000	No
			Fe	-0.000009	0.000000	No
			Cu	0.007323	0.000000	No
			Ca	0.000144	0.000000	No
			Na	0.000079	0.000000	No
As 193.759 (474)	☐	8	Al	-0.000182	0.000000	No
			V	-0.004848	0.000000	No
			Fe	-0.000159	0.000000	No
			Mo	-0.000304	0.000000	No
			Ca	-0.000010	0.000000	No
			Cr	0.001489	0.000000	No
			Ti	-0.000159	0.000000	No
			Zn	-0.000199	0.000000	No
B 208.959 (461)	☐	8	Mo	0.040678	0.000000	No
			Zn	0.000094	0.000000	No
			Mn	0.000290	0.000000	No
			Fe	-0.000008	0.000000	No
			Cu	-0.000516	0.000000	No
			Cr	0.001056	0.000000	No
			Co	0.000360	0.000000	No
			Ti	0.000557	0.000000	No
Ba 455.403 (74)	☐	2	Fe	-0.000008	0.000000	No
			Al	0.000003	0.000000	No
Be 313.042 (108)	☐	3	Ti	-0.000402	0.000000	No
			Mo	-0.000038	0.000000	No
			V	0.000959	0.000000	No
			Na	0.000256	0.000000	No
Ca 317.933 (106)	☐	1	Fe	0.000054	0.000000	No
Cd 226.502 (449)	☐	1	Mo	-0.001136	0.000000	No
Co 228.616 (447)	☐	4	Ti	0.001995	0.000000	No
			Fe	-0.000002	0.000000	No
			Mn	0.000069	0.000000	No
			Fe	-0.000006	0.000000	No
Cr 267.716 (126)	☒	6	Mn	0.000116	0.000000	No
			Al	0.000005	0.000000	No
			Cu	0.000075	0.000000	No
			Ca	0.000001	0.000000	No
			Co	0.000063	0.000000	No
			Al	0.000568	0.000000	No
Cu 219.958 (453)	☒	13	Ca	-0.000227	0.000000	No
			Na	-0.000238	0.000000	No
			Mg	-0.000439	0.000000	No
			B	-0.003834	0.000000	No
			Cr	-0.007088	0.000000	No
			Co	-0.011022	0.000000	No
			Mn	-0.004165	0.000000	No
			Mo	-0.011425	0.000000	No
			Ti	-0.011681	0.000000	No
			V	-0.010122	0.000000	No
Cu 221.810 (452)	☒	13	Zn	-0.011796	0.000000	No
			Fe	-0.000223	0.000000	No
			Al	-0.000147	0.000000	No
			Ca	-0.000148	0.000000	No
			Na	-0.000148	0.000000	No
			Mg	-0.000277	0.000000	No
			B	0.014899	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-In-fit?
			Cr	0.020542	0.000000	No
			Co	-0.005233	0.000000	No
			Mn	0.002165	0.000000	No
			Mo	-0.010463	0.000000	No
			Ti	-0.007247	0.000000	No
			V	-0.007106	0.000000	No
			Zn	-0.007367	0.000000	No
			Fe	-0.001067	0.000000	No
Cu 327.396 (103)	☒	13	Al	-0.000143	0.000000	No
			Ca	-0.000123	0.000000	No
			Na	-0.000138	0.000000	No
			Mg	-0.000249	0.000000	No
			B	0.012714	0.000000	No
			Cr	0.000995	0.000000	No
			Co	-0.006974	0.000000	No
			Mn	0.001006	0.000000	No
			Mo	-0.007649	0.000000	No
			Ti	-0.008111	0.000000	No
			V	-0.005533	0.000000	No
			Zn	-0.007110	0.000000	No
			Fe	-0.000017	0.000000	No
Fe 259.940 (130)	☒	5	Na	-0.000014	0.000000	No
			Mn	-0.001399	0.000000	No
			Mo	-0.000705	0.000000	No
			V	-0.000340	0.000000	No
			Zn	0.000310	0.000000	No
K 766.490 (44)	☒	13	Cu	0.003618	0.000000	No
			Mg	0.000031	0.000000	No
			Fe	-0.000501	0.000000	No
			Mn	0.008244	0.000000	No
			Mo	-0.008795	0.000000	No
			Al	0.000271	0.000000	No
			B	0.008494	0.000000	No
			Co	0.005627	0.000000	No
			Ti	0.005118	0.000000	No
			V	-0.004687	0.000000	No
			Zn	0.002340	0.000000	No
			Cr	0.004371	0.000000	No
			Na	0.000003	0.000000	No
Mg 280.270 (120)	☒	11	Ca	-0.000042	0.000000	No
			Na	0.000045	0.000000	No
			B	-0.001335	0.000000	No
			Cr	-0.001430	0.000000	No
			Co	-0.001417	0.000000	No
			Mn	-0.001523	0.000000	No
			Mo	-0.001745	0.000000	No
			Ti	-0.001522	0.000000	No
			V	-0.000962	0.000000	No
			Zn	-0.001715	0.000000	No
			Fe	-0.000034	0.000000	No
Mg 285.213 (118)	☒	11	Ca	-0.000042	0.000000	No
			Na	0.000044	0.000000	No
			B	-0.001799	0.000000	No
			Cr	-0.001797	0.000000	No
			Co	-0.001949	0.000000	No
			Mn	-0.001953	0.000000	No
			Mo	-0.002286	0.000000	No
			Ti	-0.002038	0.000000	No
			V	-0.002423	0.000000	No
			Zn	-0.002295	0.000000	No

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Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			Fe	-0.000527	0.000000	No
Mn 257.610 (131)	☒	5	Mg	0.000024	0.000000	No
			Fe	-0.000014	0.000000	No
			Al	-0.000002	0.000000	No
			Cr	-0.000058	0.000000	No
			V	-0.000028	0.000000	No
Mo 202.030 (457)	☒	8	Fe	-0.000006	0.000000	No
			Mn	-0.000090	0.000000	No
			Al	-0.000001	0.000000	No
			Mg	-0.000002	0.000000	No
			Cr	0.000043	0.000000	No
			Ti	0.000030	0.000000	No
			V	-0.000131	0.000000	No
			Zn	-0.000254	0.000000	No
Na 589.592 (57)	☒	4	Mg	0.000593	0.000000	No
			Cr	0.010584	0.000000	No
			Zn	0.005397	0.000000	No
			Fe	-0.000012	0.000000	No
Ni 231.604 (445)	☒	8	Fe	-0.000062	0.000000	No
			Mo	0.001560	0.000000	No
			Al	0.000002	0.000000	No
			Mg	0.000003	0.000000	No
			Cr	-0.000055	0.000000	No
			Co	0.000472	0.000000	No
			Mn	0.000095	0.000000	No
			Zn	0.000064	0.000000	No
Pb 220.353 (453)	☒	10	Al	0.000241	0.000000	No
			Cu	0.002348	0.000000	No
			Mg	0.000008	0.000000	No
			Mo	-0.001992	0.000000	No
			Fe	0.000027	0.000000	No
			Mn	0.000149	0.000000	No
			Cr	0.000109	0.000000	No
			Ca	-0.000013	0.000000	No
			Na	-0.000002	0.000000	No
			Zn	0.000108	0.000000	No
Sb 206.833 (453)	☒	9	Cr	0.017119	0.000000	No
			V	-0.001556	0.000000	No
			Fe	0.000034	0.000000	No
			Mn	0.000000	0.000000	No
			Mo	-0.005080	0.000000	No
			Ca	0.000003	0.000000	No
			Co	0.000139	0.000000	No
			Ti	0.000447	0.000000	No
			Zn	0.000099	0.000000	No
Se 196.090 (472)	☒	14	Al	0.000005	0.000000	No
			Mn	0.000837	0.000000	No
			Fe	-0.000160	0.000000	No
			Co	-0.000157	0.000000	No
			Cu	0.000107	0.000000	No
			Mg	-0.000003	0.000000	No
			Cr	-0.000048	0.000000	No
			Mo	-0.000060	0.000000	No
			Ca	-0.000007	0.000000	No
			Na	-0.000006	0.000000	No
			B	-0.000110	0.000000	No
			Ti	-0.000057	0.000000	No
			V	-0.000070	0.000000	No
			Zn	-0.000068	0.000000	No
Si 251.611 (134)	☒	10	Ca	0.000006	0.000000	No

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Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			Na	0.000049	0.000000	No
			Mg	0.000036	0.000000	No
			B	-0.000732	0.000000	No
			Mn	0.000830	0.000000	No
			Mo	0.009831	0.000000	No
			Ti	0.006504	0.000000	No
			V	0.000256	0.000000	No
			Zn	0.000733	0.000000	No
			Fe	-0.000083	0.000000	No
Sn 189.989 (477)	☒	6	Fe	0.000006	0.000000	No
			Ca	-0.000003	0.000000	No
			Na	0.000003	0.000000	No
			Mg	0.000004	0.000000	No
			Ti	-0.001478	0.000000	No
			Zn	0.000107	0.000000	No
Sr 407.771 (83)	☒	1	Ca	0.000009	0.000000	No
Sr 421.552 (80)	☒	None				
Te 214.281 (457)	☒	11	Mo	0.000341	0.000000	No
			Ti	0.002474	0.000000	No
			V	-0.171245	0.000000	No
			Zn	-0.002905	0.000000	No
			Fe	-0.000278	0.000000	No
			Al	-0.000014	0.000000	No
			Mg	0.000003	0.000000	No
			Ca	0.000007	0.000000	No
			Na	0.000003	0.000000	No
			B	0.000321	0.000000	No
			Mn	-0.000102	0.000000	No
Ti 334.941 (101)	☒	5	Fe	-0.000000	0.000000	No
			Mn	0.000000	0.000000	No
			Mg	-0.000004	0.000000	No
			Cr	0.000161	0.000000	No
			Ca	0.000004	0.000000	No
Ti 190.856 (477)	☒	10	Co	0.005004	0.000000	No
			Mo	-0.007135	0.000000	No
			Ti	-0.001460	0.000000	No
			V	-0.020145	0.000000	No
			Mn	0.001894	0.000000	No
			Fe	-0.000038	0.000000	No
			Cu	-0.000070	0.000000	No
			Cr	0.000181	0.000000	No
			Ca	0.000003	0.000000	No
			Zn	-0.000050	0.000000	No
V 292.402 (115)	☒	8	Cr	-0.003158	0.000000	No
			Mo	-0.008495	0.000000	No
			Ti	0.000800	0.000000	No
			Fe	0.000008	0.000000	No
			Mn	-0.000485	0.000000	No
			Cu	0.000072	0.000000	No
			Mg	-0.000002	0.000000	No
			Zn	0.000078	0.000000	No
Y 224.306 (450)*	☒	None				
Y 377.433 (89)*	☒	None				
Y 377.433 (89)2*	☒	None				
Zn 213.856 (458)	☒	12	Fe	0.000080	0.000000	No
			Mn	0.000094	0.000000	No
			Mg	0.000036	0.000000	No
			Cu	0.000365	0.000000	No
			Ca	0.000003	0.000000	No
			Na	0.000002	0.000000	No

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Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			B	0.000128	0.000000	No
			Cr	0.000161	0.000000	No
			Co	0.000113	0.000000	No
			Mo	-0.000118	0.000000	No
			Ti	-0.000755	0.000000	No
			V	0.000129	0.000000	No
Zr 343.823 (98)	☒	1	Fe	0.000031	0.000000	No

GPL Laboratories, LLLP
Linear Dynamic Ranges

Project: 710156 Instrument: iTEVA-Soil
Units: ug/L

Analyte	Wavelength/Mass	Linear Dynamic Range	Date of LDR
Lead	220.353	22000	11/30/07

GPL Laboratories, LLLP
Linear Dynamic Ranges

Project: 710156 Instrument: V3050
Units: ug/L

Analyte	Wavelength/Mass	Linear Dynamic Range	Date of LDR
Lead	220.353	22000	03/09/07

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Preparation Log

Project: 710156 Instrument: ITEVA-Soil
 Prep Method: Batch Number: 101635

Lab Sample ID	Client ID	Preparation Date	Initial Weight (grams)	Final Volume (ml)
BLK101635	BLK101635	10/24/2007	1.00	100
BKS101635	BKS101635	10/24/2007	1.00	100
S 710156-015-015-1/1	SB-CZ-SS-2270-SD	10/24/2007	1.19	100
S 710156-001-001-1/1	SB-CZ-SS-2270-ST	10/24/2007	1.13	100
SP710156-001-001-1/1	SB-CZ-SS-2270-ST MS	10/24/2007	1.16	100
S 710156-016-016-1/1	SB-CZ-SS-2271-SD	10/24/2007	1.21	100
S 710156-002-002-1/1	SB-CZ-SS-2271-ST	10/24/2007	1.14	100
S 710156-017-017-1/1	SB-CZ-SS-2272-SD	10/24/2007	1.16	100
S 710156-003-003-1/1	SB-CZ-SS-2272-ST	10/24/2007	1.18	100
S 710156-018-018-1/1	SB-CZ-SS-2273-SD	10/24/2007	1.21	100
S 710156-004-004-1/1	SB-CZ-SS-2273-ST	10/24/2007	1.24	100
S 710156-019-019-1/1	SB-CZ-SS-2274-SD	10/24/2007	1.15	100
S 710156-005-005-1/1	SB-CZ-SS-2274-ST	10/24/2007	1.15	100
S 710156-020-020-1/1	SB-CZ-SS-2275-SD	10/24/2007	1.22	100
S 710156-006-006-1/1	SB-CZ-SS-2275-ST	10/24/2007	1.16	100
S 710156-007-007-1/1	SB-CZ-SS-2276-ST	10/24/2007	1.18	100
S 710156-008-008-1/1	SB-CZ-SS-2277-ST	10/24/2007	1.16	100
S 710156-009-009-1/1	SB-CZ-SS-2278-ST	10/24/2007	1.21	100
S 710156-010-010-1/1	SB-CZ-SS-2279-ST	10/24/2007	1.16	100
S 710156-011-011-1/1	SB-CZ-SS-2280-ST	10/24/2007	1.19	100
S 710156-012-012-1/1	SB-CZ-SS-2281-ST	10/24/2007	1.18	100
S 710156-013-013-1/1	SB-CZ-SS-2282-ST	10/24/2007	1.23	100
S 710156-014-014-1/1	SB-CZ-SS-2283-ST	10/24/2007	1.19	100
SD710156-001-001-1/1	SB-CZ-SS-2270-ST MSD	10/24/2007	1.22	100

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Preparation Log

Project: 710156 Instrument: ITEVA-Soil
 Prep Method: Batch Number: 101637

Lab Sample ID	Client ID	Preparation Date	Initial Weight (grams)	Final Volume (ml)
BLK101637	BLK101637	10/24/2007	1.00	100
BKS101637	BKS101637	10/24/2007	1.00	100
S 710156-021-021-1/1	SB-CZ-SS-2276-SD	10/24/2007	1.16	100
SP710156-021-021-1/1	SB-CZ-SS-2276-SD MS	10/24/2007	1.19	100
S 710156-022-022-1/1	SB-CZ-SS-2277-SD	10/24/2007	1.21	100
S 710156-023-023-1/1	SB-CZ-SS-2278-SD	10/24/2007	1.15	100
S 710156-024-024-1/1	SB-CZ-SS-2279-SD	10/24/2007	1.22	100
S 710156-025-025-1/1	SB-CZ-SS-2280-SD	10/24/2007	1.23	100
S 710156-026-026-1/1	SB-CZ-SS-2281-SD	10/24/2007	1.22	100
S 710156-027-027-1/1	SB-CZ-SS-2282-SD	10/24/2007	1.19	100
S 710156-028-028-1/1	SB-CZ-SS-2283-SD	10/24/2007	1.18	100
S 710156-029-029-1/1	SB-CZ-SS-2284-SD	10/24/2007	1.27	100
S 710156-030-030-1/1	SB-CZ-SS-2285-SD	10/24/2007	1.25	100
S 710156-031-031-1/1	SB-CZ-SS-2286-SD	10/24/2007	1.23	100
S 710156-032-032-1/1	SB-CZ-SS-2287-SD	10/24/2007	1.22	100
S 710156-033-033-1/1	SB-CZ-SS-2288-SD	10/24/2007	1.20	100
S 710156-034-034-1/1	SB-CZ-SS-2289-SD	10/24/2007	1.23	100
S 710156-035-035-1/1	SB-CZ-SS-2290-SD	10/24/2007	1.18	100
S 710156-036-036-1/1	SB-CZ-SS-2291-SD	10/24/2007	1.24	100
S 710156-037-037-1/1	SB-CZ-SS-2292-SD	10/24/2007	1.16	100
S 710156-038-038-1/1	SB-CZ-SS-2293-SD	10/24/2007	1.24	100
S 710156-039-039-1/1	SB-CZ-SS-2294-SD	10/24/2007	1.26	100
S 710156-040-040-1/1	SB-CZ-SS-2295-SD	10/24/2007	1.19	100
SD710156-021-021-1/1	SB-CZ-SS-2276-SD MSD	10/24/2007	1.22	100

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Preparation Log

Project:	710156	Instrument:	V3050
Prep Method:		Batch Number:	101636

Lab Sample ID	Client ID	Preparation Date	Initial Weight (grams)	Final Volume (ml)
BLK101636	BLK101636	10/24/2007	1.00	100
BKS101636	BKS101636	10/24/2007	1.00	100
S 710156-041-041-1/1	SB-CZ-SS-2284-ST	10/24/2007	1.15	100
SP710156-041-041-1/1	SB-CZ-SS-2284-ST MS	10/24/2007	1.19	100
S 710156-042-042-1/1	SB-CZ-SS-2285-ST	12/10/2007	1.16	100
S 710156-043-043-1/1	SB-CZ-SS-2286-ST	12/10/2007	1.20	100
S 710156-044-044-1/1	SB-CZ-SS-2287-ST	12/10/2007	1.23	100
S 710156-045-045-1/1	SB-CZ-SS-2288-ST	12/10/2007	1.23	100
S 710156-046-046-1/1	SB-CZ-SS-2289-ST	12/10/2007	1.19	100
S 710156-047-047-1/1	SB-CZ-SS-2290-ST	12/10/2007	1.22	100
S 710156-048-048-1/1	SB-CZ-SS-2291-ST	12/10/2007	1.23	100
S 710156-049-049-1/1	SB-CZ-SS-2292-ST	12/10/2007	1.23	100
S 710156-050-050-1/1	SB-CZ-SS-2293-ST	12/10/2007	1.22	100
S 710156-051-051-1/1	SB-CZ-SS-2294-ST	12/10/2007	1.16	100
S 710156-052-052-1/1	SB-CZ-SS-2295-ST	12/10/2007	1.21	100
SD710156-041-041-1/1	SB-CZ-SS-2284-ST MSD	10/24/2007	1.26	100

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Analysis Run Log

Project: 710156 Instrument: ITEVA-Soil
Data File Name: 071203.txt

Sample Name	Client ID	Analysis Date	Analysis Time
STD0		12/03/07	12:39 PM
STD1		12/03/07	12:42 PM
STD2		12/03/07	12:45 PM
STD3		12/03/07	12:48 PM
STD4		12/03/07	12:52 PM
STD5		12/03/07	12:55 PM
STD6		12/03/07	12:58 PM
ICV		12/03/07	1:02 PM
ICB		12/03/07	1:05 PM
CCV1		12/03/07	1:08 PM
CCB1		12/03/07	1:12 PM
PQL		12/03/07	1:15 PM
ICSA		12/03/07	1:18 PM
ICSAB		12/03/07	1:22 PM
CCV2		12/03/07	1:32 PM
CCB2		12/03/07	1:35 PM
BLK101635	BLK101635	12/03/07	2:02 PM
BKS101635	BKS101635	12/03/07	2:05 PM
S 710156-001-001-1/1	SB-CZ-SS-2270-ST	12/03/07	2:08 PM
CCV3		12/03/07	2:12 PM
CCB3		12/03/07	2:15 PM
SP710156-001-001-1/1	SB-CZ-SS-2270-ST MS	12/03/07	2:19 PM
SD710156-001-001-1/1	SB-CZ-SS-2270-ST MSD	12/03/07	2:22 PM
SE710156-001-001-1/1	SB-CZ-SS-2270-ST	12/03/07	2:29 PM
S 710156-002-002-1/1	SB-CZ-SS-2271-ST	12/03/07	2:32 PM
S 710156-003-003-1/1	SB-CZ-SS-2272-ST	12/03/07	2:35 PM
S 710156-004-004-1/1	SB-CZ-SS-2273-ST	12/03/07	2:39 PM
S 710156-005-005-1/1	SB-CZ-SS-2274-ST	12/03/07	2:42 PM
S 710156-006-006-1/1	SB-CZ-SS-2275-ST	12/03/07	2:45 PM
S 710156-007-007-1/1	SB-CZ-SS-2276-ST	12/03/07	2:48 PM
CCV4		12/03/07	2:52 PM
CCB4		12/03/07	2:55 PM
S 710156-008-008-1/1	SB-CZ-SS-2277-ST	12/03/07	2:59 PM
S 710156-009-009-1/1	SB-CZ-SS-2278-ST	12/03/07	3:02 PM
S 710156-010-010-1/1	SB-CZ-SS-2279-ST	12/03/07	3:05 PM
S 710156-011-011-1/1	SB-CZ-SS-2280-ST	12/03/07	3:09 PM
S 710156-012-012-1/1	SB-CZ-SS-2281-ST	12/03/07	3:12 PM
S 710156-013-013-1/1	SB-CZ-SS-2282-ST	12/03/07	3:15 PM
S 710156-014-014-1/1	SB-CZ-SS-2283-ST	12/03/07	3:19 PM

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Analysis Run Log

Project: 710156 Instrument: ITEVA-Soil
Data File Name: 071203.txt

Sample Name	Client ID	Analysis Date	Analysis Time
S 710156-015-015-1/1	SB-CZ-SS-2270-SD	12/03/07	3:22 PM
S 710156-016-016-1/1	SB-CZ-SS-2271-SD	12/03/07	3:25 PM
S 710156-017-017-1/1	SB-CZ-SS-2272-SD	12/03/07	3:29 PM
CCV5		12/03/07	3:32 PM
CCB5		12/03/07	3:36 PM
S 710156-018-018-1/1	SB-CZ-SS-2273-SD	12/03/07	3:39 PM
S 710156-019-019-1/1	SB-CZ-SS-2274-SD	12/03/07	3:42 PM
S 710156-020-020-1/1	SB-CZ-SS-2275-SD	12/03/07	3:45 PM
BLK101637	BLK101637	12/03/07	3:49 PM
BKS101637	BKS101637	12/03/07	3:52 PM
S 710156-021-021-1/1	SB-CZ-SS-2276-SD	12/03/07	3:55 PM
SP710156-021-021-1/1	SB-CZ-SS-2276-SD MS	12/03/07	3:59 PM
SD710156-021-021-1/1	SB-CZ-SS-2276-SD MSD	12/03/07	4:02 PM
SE710156-021-021-1/1	SB-CZ-SS-2276-SD	12/03/07	4:09 PM
CCV6		12/03/07	4:12 PM
CCB6		12/03/07	4:15 PM
S 710156-022-022-1/1	SB-CZ-SS-2277-SD	12/03/07	4:19 PM
S 710156-023-023-1/1	SB-CZ-SS-2278-SD	12/03/07	4:22 PM
S 710156-024-024-1/1	SB-CZ-SS-2279-SD	12/03/07	4:25 PM
S 710156-025-025-1/1	SB-CZ-SS-2280-SD	12/03/07	4:29 PM
S 710156-026-026-1/1	SB-CZ-SS-2281-SD	12/03/07	4:32 PM
S 710156-027-027-1/1	SB-CZ-SS-2282-SD	12/03/07	4:35 PM
S 710156-028-028-1/1	SB-CZ-SS-2283-SD	12/03/07	4:39 PM
S 710156-029-029-1/1	SB-CZ-SS-2284-SD	12/03/07	4:42 PM
S 710156-030-030-1/1	SB-CZ-SS-2285-SD	12/03/07	4:45 PM
S 710156-031-031-1/1	SB-CZ-SS-2286-SD	12/03/07	4:49 PM
CCV7		12/03/07	4:52 PM
CCB7		12/03/07	4:56 PM
S 710156-032-032-1/1	SB-CZ-SS-2287-SD	12/03/07	4:59 PM
S 710156-033-033-1/1	SB-CZ-SS-2288-SD	12/03/07	5:02 PM
S 710156-034-034-1/1	SB-CZ-SS-2289-SD	12/03/07	5:06 PM
S 710156-035-035-1/1	SB-CZ-SS-2290-SD	12/03/07	5:09 PM
S 710156-036-036-1/1	SB-CZ-SS-2291-SD	12/03/07	5:12 PM
S 710156-037-037-1/1	SB-CZ-SS-2292-SD	12/03/07	5:16 PM
S 710156-038-038-1/1	SB-CZ-SS-2293-SD	12/03/07	5:19 PM
S 710156-039-039-1/1	SB-CZ-SS-2294-SD	12/03/07	5:22 PM
S 710156-040-040-1/1	SB-CZ-SS-2295-SD	12/03/07	5:26 PM
CCV8		12/03/07	5:32 PM
CCB8		12/03/07	5:36 PM

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Analysis Run Log

Project:	710156	Instrument:	ITEVA-Soil
		Data File Name:	071203.txt

Sample Name	Client ID	Analysis Date	Analysis Time
CCV9		12/03/07	6:13 PM
CCB9		12/03/07	6:16 PM
CCV10		12/03/07	6:53 PM
CCB10		12/03/07	6:56 PM
CCV11		12/03/07	7:33 PM
CCB11		12/03/07	7:36 PM
CCV12		12/03/07	8:13 PM
CCB12		12/03/07	8:17 PM
CCV13		12/03/07	8:53 PM
CCB13		12/03/07	8:57 PM
CCV14		12/03/07	9:33 PM
CCB14		12/03/07	9:37 PM
CCV15		12/03/07	10:15 PM
CCB15		12/03/07	10:18 PM
CCV16		12/03/07	10:56 PM
CCB16		12/03/07	10:59 PM
CCV17		12/03/07	11:37 PM
CCB17		12/03/07	11:40 PM
CCV18		12/04/07	12:18 AM
CCB18		12/04/07	12:21 AM
CCV19		12/04/07	12:48 AM
CCB19		12/04/07	12:52 AM

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Analysis Run Log

Project: 710156 Instrument: V3050
Data File Name: 071106V.ARC

Sample Name	Client ID	Analysis Date	Analysis Time
STD0		11/06/07	6:33 PM
STD1		11/06/07	6:41 PM
STD2		11/06/07	6:49 PM
STD3		11/06/07	6:58 PM
STD4		11/06/07	7:05 PM
IVICV		11/06/07	7:12 PM
BIICB		11/06/07	7:21 PM
CVCCV1		11/06/07	7:29 PM
BCCCB1		11/06/07	7:38 PM
REPORT LMT		11/06/07	7:49 PM
IAICSA		11/06/07	8:06 PM
IBICSAB		11/06/07	8:14 PM
CVCCV2		11/06/07	8:36 PM
BCCCB2		11/06/07	8:48 PM
CVCCV3		11/06/07	10:22 PM
BCCCB3		11/06/07	10:31 PM
CVCCV4		11/07/07	12:05 AM
BCCCB4		11/07/07	12:14 AM
CVCCV5		11/07/07	1:51 AM
BCCCB5		11/07/07	2:00 AM
CVCCV6		11/07/07	3:35 AM
BCCCB6		11/07/07	3:43 AM
BLK101636	BLK101636	11/07/07	4:11 AM
BKS101636	BKS101636	11/07/07	4:19 AM
S 710156-041-041-1/1	SB-CZ-SS-2284-ST	11/07/07	4:28 AM
SP710156-041-041-1/1	SB-CZ-SS-2284-ST MS	11/07/07	4:36 AM
SD710156-041-041-1/1	SB-CZ-SS-2284-ST MSD	11/07/07	4:44 AM
PS710156-041-041-1/1	SB-CZ-SS-2284-ST	11/07/07	4:53 AM
SE710156-041-041-1/1	SB-CZ-SS-2284-ST	11/07/07	5:01 AM
CVCCV7		11/07/07	5:12 AM
BCCCB7		11/07/07	5:21 AM
S 710156-042-042-1/1	SB-CZ-SS-2285-ST	11/07/07	5:29 AM
S 710156-043-043-1/1	SB-CZ-SS-2286-ST	11/07/07	5:37 AM
S 710156-044-044-1/1	SB-CZ-SS-2287-ST	11/07/07	5:46 AM
S 710156-045-045-1/1	SB-CZ-SS-2288-ST	11/07/07	5:54 AM
S 710156-046-046-1/1	SB-CZ-SS-2289-ST	11/07/07	6:02 AM
S 710156-047-047-1/1	SB-CZ-SS-2290-ST	11/07/07	6:11 AM
S 710156-048-048-1/1	SB-CZ-SS-2291-ST	11/07/07	6:19 AM
S 710156-049-049-1/1	SB-CZ-SS-2292-ST	11/07/07	6:28 AM

GPL Laboratories, LLLP

Analysis Run Log

Project: 710156 Instrument: V3050
Data File Name: 071106V.ARC

Sample Name	Client ID	Analysis Date	Analysis Time
S 710156-050-050-1/1	SB-CZ-SS-2293-ST	11/07/07	6:36 AM
S 710156-051-051-1/1	SB-CZ-SS-2294-ST	11/07/07	6:44 AM
CVCCV8		11/07/07	6:55 AM
BCCCB8		11/07/07	7:04 AM
S 710156-052-052-1/1	SB-CZ-SS-2295-ST	11/07/07	7:12 AM
CVCCV9		11/07/07	7:54 AM
BCCCB9		11/07/07	8:03 AM

Instrument ID: Trace (375590) Inst. Method: TraceV2 Nebulizer: Carr. cell Analytical Batch No: 671106V
 Profile: - 0.0/2 Hg Intensity: 51441 AI Setting: 330

117 of 386

Workorder	Client	Prep. Seq.	Batch #	Matrix s/w/e	Prep. Date	Method	Comments / Dilution
7/0176	GfP		071	S	11-04-07	1119041	Re Main
7/1002	Parson		069	Y		1119041	Re Main & SH.T.
7/1012	Artcad: S	10R46	077	E	11-06-07	60108	
7/1014	↓	↓	↓	↓	↓	↓	
7/1016	SCBA	101636	029	S	10-24-07	60106	10x alk Phos only

Source Solution Numbers

Post Digestion Spikes

Slits	Number	Slits	Number	Spike Samples:	9.9 mls of sample with 0.1 mls of 4N HCl
S0	129-116-10	ICV	41919		7/0170-008-078-25
S1	41930	CCV	42032		7/1002-001-001-15
S2	41931	ICSA	42009		7/0176-043-041-15
S3	41944	ICSAB	42010		
S4	42097	CRI	41804		
S5	—	Low Ck	41820		
Ints	41924	LR	41844		

Analyst: Re Date: 7/10/2007 Reviewed: KA Date: 11-7-07

ICP ANALYSIS LOG

GPL - Maryland Laboratory

ICPST Analysis Log

GPI - Maryland Laboratory					GPI - Maryland Laboratory				
Seq#	Sample Name	TOI	Date	Time	Seq#	Sample Name	TOI	Date	Time
15120	11062307 10:33	1	1/10/2007	10:33	15120	11062307 10:33	1	1/10/2007	10:33
25120	11062307 10:41	1	1/10/2007	10:41	25120	11062307 10:41	1	1/10/2007	10:41
35120	11062307 10:46	1	1/10/2007	10:46	35120	11062307 10:46	1	1/10/2007	10:46
45120	11062307 10:50	1	1/10/2007	10:50	45120	11062307 10:50	1	1/10/2007	10:50
55120	11062307 10:55	1	1/10/2007	10:55	55120	11062307 10:55	1	1/10/2007	10:55
65120	11062307 10:57	1	1/10/2007	10:57	65120	11062307 10:57	1	1/10/2007	10:57
75120	11062307 10:57	1	1/10/2007	10:57	75120	11062307 10:57	1	1/10/2007	10:57
85120	11062307 10:57	1	1/10/2007	10:57	85120	11062307 10:57	1	1/10/2007	10:57
95120	11062307 10:57	1	1/10/2007	10:57	95120	11062307 10:57	1	1/10/2007	10:57
105120	11062307 10:57	1	1/10/2007	10:57	105120	11062307 10:57	1	1/10/2007	10:57
115120	11062307 10:57	1	1/10/2007	10:57	115120	11062307 10:57	1	1/10/2007	10:57
125120	11062307 10:57	1	1/10/2007	10:57	125120	11062307 10:57	1	1/10/2007	10:57
135120	11062307 10:57	1	1/10/2007	10:57	135120	11062307 10:57	1	1/10/2007	10:57
145120	11062307 10:57	1	1/10/2007	10:57	145120	11062307 10:57	1	1/10/2007	10:57
155120	11062307 10:57	1	1/10/2007	10:57	155120	11062307 10:57	1	1/10/2007	10:57
165120	11062307 10:57	1	1/10/2007	10:57	165120	11062307 10:57	1	1/10/2007	10:57
175120	11062307 10:57	1	1/10/2007	10:57	175120	11062307 10:57	1	1/10/2007	10:57
185120	11062307 10:57	1	1/10/2007	10:57	185120	11062307 10:57	1	1/10/2007	10:57
195120	11062307 10:57	1	1/10/2007	10:57	195120	11062307 10:57	1	1/10/2007	10:57
205120	11062307 10:57	1	1/10/2007	10:57	205120	11062307 10:57	1	1/10/2007	10:57
215120	11062307 10:57	1	1/10/2007	10:57	215120	11062307 10:57	1	1/10/2007	10:57
225120	11062307 10:57	1	1/10/2007	10:57	225120	11062307 10:57	1	1/10/2007	10:57
235120	11062307 10:57	1	1/10/2007	10:57	235120	11062307 10:57	1	1/10/2007	10:57
245120	11062307 10:57	1	1/10/2007	10:57	245120	11062307 10:57	1	1/10/2007	10:57
255120	11062307 10:57	1	1/10/2007	10:57	255120	11062307 10:57	1	1/10/2007	10:57
265120	11062307 10:57	1	1/10/2007	10:57	265120	11062307 10:57	1	1/10/2007	10:57
275120	11062307 10:57	1	1/10/2007	10:57	275120	11062307 10:57	1	1/10/2007	10:57
285120	11062307 10:57	1	1/10/2007	10:57	285120	11062307 10:57	1	1/10/2007	10:57
295120	11062307 10:57	1	1/10/2007	10:57	295120	11062307 10:57	1	1/10/2007	10:57
305120	11062307 10:57	1	1/10/2007	10:57	305120	11062307 10:57	1	1/10/2007	10:57
315120	11062307 10:57	1	1/10/2007	10:57	315120	11062307 10:57	1	1/10/2007	10:57
325120	11062307 10:57	1	1/10/2007	10:57	325120	11062307 10:57	1	1/10/2007	10:57
335120	11062307 10:57	1	1/10/2007	10:57	335120	11062307 10:57	1	1/10/2007	10:57
345120	11062307 10:57	1	1/10/2007	10:57	345120	11062307 10:57	1	1/10/2007	10:57
355120	11062307 10:57	1	1/10/2007	10:57	355120	11062307 10:57	1	1/10/2007	10:57
365120	11062307 10:57	1	1/10/2007	10:57	365120	11062307 10:57	1	1/10/2007	10:57
375120	11062307 10:57	1	1/10/2007	10:57	375120	11062307 10:57	1	1/10/2007	10:57
385120	11062307 10:57	1	1/10/2007	10:57	385120	11062307 10:57	1	1/10/2007	10:57
395120	11062307 10:57	1	1/10/2007	10:57	395120	11062307 10:57	1	1/10/2007	10:57
405120	11062307 10:57	1	1/10/2007	10:57	405120	11062307 10:57	1	1/10/2007	10:57
415120	11062307 10:57	1	1/10/2007	10:57	415120	11062307 10:57	1	1/10/2007	10:57
425120	11062307 10:57	1	1/10/2007	10:57	425120	11062307 10:57	1	1/10/2007	10:57
435120	11062307 10:57	1	1/10/2007	10:57	435120	11062307 10:57	1	1/10/2007	10:57
445120	11062307 10:57	1	1/10/2007	10:57	445120	11062307 10:57	1	1/10/2007	10:57
455120	11062307 10:57	1	1/10/2007	10:57	455120	11062307 10:57	1	1/10/2007	10:57
465120	11062307 10:57	1	1/10/2007	10:57	465120	11062307 10:57	1	1/10/2007	10:57
475120	11062307 10:57	1	1/10/2007	10:57	475120	11062307 10:57	1	1/10/2007	10:57
485120	11062307 10:57	1	1/10/2007	10:57	485120	11062307 10:57	1	1/10/2007	10:57
495120	11062307 10:57	1	1/10/2007	10:57	495120	11062307 10:57	1	1/10/2007	10:57
505120	11062307 10:57	1	1/10/2007	10:57	505120	11062307 10:57	1	1/10/2007	10:57
515120	11062307 10:57	1	1/10/2007	10:57	515120	11062307 10:57	1	1/10/2007	10:57
525120	11062307 10:57	1	1/10/2007	10:57	525120	11062307 10:57	1	1/10/2007	10:57
535120	11062307 10:57	1	1/10/2007	10:57	535120	11062307 10:57	1	1/10/2007	10:57
545120	11062307 10:57	1	1/10/2007	10:57	545120	11062307 10:57	1	1/10/2007	10:57
555120	11062307 10:57	1	1/10/2007	10:57	555120	11062307 10:57	1	1/10/2007	10:57
565120	11062307 10:57	1	1/10/2007	10:57	565120	11062307 10:57	1	1/10/2007	10:57
575120	11062307 10:57	1	1/10/2007	10:57	575120	11062307 10:57	1	1/10/2007	10:57
585120	11062307 10:57	1	1/10/2007	10:57	585120	11062307 10:57	1	1/10/2007	10:57
595120	11062307 10:57	1	1/10/2007	10:57	595120	11062307 10:57	1	1/10/2007	10:57
605120	11062307 10:57	1	1/10/2007	10:57	605120	11062307 10:57	1	1/10/2007	10:57
615120	11062307 10:57	1	1/10/2007	10:57	615120	11062307 10:57	1	1/10/2007	10:57
625120	11062307 10:57	1	1/10/2007	10:57	625120	11062307 10:57	1	1/10/2007	10:57
635120	11062307 10:57	1	1/10/2007	10:57	635120	11062307 10:57	1	1/10/2007	10:57
645120	11062307 10:57	1	1/10/2007	10:57	645120	11062307 10:57	1	1/10/2007	10:57
655120	11062307 10:57	1	1/10/2007	10:57	655120	11062307 10:57	1	1/10/2007	10:57
665120	11062307 10:57	1	1/10/2007	10:57	665120	11062307 10:57	1	1/10/2007	10:57
675120	11062307 10:57	1	1/10/2007	10:57	675120	11062307 10:57	1	1/10/2007	10:57
685120	11062307 10:57	1	1/10/2007	10:57	685120	11062307 10:57	1	1/10/2007	10:57
695120	11062307 10:57	1	1/10/2007	10:57	695120	11062307 10:57	1	1/10/2007	10:57
705120	11062307 10:57	1	1/10/2007	10:57	705120	11062307 10:57	1	1/10/2007	10:57
715120	11062307 10:57	1	1/10/2007	10:57	715120	11062307 10:57	1	1/10/2007	10:57
725120	11062307 10:57	1	1/10/2007	10:57	725120	11062307 10:57	1	1/10/2007	10:57
735120	11062307 10:57	1	1/10/2007	10:57	735120	11062307 10:57	1	1/10/2007	10:57
745120	11062307 10:57	1	1/10/2007	10:57	745120	11062307 10:57	1	1/10/2007	10:57
755120	11062307 10:57	1	1/10/2007	10:57	755120	11062307 10:57	1	1/10/2007	10:57
765120	11062307 10:57	1	1/10/2007	10:57	765120	11062307 10:57	1	1/10/2007	10:57
775120	11062307 10:57	1	1/10/2007	10:57	775120	11062307 10:57	1	1/10/2007	10:57
785120	11062307 10:57	1	1/10/2007	10:57	785120	11062307 10:57	1	1/10/2007	10:57
795120	11062307 10:57	1	1/10/2007	10:57	795120	11062307 10:57	1	1/10/2007	10:57
805120	11062307 10:57	1	1/10/2007	10:57	805120	11062307 10:57	1	1/10/2007	10:57
815120	11062307 10:57	1	1/10/2007	10:57	815120	11062307 10:57	1	1/10/2007	10:57
825120	11062307 10:57	1	1/10/2007	10:57	825120	11062307 10:57	1	1/10/2007	10:57
835120	11062307 10:57	1	1/10/2007	10:57	835120	11062307 10:57	1	1/10/2007	10:57
845120	11062307 10:57	1	1/10/2007	10:57	845120	11062307 10:57	1	1/10/2007	10:57
855120	11062307 10:57	1	1/10/2007	10:57	855120	11062307 10:57	1	1/10/2007	10:57
865120	11062307 10:57	1	1/10/2007	10:57	865120	11062307 10:57	1	1/10/2007	10:57
875120	11062307 10:57	1	1/10/2007	10:57	875120	11062307 10:57	1	1/10/2007	10:57
885120	11062307 10:57	1	1/10/2007	10:57	885120	11062307 10:57	1	1/10/2007	10:57
895120	11062307 10:57	1	1/10/2007	10:57	895120	11062307 10:57	1	1/10/2007	10:57
905120	11062307 10:57	1	1/10/2007	10:57	905120	11062307 10:57	1	1/10/2007	10:57
915120	11062307 10:57	1	1/10/2007	10:57	915120	11062307 10:57	1	1/10/2007	10:57
925120	11062307 10:57	1	1/10/2007	10:57	925120	11062307 10:57	1	1/10/2007	10:57
935120	11062307 10:57	1	1/10/2007	10:57	935120	11062307 10:57	1	1/10/2007	10:57
945120	11062307 10:57	1	1/10/2007	10:57	945120	11062307 10:57	1	1/10/2007	10:57
955120	11062307 10:57	1	1/10/2007	10:57	955120	11062307 10:57	1	1/10/2007	10:57
965120	11062307 10:57	1	1/10/2007	10:57	965120	11062307 10:57	1	1/10/2007	10:57
975120	11062307 10:57	1	1/10/2007	10:57	975120	11062307 10:57	1	1/10/2007	10:57
985120	11062307 10:57	1	1/10/2007	10:57	985120	11062307 10:57	1	1/10/2007	10:57
995120	11062307 10:57	1	1/10/2007	10:57	995120	11062307 10:57	1	1/10/2007	10:57
1005120	11062307 1								

Analyst Signature: PC

Date: 7/10/2007

Analyst Signature: PC

Sample Dilutions:

7/1002 - 20/01-13 2x K

Method: TRACEV2 Standard: STD0

Run Time: 11/06/07 18:33:09

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	-.00298	.00062	.00079	.00182	.00210	.00062	.03422
#1	-.00325	.00095	.00148	.00183	.00213	-.00003	.03414
#2	-.00272	.00030	.00010	.00182	.00207	.00127	.03430
Elem	Cr	Co	Cu	Fe	Mg	Mn	Mn3441
Avge	.00035	-.00047	.00818	.00057	.00044	.00012	-.01863
#1	.00020	-.00050	.00808	.00043	.00045	.00013	-.01856
#2	.00050	-.00045	.00828	.00072	.00042	.00012	-.01870
Elem	Ni	K	Ag	Na	Tl	V	Zn
Avge	-.00084	.01082	-.00011	-.02381	-.00181	.00005	.00323
#1	-.00153	.01038	.00003	-.02426	-.00140	.00008	.00333
#2	-.00015	.01127	-.00025	-.02336	-.00222	.00002	.00314
Elem	B	Mo	Sn	Ti	1/Pb	2/Pb	1/Se
Avge	.00060	-.00004	.00015	.00076	-.01194	.00110	-.00220
#1	.00058	-.00030	.00035	.00048	-.01231	.00058	-.00285
#2	.00062	.00022	-.00005	.00105	-.01157	.00162	-.00155
Elem	2/Se	2V					
Avge	.0014	.00004					
#1	.0003	.00010					
#2	.0024	-.00002					

Method: TRACEV2 Standard: STD1

Run Time: 11/06/07 18:41:32

Elem	Al	Sb	As	Ba	Be	Cd	Cr
Avge	1.9010	.29117	.24926	.88928	.09113	1.9708	.22969
#1	1.9023	.28795	.24834	.88996	.09124	1.9689	.22956
#2	1.8997	.29439	.25017	.88860	.09102	1.9727	.22982
Elem	Co	Cu	Fe	Mn	Mn3441	Ni	Ag
Avge	.39735	.31047	1.2834	.39954	.13052	.69705	.48609
#1	.39618	.31013	1.2819	.39894	.13028	.69525	.48573
#2	.39852	.31080	1.2848	.40014	.13076	.69885	.48645
Elem	Tl	V	Zn	B	Mo	Sn	Ti
Avge	.10170	.18881	.56986	.52669	.25413	.15838	1.8443
#1	.10050	.18852	.56893	.52567	.25317	.15733	1.8448
#2	.10290	.18911	.57078	.52772	.25509	.15943	1.8439
Elem	1/Pb	2/Pb	1/Se	2/Se	2V		
Avge	.78333	.35370	.26488	.1771	.18019		
#1	.78396	.35329	.26727	.1778	.18033		
#2	.78271	.35410	.26249	.1763	.18005		

Method: TRACEV2 Standard: STD2
Run Time: 11/06/07 18:49:55

Elem	Al	Sb	As	Ba	Be	Cd	Cr
Avge	3.7941	.57328	.50914	1.7495	.19137	3.9628	.47112
#1	3.7965	.57306	.51164	1.7469	.19189	3.9646	.47210
#2	3.7918	.57350	.50665	1.7521	.19084	3.9611	.47015
Elem	Co	Cu	Fe	Mn	Mn3441	Ni	Ag
Avge	.84174	.64103	2.6950	.85219	.29403	1.4007	1.0334
#1	.84531	.64229	2.7023	.85495	.29391	1.4028	1.0363
#2	.83818	.63977	2.6876	.84944	.29414	1.3985	1.0305
Elem	Tl	V	Zn	B	Mo	Sn	Ti
Avge	.20514	.40107	1.1823	1.0831	.51591	.33896	3.8123
#1	.20478	.40214	1.1863	1.0846	.51505	.33963	3.8204
#2	.20550	.40000	1.1782	1.0817	.51677	.33829	3.8041
Elem	1/Pb	2/Pb	1/Se	2/Se	2V		
Avge	1.5969	.73999	.52423	.3635	.38747		
#1	1.6002	.74041	.52865	.3649	.38889		
#2	1.5937	.73956	.51982	.3621	.38605		

Method: TRACEV2 Standard: STD3
Run Time: 11/06/07 18:58:18

Elem	Ca	Mg	K	Na
Avge	26.192	13.613	6.0508	3.0643
#1	26.200	13.613	6.0463	3.0656
#2	26.184	13.613	6.0552	3.0630

Method: TRACEV2 Standard: STD4
Run Time: 11/06/07 19:05:09

Elem	1/Pb	2/Pb
Avge	3.0058	1.4489
#1	3.0044	1.4515
#2	3.0072	1.4463

Method: TRACEV2

Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Al	308.215	Multiple	Standards	26304.5	78.1434	11/06/07 06:49:55
Sb	206.838	Multiple	Standards	1727.25	-1.09735	11/06/07 06:49:55
As	189.042	Multiple	Standards	1975.60	-1.52803	11/06/07 06:49:55
Ba	493.409	Multiple	Standards	568.007	-1.05468	11/06/07 06:49:55
Be	313.042	Multiple	Standards	545.788	-1.13716	11/06/07 06:49:55
Cd	226.502	Multiple	Standards	256.018	-.152539	11/06/07 06:49:55
Ca	317.933	STD3	STD0	1.18587	.024171	11/06/07 07:05:09
Cr	267.716	Multiple	Standards	2147.78	-.717848	11/06/07 06:49:55
Co	228.616	Multiple	Standards	1224.51	.652185	11/06/07 06:49:55
Cu	324.753	Multiple	Standards	1616.21	-13.1594	11/06/07 06:49:55
Fe	271.441	Multiple	Standards	38050.1	-15.7231	11/06/07 06:49:55
Pb	220.353	NONE	NONE	1.00000	.000000	*NOT STANDARDIZED
Mg	279.078	STD3	STD0	1.37985	-.000734	11/06/07 07:05:09
Mn	257.610	Multiple	Standards	1198.39	-.069957	11/06/07 06:49:55
Mn3441	344.199	Multiple	Standards	3237.28	60.3598	11/06/07 06:49:55
Ni	231.604	Multiple	Standards	715.549	.604476	11/06/07 06:49:55
K	766.491	STD3	STD0	1.12632	-.000113	11/06/07 07:05:09
Se	196.026	NONE	NONE	1.00000	.000000	*NOT STANDARDIZED
Ag	328.068	Multiple	Standards	996.989	.187819	11/06/07 06:49:55
Na	330.232	STD3	STD0	1.18727	.011524	11/06/07 07:05:09
Tl	190.864	Multiple	Standards	4800.32	8.68630	11/06/07 06:49:55
V	292.402	Multiple	Standards	2575.21	-.053180	11/06/07 06:49:55
Zn	213.856	Multiple	Standards	872.580	-2.77181	11/06/07 06:49:55
B	249.678	Multiple	Standards	931.709	-.523006	11/06/07 06:49:55
Mo	202.030	Multiple	Standards	1950.84	.092461	11/06/07 06:49:55
Sn	189.989	Multiple	Standards	3051.79	-.373095	11/06/07 06:49:55
Ti	334.941	Multiple	Standards	266.757	-.161602	11/06/07 06:49:55
1/Pb	220.351	Multiple	Standards	654.670	7.79814	11/06/07 07:05:09
2/Pb	220.352	Multiple	Standards	1368.28	-1.46799	11/06/07 07:05:09
1/Se	196.021	Multiple	Standards	1888.26	4.13299	11/06/07 06:49:55
2/Se	196.022	Multiple	Standards	2734.19	-3.67924	11/06/07 06:49:55
2V	292.402	Multiple	Standards	2448.84	-.009022	11/06/07 06:49:55

Method: TRACEV2

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Al	308.215	STD0	.000000	-.358049	.358049
		STD1	50000.0	50083.7	-83.6641
		STD2	100000.	99880.9	119.117

CorCoef: 1.00000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sb	206.838	STD0	.000000	-.018179	.018179
		STD1	500.000	501.825	-1.82480
		STD2	1000.00	989.106	10.8936

CorCoef: 0.99996

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
As	189.042	STD0	.000000	.028158	-.028158
		STD1	500.000	490.903	9.09714
		STD2	1000.00	1004.33	-4.33228

CorCoef: 0.99992

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ba	493.409	STD0	.000000	-.019318	.019318
		STD1	500.000	504.064	-4.06369
		STD2	1000.00	992.673	7.32727

CorCoef: 0.99996

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Be	313.042	STD0	.000000	.007633	-.007633
		STD1	50.0000	48.6009	1.39909
		STD2	100.000	103.308	-3.30817

CorCoef: 0.99942

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cd	226.502	STD0	.000000	.007000	-.007000
		STD1	500.000	504.404	-4.40353
		STD2	1000.00	1014.41	-14.4068

CorCoef: 0.99999

Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
Ca	317.933	STD0	.064753	.034221	.030532
		STD3	31.0841	26.1917	4.89235

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cr	267.716	STD0	.000000	.032426	-.032426
		STD1	500.000	492.603	7.39709
		STD2	1000.00	1011.15	-11.1463

CorCoef: 0.99989

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Co	228.616	STD0	.000000	.071195	-.071195
		STD1	500.000	487.209	12.7910
		STD2	1000.00	1031.37	-31.3740

CorCoef: 0.99949

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cu	324.753	STD0	.000000	.057045	-.057045
		STD1	500.000	488.618	11.3815
		STD2	1000.00	1022.87	-22.8730
CorCoef: 0.99967					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Fe	271.441	STD0	.000000	6.11975	-6.11975
		STD1	50000.0	48816.1	1183.92
		STD2	100000.	102528.	-2527.96
CorCoef: 0.99962					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Pb	220.353	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000
Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
Mg	279.078	STD0	-.000131	.000437	-.000568
		STD3	18.7835	13.6133	5.17021
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mn	257.610	STD0	.000000	.079661	-.079661
		STD1	500.000	478.730	21.2702
		STD2	1000.00	1021.19	-21.1883
CorCoef: 0.99935					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mn3441	344.199	STD0	.000000	.058033	-.058033
		STD1	500.000	482.894	17.1061
		STD2	1000.00	1012.21	-12.2122
CorCoef: 0.99965					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ni	231.604	STD0	.000000	.005102	-.005102
		STD1	500.000	499.380	.620300
		STD2	1000.00	1002.84	-2.84058
CorCoef: 1.00000					
Element	Wavelength	Standard	Known Signal	Measured Signal	Residual Signal
K	766.491	STD0	.012078	.010824	.001254
		STD3	6.81503	6.05079	.764237
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Se	196.026	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ag	328.068	STD0	.000000	.076024	-.076024
		STD1	500.000	484.810	15.1897
		STD2	1000.00	1030.44	-30.4395
CorCoef: 0.99942					

Element	Wavelength	Standard	Known	Measured	Residual
Na	330.232	STD0	Signal	Signal	Signal
		STD3	-.016744	-.023809	.007066
			3.64972	3.06433	.585385
Element	Wavelength	Standard	Known	Measured	Residual
Tl	190.864	STD0	Concentration	Concentration	Concentration
		STD1	.000000	-.000448	.000448
		STD2	500.000	496.888	3.11243
			1000.00	993.417	6.58319
CorCoef: 1.00000					
Element	Wavelength	Standard	Known	Measured	Residual
V	292.402	STD0	Concentration	Concentration	Concentration
		STD1	.000000	.075533	-.075533
		STD2	500.000	486.182	13.8181
			1000.00	1032.79	-32.7902
CorCoef: 0.99943					
Element	Wavelength	Standard	Known	Measured	Residual
Zn	213.856	STD0	Concentration	Concentration	Concentration
		STD1	.000000	.049880	-.049880
		STD2	500.000	494.475	5.52496
			1000.00	1028.85	-28.8539
CorCoef: 0.99975					
Element	Wavelength	Standard	Known	Measured	Residual
B	249.678	STD0	Concentration	Concentration	Concentration
		STD1	.000000	.035305	-.035305
		STD2	500.000	490.201	9.79898
			1000.00	1008.65	-8.64594
CorCoef: 0.99987					
Element	Wavelength	Standard	Known	Measured	Residual
Mo	202.030	STD0	Concentration	Concentration	Concentration
		STD1	.000000	.018533	-.018533
		STD2	500.000	495.863	4.13666
			1000.00	1006.55	-6.55328
CorCoef: 0.99996					
Element	Wavelength	Standard	Known	Measured	Residual
Sn	189.989	STD0	Concentration	Concentration	Concentration
		STD1	.000000	.085146	-.085146
		STD2	500.000	482.975	17.0247
			1000.00	1034.07	-34.0674
CorCoef: 0.99928					
Element	Wavelength	Standard	Known	Measured	Residual
Ti	334.941	STD0	Concentration	Concentration	Concentration
		STD1	.000000	.041426	-.041426
		STD2	500.000	491.824	8.17578
			1000.00	1016.79	-16.7896
CorCoef: 0.99982					
Element	Wavelength	Standard	Known	Measured	Residual
1/Pb	220.351	STD0	Concentration	Concentration	Concentration
		STD1	.000000	-.016101	.016101
		STD2	500.000	520.622	-20.6222
		STD4	1000.00	1053.25	-53.2471
			2000.00	1975.59	24.4050
CorCoef: 0.99990					

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
2/Pb	220.352	STD0	.000000	.034088	-.034088
		STD1	500.000	482.487	17.5133
		STD2	1000.00	1011.04	-11.0424
		STD4	2000.00	1981.04	18.9592

CorCoef: 0.99974

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
1/Se	196.021	STD0	.000000	-.018219	.018219
		STD1	500.000	504.297	-4.29675
		STD2	1000.00	994.018	5.98151

CorCoef: 0.99996

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
2/Se	196.022	STD0	.000000	.036719	-.036719
		STD1	500.000	480.452	19.5479
		STD2	1000.00	990.280	9.72034

CorCoef: 0.99985

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
2V	292.402	STD0	.000000	.082956	-.082956
		STD1	500.000	441.243	58.7567
		STD2	1000.00	948.851	51.1487

CorCoef: 0.99918

Analysis Report

QC Standard

11/06/07 07:21:11 PM

page 1

Method: TRACEV2 Sample Name: IVICV

Operator:

Run Time: 11/06/07 19:12:55

Comment:

Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	4992.140	399.4377	Q420.1220	416.4068	41.04513	40.92244	5021.362
#1	4997.346	402.2276	418.4744	418.8903	40.36243	40.82153	4934.419
#2	4986.934	396.6477	Q421.7697	413.9232	41.72782	41.02335	5108.305
Errors	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass
Value	5000.000	400.0000	400.0000	400.0000	40.00000	40.00000	5000.000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	400.8921	Q423.7687	393.1571	4986.168	418.8248	5129.820	405.8015
#1	397.9569	417.5777	387.2808	4928.427	414.0435	5041.649	398.3892
#2	403.8274	Q429.9597	399.0334	5043.909	Q423.6060	5217.992	413.2139
Errors	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	400.0000	400.0000	400.0000	5000.000	400.0000	5000.000	400.0000
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	393.1794	411.1597	5051.814	408.6513	397.2024	9754.701	394.0617
#1	388.9780	409.6447	4994.050	404.9729	390.3560	9713.593	394.5752
#2	397.3809	412.6747	5109.577	412.3296	404.0489	9795.810	393.5482
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		400.0000	5000.000	400.0000	400.0000	10000.00	400.0000
Range		5.000000	5.000000	5.000000	5.000000	5.000000	5.000000

Elem	V	Zn'	B	Mo	Sn	Ti	1/Pb
Avge	407.3625	416.8209	416.2082	398.5693	406.1276	402.7458	416.4529
#1	400.4694	411.6505	412.1646	396.9932	397.9157	399.9437	414.9681
#2	414.2557	Q421.9913	Q420.2518	400.1454	414.3394	405.5479	417.9377
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	400.0000	400.0000	400.0000	400.0000	400.0000	400.0000	
Range	5.000000	5.000000	5.000000	5.000000	5.000000	5.000000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	420.0106	410.4271	407.7632	404.4172
#1	413.5812	412.3579	401.2803	396.7200
#2	426.4400	408.4964	414.2461	412.1144
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: BIICB

Operator:

Run Time: 11/06/07 19:21:18

Comment:

Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	-.147262	.1725244	-1.39856	.1189864	-.115855	-.193180	25.86136

#1	1.491921	-.992573	-1.32239	.1717670	-.129023	-.153139	30.54310
#2	-1.78645	1.337622	-1.47474	.0662058	-.102688	-.233220	21.17963

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	2.000000	5.000000	1000.000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	.1482738	-.048342	1.059628	6.530062	-.191385	3.042138	.2269787

#1	.0096488	-.080676	1.388065	5.071619	-.525561	4.972930	.2738096
#2	.2868989	-.016009	.7311907	7.988504	.1427910	1.111346	.1801478

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-5.60498	-.018636	3.539080	-.827033	.1882802	-48.1456	3.236249

#1	-6.50860	-.065705	5.540904	-1.36014	.4992546	11.39051	4.412815
#2	-4.70136	.0284324	1.537255	-.293931	-.122694	-107.682	2.059684

Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range		10.00000	250.0000	5.000000	3.000000	2500.000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	.1145954	.9349179	-.135208	1.080868	.1025612	.1433471	-1.15965

#1	-.052498	.8589564	-.255984	1.056381	.4995664	.0604667	-.921743
#2	.2816888	1.010879	-.014431	1.105355	-.294444	.2262274	-1.39756

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	20.00000	15.00000	5.000000	20.00000	20.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	.2926300	-1.24091	-.620211	.3495340

#1	-.327588	-2.98791	-.546367	.5704891
#2	.9128482	.5060846	-.694055	.1285790

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: CVCCV

Operator:

Run Time: 11/06/07 19:29:41

Comment:

Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	50424.97	505.0892	491.0302	503.9268	48.71201	489.3142	98426.45
#1	50396.93	505.0490	494.9262	504.6277	48.38307	488.9001	98052.64
#2	50453.01	505.1294	487.1343	503.2259	49.04096	489.7283	98800.27
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	500.0000	500.0000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	488.4879	480.7513	494.1852	48300.33	491.6605	99264.32	483.9511
#1	487.4235	477.6097	492.2141	48082.48	491.3307	98786.89	480.9860
#2	489.5524	483.8929	496.1563	48518.19	491.9903	99741.75	486.9162
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	489.3640	488.1047	24025.78	490.4099	492.0174	98964.00	499.8467
#1	490.6166	487.9390	23946.91	488.8689	489.1947	98919.50	503.8578
#2	488.1114	488.2704	24104.66	491.9509	494.8401	99008.51	495.8357
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		500.0000	25000.00	500.0000	500.0000	100000.0	500.0000
Range		10.00000	10.00000	10.00000	10.00000	10.00000	10.00000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	488.2027	493.2477	499.8054	494.5804	486.0335	494.0499	495.0856
#1	485.8638	491.4453	498.4952	490.6109	483.7427	491.8177	495.4128
#2	490.5416	495.0500	501.1157	498.5499	488.3243	496.2821	494.7584
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	
Elem	2/Pb	1/Se	2/Se	2V			
Avge	489.9478	499.3896	485.9199	484.8532			
#1	489.2895	497.5542	484.5262	479.8854			
#2	490.6061	501.2250	487.3137	489.8209			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
Value							
Range							

Method: TRACEV2 Sample Name: BCCCCB

Operator:

Run Time: 11/06/07 19:38:05

Comment:

Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avg	4.043633	-1.03566	-2.64189	.1100481	-.110779	-.185882	38.69480
#1	4.911131	-.314535	-.814551	.0869564	-.054484	-.145459	27.70902
#2	3.176134	-1.75679	-4.46922	.1331398	-.167075	-.226305	49.68057
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	2.000000	5.000000	1000.000
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avg	.2319028	.5571836	.6018977	-1.42545	-.461404	17.33867	.1480632
#1	.1137111	.4944133	.0416339	-3.99321	-.931765	19.88771	.1462827
#2	.3500945	.6199540	1.162162	1.142311	.0089561	14.78963	.1498438
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avg	-8.52631	.0743401	8.207474	-2.96354	.5261310	26.59764	-2.11421
#1	-9.46033	.1988732	7.837238	-1.78927	.2908629	8.710062	-4.22138
#2	-7.59230	-.050193	8.577710	-4.13780	.7613992	44.48523	-.007029
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range		10.00000	250.0000	5.000000	3.000000	2500.000	10.00000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avg	.3814143	.5576739	.4817399	1.685203	-.449066	.0810139	2.949944
#1	.5456676	.4437394	.2205248	1.901521	-1.00298	.0308366	3.800357
#2	.2171610	.6716083	.7429551	1.468886	.1048444	.1311912	2.099531
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	20.00000	15.00000	5.000000	20.00000	20.00000	
Elem	2/Pb	1/Se	2/Se	2V			
Avg	-2.16719	.8852844	-4.88806	.4185037			
#1	-3.29794	3.114156	-4.24110	.4932656			
#2	-1.03645	-1.34359	-5.53503	.3437417			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
Value							
Range							

Method: TRACEV2 Sample Name: REPORT LMT

Operator:

Run Time: 11/06/07 19:49:19

Comment:

Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	201.9735	19.02546	19.74359	4.941365	1.860181	5.966289	988.4924
#1	203.6321	19.21812	20.05675	4.950326	1.882654	6.057828	992.4446
#2	200.3150	18.83280	19.43044	4.932404	1.837708	5.874750	984.5403
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	200.0000	20.00000	20.00000	5.000000	2.000000	6.000000	1000.000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	4.362914	4.399576	10.06316	143.2335	9.485992	254.9837	4.901712
#1	4.250429	4.324273	10.14137	141.1106	9.541317	255.3075	4.927048
#2	4.475398	4.474880	9.984953	145.3564	9.430668	254.6599	4.876378
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	5.000000	5.000000	10.00000	150.0000	10.00000	250.0000	5.000000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-.241383	10.07339	233.4761	19.52602	4.941857	2428.514	29.52589
#1	-.847484	10.43669	232.4355	18.36803	4.979312	2376.398	33.22859
#2	.3647188	9.710089	234.5167	20.68401	4.904402	2480.631	25.82318
Errors	NOCHECK	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass	QC Pass
Value		10.00000	250.0000		5.000000	2500.000	30.00000
Range		20.00000	20.00000		20.00000	20.00000	20.00000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	9.814300	20.58393	16.10713	5.311259	25.29998	24.46981	7.942808
#1	9.965164	20.53565	15.81971	5.212111	26.26073	24.45917	5.794827
#2	9.663438	20.63221	16.39455	5.410407	24.33924	24.48044	10.09079
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	10.00000	20.00000	15.00000	5.000000	25.00000	25.00000	
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	
Elem	2/Pb	1/Se	2/Se	2V			
Avge	10.25747	20.23250	19.17266	9.247486			
#1	11.41444	19.63267	17.73559	9.128120			
#2	9.100492	20.83234	20.60973	9.366853			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
Value							
Range							

Analysis Report

QC Standard

11/06/07 08:05:59 PM

page 1

Method: TRACEV2 Sample Name: CRCRI

Operator:

Run Time: 11/06/07 19:57:43

Comment:

Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	195.7642	57.38566	8.601996	201.4127	4.780230	5.190341	4913.950

#1	194.6019	54.01522	Q6.701019	201.3115	4.787281	4.999359	4912.309
#2	196.9265	60.75610	10.50297	201.5139	4.773179	5.381323	4915.591

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	200.0000	60.00000	10.00000	200.0000	5.000000	5.000000	5000.000
Range	30.00000	50.00000	30.00000	30.00000	30.00000	30.00000	30.00000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	10.02336	48.39088	23.78569	90.14139	9.820492	5000.718	14.69689

#1	10.03837	48.58741	23.76257	84.58901	10.05859	4997.977	14.69429
#2	10.00835	48.19435	23.80880	95.69376	9.582394	5003.459	14.69949

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	10.00000	50.00000	25.00000	100.0000	10.00000	5000.000	15.00000
Range	30.00000	30.00000	30.00000	30.00000	50.00000	30.00000	30.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	7.998077	38.64308	4964.152	33.78759	10.14595	4869.828	22.81401

#1	7.139468	38.61640	4979.028	37.89970	10.35315	4911.301	24.21904
#2	8.856687	38.66976	4949.275	29.67548	9.938752	4828.355	21.40898

Errors	NOCHECK	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass	QC Pass
Value		40.00000	5000.000		10.00000	5000.000	25.00000
Range		30.00000	30.00000		30.00000	30.00000	50.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	50.35892	59.16505	-.092623	.2699135	-.492161	.0085962	10.11818

#1	50.33258	59.14825	.0868751	.4460688	1.913506	-.026082	10.71692
#2	50.38525	59.18186	-.272121	.0937581	-2.89783	.0432748	9.519441

Errors	QC Pass	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	50.00000	60.00000					
Range	30.00000	30.00000					

Elem	2/Pb	1/Se	2/Se	2V
Avge	9.671751	30.89726	35.23264	48.49030

#1	9.729530	30.25575	41.72156	48.47493
#2	9.613972	31.53876	28.74372	48.50568

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: IAICSA

Operator:

Run Time: 11/06/07 20:06:05

Comment:

Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avg	490501.0	2.938327	-2.67053	.9814461	-.147669	.1178551	503001.6
#1	494609.5	3.016938	-1.35156	1.042932	-.125681	-.028252	506928.1
#2	486392.5	2.859715	-3.98950	.9199606	-.169657	.2639618	499075.1
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500000.0	.0000000	.0000000	.0000000	.0000000	.0000000	500000.0
Range	50000.00	20.00000	20.00000	5.000000	2.000000	6.000000	50000.00
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avg	1.955984	1.460429	1.598164	188552.3	-1.50352	491013.2	Q7.399029
#1	1.827110	1.349061	1.703566	189858.9	-1.07747	494054.7	Q6.804961
#2	2.084858	1.571796	1.492762	187245.6	-1.92957	487971.8	Q7.993096
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.0000000	.0000000	.0000000	200000.0	.0000000	500000.0	.0000000
Range	5.000000	5.000000	10.00000	20000.00	6.000000	50000.00	5.000000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avg	36.27835	2.345625	-3.11938	.0276083	.0617602	-367.074	5.354590
#1	35.44175	2.348593	-3.36289	-.418786	-.198998	-473.033	4.674269
#2	37.11496	2.342656	-2.87588	.4740030	.3225187	-261.116	6.034912
Errors	NOCHECK	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass	QC Pass
Value		.0000000	.0000000		.0000000	.0000000	.0000000
Range		10.00000	250.0000		3.000000	2500.000	20.00000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avg	-.129110	15.73526	3.213017	.4522954	2.598314	5.317619	17.00903
#1	.0128422	16.05059	2.125072	.4812340	1.873480	5.323896	16.95521
#2	-.271062	15.41993	4.300961	.4233569	3.323148	5.311343	17.06284
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	20.00000	15.00000	5.000000	25.00000	25.00000	
Elem	2/Pb	1/Se	2/Se	2V			
Avg	-10.7599	2.957926	-1.43767	4.362023			
#1	-10.0939	6.033135	-3.64487	3.916950			
#2	-11.4259	-.117284	.7695236	4.807097			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
Value							
Range							

Method: TRACEV2 Sample Name: IBICSAB

Operator:

Run Time: 11/06/07 20:14:27

Comment:

Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	465928.7	571.7118	92.20438	485.0886	459.4430	895.2152	481576.4
#1	445379.5	546.9722	85.20576	464.3112	436.3807	853.9451	456111.3
#2	486478.0	596.4514	99.20300	505.8660	482.5053	936.4853	507041.6
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500000.0	600.0000	100.0000	500.0000	500.0000	1000.000	500000.0
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	458.6281	444.0423	497.1129	181838.8	45.20203	478136.8	472.0203
#1	436.7302	421.9973	473.9778	173000.4	43.76748	455776.7	448.7917
#2	480.5261	466.0873	520.2481	190677.3	46.63658	500496.9	495.2490
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	200000.0	50.00000	500000.0	500.0000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	495.3326	895.0120	5385.600	47.73303	198.2730	10139.98	94.28642
#1	472.4338	854.6517	5173.898	43.16154	188.8898	9674.325	93.35952
#2	518.2314	935.3722	5597.302	52.30452	207.6561	10605.64	95.21332
Errors	NOCHECK	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass	QC Pass
Value		1000.000	5000.000		200.0000	10000.00	100.0000
Range		20.00000	20.00000		20.00000	20.00000	20.00000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	466.0508	946.1297	992.4190	938.7548	933.5881	944.7507	61.45580
#1	442.9030	901.4368	947.4298	892.7943	884.6893	899.8430	58.51355
#2	489.1986	990.8226	1037.408	984.7154	982.4871	989.6586	64.39804
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	1000.000	1000.000	1000.000	1000.000	1000.000	
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	
Elem	2/Pb	1/Se	2/Se	2V			
Avge	37.07504	49.45842	46.87029	482.6014			
#1	36.39434	46.09943	41.69255	457.5569			
#2	37.75574	52.81741	52.04803	507.6459			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
Value							
Range							

Method: TRACEV2 Sample Name: LR

Operator:

Run Time: 11/06/07 20:22:50

Comment:

Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	243.6795	4957.489	1975.235	9544.595	477.9583	1950.331	258.9064
#1	249.9344	4943.997	1976.146	9515.183	479.4130	1949.562	274.8301
#2	237.4245	4970.981	1974.324	9574.007	476.5036	1951.099	242.9827
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value		5000.000	2000.000	10000.00	500.0000	2000.000	
Range		5.000000	5.000000	5.000000	5.000000	5.000000	
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	9743.246	9719.435	9803.740	486946.4	19586.90	204.5361	9574.838
#1	9748.240	9739.270	9820.853	488013.5	19562.26	213.5087	9603.679
#2	9738.253	9699.601	9786.627	485879.2	19611.55	195.5635	9545.997
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	QC Pass
Value	10000.00	10000.00	10000.00	500000.0	20000.00		10000.00
Range	5.000000	5.000000	5.000000	5.000000	5.000000		5.000000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	9890.860	7295.849	25.29769	1946.781	989.0209	147.0284	1928.884
#1	9912.766	7288.095	29.88894	1938.383	993.7178	364.3917	1925.271
#2	9868.955	7303.602	20.70644	1955.179	984.3240	-70.3349	1932.497
Errors	NOCHECK	QC Pass	NOCHECK	QC Pass	QC Pass	NOCHECK	QC Pass
Value		7500.000		2000.000	1000.000		2000.000
Range		5.000000		5.000000	5.000000		5.000000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	9822.435	2878.671	4887.594	9623.780	9818.897	19556.46	19431.26
#1	9852.707	2884.422	4888.733	9601.296	9848.432	19605.48	19366.22
#2	9792.164	2872.921	4886.454	9646.265	9789.362	19507.44	19496.30
Errors	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	QC Pass	NOCHECK
Value	10000.00	3000.000	5000.000	10000.00		20000.00	
Range	5.000000	5.000000	5.000000	5.000000		5.000000	
Elem	2/Pb	1/Se	2/Se	2V			
Avge	19664.73	1945.998	1947.173	9804.140			
#1	19660.28	1931.971	1941.590	9844.972			
#2	19669.18	1960.025	1952.756	9763.308			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
Value							
Range							

Method: TRACEV2 Sample Name: CVCCV3

Operator:

Run Time: 11/06/07 20:36:54

Comment:

Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	50864.72	509.9690	499.2266	499.8451	49.54916	494.1035	99992.16
#1	50816.48	509.3129	497.0161	499.6526	49.57583	494.6595	100038.6
#2	50912.97	510.6251	501.4370	500.0375	49.52249	493.5474	99945.77
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	500.0000	500.0000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	495.9883	490.4457	506.2625	49083.20	497.2051	101359.4	494.0022
#1	496.5417	490.9800	506.6046	49129.54	496.6239	101423.9	494.2602
#2	495.4351	489.9114	505.9204	49036.88	497.7862	101295.0	493.7442
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	494.9790	493.8940	24304.42	499.4761	504.4757	100245.0	500.8083
#1	495.7158	494.0694	24338.43	498.3737	504.8859	100206.2	501.8000
#2	494.2422	493.7185	24270.41	500.5785	504.0655	100283.7	499.8166
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		500.0000	25000.00	500.0000	500.0000	100000.0	500.0000
Range		10.00000	10.00000	10.00000	10.00000	10.00000	10.00000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	498.4815	502.2933	510.2188	502.0389	495.1035	505.0503	497.9401
#1	498.8307	502.5575	509.3468	500.5306	493.4210	504.7374	497.4250
#2	498.1323	502.0292	511.0908	503.5472	496.7860	505.3632	498.4551
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	
Elem	2/Pb	1/Se	2/Se	2V			
Avge	496.8374	506.5251	495.9515	497.7985			
#1	496.2232	506.0764	494.5222	497.9820			
#2	497.4516	506.9738	497.3807	497.6151			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
Value							
Range							

Analysis Report

QC Standard

11/06/07 08:56:21 PM

page 1

Method: TRACEV2 Sample Name: BCCCCB3

Operator:

Run Time: 11/06/07 20:48:06

Comment:

Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	-.485503	-1.76110	-2.69743	.1999904	-.061329	.1056221	35.28073
#1	9.569179	-3.31287	-.439011	.3258643	-.070258	.1521730	41.00532
#2	-10.5402	-.209339	-4.95584	.0741165	-.052400	.0590711	29.55614
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	2.000000	5.000000	1000.000
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	.0924830	.9597654	.7989283	18.10744	-.493390	19.98008	.2632685
#1	-.017048	.3749180	.8934041	28.11726	.0161398	28.42582	.3841618
#2	.2020138	1.544613	.7044523	8.097616	-1.00292	11.53434	.1423751
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-5.60076	.0111845	2.269700	1.097736	-.200373	49.55272	-.497830
#1	-3.64276	.1559813	-.206176	2.142684	-.011938	77.26834	-1.43315
#2	-7.55875	-.133612	4.745575	.0527876	-.388807	21.83710	.4374867
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range		10.00000	250.0000	5.000000	3.000000	2500.000	10.00000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	-.084608	-.670639	1.313451	1.977030	.5475076	.4110448	.4260785
#1	-.116720	-.653703	1.392941	2.487864	-.450183	.3999104	.5103344
#2	-.052496	-.687575	1.233962	1.466197	1.545198	.4221793	.3418225
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	20.00000	15.00000	5.000000	20.00000	20.00000	
Elem	2/Pb	1/Se	2/Se	2V			
Avge	-.953236	3.158257	.0673641	.4310587			
#1	-.231070	5.411398	.5082169	.2810050			
#2	-1.67540	.9051150	-.373489	.5811125			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
Value							
Range							

Method: TRACEV2 Sample Name: CVCCV3

Operator:

Run Time: 11/06/07 22:22:49

Comment: UG/L

Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	50795.16	513.1791	510.4354	493.8992	50.62289	497.4271	102247.9
#1	50803.52	513.1207	509.6645	495.2667	50.13445	497.4259	101734.0
#2	50786.82	513.2375	511.2064	492.5317	51.11133	497.4284	102761.9

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	500.0000	500.0000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	503.7692	507.2455	516.7107	50429.53	510.2545	104437.7	512.0199
#1	502.2025	503.5234	513.7321	50143.09	508.0337	103725.3	508.1131
#2	505.3359	510.9675	519.6893	50715.97	512.4753	105150.2	515.9266

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	501.2999	495.4306	25024.12	509.2077	519.7673	100008.6	499.6039
#1	498.0115	495.9079	24915.41	505.3749	516.0306	100179.4	498.3238
#2	504.5882	494.9533	25132.83	513.0405	523.5041	99837.88	500.8840

Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		500.0000	25000.00	500.0000	500.0000	100000.0	500.0000
Range		10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	514.9893	518.3362	518.0687	504.3471	517.0087	511.9900	505.5439
#1	511.4007	515.7407	515.5920	503.6368	512.6568	510.7660	503.5260
#2	518.5779	520.9316	520.5455	505.0574	521.3605	513.2141	507.5618

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	512.6097	492.4022	517.6104	518.1586
#1	510.2874	490.9561	512.5842	514.8874
#2	514.9320	493.8483	522.6365	521.4297

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: BCCCCB3

Operator:

Run Time: 11/06/07 22:31:10

Comment: UG/L

Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	20.45987	1.224232	-1.80096	.1080572	-.344842	.1320898	109.5385

#1	21.39581	-.094679	-.103859	.1095495	-.425133	.0493221	134.0248
#2	19.52393	2.543144	-3.49806	.1065649	-.264550	.2148575	85.05215

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	2.000000	5.000000	1000.000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	.1390979	.3332764	3.174809	19.46867	-.114135	23.12010	.2965692

#1	.5998695	1.009926	3.834725	23.71436	.0260203	25.89914	.2842735
#2	-.321674	-.343373	2.514894	15.22299	-.254289	20.34106	.3088649

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-12.5901	.7852842	14.89808	1.561212	.0303788	228.3252	1.650604

#1	-13.8391	.9662141	13.37515	1.764734	.0555287	219.8592	.7018385
#2	-11.3410	.6043541	16.42101	1.357691	.0052289	236.7911	2.599369

Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range		10.00000	250.0000	5.000000	3.000000	2500.000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	.0827919	-.723660	.7261115	2.057360	.2381568	.2618325	1.974679

#1	-.051617	-.685462	1.412236	3.000115	1.250398	.3495700	3.364834
#2	.2172010	-.761859	.0399874	1.114604	-.774084	.1740950	.5845249

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	20.00000	15.00000	5.000000	20.00000	20.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	-1.15866	-.355777	2.519587	.6448791

#1	-1.64350	5.645028	-.175531	.5179998
#2	-.673814	-6.35658	5.214704	.7717585

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Analysis Report

11/06/07 11:04:30 PM

page 1

Method: TRACEV2 Sample Name: BLK 069

Operator:

Run Time: 11/06/07 22:56:14

Comment: UG/L

Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	7.250547	3.005314	-.117473	.1343442	-.173005	.0213944	112.1657
#1	8.136010	.5990556	-1.36278	.1013990	-.182652	-.002372	108.9154
#2	6.365084	5.411573	1.127838	.1672895	-.163357	.0451604	115.4161
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.0000	10.00000	10.00000	2.500000	1.000000	3.000000	500.0000
Low	-100.000	-10.0000	-10.0000	-2.50000	-1.00000	-3.00000	-500.000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	1.644548	-1.32014	.1623117	28.18491	.5760544	-1.89898	.4661864
#1	1.526027	-1.10680	.2530866	27.05638	-.293563	-2.35326	.4332453
#2	1.763070	-1.53347	.0715367	29.31345	1.445672	-1.44470	.4991274
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.500000	2.500000	5.000000	75.00000	5.000000	125.0000	2.500000
Low	-2.50000	-2.50000	-5.00000	-75.0000	-5.00000	-125.000	-2.50000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-6.80718	-2.06440	18.26399	.6063145	.2534922	680.7428	-4.77905
#1	-8.74294	-1.87928	16.54427	1.568629	.1620638	617.3787	-4.24892
#2	-4.87141	-2.24952	19.98371	-.356000	.3449207	744.1070	-5.30918
Errors	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High		5.000000	125.0000	10.00000	1.500000	1250.000	15.00000
Low		-5.00000	-125.000	-10.0000	-1.50000	-1250.00	-15.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	-.053889	5.297072	.8342795	-.1111776	H24.02023	.5845535	7.124539
#1	-.256153	5.332312	.4036871	-.162396	H24.71255	.7221610	7.623022
#2	.1483760	5.261830	1.264872	-.061156	H23.32791	.4469460	6.626057
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass	NOCHECK
High	5.000000	10.00000	7.500000	2.500000	12.50000	12.50000	
Low	-5.00000	-10.0000	-7.50000	-2.50000	-12.5000	-12.5000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	-2.69830	-12.3694	7.094049	.2156486
#1	-4.25197	-11.9288	8.317207	.1791564
#2	-1.14463	-12.8100	5.870890	.2521407
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Analysis Report

11/06/07 11:12:51 PM

page 1

Method: TRACEV2 Sample Name: BKS 069

Operator:

Run Time: 11/06/07 23:04:36

Comment: UG/L

Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avg	10266.98	101.6134	98.18763	1063.179	50.05480	104.4549	9987.230
#1	10240.57	101.0638	97.01017	1058.527	50.65385	104.5943	10077.96
#2	10293.40	102.1629	99.36509	1067.831	49.45575	104.3155	9896.503
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	12000.00	120.0000	120.0000	1200.000	60.00000	120.0000	12000.00
Low	8000.000	80.00000	80.00000	800.0000	40.00000	80.00000	8000.000
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avg	523.7797	499.8906	517.2566	9974.557	1026.574	9983.006	1016.829
#1	525.7579	505.9534	521.9663	10058.69	1031.932	10095.24	1030.378
#2	521.8015	493.8279	512.5469	9890.420	1021.216	9870.771	1003.280
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	600.0000	600.0000	12000.00	1200.000	12000.00	1200.000
Low	400.0000	400.0000	400.0000	8000.000	800.0000	8000.000	800.0000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avg	1026.165	518.6605	9860.008	90.29839	100.8933	10676.55	98.78845
#1	1030.824	519.3020	9924.236	92.03326	102.1665	10608.60	101.4856
#2	1021.505	518.0191	9795.779	88.56352	99.62016	10744.49	96.09134
Errors	NOCHECK	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass
High		600.0000	12000.00		120.0000	12000.00	120.0000
Low		400.0000	8000.000		80.00000	8000.000	80.00000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avg	518.7609	1014.118	968.4388	511.0921	522.3202	2014.215	1036.134
#1	524.7864	1023.274	973.7221	511.9318	531.9821	2025.495	1039.127
#2	512.7354	1004.962	963.1556	510.2524	512.6583	2002.935	1033.141
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	600.0000	1200.000	1200.000	600.0000	600.0000	2400.000	
Low	400.0000	800.0000	800.0000	400.0000	400.0000	1600.000	
Elem	2/Pb	1/Se	2/Se	2V			
Avg	1021.794	79.87708	95.50900	516.8959			
#1	1028.335	84.65368	95.72302	522.6988			
#2	1015.253	75.10047	95.29500	511.0929			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
High							
Low							

Analysis Report

11/06/07 11:21:12 PM

page 1

Method: TRACEV2 Sample Name: S 711002-001-001-1/2 Operator:
 Run Time: 11/06/07 23:12:57
 Comment: UG/L
 Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	306234.6	3.129723	91.12148	1212.719	17.32712	2.262480	24926.36
#1	306014.0	.3322668	93.64081	1211.063	17.36887	2.771763	24944.19
#2	306455.2	5.927178	88.60214	1214.375	17.28536	1.753197	24908.53
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	882.8430	230.2100	951.3586	404911.4	151.7991	110723.0	5218.742
#1	883.0353	230.6179	951.6078	405081.7	151.8716	110876.8	5226.499
#2	882.6508	229.8020	951.1094	404741.2	151.7265	110569.1	5210.984
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	5324.160	394.1082	45243.39	4.436922	L-3.93374	1916.505	7.630499
#1	5327.730	394.6379	45270.25	4.586310	L-4.15785	1970.224	6.717289
#2	5320.590	393.5784	45216.53	4.287534	L-3.70964	1862.787	8.543709
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	1062.896	638.7455	103.1137	8.399835	31.42771	9905.982	167.9590
#1	1064.571	639.0765	104.1869	8.598011	31.42197	9919.668	167.4283
#2	1061.221	638.4144	102.0406	8.201658	31.43345	9892.296	168.4897
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	143.7190	-5.98590	9.648209	1036.627
#1	144.0932	-11.2709	12.51478	1038.831
#2	143.3448	-.700921	6.781639	1034.422
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Analysis Report

11/06/07 11:29:33 PM

page 1

Method: TRACEV2 Sample Name: D 711002-001-001-1/2 Operator:
 Run Time: 11/06/07 23:21:18
 Comment: UG/L
 Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avg	356318.3	5.277006	90.87667	1350.606	19.86687	-1.04495	22936.43
#1	356116.7	5.516262	89.94840	1348.001	19.76335	-.302727	22986.62
#2	356519.8	5.037750	91.80495	1353.212	19.97038	-1.78718	22886.24
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avg	1107.936	227.9006	1040.202	464745.1	163.0497	130350.8	5079.987
#1	1108.454	228.2404	1043.657	465901.3	163.0647	130732.9	5102.468
#2	1107.418	227.5607	1036.747	463588.8	163.0348	129968.8	5057.506
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avg	5245.797	462.7686	H52504.63	-4.23789	L-4.78086	1693.837	11.89892
#1	5256.661	463.2731	H52591.41	-3.51575	L-4.79523	1714.503	14.04919
#2	5234.934	462.2641	H52417.85	-4.96003	L-4.76648	1673.172	9.748642
Errors	LC Pass	LC Pass	LC High	LC Pass	LC Low	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avg	951.3453	694.2584	73.68218	9.301994	32.20372	10332.02	179.2925
#1	954.7842	696.3795	75.07474	10.07433	32.26792	10376.06	178.1921
#2	947.9064	692.1374	72.28961	8.529662	32.13952	10287.97	180.3929
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avg	154.9283	-15.9218	1.603931	929.1393
#1	155.5009	-8.86598	-.840759	933.5395
#2	154.3556	-22.9776	4.048622	924.7390
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Analysis Report

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page 1

Method: TRACEV2 Sample Name: SP711002-001-001-1/2 Operator:
 Run Time: 11/06/07 23:29:39
 Comment: UG/L
 Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	383864.2	76.35628	172.7957	5217.153	116.1269	96.39830	30239.83
#1	383633.0	79.50317	171.8013	5211.340	116.6156	96.76634	30327.19
#2	384095.3	73.20939	173.7900	5222.966	115.6383	96.03026	30152.48

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	1345.373	1117.158	1399.674	437313.5	194.1043	130986.2	6726.418
#1	1347.936	1121.115	1401.172	438686.2	193.5885	131466.4	6749.858
#2	1342.809	1113.202	1398.175	435940.8	194.6202	130506.1	6702.979

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	6891.946	1395.427	H57781.87	89.29578	91.36865	11321.95	103.8125
#1	6908.541	1396.314	H57813.58	92.75654	91.79109	11284.13	97.67078
#2	6875.352	1394.540	H57750.16	85.83503	90.94622	11359.76	109.9542

Errors	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	1834.634	1606.446	945.8751	960.0068	912.0409	10240.05	212.6323
#1	1840.144	1610.233	948.1284	959.1279	917.1076	10269.10	213.4166
#2	1829.125	1602.659	943.6218	960.8856	906.9741	10210.99	211.8481

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	184.8402	81.82093	93.03310	1807.386
#1	183.6743	80.62522	98.82208	1812.434
#2	186.0061	83.01664	87.24411	1802.339

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Analysis Report

QC Standard

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page 1

Method: TRACEV2 Sample Name: CRCRI
 Run Time: 11/06/07 23:40:51
 Comment: UG/L
 Mode: CONC Corr. Factor: 1

Operator:

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	225.6390	59.37131	8.280772	198.7497	4.704037	5.158212	4916.648
#1	231.6729	60.14327	8.422322	198.4994	4.736871	5.150851	4918.135
#2	219.6050	58.59935	8.139222	199.0000	4.671203	5.165573	4915.162
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	200.0000	60.00000	10.00000	200.0000	5.000000	5.000000	5000.000
Range	30.00000	50.00000	30.00000	30.00000	30.00000	30.00000	30.00000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	9.978943	49.25516	24.42925	Q137.4612	9.688724	5048.894	15.54032
#1	9.641981	49.39108	24.78099	Q150.2889	10.48486	5052.872	15.68689
#2	10.31590	49.11924	24.07750	124.6336	8.892591	5044.916	15.39375
Errors	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass
Value	10.00000	50.00000	25.00000	100.0000	10.00000	5000.000	15.00000
Range	30.00000	30.00000	30.00000	30.00000	50.00000	30.00000	30.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	12.75874	39.24239	5009.269	33.78612	10.00478	4969.144	27.08913
#1	15.19603	39.72344	4999.243	33.47250	10.11167	4991.339	28.59200
#2	10.32146	38.76135	5019.295	34.09975	9.897882	4946.948	25.58626
Errors	NOCHECK	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass	QC Pass
Value		40.00000	5000.000		10.00000	5000.000	25.00000
Range		30.00000	30.00000		30.00000	30.00000	50.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	50.78805	59.55181	.9642136	.3667409	.9628701	.8961496	11.81734
#1	50.81430	59.59155	1.162014	-.005524	2.917630	.9928822	12.12473
#2	50.76181	59.51207	.7664129	.7390054	-.991890	.7994171	11.50995
Errors	QC Pass	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	50.00000	60.00000					
Range	30.00000	30.00000					

Elem	2/Pb	1/Se	2/Se	2V
Avge	8.624303	35.93839	32.70988	49.22080
#1	9.664805	31.11013	34.65358	49.16475
#2	7.583801	40.76666	30.76619	49.27686
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Analysis Report

QC Standard

11/06/07 11:57:29 PM

page 1

Method: TRACEV2 Sample Name: IAICSA

Operator:

Run Time: 11/06/07 23:49:14

Comment: UG/L

Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	492554.1	3.181659	-5.61898	1.021935	-.208326	1.219505	504129.3
#1	492960.0	8.541977	-7.23742	1.050262	-.102260	.8943100	500274.2
#2	492148.2	-2.17866	-4.00054	.9936075	-.314391	1.544701	507984.5
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500000.0	.0000000	.0000000	.0000000	.0000000	.0000000	500000.0
Range	50000.00	20.00000	20.00000	5.000000	2.000000	6.000000	50000.00
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	2.027071	1.259320	2.064720	190145.5	-.419820	495876.6	Q8.244240
#1	1.829238	.8094777	1.493796	188717.3	-1.59788	491200.3	Q8.198673
#2	2.224905	1.709163	2.635645	191573.8	.7582374	500553.0	Q8.289805
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.0000000	.0000000	.0000000	200000.0	.0000000	500000.0	.0000000
Range	5.000000	5.000000	10.00000	20000.00	6.000000	50000.00	5.000000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	40.81604	2.648347	-1.05704	1.196969	-.192457	-301.621	8.134966
#1	39.64532	2.581180	-2.57870	-2.44803	-.353118	-274.021	10.64620
#2	41.98676	2.715514	.4646225	4.841970	-.031795	-329.221	5.623730
Errors	NOCHECK	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass	QC Pass
Value		.0000000	.0000000		.0000000	.0000000	.0000000
Range		10.00000	250.0000		3.000000	2500.000	20.00000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	.1013265	16.60494	4.303561	.9283817	1.347717	5.521483	16.00578
#1	.3549876	15.81243	4.038494	.4428232	5.616949	5.442190	14.81386
#2	-.152335	17.39745	4.568627	1.413940	-2.92152	5.600778	17.19771
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	20.00000	15.00000	5.000000	25.00000	25.00000	
Elem	2/Pb	1/Se	2/Se	2V			
Avge	-8.63273	1.847035	.8718147	4.739745			
#1	-9.80386	-.526418	-3.40896	5.118622			
#2	-7.46161	4.220488	5.152588	4.360868			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
Value							
Range							

Analysis Report

QC Standard

11/07/07 00:05:52 AM

page 1

Method: TRACEV2

Sample Name: IBICSAB

Operator:

Run Time: 11/06/07 23:57:36

Comment: UG/L

Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	490503.6	613.5129	103.3146	510.0311	472.0815	938.3237	498785.8
#1	490114.8	613.7076	101.9921	509.8456	471.6446	938.5970	498685.2
#2	490892.4	613.3184	104.6371	510.2165	472.5185	938.0504	498886.2
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500000.0	600.0000	100.0000	500.0000	500.0000	1000.000	500000.0
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	481.6263	462.3519	517.1876	189069.2	47.16980	495045.8	492.3184
#1	481.5594	461.8687	517.5462	189080.5	43.85004	495077.1	491.7129
#2	481.6932	462.8351	516.8290	189058.1	50.48956	495014.3	492.9239
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	200000.0	50.00000	500000.0	500.0000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	518.9826	938.3901	5616.556	50.39330	204.9175	10631.76	98.45776
#1	520.3660	938.1952	5603.611	49.67745	204.7533	10568.39	99.30962
#2	517.5992	938.5849	5629.502	51.10916	205.0816	10695.13	97.60589
Errors	NOCHECK	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass	QC Pass
Value		1000.000	5000.000		200.0000	10000.00	100.0000
Range		20.00000	20.00000		20.00000	20.00000	20.00000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	484.5799	988.2081	1036.953	987.0821	970.1992	983.9971	62.04407
#1	484.9672	988.1202	1036.988	980.2572	971.2364	983.8932	57.30038
#2	484.1926	988.2960	1036.919	993.9070	969.1621	984.1008	66.78775
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	1000.000	1000.000	1000.000	1000.000	1000.000	
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	
Elem	2/Pb	1/Se	2/Se	2V			
Avge	39.73255	51.25195	49.96393	502.8517			
#1	37.12475	51.59094	48.72066	504.1534			
#2	42.34035	50.91297	51.20720	501.5501			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
Value							
Range							

Analysis Report

QC Standard

11/07/07 00:14:13 AM

page 1

Method: TRACEV2 Sample Name: CVCCV3
 Run Time: 11/07/07 00:05:57
 Comment: UG/L
 Mode: CONC Corr. Factor: 1

Operator:

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avg	51295.13	519.2894	511.1672	503.8469	49.87950	501.8595	100848.9
#1	51228.68	519.9097	511.3230	504.0451	49.34232	499.9693	100232.6
#2	51361.59	518.6691	511.0114	503.6487	50.41669	503.7496	101465.3
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	500.0000	500.0000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avg	503.6572	497.6132	505.1752	49662.46	506.7491	102482.6	500.3273
#1	501.4816	492.6304	501.3532	49312.91	504.6811	101598.9	495.3460
#2	505.8327	502.5960	508.9971	50012.00	508.8171	103366.3	505.3086
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avg	500.3459	502.5638	24597.26	507.2941	505.3926	100891.6	509.9870
#1	494.5070	502.3000	24451.94	505.3901	501.3883	100861.7	508.3324
#2	506.1847	502.8276	24742.58	509.1980	509.3970	100921.4	511.6416
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		500.0000	25000.00	500.0000	500.0000	100000.0	500.0000
Range		10.00000	10.00000	10.00000	10.00000	10.00000	10.00000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avg	503.2290	509.7031	514.6672	514.2662	499.7206	507.1436	508.7593
#1	498.5100	506.5360	512.2742	512.8440	495.2683	505.1224	508.1469
#2	507.9479	512.8702	517.0602	515.6884	504.1730	509.1649	509.3717
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	
Elem	2/Pb	1/Se	2/Se	2V			
Avg	505.7439	512.2790	504.8014	502.3657			
#1	502.9481	513.5824	501.2939	498.0178			
#2	508.5397	510.9757	508.3090	506.7136			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
Value							
Range							

Analysis Report

QC Standard

11/07/07 00:22:35 AM

page 1

Method: TRACEV2 Sample Name: BCCCB3
 Run Time: 11/07/07 00:14:19
 Comment: UG/L
 Mode: CONC Corr. Factor: 1

Operator:

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	19.72274	2.948606	-2.20809	.1614949	-.181252	-.071505	72.07698
#1	23.70573	1.793306	-5.61471	.1640333	-.177942	-.055955	79.36678
#2	15.73974	4.103907	1.198539	.1589564	-.184562	-.087055	64.78718
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	2.000000	5.000000	1000.000
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	-.187037	.3486711	1.019097	18.30201	-.170272	40.04475	.2591353
#1	-.105283	.6516815	.8790557	24.56604	.0003205	46.08902	.2430392
#2	-.268791	.0456607	1.159137	12.03798	-.340865	34.00046	.2752314
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-7.52610	1.040813	6.712710	.4241480	.1241195	36.53934	1.598626
#1	-8.18133	1.029752	6.321158	.5281822	-.069683	87.47760	5.298571
#2	-6.87087	1.051875	7.104263	.3201137	.3179222	-14.3989	-2.10132
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range		10.00000	250.0000	5.000000	3.000000	2500.000	10.00000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	.6830915	-.508788	1.026301	1.939011	-.484606	.0806336	.1832525
#1	.6802550	-.608768	.8268420	2.260840	-2.50408	.1142765	-.824778
#2	.6859280	-.408808	1.225759	1.617182	1.534867	.0469907	1.191283
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	20.00000	15.00000	5.000000	20.00000	20.00000	
Elem	2/Pb	1/Se	2/Se	2V			
Avge	-.347152	-.964074	1.118141	.5337552			
#1	.4127527	-.404676	.9944943	.5226150			
#2	-1.10706	-1.52347	1.241788	.5448955			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
Value							
Range							

Analysis Report

11/07/07 00:30:56 AM

page 1

Method: TRACEV2 Sample Name: PS711002-001-001-1/2 Operator:
 Run Time: 11/07/07 00:22:40
 Comment: UG/L
 Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avg	303968.6	81.64500	169.8660	1212.533	27.19538	23.82434	29920.93
#1	304165.7	82.14337	168.1310	1212.479	27.32277	24.44928	30021.45
#2	303771.5	81.14662	171.6010	1212.588	27.06799	23.19939	29820.41
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avg	904.6566	262.4976	983.4586	411208.9	228.8758	117725.6	5393.102
#1	906.5079	263.5347	986.5798	412659.4	227.7490	118212.8	5417.030
#2	902.8053	261.4604	980.3373	409758.5	230.0026	117238.5	5369.172
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avg	5423.191	430.8095	48865.16	67.22185	37.26446	6704.190	93.37062
#1	5442.251	431.4635	48991.24	64.39032	37.54512	6713.805	97.47784
#2	5404.132	430.1554	48739.08	70.05338	36.98380	6694.574	89.26340
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avg	1098.267	720.4599	169.2255	38.37431	132.6711	9913.124	247.4713
#1	1102.275	723.4905	169.8651	37.83724	131.4488	9942.132	246.6890
#2	1094.259	717.4293	168.5859	38.91138	133.8935	9884.116	248.2537
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	
Elem	2/Pb	1/Se	2/Se	2V			
Avg	219.5779	58.62492	71.52019	1072.384			
#1	218.2788	53.37867	69.89601	1076.995			
#2	220.8770	63.87117	73.14436	1067.773			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
High							
Low							

Analysis Report

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Method: TRACEV2 Sample Name: SE711002-001-001-1/2 Operator:
 Run Time: 11/07/07 00:31:01
 Comment: UG/L 5
 Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avg	64354.68	.3696486	16.40552	242.1916	3.382224	.4458289	5280.720
#1	64454.75	-.708297	16.98222	241.9290	3.378056	.5660992	5298.094
#2	64254.62	1.447595	15.82882	242.4542	3.386393	.3255587	5263.345
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avg	182.7369	48.98367	191.5338	85625.18	30.78816	23724.83	1104.511
#1	182.6122	48.73632	192.1829	85830.30	31.40248	23791.38	1107.299
#2	182.8616	49.23103	190.8847	85420.06	30.17384	23658.28	1101.723
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avg	1092.501	82.51517	10883.39	1.113385	-.608277	535.3473	4.275970
#1	1092.593	81.80393	10930.65	-.137554	-.598309	541.0488	2.302573
#2	1092.409	83.22642	10836.13	2.364325	-.618244	529.6458	6.249366
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avg	220.3485	134.6918	22.42072	2.458584	10.31054	2024.311	35.83246
#1	220.7430	135.1123	22.69561	1.251308	8.292730	2027.935	36.68181
#2	219.9540	134.2712	22.14583	3.665860	12.32835	2020.687	34.98311
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avg	28.26590	-4.34422	3.842067	215.6368
#1	28.76271	-6.60455	3.095821	216.1517
#2	27.76909	-2.08389	4.588312	215.1219
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Analysis Report

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Method: TRACEV2 Sample Name: BLK 077
 Run Time: 11/07/07 00:42:13
 Comment: UG/L
 Mode: CONC Corr. Factor: 1

Operator:

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avg	14.39770	3.557024	-2.29235	.1031690	.1155705	-.016316	-4.39781
#1	20.19516	5.524530	-3.16044	.0196687	-.005332	-.031128	11.43962
#2	8.600238	1.589517	-1.42426	.1866692	.2364733	-.001504	-20.2353
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.0000	10.00000	10.00000	2.500000	1.000000	3.000000	500.0000
Low	-100.000	-10.0000	-10.0000	-2.50000	-1.00000	-3.00000	-500.000
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avg	.6622777	-.439031	-1.02534	40.42554	-.180504	3.924110	.4110888
#1	.8414698	-.528308	-.762357	37.55790	.5853105	.6609122	.3999300
#2	.4830856	-.349754	-1.28832	43.29318	-.946318	7.187308	.4222475
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.500000	2.500000	5.000000	75.00000	5.000000	125.0000	2.500000
Low	-2.50000	-2.50000	-5.00000	-75.0000	-5.00000	-125.000	-2.50000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avg	1.805304	-1.00602	5.674446	-.345293	.3015432	366.7944	-5.14389
#1	-1.46301	-1.36133	10.48826	.2470809	.1620275	422.4815	-9.72692
#2	5.073616	-.650717	.8606320	-.937666	.4410588	311.1073	-.560851
Errors	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High		5.000000	125.0000	10.00000	1.500000	1250.000	15.00000
Low		-5.00000	-125.000	-10.0000	-1.50000	-1250.00	-15.0000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avg	.3080521	2.095924	4.797047	.6907902	-.680257	2.985068	3.849977
#1	.3443720	2.109667	4.501838	.3959941	.0213851	3.114819	4.683689
#2	.2717322	2.082182	5.092255	.9855864	-1.38190	2.855316	3.016266
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5.000000	10.00000	7.500000	2.500000	12.50000	12.50000	
Low	-5.00000	-10.0000	-7.50000	-2.50000	-12.5000	-12.5000	
Elem	2/Pb	1/Se	2/Se	2V			
Avg	-2.19586	-9.27207	4.117974	.4527024			
#1	-1.46399	-7.36589	4.053443	.5942175			
#2	-2.92772	-11.1783	4.182506	.3111873			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
High							
Low							

Analysis Report

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Method: TRACEV2 Sample Name: BKS 077
 Run Time: 11/07/07 00:50:34
 Comment: UG/L
 Mode: CONC Corr. Factor: 1

Operator:

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avg	10221.23	105.1301	100.6286	1025.812	48.08691	102.4241	9801.348
#1	10200.24	102.1461	99.61204	1024.940	48.06949	102.2023	9789.210
#2	10242.22	108.1141	101.6451	1026.684	48.10434	102.6458	9813.486
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	12000.00	120.0000	120.0000	1200.000	60.00000	120.0000	12000.00
Low	8000.000	80.00000	80.00000	800.0000	40.00000	80.00000	8000.000
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avg	505.9797	487.0709	493.4708	9889.352	1003.821	10054.48	985.4625
#1	505.3525	486.7627	491.6623	9887.870	1000.100	10038.86	984.1531
#2	506.6070	487.3792	495.2793	9890.834	1007.542	10070.11	986.7718
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	600.0000	600.0000	12000.00	1200.000	12000.00	1200.000
Low	400.0000	400.0000	400.0000	8000.000	800.0000	8000.000	800.0000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avg	985.6122	505.6597	10580.96	96.59291	99.62272	10262.82	101.2473
#1	985.2177	505.7886	10554.15	93.45245	99.39729	10189.40	99.62216
#2	986.0068	505.5307	10607.78	99.73338	99.84815	10336.24	102.8724
Errors	NOCHECK	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass
High		600.0000	12000.00		120.0000	12000.00	120.0000
Low		400.0000	8000.000		80.00000	8000.000	80.00000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avg	501.1019	996.7339	974.9934	522.4468	513.0415	2058.970	1012.315
#1	500.2082	995.4776	973.5496	521.7388	512.7819	2053.375	1008.689
#2	501.9955	997.9902	976.4372	523.1549	513.3011	2064.564	1015.942
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	600.0000	1200.000	1200.000	600.0000	600.0000	2400.000	
Low	400.0000	800.0000	800.0000	400.0000	400.0000	1600.000	
Elem	2/Pb	1/Se	2/Se	2V			
Avg	999.5738	92.45219	98.66316	498.1764			
#1	995.8059	88.49469	95.93121	497.7239			
#2	1003.342	96.40971	101.3951	498.6290			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
High							
Low							

Analysis Report

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Method: TRACEV2 Sample Name: S B071105 BE1
 Run Time: 11/07/07 00:58:55
 Comment: UG/L
 Mode: CONC Corr. Factor: 1

Operator:

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avg	11.18584	1.703715	-2.27909	.2097650	.0986968	-.026225	28.74554
#1	12.38841	-1.39042	-1.72120	.2356848	.1441038	-.107776	22.81895
#2	9.983263	4.797853	-2.83699	.1838452	.0532898	.0553256	34.67213
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avg	1.087503	-.078205	-1.14872	10.00237	-.306920	6.386388	.4193497
#1	.9086758	-.586234	-1.41064	2.566704	-.803804	5.036383	.4146635
#2	1.266330	.4298234	-.886804	17.43803	.1899638	7.736393	.4240358
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avg	-1.13822	-1.07351	50.04120	2.124564	.2396237	139965.8	.9942117
#1	-.517158	-.732110	39.33083	.9044406	.1123375	140134.3	.0826754
#2	-1.75929	-1.41491	60.75156	3.344688	.3669099	139797.2	1.905748
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avg	.0426113	2.434389	2.515473	1.182646	2.738091	1.176029	4.735703
#1	.3371669	2.492902	2.135229	1.421999	2.091800	1.097350	1.828727
#2	-.251944	2.375876	2.895717	.9432933	3.384382	1.254709	7.642679
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	
Elem	2/Pb	1/Se	2/Se	2V			
Avg	-2.82834	1.084286	2.644588	.7284599			
#1	-2.12018	-5.11349	3.913286	.3944656			
#2	-3.53650	7.282057	1.375890	1.062454			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
High							
Low							

Method: TRACEV2 Sample Name: S 711012-001-001-1/1 Operator:
 Run Time: 11/07/07 01:07:16
 Comment: UG/L
 Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avg	21.77122	-1.65124	-.978635	80.23143	.3450463	.1017054	5932.798
#1	27.14300	-2.77365	-.745695	79.75998	.1629786	.0692123	5988.493
#2	16.39943	-.528841	-1.21158	80.70288	.5271140	.1341984	5877.102
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avg	1.041789	.2045576	1.866514	58.64502	13.50011	4002.091	222.5759
#1	.9892681	-.259940	2.489323	55.86546	13.03150	4046.262	225.4141
#2	1.094310	.6690549	1.243705	61.42458	13.96872	3957.921	219.7376
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avg	228.0835	2.062227	672.6862	.2110055	.2981578	137133.5	-3.17476
#1	229.4561	2.439062	673.1118	-.042454	.3113841	136842.0	-4.51087
#2	226.7108	1.685392	672.2605	.4644651	.2849315	137425.0	-1.83865
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avg	.6482422	75.06988	24.55183	.0056031	1.078261	4.136001	17.03423
#1	.5492932	75.86273	24.52051	.4129782	-.352879	4.131267	17.06960
#2	.7471911	74.27705	24.58314	-.401772	2.509400	4.140735	16.99886
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avg	11.73293	-1.75303	1.192907	.9308820
#1	11.01234	-.533175	.2027884	.7990634
#2	12.45353	-2.97289	2.183025	1.062701
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Analysis Report

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Method: TRACEV2 Sample Name: SP711012-001-001-1/1 Operator:
 Run Time: 11/07/07 01:15:37
 Comment: UG/L
 Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avg	10152.47	106.1379	96.15632	1103.254	46.47717	101.2364	15394.88
#1	10137.52	105.1554	98.07072	1102.081	46.53663	101.3688	15389.01
#2	10167.42	107.1204	94.24192	1104.428	46.41772	101.1039	15400.74
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avg	498.8937	470.7736	479.8289	9634.510	992.0271	13539.66	1167.732
#1	497.6734	471.8779	479.5538	9617.265	989.4883	13540.84	1167.511
#2	500.1139	469.6693	480.1039	9651.754	994.5660	13538.48	1167.953
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avg	1188.889	502.2763	11388.01	95.44700	95.51140	146630.1	98.71182
#1	1190.542	501.6878	11369.44	94.17881	95.43661	146286.0	98.11829
#2	1187.236	502.8648	11406.58	96.71519	95.58619	146974.3	99.30535
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avg	482.8550	1042.781	982.4196	508.0035	485.7300	1978.149	1005.988
#1	482.0783	1042.689	979.9433	507.1922	483.8784	1977.278	1002.159
#2	483.6316	1042.873	984.8959	508.8148	487.5816	1979.020	1009.816
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	
Elem	2/Pb	1/Se	2/Se	2V			
Avg	985.0466	93.17875	96.58101	474.9460			
#1	983.1526	93.54289	94.49666	476.2587			
#2	986.9407	92.81461	98.66536	473.6333			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
High							
Low							

Analysis Report

11/07/07 01:32:15 AM

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Method: TRACEV2 Sample Name: SD711012-001-001-1/1 Operator:
 Run Time: 11/07/07 01:23:59
 Comment: UG/L
 Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avg	10184.77	106.5878	98.99348	1096.285	47.33329	101.8546	15631.87
#1	10125.85	107.7425	96.96022	1090.500	46.89514	101.1124	15540.06
#2	10243.70	105.4331	101.0267	1102.070	47.77143	102.5967	15723.69
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avg	501.4892	478.9182	487.9788	9756.025	1002.875	13781.21	1221.284
#1	498.2993	474.2763	483.0906	9708.522	998.5357	13672.03	1210.718
#2	504.6791	483.5600	492.8670	9803.530	1007.215	13890.39	1231.851
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avg	1235.794	504.5066	11443.02	96.65305	97.44950	147423.5	103.7029
#1	1229.715	500.9009	11359.66	94.81634	96.71142	146844.8	99.48891
#2	1241.874	508.1123	11526.39	98.48975	98.18758	148002.3	107.9169
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avg	491.6934	1055.822	986.9686	512.9597	498.3930	2011.764	1009.069
#1	487.4672	1047.522	980.4009	510.9067	490.6898	1998.026	1004.920
#2	495.9196	1064.123	993.5363	515.0127	506.0962	2025.502	1013.219
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avg	999.7779	96.57735	96.69080	487.0214
#1	995.3434	92.69354	95.87764	482.4026
#2	1004.212	100.4612	97.50394	491.6403
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Analysis Report

11/07/07 01:40:36 AM

page 1

Method: TRACEV2 Sample Name: SE711012-001-001-1/1 Operator:
 Run Time: 11/07/07 01:32:21
 Comment: UG/L 5
 Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	-3.81196	.8115504	-2.04024	15.94694	-.038247	-.140197	1220.896
#1	-8.36888	-.157273	-.421526	16.01316	.0452243	-.074830	1205.009
#2	.7449604	1.780374	-3.65895	15.88072	-.121718	-.205565	1236.783
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	.2511024	.1690324	-.029195	9.936907	2.954324	833.1420	45.83943
#1	-.177003	.3361879	-.225528	5.763681	1.711407	828.4298	45.59243
#2	.6792080	.0018770	.1671374	14.11013	4.197241	837.8542	46.08642
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	43.34891	.3500729	112.4134	-1.83742	.4648165	27301.23	-.078035
#1	42.04370	.2396917	123.1129	-2.10458	.5677059	27340.35	-3.12293
#2	44.65413	.4604541	101.7138	-1.57026	.3619271	27262.12	2.966855
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	.3709635	16.23257	6.551345	1.131143	1.185588	1.290029	6.226547
#1	.4716475	16.17556	6.387150	.9899939	2.663806	1.286568	6.963361
#2	.2702796	16.28959	6.715540	1.272293	-.292629	1.293491	5.489734
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	
Elem	2/Pb	1/Se	2/Se	2V			
Avge	1.318101	-.827596	-2.34244	.1630711			
#1	-.914681	-.884960	-2.71450	.6178320			
#2	3.550883	-.770231	-1.97038	-.291690			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
High							
Low							

Analysis Report

11/07/07 01:48:57 AM

page 1

Method: TRACEV2 Sample Name: S 711014-001-001-1/1 Operator:
 Run Time: 11/07/07 01:40:42
 Comment: UG/L
 Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avg	30.15790	5.113882	1.908062	49.03930	-.032160	.4779270	23927.61
#1	20.39174	5.621570	2.917534	48.86654	-.108790	.4129952	24123.67
#2	39.92406	4.606194	.8985900	49.21206	.0444708	.5428589	23731.56
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avg	1.786204	.3994223	55.26091	28.54657	8.767821	1902.282	177.2149
#1	1.692822	.6329902	56.34190	31.75081	9.343850	1921.094	179.2357
#2	1.879587	.1658545	54.17992	25.34233	8.191793	1883.469	175.1940
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avg	172.5683	6.399233	567.0534	.2898575	.1584685	134395.8	-.576982
#1	175.0230	6.584828	569.4528	-1.67199	.3626004	134464.4	1.640507
#2	170.1135	6.213638	564.6540	2.251708	-.045663	134327.2	-2.79447
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avg	1.230326	113.4511	18.62502	.4281390	2.843460	7.623743	11.95194
#1	1.601792	114.4886	18.65818	.4554900	2.239467	7.696591	11.21968
#2	.8588595	112.4136	18.59185	.4007881	3.447453	7.550894	12.68421
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	
Elem	2/Pb	1/Se	2/Se	2V			
Avg	7.175648	-6.04111	3.455221	1.280179			
#1	8.405820	-10.9724	2.978093	1.353528			
#2	5.945475	-1.10981	3.932349	1.206829			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
High							
Low							

Analysis Report

QC Standard

11/07/07 02:00:10 AM

page 1

Method: TRACEV2 Sample Name: CVCCV4
 Run Time: 11/07/07 01:51:54
 Comment: UG/L
 Mode: CONC Corr. Factor: 1

Operator:

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	53219.65	535.9454	527.2978	521.5951	51.08798	513.0435	103483.7
#1	54509.38	546.0902	541.8451	533.8657	52.38417	523.9777	105975.5
#2	51929.93	525.8006	512.7505	509.3245	49.79178	502.1092	100991.8
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	500.0000	500.0000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	516.0198	507.3213	521.3434	50813.23	513.9981	104473.7	511.4312
#1	528.5652	519.8137	534.3931	52116.26	521.3132	107044.2	524.1357
#2	503.4745	494.8290	508.2938	49510.19	506.6830	101903.2	498.7267
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	511.0463	513.0870	25319.99	516.9314	519.8425	104851.5	525.4581
#1	521.5248	525.3208	25859.76	523.1821	532.1700	107096.6	537.4551
#2	500.5677	500.8531	24780.22	510.6807	507.5149	102606.3	513.4612
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		500.0000	25000.00	500.0000	500.0000	100000.0	500.0000
Range		10.00000	10.00000	10.00000	10.00000	10.00000	10.00000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	515.6693	521.9581	526.5960	522.2616	509.0563	520.7344	518.7428
#1	528.6571	535.4061	538.8937	533.6472	521.8126	533.8343	530.2566
#2	502.6814	508.5101	514.2982	510.8760	496.3000	507.6344	507.2291
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	
Elem	2/Pb	1/Se	2/Se	2V			
Avge	511.6257	523.8830	513.4555	513.8384			
#1	516.8415	534.6664	517.4399	527.2572			
#2	506.4099	513.0996	509.4712	500.4197			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
Value							
Range							

Method: TRACEV2 Sample Name: BCCCCB4
 Run Time: 11/07/07 02:00:16
 Comment: UG/L
 Mode: CONC Corr. Factor: 1

Operator:

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	2.551520	-1.14886	-2.59686	.0707650	-.098774	-.086199	34.03203
#1	6.817002	-3.18149	-1.88836	.1443078	-.113247	-.020106	41.04050
#2	-1.71396	.8837721	-3.30537	-.002778	-.084302	-.152292	27.02357
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	2.000000	5.000000	1000.000
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	.0887471	.1908868	-.039855	4.502358	-.822880	16.91479	.1951323
#1	.0106733	-.018110	.3182899	11.05366	-1.26525	23.54770	.2441326
#2	.1668208	.3998836	-.398000	-2.04894	-.380512	10.28188	.1461320
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-4.67448	.7480724	6.793861	-.146469	.6616843	106.2692	.5396748
#1	-4.09528	1.462193	17.65844	-1.23573	.0840118	217.7732	2.788698
#2	-5.25368	.0339519	-4.07071	.9427928	1.239357	-5.23489	-1.70935
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range		10.00000	250.0000	5.000000	3.000000	2500.000	10.00000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	.2830156	-.027023	.7210950	2.088153	1.163826	.1036706	5.859502
#1	.4852296	.0241388	.9831585	2.227620	.6604099	.0121954	.9889169
#2	.0808015	-.078184	.4590315	1.948687	1.667242	.1951458	10.73009
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	20.00000	15.00000	5.000000	20.00000	20.00000	
Elem	2/Pb	1/Se	2/Se	2V			
Avge	-4.16418	3.239285	-1.83946	.0993423			
#1	-2.39244	.9354870	-2.32146	.5214496			
#2	-5.93592	5.543082	-1.35746	-.322765			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
Value							
Range							

Method: TRACEV2 Sample Name: SP711014-001-001-1/1 Operator:
 Run Time: 11/07/07 02:08:38
 Comment: UG/L
 Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	10259.77	110.3493	102.1987	1076.331	48.26337	103.0785	33746.03
#1	10231.09	111.1273	101.0552	1072.883	48.37255	103.0399	33735.49
#2	10288.44	109.5712	103.3422	1079.778	48.15420	103.1172	33756.57
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	506.4011	490.5176	550.2381	9915.539	1012.413	11898.85	1166.255
#1	506.5986	490.6849	549.8195	9896.453	1015.633	11894.31	1166.429
#2	506.2036	490.3504	550.6567	9934.625	1009.194	11903.40	1166.080
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	1171.542	515.4336	11484.87	99.21886	98.90825	143609.8	96.76280
#1	1169.038	514.3528	11477.23	98.91044	98.96333	143224.6	97.45300
#2	1174.046	516.5143	11492.52	99.52728	98.85317	143994.9	96.07259
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	502.7754	1111.644	988.1740	521.5780	514.0926	2046.738	1016.201
#1	502.3006	1110.711	987.3804	518.9835	511.1263	2040.977	1016.616
#2	503.2503	1112.578	988.9677	524.1725	517.0589	2052.499	1015.786
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	
Elem	2/Pb	1/Se	2/Se	2V			
Avge	1010.519	95.80705	100.9246	498.1427			
#1	1015.141	93.78959	101.4707	497.2436			
#2	1005.898	97.82451	100.3786	499.0417			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
High							
Low							

Analysis Report

11/07/07 02:25:15 AM

page 1

Method: TRACEV2 Sample Name: SD711014-001-001-1/1 Operator:
 Run Time: 11/07/07 02:17:00
 Comment: UG/L
 Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avg	10226.64	109.0695	104.2604	1075.428	48.18827	102.2801	34377.45
#1	10217.36	110.1214	104.6752	1076.781	47.94625	102.1878	34294.26
#2	10235.91	108.0176	103.8456	1074.076	48.43029	102.3724	34460.65
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avg	505.1454	488.2407	550.5703	9858.281	1004.147	11860.65	1166.954
#1	505.1233	486.2375	548.1589	9835.119	999.7258	11817.62	1161.944
#2	505.1676	490.2438	552.9818	9881.444	1008.569	11903.68	1171.963
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avg	1174.858	511.8048	11397.53	96.66562	99.51450	148110.5	100.5173
#1	1173.499	512.0911	11365.67	95.85535	98.85830	148020.2	99.88188
#2	1176.216	511.5183	11429.39	97.47588	100.1707	148200.7	101.1526
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avg	500.5200	1112.208	992.2921	517.4827	506.9713	2031.916	1013.601
#1	498.6684	1109.703	990.1090	515.4497	506.1524	2027.057	1010.461
#2	502.3715	1114.713	994.4753	519.5158	507.7903	2036.775	1016.742
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	
Elem	2/Pb	1/Se	2/Se	2V			
Avg	999.4203	91.81035	99.09312	495.4671			
#1	994.3583	91.19502	98.18540	493.7750			
#2	1004.482	92.42568	100.0008	497.1591			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
High							
Low							

Analysis Report

11/07/07 02:33:36 AM

page 1

Method: TRACEV2 Sample Name: SE711014-001-001-1/1 Operator:
 Run Time: 11/07/07 02:25:21
 Comment: UG/L 5
 Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	-6.64846	2.164645	-4.04413	9.730030	-.074605	-.013775	4803.704
#1	-6.43478	1.757356	-5.28568	9.769023	-.112348	.0001725	4810.530
#2	-6.86214	2.571934	-2.80259	9.691038	-.036862	-.027722	4796.878
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	.2737021	.3161586	10.84068	1.035881	-.022479	387.7154	35.44377
#1	.2712397	.3957798	10.57233	-8.81977	.1469582	387.7486	35.46216
#2	.2761646	.2365376	11.10903	10.89154	-.191916	387.6822	35.42539
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	32.32165	1.508883	91.36760	-.782055	.2764561	26614.48	1.964175
#1	30.88847	1.303786	85.56630	-1.76808	.4176394	26562.87	-1.18110
#2	33.75483	1.713981	97.16889	.2039734	.1352727	26666.09	5.109447
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	.3782098	23.99045	4.508103	.8988504	3.483610	1.825529	3.719548
#1	.2114260	24.19450	4.819095	.9972619	3.867316	1.937475	4.717840
#2	.5449935	23.78640	4.197111	.8004388	3.099903	1.713582	2.721255
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	
Elem	2/Pb	1/Se	2/Se	2V			
Avge	-1.89360	-2.44591	.0497550	.0503292			
#1	-2.13860	-3.54860	-.877944	-.197604			
#2	-1.64861	-1.34322	.9774545	.2982622			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
High							
Low							

Analysis Report

11/07/07 02:41:58 AM

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Method: TRACEV2 Sample Name: S 711014-002-002-1/1 Operator:
 Run Time: 11/07/07 02:33:42
 Comment: UG/L
 Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	-1.68820	.5301247	1.441979	123.7977	.0260692	.3373945	26627.39
#1	-3.92781	-4.09514	2.363990	124.0901	.0894856	.1137705	26501.06
#2	.5514110	5.155385	.5199677	123.5054	-.037347	.5610184	26753.72
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	.8662113	.4342011	15.01636	18.31157	18.05537	1696.332	280.7114
#1	.8849038	.4196038	14.70813	21.53741	17.33281	1684.999	278.8727
#2	.8475188	.4487985	15.32459	15.08573	18.77792	1707.665	282.5500
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	278.6250	3.648871	465.7380	-.876478	.2567525	134405.6	-1.40842
#1	275.7830	3.309518	467.8672	.8181546	.1795458	134568.8	1.049887
#2	281.4670	3.988223	463.6089	-2.57111	.3339592	134242.3	-3.86673
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	1.401680	84.90079	18.67663	.7861350	-.184618	1.890881	21.10326
#1	1.326989	84.23678	18.54191	.7570161	-1.28360	1.889289	21.64086
#2	1.476372	85.56479	18.81136	.8152539	.9143611	1.892473	20.56566
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	
Elem	2/Pb	1/Se	2/Se	2V			
Avge	16.53130	-6.82047	2.095401	1.433142			
#1	15.17867	-6.65977	4.556996	1.549642			
#2	17.88394	-6.98118	-.366195	1.316642			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
High							
Low							

Analysis Report

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Method: TRACEV2 Sample Name: S 711014-003-003-1/1 Operator:
 Run Time: 11/07/07 02:42:04
 Comment: UG/L
 Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	2.637477	3.420486	1.183650	100.1617	-.019764	.3313789	28925.19
#1	2.703543	4.702521	.5390789	100.1482	-.027915	.4335990	29039.40
#2	2.571413	2.138452	1.828222	100.1753	-.011613	.2291587	28810.99
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	.8108754	-.459938	36.77649	8.486955	18.98525	1698.333	80.53261
#1	1.117163	.0996777	36.96139	15.37285	18.18352	1705.392	80.78603
#2	.5045883	-1.01955	36.59158	1.601063	19.78698	1691.275	80.27918
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	74.62830	4.337563	368.1538	.2914406	-.113817	137500.5	-2.69509
#1	77.99331	4.110028	378.0762	-1.43154	.2374425	137729.3	-4.98742
#2	71.26330	4.565098	358.2313	2.014423	-.465077	137271.7	-.402754
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	.7855119	107.9018	17.47436	-.106874	-.763972	.8991773	22.99782
#1	.8182883	108.4231	17.49385	.2497801	-1.24102	1.082507	22.76946
#2	.7527354	107.3804	17.45486	-.463528	-.286920	.7158471	23.22619
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	
Elem	2/Pb	1/Se	2/Se	2V			
Avge	16.97885	-4.21500	2.544539	.5621824			
#1	15.89044	-3.02619	-.634339	.7144344			
#2	18.06726	-5.40381	5.723418	.4099304			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
High							
Low							

Analysis Report

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Method: TRACEV2 Sample Name: S 711014-004-004-1/1 Operator:
 Run Time: 11/07/07 02:50:25
 Comment: UG/L
 Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avg	22.59569	8.361781	2.635968	30.66249	-.036884	.3566652	46363.56
#1	18.06467	9.312112	5.058220	30.56317	-.120873	.2866049	46600.16
#2	27.12671	7.411450	.2137156	30.76181	.0471051	.4267255	46126.96
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avg	1.061060	.6112739	41.16031	37.10851	15.04731	1691.632	245.7181
#1	1.102707	.8339414	41.84575	42.44346	15.83950	1704.186	247.5368
#2	1.019414	.3886063	40.47487	31.77357	14.25512	1679.078	243.8995
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avg	243.1252	5.721812	384.9859	.6881969	.1149762	137486.9	-4.44752
#1	244.3017	5.369592	389.5873	.9035812	.0236444	137246.9	-5.61239
#2	241.9487	6.074031	380.3845	.4728126	.2063081	137726.9	-3.28265
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avg	.9487662	90.65915	18.42424	.0833108	.7293956	4.086631	20.53473
#1	1.023370	91.11761	18.26509	.2609112	1.889036	4.139678	20.28350
#2	.8741624	90.20068	18.58340	-.094290	-.430245	4.033583	20.78595
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	
Elem	2/Pb	1/Se	2/Se	2V			
Avg	12.30349	-4.69117	3.377760	1.087898			
#1	13.61738	-5.15104	3.930770	.9812827			
#2	10.98959	-4.23130	2.824749	1.194513			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
High							
Low							

Analysis Report

11/07/07 03:07:02 AM

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Method: TRACEV2 Sample Name: S 711014-005-005-1/1 Operator:
 Run Time: 11/07/07 02:58:46
 Comment: UG/L
 Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avg	10.28939	5.592125	-.314783	48.22880	-.208997	.5510169	46300.86
#1	17.83675	3.994355	-.679149	48.27136	-.192622	.8620746	46208.27
#2	2.742036	7.189895	.0495836	48.18624	-.225372	.2399592	46393.44
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avg	.9372389	-.316549	28.00797	18.53495	20.66714	1709.638	190.8504
#1	1.026218	-.465025	27.94374	18.10858	20.96606	1704.794	190.2618
#2	.8482595	-.168074	28.07220	18.96133	20.36822	1714.482	191.4391
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avg	184.6325	4.673590	418.9278	-.982315	.3280835	138889.6	1.575081
#1	185.5373	4.663077	420.7202	-1.79673	.3681025	138692.8	.5421997
#2	183.7277	4.684102	417.1354	-.167902	.2880644	139086.5	2.607962
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avg	1.211111	87.92230	15.94379	-.000648	.2108864	2.333549	24.38647
#1	1.384583	87.78721	16.02781	-.311870	.0500459	2.360008	25.12300
#2	1.037639	88.05739	15.85977	.3105741	.3717269	2.307089	23.64993
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avg	18.80736	-8.42262	2.737714	1.201152
#1	18.88747	-10.4562	2.532872	1.346098
#2	18.72724	-6.38907	2.942556	1.056206
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Method: TRACEV2 Sample Name: CRCRI

Operator:

Run Time: 11/07/07 03:09:59

Comment: UG/L

Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	195.8443	59.71037	8.492960	198.0409	4.613818	5.244425	5016.030

#1	193.6741	58.35022	7.971579	197.6312	4.570730	5.077121	5036.935
#2	198.0146	61.07053	9.014340	198.4505	4.656906	5.411729	4995.125

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	200.0000	60.00000	10.00000	200.0000	5.000000	5.000000	5000.000
Range	30.00000	50.00000	30.00000	30.00000	30.00000	30.00000	30.00000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	9.852016	49.95277	25.88860	100.6825	10.19489	5115.953	15.19428

#1	9.819513	49.92339	26.27267	94.78709	10.14418	5134.420	15.14311
#2	9.884519	49.98216	25.50454	106.5779	10.24560	5097.486	15.24544

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	10.00000	50.00000	25.00000	100.0000	10.00000	5000.000	15.00000
Range	30.00000	30.00000	30.00000	30.00000	50.00000	30.00000	30.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	8.037552	39.62317	5065.351	36.50076	10.68094	4944.495	23.13897

#1	8.712835	40.50157	5090.003	35.67325	10.81129	4903.605	19.37148
#2	7.362268	38.74477	5040.699	37.32827	10.55059	4985.386	26.90646

Errors	NOCHECK	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass	QC Pass
Value		40.00000	5000.000		10.00000	5000.000	25.00000
Range		30.00000	30.00000		30.00000	30.00000	50.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	51.75001	60.56114	.0005619	.0145417	-.494579	-.184556	9.994803

#1	51.76928	60.70283	.1741677	-.472262	-1.17591	-.142644	8.829924
#2	51.73074	60.41945	-.173044	.5013449	.1867504	-.226467	11.15968

Errors	QC Pass	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	50.00000	60.00000					
Range	30.00000	30.00000					

Elem	2/Pb	1/Se	2/Se	2V
Avge	10.29482	34.80698	37.34753	49.87018

#1	10.80119	35.00805	36.00573	49.73033
#2	9.788443	34.60591	38.68933	50.01002

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: IAICSA
 Run Time: 11/07/07 03:18:21
 Comment: UG/L
 Mode: CONC Corr. Factor: 1

Operator:

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avg	492676.2	3.989295	-2.63244	.9305916	-.488209	2.991242	511960.3
#1	492514.7	1.237434	.6661717	.9188249	-.487721	2.936602	510985.5
#2	492837.8	6.741157	-5.93104	.9423584	-.488697	3.045883	512935.1
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500000.0	.0000000	.0000000	.0000000	.0000000	.0000000	500000.0
Range	50000.00	20.00000	20.00000	5.000000	2.000000	6.000000	50000.00
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avg	1.636572	1.122276	3.751425	193637.8	-.916818	506711.2	Q5.540726
#1	1.596198	1.213114	3.226032	193144.6	-.156574	505923.3	Q5.313409
#2	1.676947	1.031439	4.276819	194131.1	-1.67706	507499.1	Q5.768044
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.0000000	.0000000	.0000000	200000.0	.0000000	.500000.0	.0000000
Range	5.000000	5.000000	10.00000	20000.00	6.000000	50000.00	5.000000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avg	39.47247	3.282696	-1.94907	2.025686	-.006031	-199.516	4.561362
#1	38.18324	3.230353	-4.03904	2.859600	-.006128	-220.058	-.459297
#2	40.76169	3.335039	.1408946	1.191773	-.005934	-178.974	9.582022
Errors	NOCHECK	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass	QC Pass
Value		.0000000	.0000000		.0000000	.0000000	.0000000
Range		10.00000	250.0000		3.000000	2500.000	20.00000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avg	-.415147	17.70920	5.631642	.1897699	1.053452	5.450610	18.44908
#1	-.434103	17.64368	6.071451	.1308671	2.318886	5.601850	19.03563
#2	-.396192	17.77473	5.191834	.2486726	-.211981	5.299370	17.86253
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	20.00000	15.00000	5.000000	25.00000	25.00000	
Elem	2/Pb	1/Se	2/Se	2V			
Avg	-10.5999	5.209660	.4335785	6.119985			
#1	-9.75278	7.562911	.5078239	5.975029			
#2	-11.4470	2.856408	.3593330	6.264940			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
Value							
Range							

Method: TRACEV2 Sample Name: IBICSAB
 Run Time: 11/07/07 03:26:43
 Comment: UG/L
 Mode: CONC Corr. Factor: 1

Operator:

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	493151.0	616.8057	100.0391	510.8610	483.7610	945.1519	506084.8

#1	492118.2	614.2101	99.17088	510.5691	481.9745	942.9399	503641.1
#2	494183.8	619.4011	100.9072	511.1528	485.5476	947.3638	508528.4

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500000.0	600.0000	100.0000	500.0000	500.0000	1000.000	500000.0
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	485.4103	474.0942	529.6901	192953.8	46.99526	505388.6	501.2788

#1	483.4785	472.0496	527.4567	192165.8	45.76362	503086.3	499.7266
#2	487.3422	476.1388	531.9235	193741.8	48.22690	507690.8	502.8311

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	200000.0	50.00000	500000.0	500.0000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	521.6140	940.8088	5797.167	52.99407	209.8980	10627.08	97.86763

#1	519.6482	937.2054	5776.605	52.55699	209.1840	10604.75	103.3364
#2	523.5798	944.4122	5817.730	53.43115	210.6120	10649.41	92.39887

Errors	NOCHECK	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass	QC Pass
Value		1000.000	5000.000		200.0000	10000.00	100.0000
Range		20.00000	20.00000		20.00000	20.00000	20.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	496.0145	1007.057	1055.041	993.1013	1001.358	998.4336	67.30999

#1	493.6795	1002.404	1052.236	987.9329	991.4020	994.9802	65.69371
#2	498.3495	1011.710	1057.846	998.2696	1011.315	1001.887	68.92627

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	1000.000	1000.000	1000.000	1000.000	1000.000	
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	36.83779	52.39549	53.29331	515.8839

#1	35.79847	55.03085	51.32002	514.5565
#2	37.87712	49.76014	55.26660	517.2112

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: CVCCV4
 Run Time: 11/07/07 03:35:06
 Comment: UG/L
 Mode: CONC Corr. Factor: 1

Operator:

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	51627.39	512.8136	519.9547	498.4302	52.03586	504.5879	104334.7
#1	51684.41	512.9622	522.8430	498.2930	52.52533	505.9513	104973.7
#2	51570.37	512.6651	517.0665	498.5673	51.54639	503.2245	103695.8
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	500.0000	500.0000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	511.3232	520.2576	527.5423	51670.16	522.5989	107356.6	524.2535
#1	513.9411	524.8187	530.2718	52019.85	525.3453	108100.1	528.2068
#2	508.7054	515.6965	524.8128	51320.46	519.8524	106613.2	520.3002
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	514.1130	502.5016	25730.39	518.9697	531.7378	101503.5	505.9572
#1	519.8626	503.6463	25826.33	523.6928	534.8443	101424.4	502.9395
#2	508.3635	501.3570	25634.45	514.2467	528.6313	101582.6	508.9749
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		500.0000	25000.00	500.0000	500.0000	100000.0	500.0000
Range		10.00000	10.00000	10.00000	10.00000	10.00000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	527.6820	529.7519	527.6875	516.2863	530.4697	520.4638	514.6448
#1	531.0531	532.5058	530.9476	515.5119	536.4045	522.4809	520.0852
#2	524.3108	526.9980	524.4274	517.0607	524.5349	518.4466	509.2043
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	526.5758	507.6342	524.6374	529.2440
#1	527.9752	508.9544	531.0620	532.7847
#2	525.1764	506.3139	518.2130	525.7032
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Method: TRACEV2 Sample Name: BCCCB4

Operator:

Run Time: 11/07/07 03:43:28

Comment: UG/L

Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	21.11902	.6804965	-2.52045	.1161318	-.372906	-.120482	131.9973

#1	22.90593	.1163933	-2.94161	.0922442	-.412146	-.073808	156.3970
#2	19.33210	1.244600	-2.09929	.1400194	-.333667	-.167156	107.5976

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	2.000000	5.000000	1000.000

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	.2785300	.3916762	3.204136	18.48163	-2.20624	41.60372	.2810555

#1	.5393010	.1960921	3.802911	24.71283	-2.04242	52.63712	.3152217
#2	.0177589	.5872602	2.605361	12.25043	-2.37005	30.57032	.2468893

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-7.61746	.8366108	18.92384	-.722168	.5044115	215.0001	.8319730

#1	-7.33291	.0529098	18.66950	-1.95076	.5324196	198.1887	-2.56916
#2	-7.90201	1.620312	19.17819	.5064204	.4764034	231.8116	4.233102

Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range		10.00000	250.0000	5.000000	3.000000	2500.000	10.00000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	.3218492	-.019220	1.065130	1.819407	.3965462	.2085254	-.727122

#1	.2896007	-.017122	.8647438	1.802784	1.166866	.2139420	-.003037
#2	.3540977	-.021318	1.265515	1.836029	-.373774	.2031088	-1.45121

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	20.00000	15.00000	5.000000	20.00000	20.00000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	-2.94591	-.650161	-.758291	.4042515

#1	-3.06223	.4723952	-3.16245	.3091998
#2	-2.82959	-1.77272	1.645869	.4993032

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value				
Range				

Analysis Report

11/07/07 04:00:05 AM

page 1

Method: TRACEV2 Sample Name: S 711014-006-006-1/1 Operator:
 Run Time: 11/07/07 03:51:50
 Comment: UG/L
 Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avg	14.15385	6.927474	-.477577	45.29877	-.365640	.3897311	50084.02
#1	14.76615	7.360631	-1.83603	45.43634	-.314873	.4360874	49642.65
#2	13.54154	6.494319	.8808721	45.16120	-.416407	.3433747	50525.40
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avg	1.268612	-.382635	27.34693	13.14314	23.60261	1698.308	174.6236
#1	.7904223	-.421690	26.59012	9.818673	21.49237	1680.823	172.7172
#2	1.746803	-.343579	28.10375	16.46761	25.71286	1715.793	176.5301
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avg	161.4930	4.266251	388.2425	1.544588	-.014002	139079.1	-2.10411
#1	161.3833	3.934884	385.5820	-1.35428	-.291612	139204.8	-.135871
#2	161.6027	4.597618	390.9031	4.443460	.2636075	138953.5	-4.07234
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avg	1.182536	78.34245	16.70789	1.118820	3.758265	.9142696	29.11377
#1	1.376980	77.56198	16.45474	1.030866	3.596449	.8470321	27.41384
#2	.9880924	79.12292	16.96103	1.206773	3.920080	.9815071	30.81370
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	
Elem	2/Pb	1/Se	2/Se	2V			
Avg	20.84692	-2.81658	3.725049	1.346418			
#1	18.53152	-3.55675	-.253171	1.228859			
#2	23.16232	-2.07641	7.703270	1.463977			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
High							
Low							

Analysis Report

11/07/07 04:08:27 AM

page 1

Method: TRACEV2 Sample Name: S 711014-007-007-1/1 Operator:
 Run Time: 11/07/07 04:00:11
 Comment: UG/L
 Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	17.18287	10.65505	-.580559	30.07755	-.435223	.6297364	47976.98
#1	13.15707	10.83947	.7317690	29.87948	-.456158	.6137552	48104.16
#2	21.20867	10.47064	-1.89289	30.27561	-.414289	.6457176	47849.81
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	1.313800	.0467640	116.9519	48.52451	40.36766	1785.572	227.9420
#1	1.346569	-.252353	117.5127	48.66149	42.39952	1790.412	228.9500
#2	1.281030	.3458807	116.3910	48.38752	38.33580	1780.732	226.9341
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	212.6040	6.366893	605.9031	2.032923	.4373603	139029.0	-1.70098
#1	212.6133	6.076923	603.4521	4.755563	.1544004	138815.3	-3.40978
#2	212.5948	6.656863	608.3541	-.689716	.7203202	139242.6	.0078266
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	.8501720	109.9469	19.06620	.2640549	4.643989	2.773620	45.67126
#1	.8518932	110.3963	18.58441	.2643399	4.363727	2.623591	43.10836
#2	.8484509	109.4975	19.54800	.2637699	4.924250	2.923649	48.23416
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	
Elem	2/Pb	1/Se	2/Se	2V			
Avge	37.71575	-5.19161	5.645060	1.014307			
#1	42.04499	-8.53110	11.39876	.7510884			
#2	33.38651	-1.85211	-.108640	1.277526			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
High							
Low							

Analysis Report

11/07/07 04:19:39 AM

page 1

Method: TRACEV2 Sample Name: BLK 029

Operator:

Run Time: 11/07/07 04:11:23

Comment: UG/L

Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avg	H129.4314	-.819144	.0874965	.0452629	-.452011	.2217700	130.6209
#1	H128.9964	-1.18542	.6484446	.0282413	-.463026	.0742257	134.4223
#2	H129.8663	-.452869	-.473452	.0622844	-.440997	.3693143	126.8196
Errors	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.0000	10.00000	10.00000	2.500000	1.000000	3.000000	500.0000
Low	-100.000	-10.0000	-10.0000	-2.50000	-1.00000	-3.00000	-500.000
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avg	.4306572	-.052341	3.787276	7.617610	-.175450	6.819167	.2509120
#1	.2071470	-.235643	3.983119	-.378574	-.099960	8.848960	.2837182
#2	.6541673	.1309604	3.591433	15.61379	-.250941	4.789374	.2181059
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.500000	2.500000	5.000000	75.00000	5.000000	125.0000	2.500000
Low	-2.50000	-2.50000	-5.00000	-75.0000	-5.00000	-125.000	-2.50000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avg	-12.8914	1.016629	9.412790	-1.22604	.2812158	279.8183	-4.82534
#1	-14.1370	1.257763	5.724074	-1.24862	.2417865	211.8972	-3.61798
#2	-11.6458	.7754942	13.10151	-1.20346	.3206450	347.7394	-6.03269
Errors	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High		5.000000	125.0000	10.00000	1.500000	1250.000	15.00000
Low		-5.00000	-125.000	-10.0000	-1.50000	-1250.00	-15.0000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avg	.1529508	.0231971	.6741644	.5083936	2.397734	.1477173	.7443514
#1	.0854780	.1781137	1.053363	.4583033	2.167527	.0389195	1.180981
#2	.2204236	-.131719	.2949660	.5584839	2.627941	.2565152	.3077218
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	5.000000	10.00000	7.500000	2.500000	12.50000	12.50000	
Low	-5.00000	-10.0000	-7.50000	-2.50000	-12.5000	-12.5000	
Elem	2/Pb	1/Se	2/Se	2V			
Avg	-.635471	-4.43682	.3792245	.2213470			
#1	-.740550	-4.17819	.2160404	.0210547			
#2	-.530392	-4.69546	.5424086	.4216394			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
High							
Low							

Analysis Report

11/07/07 04:28:00 AM

page 1

Method: TRACEV2 Sample Name: BKS 029
 Run Time: 11/07/07 04:19:45
 Comment: UG/L
 Mode: CONC Corr. Factor: 1

Operator:

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avg	10247.25	99.44360	94.37015	1015.656	50.97899	102.2229	10384.47
#1	10255.65	98.92115	93.27339	1016.300	50.97346	102.5690	10365.04
#2	10238.85	99.96606	95.46690	1015.011	50.98451	101.8767	10403.90
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	12000.00	120.0000	120.0000	1200.000	60.00000	120.0000	12000.00
Low	8000.000	80.00000	80.00000	800.0000	40.00000	80.00000	8000.000
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avg	518.0604	507.8661	520.8893	10404.15	1022.194	10477.15	1038.359
#1	518.1730	507.0347	520.8544	10387.94	1020.387	10457.40	1036.339
#2	517.9479	508.6975	520.9242	10420.35	1024.001	10496.90	1040.380
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.0000	600.0000	600.0000	12000.00	1200.000	12000.00	1200.000
Low	400.0000	400.0000	400.0000	8000.000	800.0000	8000.000	800.0000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avg	1021.048	504.3819	10093.44	92.28320	102.8498	10677.38	92.09033
#1	1019.237	503.3000	10086.58	94.08126	102.7962	10719.04	91.55351
#2	1022.860	505.4637	10100.30	90.48513	102.9033	10635.72	92.62716
Errors	NOCHECK	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass
High		600.0000	12000.00		120.0000	12000.00	120.0000
Low		400.0000	8000.000		80.00000	8000.000	80.00000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avg	527.2398	1024.309	959.8748	516.8264	552.6051	2071.553	1021.643
#1	525.8791	1023.036	958.1495	516.2276	550.9685	2070.266	1025.009
#2	528.6005	1025.582	961.6000	517.4251	554.2416	2072.841	1018.277
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	600.0000	1200.000	1200.000	600.0000	600.0000	2400.000	
Low	400.0000	800.0000	800.0000	400.0000	400.0000	1600.000	
Elem	2/Pb	1/Se	2/Se	2V			
Avg	1022.469	75.80319	100.5231	527.3185			
#1	1018.075	79.05589	101.5938	527.2947			
#2	1026.863	72.55051	99.45239	527.3422			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
High							
Low							

Analysis Report

11/07/07 04:36:22 AM

page 1

Method: TRACEV2 Sample Name: S 710156-041-041-1/1 Operator:
 Run Time: 11/07/07 04:28:06
 Comment: UG/L 10
 Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avg	34261.08	3.435365	3.811633	82.18993	1.115431	2.112694	3424.991
#1	35349.78	.2437997	4.495724	84.98275	1.219592	2.231298	3523.490
#2	33172.38	6.626930	3.127542	79.39710	1.011270	1.994089	3326.493
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avg	444.3399	21.49865	124.1559	174014.0	49.06105	2178.837	1152.224
#1	459.0339	21.55090	127.9204	179437.7	50.55644	2247.189	1187.263
#2	429.6460	21.44640	120.3914	168590.3	47.56565	2110.486	1117.186
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avg	1149.283	117.3820	932.0719	7.685792	.2332837	111.6212	3.189922
#1	1185.886	121.3841	959.0118	7.726852	.4444177	50.63485	5.897189
#2	1112.680	113.3799	905.1320	7.644731	.0221497	172.6076	.4826555
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avg	474.1737	183.8564	9.515420	2.771765	5.928925	11294.81	53.66769
#1	488.2177	189.6900	9.377296	2.430690	5.183314	11654.91	54.42801
#2	460.1297	178.0228	9.653544	3.112839	6.674536	10934.70	52.90737
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	
Elem	2/Pb	1/Se	2/Se	2V			
Avg	46.75761	3.792574	9.632278	461.9863			
#1	48.62054	.7180800	11.23111	475.1996			
#2	44.89468	6.867069	8.033444	448.7730			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
High							
Low							

Analysis Report

11/07/07 04:44:44 AM

page 1

Method: TRACEV2 Sample Name: SP710156-041-041-1/1 Operator:
 Run Time: 11/07/07 04:36:28
 Comment: UG/L 10
 Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avg	56512.74	7.263295	18.09960	218.3620	7.410398	14.45678	5291.266
#1	59821.75	6.789721	15.59839	232.5385	7.724711	15.06289	5606.348
#2	53203.72	7.736868	20.60081	204.1856	7.096084	13.85067	4976.185
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avg	594.1202	83.93623	211.7721	210297.7	176.2114	3996.845	1502.896
#1	628.3498	89.03921	223.1762	222018.1	186.7295	4214.121	1589.645
#2	559.8906	78.83324	200.3680	198577.2	165.6933	3779.569	1416.146
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avg	1502.448	233.3572	2320.021	18.34635	12.08912	1250.760	27.43455
#1	1589.416	246.5147	2515.525	16.91304	13.03027	1464.527	18.16246
#2	1415.479	220.1998	2124.517	19.77966	11.14796	1036.993	36.70664
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avg	632.1405	351.4024	118.7873	53.60059	61.02618	13924.20	168.6487
#1	669.2409	372.4425	128.4687	57.29584	65.92500	14768.72	186.0901
#2	595.0401	330.3622	109.1059	49.90534	56.12736	13079.67	151.2074
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	
Elem	2/Pb	1/Se	2/Se	2V			
Avg	179.9926	4.850104	25.09434	614.9232			
#1	187.0491	7.529805	21.60453	653.4072			
#2	172.9361	2.170402	28.58415	576.4393			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
High							
Low							

Analysis Report

11/07/07 04:53:06 AM

page 1

Method: TRACEV2 Sample Name: SD710156-041-041-1/1 Operator:
 Run Time: 11/07/07 04:44:50
 Comment: UG/L 10
 Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avg	53035.69	11.64407	12.40199	200.4619	6.552485	12.69442	4954.037
#1	53133.77	9.814543	13.74929	200.9176	6.566660	12.71801	4954.508
#2	52937.62	13.47361	11.05468	200.0063	6.538310	12.67083	4953.567
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avg	558.5933	76.86760	198.2893	195989.4	157.8357	3814.302	1391.165
#1	558.7692	76.79467	198.1174	196095.6	159.8441	3818.025	1392.094
#2	558.4174	76.94053	198.4612	195883.1	155.8274	3810.579	1390.236
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avg	1381.427	217.4910	2178.447	16.99318	11.43947	1222.705	12.12172
#1	1382.706	217.9977	2178.444	18.90387	11.38799	1249.396	16.29105
#2	1380.148	216.9842	2178.450	15.08250	11.49095	1196.014	7.952405
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avg	592.4551	324.4139	108.7886	49.47977	54.14001	12961.49	160.3245
#1	592.2889	325.2165	108.1902	49.36898	51.09845	12984.94	161.0844
#2	592.6211	323.6114	109.3869	49.59056	57.18156	12938.04	159.5647
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	
Elem	2/Pb	1/Se	2/Se	2V			
Avg	156.5912	16.49064	17.24433	578.6184			
#1	159.2238	21.25741	17.72697	578.0773			
#2	153.9587	11.72386	16.76169	579.1596			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
High							
Low							

Analysis Report

11/07/07 05:01:28 AM

page 1

Method: TRACEV2 Sample Name: PS710156-041-041-1/1 Operator:
 Run Time: 11/07/07 04:53:12
 Comment: UG/L 10
 Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avg	35412.13	82.63968	83.69948	101.3323	11.51683	22.87972	8680.250
#1	35541.38	80.84001	83.24791	101.5751	11.56788	23.23964	8730.124
#2	35282.88	84.43935	84.15105	101.0895	11.46577	22.51979	8630.376
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avg	471.2372	53.69560	159.2554	180264.8	132.0249	7588.951	1268.351
#1	473.3285	53.73933	160.1980	181437.5	132.2721	7630.365	1276.623
#2	469.1460	53.65187	158.3128	179092.2	131.7777	7547.537	1260.078
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avg	1249.888	157.7491	6305.362	76.36032	51.08450	5132.707	103.8317
#1	1259.302	158.5372	6333.190	78.09005	51.28353	5161.096	102.4678
#2	1240.474	156.9610	6277.535	74.63059	50.88546	5104.318	105.1956
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avg	508.1880	270.4085	82.67914	34.07919	115.0665	11472.17	133.3264
#1	511.2871	271.6422	82.07514	33.78754	116.2653	11529.48	132.5883
#2	505.0890	269.1747	83.28314	34.37084	113.8677	11414.86	134.0644
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	
Elem	2/Pb	1/Se	2/Se	2V			
Avg	131.3741	75.93240	76.57416	496.4319			
#1	132.1138	76.28512	78.99239	498.8593			
#2	130.6343	75.57970	74.15592	494.0045			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
High							
Low							

Analysis Report

11/07/07 05:09:49 AM

page 1

Method: TRACEV2 Sample Name: SE710156-041-041-1/1 Operator:
 Run Time: 11/07/07 05:01:34
 Comment: UG/L 50
 Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avg	7180.378	.2583900	-1.51460	17.25454	.0557677	.1071994	726.9672
#1	7189.176	2.183909	-2.02992	17.16340	.0253501	.1211963	737.7784
#2	7171.581	-1.66713	-.999277	17.34568	.0861854	.0932026	716.1559
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avg	91.31789	4.103368	26.16430	35626.16	9.129038	450.7571	233.6923
#1	91.58981	4.325479	26.55351	35726.06	8.301911	453.6878	234.6876
#2	91.04598	3.881257	25.77510	35526.27	9.956165	447.8263	232.6970
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avg	229.5995	25.07942	171.4542	-.597213	.1290468	.7408276	2.189631
#1	229.9478	24.55312	170.6252	.2869654	.1287720	44.33145	.7735968
#2	229.2511	25.60572	172.2832	-1.48139	.1293216	-42.8498	3.605665
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avg	96.21515	37.20198	2.236173	.3678051	.9706502	2322.550	11.41269
#1	96.64548	37.40091	1.856933	.7492104	-.410370	2328.068	11.19239
#2	95.78481	37.00306	2.615412	-.013600	2.351670	2317.033	11.63299
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	
Elem	2/Pb	1/Se	2/Se	2V			
Avg	7.987101	-4.22798	1.218049	93.84113			
#1	6.856559	-4.14667	2.503664	94.20585			
#2	9.117641	-4.30928	-.067566	93.47641			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
High							
Low							

Method: TRACEV2 Sample Name: CVCCV4

Operator:

Run Time: 11/07/07 05:12:46

Comment: UG/L

Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	52110.46	520.5532	516.3801	510.4827	50.66516	505.5337	102446.9
#1	52211.05	522.4377	517.4490	511.4970	50.65160	505.6225	102451.5
#2	52009.88	518.6686	515.3113	509.4683	50.67873	505.4450	102442.3
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	500.0000	500.0000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	508.1217	507.3010	519.6420	50516.67	515.3359	104222.4	510.2991
#1	508.1404	507.3079	520.2983	50544.77	512.9432	104250.9	510.4869
#2	508.1031	507.2941	518.9858	50488.57	517.7286	104193.9	510.1114
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	508.8691	503.9338	25390.94	518.7626	519.6080	102832.2	510.4093
#1	509.1095	503.1562	25442.88	518.3385	520.0538	103084.3	506.0439
#2	508.6287	504.7114	25339.01	519.1868	519.1622	102580.1	514.7747
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		500.0000	25000.00	500.0000	500.0000	100000.0	500.0000
Range		10.00000	10.00000	10.00000	10.00000	10.00000	10.00000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	513.5817	520.5129	521.5375	514.5031	512.0818	514.9326	516.0558
#1	513.1099	520.3227	522.2443	513.1859	512.3598	516.3809	513.2483
#2	514.0535	520.7033	520.8307	515.8202	511.8038	513.4843	518.8632
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	
Elem	2/Pb	1/Se	2/Se	2V			
Avge	514.9759	517.4918	519.3980	514.0211			
#1	512.7905	514.9701	520.0226	513.2312			
#2	517.1612	520.0134	518.7734	514.8109			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
Value							
Range							

Method: TRACEV2 Sample Name: BCCCCB4

Operator:

Run Time: 11/07/07 05:21:08

Comment: UG/L

Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	8.595651	1.284788	-3.36278	.0576613	-.262217	.0757346	74.51308
#1	15.12776	1.358985	-1.52834	.0246336	-.256353	.0197959	72.00010
#2	2.063539	1.210591	-5.19722	.0906891	-.268082	.1316732	77.02607
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	2.000000	5.000000	1000.000
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	-.010441	.4744493	1.349429	7.762651	-.171906	20.82302	.2150469
#1	-.045394	.4923466	.8494233	6.034981	.2834590	22.25295	.1807435
#2	.0245114	.4565521	1.849436	9.490322	-.627271	19.39308	.2493504
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-8.80099	-.500099	11.79829	.1016577	.5951033	100.6861	3.290954
#1	-9.16017	-1.01604	12.50394	-.604650	.4995181	148.7777	2.772504
#2	-8.44181	.0158367	11.09263	.8079657	.6906884	52.59462	3.809404
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range		10.00000	250.0000	5.000000	3.000000	2500.000	10.00000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	-.088386	-.010170	1.398935	1.574948	.6228834	.2489738	1.678454
#1	.1492262	-.001769	1.417145	1.970858	1.214915	.1994861	.9265249
#2	-.325998	-.018570	1.380724	1.179038	.0308518	.2984615	2.430384
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	20.00000	15.00000	5.000000	20.00000	20.00000	
Elem	2/Pb	1/Se	2/Se	2V			
Avge	-1.09720	-1.34128	.8230094	.1275162			
#1	-.038191	-2.00827	.0970433	.1205679			
#2	-2.15622	-.674295	1.548976	.1344645			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
Value							
Range							

Analysis Report

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Method: TRACEV2 Sample Name: S 710156-042-042-1/1 Operator:
 Run Time: 11/07/07 05:29:30
 Comment: UG/L 10
 Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avg	41365.04	-.604055	9.750587	355.2861	.8301466	1.670297	2679.850
#1	41671.20	-.338503	10.64417	358.3130	.8059437	1.655613	2683.161
#2	41058.88	-.869607	8.857006	352.2593	.8543493	1.684980	2676.539
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avg	305.6017	96.38911	209.9497	174742.5	23.46697	1739.798	H13989.30
#1	307.0277	96.32458	210.6441	175485.3	24.09990	1748.011	H14030.33
#2	304.1756	96.45364	209.2553	173999.7	22.83405	1731.585	H13948.28
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avg	14359.76	140.4037	1639.410	2.729081	.5415265	178.8189	-19.9192
#1	14431.27	141.0420	1646.896	2.924960	.0202639	167.8285	-19.4412
#2	14288.24	139.7653	1631.923	2.533202	1.062789	189.8093	-20.3973
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avg	398.7833	225.0038	8.722938	3.859847	4.736459	8099.602	24.96545
#1	399.9080	224.3493	7.618176	3.816211	1.631356	8139.287	22.69561
#2	397.6585	225.6582	9.827702	3.903483	7.841563	8059.917	27.23529
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	
Elem	2/Pb	1/Se	2/Se	2V			
Avg	22.71761	-4.01971	6.103349	389.5512			
#1	24.80192	-5.50594	7.140284	389.7614			
#2	20.63331	-2.53347	5.066414	389.3410			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
High							
Low							

Analysis Report

11/07/07 05:46:08 AM

page 1

Method: TRACEV2 Sample Name: S 710156-043-043-1/1 Operator:
 Run Time: 11/07/07 05:37:52
 Comment: UG/L 10
 Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	42061.00	3.495001	10.09337	239.9946	.8144219	1.362490	4236.292
#1	42147.00	3.327993	9.615868	240.1727	.8177533	1.477310	4245.896
#2	41975.00	3.662009	10.57086	239.8165	.8110906	1.247669	4226.689
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	332.0307	55.92017	208.1849	169910.3	31.03677	1935.833	8130.110
#1	332.3789	55.72695	208.8460	170112.4	31.49867	1939.182	8143.088
#2	331.6826	56.11340	207.5238	169708.2	30.57486	1932.484	8117.131
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	8177.184	140.9901	1750.945	6.100302	.5089116	201.7851	-9.65973
#1	8190.520	141.7166	1750.748	7.760854	.4172619	198.8282	-12.4268
#2	8163.847	140.2637	1751.142	4.439749	.6005614	204.7421	-6.89262
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	396.5902	207.7439	11.59378	3.154613	6.682974	8397.419	37.10326
#1	397.1450	207.9895	12.36024	3.442732	6.212459	8411.310	36.70673
#2	396.0354	207.4982	10.82731	2.866495	7.153489	8383.528	37.49978
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	
Elem	2/Pb	1/Se	2/Se	2V			
Avge	28.00341	3.808193	7.246235	388.1536			
#1	28.89454	8.724897	7.278713	388.9259			
#2	27.11229	-1.10851	7.213757	387.3814			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
High							
Low							

Analysis Report

11/07/07 05:54:29 AM

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Method: TRACEV2 Sample Name: S 710156-044-044-1/1 Operator:
 Run Time: 11/07/07 05:46:14
 Comment: UG/L 10
 Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	46071.86	3.270692	6.725845	151.9926	.7943309	1.016121	3231.831
#1	46076.38	2.795612	6.366278	152.0178	.8233052	1.163355	3233.366
#2	46067.33	3.745772	7.085413	151.9673	.7653567	.8688870	3230.296
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	377.9391	40.86462	188.0440	184228.5	28.30605	1706.288	5708.899
#1	378.3916	41.01490	188.3198	184280.2	27.05199	1709.534	5711.534
#2	377.4867	40.71433	187.7683	184176.7	29.56010	1703.042	5706.265
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	5724.504	140.5797	1401.523	3.618183	.1622641	188.8312	-2.03842
#1	5732.603	140.1177	1405.805	5.039391	.1754626	179.5532	-4.54522
#2	5716.405	141.0418	1397.241	2.196976	.1490655	198.1091	.4683762
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	412.8829	159.5722	10.24826	2.923921	6.997013	8183.872	33.83459
#1	413.6387	159.7547	9.691607	3.055891	6.398415	8179.932	32.32765
#2	412.1272	159.3898	10.80492	2.791952	7.595611	8187.813	35.34153
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	
Elem	2/Pb	1/Se	2/Se	2V			
Avge	25.54166	1.093999	4.880154	404.3837			
#1	24.41405	2.349916	6.384006	404.9636			
#2	26.66927	-.161917	3.376301	403.8038			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
High							
Low							

Analysis Report

11/07/07 06:02:51 AM

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Method: TRACEV2 Sample Name: S 710156-045-045-1/1 Operator:
 Run Time: 11/07/07 05:54:35
 Comment: UG/L 10
 Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	28885.10	4.235267	3.569972	55.41712	1.201763	1.743905	2325.037
#1	28901.53	5.384010	6.325853	55.57309	1.249822	1.355324	2302.766
#2	28868.66	3.086523	.8140900	55.26115	1.153703	2.132486	2347.308
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	521.3495	25.80879	129.0664	212306.2	34.45823	1954.651	1288.194
#1	520.4822	25.58499	128.3167	211151.8	32.42013	1943.602	1280.217
#2	522.2168	26.03259	129.8162	213460.7	36.49633	1965.700	1296.172
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	1286.446	104.5660	977.6012	6.910515	.1897165	228.0838	.7869177
#1	1282.374	103.7478	973.4835	9.690479	.1228917	227.7981	4.363462
#2	1290.517	105.3842	981.7189	4.130550	.2565412	228.3695	-2.78963
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	541.5422	176.7705	7.661561	4.502091	6.807516	11759.92	38.21291
#1	538.2289	175.6089	7.379440	4.498778	6.578773	11718.82	39.25252
#2	544.8556	177.9320	7.943682	4.505403	7.036259	11801.02	37.17329
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	
Elem	2/Pb	1/Se	2/Se	2V			
Avge	32.58078	2.312818	9.209240	529.2549			
#1	29.00382	3.683465	12.69386	526.2275			
#2	36.15774	.9421704	5.724617	532.2822			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
High							
Low							

Analysis Report

11/07/07 06:11:12 AM

page 1

Method: TRACEV2 Sample Name: S 710156-046-046-1/1 Operator:
 Run Time: 11/07/07 06:02:57
 Comment: UG/L 10
 Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avg	38389.59	3.751645	3.905120	47.33045	1.679634	5.191675	2311.748
#1	39616.44	3.521601	5.592325	48.98255	1.788793	4.751411	2332.165
#2	37162.73	3.981689	2.217915	45.67836	1.570474	5.631939	2291.331
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avg	505.1137	14.75900	101.7443	294435.6	61.65008	1970.714	546.6398
#1	517.0855	14.14957	104.1216	300375.4	62.76628	2017.940	558.8868
#2	493.1419	15.36844	99.36706	288495.7	60.53389	1923.488	534.3928
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avg	561.1714	71.77939	851.0273	19.14346	.7031786	116.6566	12.13662
#1	578.0050	74.89857	862.4336	18.32173	.7383275	119.2132	18.53152
#2	544.3378	68.66021	839.6210	19.96519	.6680298	114.0999	5.741721
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avg	628.2583	128.9826	10.86016	4.510893	9.919688	14386.26	64.35670
#1	640.7451	131.6733	10.70267	4.699485	9.842707	14772.33	64.63373
#2	615.7714	126.2919	11.01765	4.322301	9.996670	14000.20	64.07967
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	
Elem	2/Pb	1/Se	2/Se	2V			
Avg	60.29666	16.42247	20.50383	615.8159			
#1	61.83244	12.01448	21.47523	626.9835			
#2	58.76088	20.83047	19.53242	604.6484			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
High							
Low							

Analysis Report

11/07/07 06:19:34 AM

page 1

Method: TRACEV2 Sample Name: S 710156-047-047-1/1 Operator:
 Run Time: 11/07/07 06:11:19
 Comment: UG/L 10
 Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	41633.58	6.035191	11.69398	70.40190	1.321038	5.309956	2675.979
#1	41632.59	6.803124	10.25803	70.33864	1.336075	5.042923	2680.874
#2	41634.57	5.267259	13.12994	70.46516	1.306000	5.576988	2671.084
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00

Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	473.7430	18.69394	141.8457	281768.6	118.4094	1891.175	792.8302
#1	474.2062	18.89993	142.0454	281997.6	118.2639	1893.342	792.6166
#2	473.2799	18.48796	141.6461	281539.5	118.5548	1889.007	793.0437
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000

Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	793.4296	89.64888	598.4904	19.12061	1.036711	107.6763	-.096076
#1	792.8874	89.42948	604.8098	21.16539	1.049545	128.0117	2.813292
#2	793.9717	89.86828	592.1711	17.07584	1.023876	87.34090	-3.00544
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000

Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	639.1323	156.7305	11.87455	4.345569	12.76705	12492.28	121.6674
#1	639.3478	156.7854	11.89568	4.561901	13.71716	12497.28	120.2073
#2	638.9167	156.6755	11.85342	4.129236	11.81694	12487.28	123.1276
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	

Elem	2/Pb	1/Se	2/Se	2V
Avge	116.7802	18.38642	19.48759	627.3681
#1	117.2922	20.04289	21.72651	627.9529
#2	116.2682	16.72995	17.24866	626.7833
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High				
Low				

Analysis Report

11/07/07 06:27:56 AM

page 1

Method: TRACEV2 Sample Name: S 710156-048-048-1/1 Operator:
 Run Time: 11/07/07 06:19:41
 Comment: UG/L 10
 Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avg	16469.76	3.208116	11.70129	46.43762	1.389881	5.157335	1099.700
#1	16825.72	1.591734	10.91619	47.49752	1.466995	5.540333	1123.639
#2	16113.80	4.824498	12.48640	45.37772	1.312768	4.774338	1075.761
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avg	460.1677	18.70306	188.8474	305179.6	105.1066	1426.736	654.1891
#1	470.1657	18.80400	193.7534	312064.5	107.5280	1467.969	670.1564
#2	450.1697	18.60213	183.9414	298294.6	102.6852	1385.502	638.2219
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avg	667.2913	91.41453	254.4132	17.64042	.4570028	155.7277	9.059627
#1	686.6331	93.97495	265.1739	18.95763	.4707336	113.1473	11.45326
#2	647.9494	88.85410	243.6526	16.32322	.4432720	198.3081	6.665996
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avg	748.6268	146.3759	9.388918	4.621133	10.94190	13790.49	100.8627
#1	764.9424	149.5025	8.601857	4.357865	11.00701	14117.14	100.4464
#2	732.3112	143.2492	10.17598	4.884400	10.87678	13463.83	101.2790
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	
Elem	2/Pb	1/Se	2/Se	2V			
Avg	107.2284	15.94340	18.48881	731.1354			
#1	111.0688	11.56747	22.65257	745.4016			
#2	103.3881	20.31933	14.32504	716.8691			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
High							
Low							

Method: TRACEV2 Sample Name: S 710156-049-049-1/1 Operator:
 Run Time: 11/07/07 06:28:03
 Comment: UG/L 10
 Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	12693.18	7.755357	5.440391	33.67387	1.490574	3.834757	858.7891
#1	12684.28	3.699897	4.614068	33.72524	1.504409	3.499807	847.9460
#2	12702.08	11.81082	6.266714	33.62250	1.476738	4.169706	869.6322
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	434.8774	26.22428	130.2619	258893.7	40.80092	1739.181	585.3273
#1	433.5886	26.12593	129.9506	257848.2	40.54431	1733.962	582.2864
#2	436.1663	26.32263	130.5731	259939.2	41.05752	1744.399	588.3682
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	593.4154	83.34415	147.3458	8.852170	.6111418	154.9682	-1.23372
#1	593.9117	83.57752	138.0830	9.822480	.4156457	123.1173	-1.23754
#2	592.9192	83.11079	156.6087	7.881859	.8066379	186.8191	-1.22990
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	805.8660	155.5974	8.643858	3.403873	13.52243	15367.13	42.99262
#1	802.5729	155.1706	7.665488	4.166922	14.20403	15325.63	41.81156
#2	809.1590	156.0241	9.622227	2.640825	12.84083	15408.64	44.17366
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	
Elem	2/Pb	1/Se	2/Se	2V			
Avge	39.70494	10.85006	7.853102	785.2282			
#1	39.91056	12.64191	8.412643	782.3782			
#2	39.49932	9.058210	7.293560	788.0782			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
High							
Low							

Analysis Report

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Method: TRACEV2 Sample Name: S 710156-050-050-1/1 Operator:
 Run Time: 11/07/07 06:36:24
 Comment: UG/L 10
 Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avg	44409.29	3.707095	-1.49198	261.4067	1.442981	3.171030	2089.790
#1	44520.71	5.933147	-2.10740	262.1969	1.460006	2.945971	2090.499
#2	44297.87	1.481043	-.876562	260.6165	1.425956	3.396090	2089.081
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avg	354.8251	78.30503	134.0020	171817.3	35.30465	3765.436	3553.906
#1	355.8703	78.40076	134.3731	172011.5	35.52820	3771.905	3558.395
#2	353.7799	78.20931	133.6309	171623.0	35.08110	3758.966	3549.416
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avg	3481.892	181.3484	1112.580	11.19005	.2892272	260.1992	-2.49866
#1	3487.033	181.7700	1113.299	11.97942	.4949377	268.8859	-1.88011
#2	3476.751	180.9269	1111.862	10.40068	.0835167	251.5125	-3.11721
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avg	449.6663	192.2081	6.726439	1.595943	7.504510	11298.57	37.96565
#1	450.2295	192.2827	7.104265	1.140680	6.976968	11321.58	38.91507
#2	449.1031	192.1336	6.348614	2.051205	8.032053	11275.56	37.01622
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	
Elem	2/Pb	1/Se	2/Se	2V			
Avg	33.97403	10.48977	11.54007	438.2643			
#1	33.83464	8.987880	13.47507	437.5016			
#2	34.11342	11.99166	9.605072	439.0269			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
High							
Low							

Analysis Report

11/07/07 06:53:02 AM

page 1

Method: TRACEV2 Sample Name: S 710156-051-051-1/1 Operator:
 Run Time: 11/07/07 06:44:46
 Comment: UG/L 10
 Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avg	43771.96	5.541501	1.103709	828.2173	1.512633	4.189903	8426.025
#1	45175.54	6.906510	3.722127	853.0314	1.604836	4.590971	8714.772
#2	42368.39	4.176491	-1.51471	803.4032	1.420430	3.788835	8137.278
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avg	232.3399	101.1414	281.1399	135432.1	131.3169	5531.310	H12290.54
#1	239.8590	103.9498	291.2198	140226.6	135.4789	5737.799	H12716.38
#2	224.8207	98.33299	271.0600	130637.5	127.1550	5324.821	H11864.69
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avg	12214.44	234.8453	2191.592	6.698455	1.237990	400.8740	-16.2613
#1	12644.30	243.3506	2259.021	4.940974	1.138101	320.6139	-13.8043
#2	11784.58	226.3399	2124.164	8.455936	1.337878	481.1341	-18.7183
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avg	337.1445	585.5878	13.16839	3.167141	6.784657	8786.230	130.2420
#1	348.5867	605.3417	13.82796	2.637193	6.540723	9082.154	131.3920
#2	325.7023	565.8338	12.50882	3.697090	7.028591	8490.308	129.0919
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	
Elem	2/Pb	1/Se	2/Se	2V			
Avg	131.8543	1.959901	9.067602	329.8343			
#1	137.5222	-2.15644	8.489546	340.6986			
#2	126.1864	6.076238	9.645658	318.9700			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
High							
Low							

Analysis Report

QC Standard

11/07/07 07:04:15 AM

page 1

Method: TRACEV2 Sample Name: CVCCV5
 Run Time: 11/07/07 06:55:59
 Comment: UG/L
 Mode: CONC Corr. Factor: 1

Operator:

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	51874.17	515.1162	530.7296	497.7400	53.77890	512.4412	108035.5
#1	51840.63	514.1083	531.3640	497.5214	53.76555	512.7101	108093.2
#2	51907.71	516.1242	530.0951	497.9586	53.79225	512.1724	107977.8
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	500.0000	500.0000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	524.1481	541.7174	543.7450	53655.98	532.9384	Q111190.9	548.5342
#1	523.1860	542.0765	544.0416	53754.07	533.7820	Q111325.3	549.3157
#2	525.1102	541.3583	543.4484	53557.89	532.0947	Q111056.5	547.7526
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	520.1833	510.3724	26387.68	530.2746	Q550.8719	100995.6	504.2799
#1	520.7024	509.9384	26398.28	530.7814	Q551.7521	100829.0	506.0564
#2	519.6641	510.8064	26377.08	529.7678	549.9917	101162.2	502.5033
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass
Value		500.0000	25000.00	500.0000	500.0000	100000.0	500.0000
Range		10.00000	10.00000	10.00000	10.00000	10.00000	10.00000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	547.6285	547.4857	543.1359	519.0082	Q553.0966	531.4778	523.4026
#1	548.2962	548.5586	543.5594	516.5876	Q556.1392	531.9137	527.1658
#2	546.9607	546.4127	542.7125	521.4287	Q550.0539	531.0419	519.6394
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	
Elem	2/Pb	1/Se	2/Se	2V			
Avge	537.7062	505.5601	542.6318	552.1223			
#1	537.0901	509.4088	541.4676	552.6673			
#2	538.3222	501.7114	543.7960	551.5773			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
Value							
Range							

Analysis Report

QC Standard

11/07/07 07:12:38 AM

page 1

Method: TRACEV2 Sample Name: BCCCCB5
 Run Time: 11/07/07 07:04:22
 Comment: UG/L
 Mode: CONC Corr. Factor: 1

Operator:

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	4.100441	-.894229	-3.19081	.0061025	-.445391	-.030580	135.5389
#1	5.182865	-2.03674	-4.69241	-.024684	-.452965	-.214390	139.5118
#2	3.018018	.2482828	-1.68920	.0368892	-.437817	.1532304	131.5661
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	2.000000	5.000000	1000.000
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	-.457061	-.066900	3.075241	9.161436	.0763019	15.64894	.3628977
#1	-.485550	-.066586	2.657628	2.552411	-1.64106	19.94740	.4101206
#2	-.428571	-.067213	3.492853	15.77046	1.793668	11.35049	.3156748
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-17.2847	-.063564	.7121235	2.374215	.1619027	2.053308	2.979125
#1	-19.9259	-.502280	.7370966	1.445333	-.183799	6.449424	-.743949
#2	-14.6435	.3751520	.6871505	3.303098	.5076045	-2.34281	6.702199
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range		10.00000	250.0000	5.000000	3.000000	2500.000	10.00000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	-.190054	-.516203	-.137221	1.002029	-1.18833	.0911316	4.253006
#1	-.258018	-.586318	.1977535	1.651985	-2.57227	.1372786	2.456253
#2	-.122089	-.446088	-.472195	.3520727	.1956177	.0449847	6.049759
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	20.00000	15.00000	5.000000	20.00000	20.00000	
Elem	2/Pb	1/Se	2/Se	2V			
Avge	-2.01217	1.115939	3.003233	-.237082			
#1	-3.68984	.1610601	2.087349	-.097733			
#2	-.334494	2.070818	3.919117	-.376430			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
Value							
Range							

Analysis Report

11/07/07 07:21:00 AM

page 1

Method: TRACEV2 Sample Name: S 710156-052-052-1/1 Operator:
 Run Time: 11/07/07 07:12:45
 Comment: UG/L 10
 Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avg	39839.07	5.790667	1.260369	81.99794	1.166459	2.880657	3675.511
#1	40015.73	2.375057	.6819110	82.33131	1.173648	2.977131	3689.429
#2	39662.41	9.206276	1.838827	81.66457	1.159270	2.784184	3661.593
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	525000.0	5250.000	2100.000	10500.00	525.0000	2100.000	525000.0
Low	-200.000	-20.0000	-20.0000	-5.00000	-2.00000	-3.00000	-1000.00
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avg	386.9034	23.59200	174.4984	174731.2	274.0623	2400.055	1073.485
#1	388.5703	23.51857	175.1931	175489.9	277.8843	2411.860	1078.193
#2	385.2366	23.66543	173.8037	173972.5	270.2402	2388.249	1068.776
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10500.00	10500.00	10500.00	525000.0	21000.00	525000.0	10500.00
Low	-5.00000	-5.00000	-10.0000	-150.000	-10.0000	-250.000	-5.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avg	1060.142	122.0361	863.8276	9.009823	.9410224	222.8502	2.474051
#1	1062.320	123.6447	865.0492	11.54882	.8333625	130.7146	3.484511
#2	1057.964	120.4275	862.6060	6.470827	1.048682	314.9858	1.463590
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	105000.0	7875.000	50000.00	2100.000	1050.000	525000.0	2100.000
Low	-15.0000	-10.0000	-250.000	-20.0000	-3.00000	-2500.00	-30.0000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avg	451.5919	184.6146	8.524769	2.030729	2.854447	10596.25	270.9529
#1	453.4893	185.1803	7.799876	2.090325	3.922534	10641.48	272.2074
#2	449.6944	184.0488	9.249661	1.971132	1.786361	10551.02	269.6985
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	10500.00	3150.000	5250.000	10500.00	10500.00	21000.00	
Low	-10.0000	-20.0000	-15.0000	-5.00000	-25.0000	-10.0000	
Elem	2/Pb	1/Se	2/Se	2V			
Avg	275.6168	5.035142	10.99704	440.5118			
#1	280.7227	4.978249	14.83398	441.4579			
#2	270.5110	5.092035	7.160099	439.5657			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
High							
Low							

Method: TRACEV2 Sample Name: CRCRII

Operator:

Run Time: 11/07/07 07:29:38

Comment: UG/L

Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	Q199.9247	Q57.62461	Q8.026874	Q194.9869	Q4.687674	Q5.094208	Q5312.379
#1	Q203.5024	Q58.89930	Q6.751384	Q195.0560	Q4.694941	Q5.050773	Q5266.372
#2	Q196.3470	Q56.34992	Q9.302363	Q194.9178	Q4.680407	Q5.137642	Q5358.386
Errors	QC Fail	QC Fail	QC Fail	QC Fail	QC Fail	QC Fail	QC Fail
Value	400.0000	120.0000	20.00000	400.0000	10.00000	10.00000	500.0000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	Q10.11256	Q52.77864	Q29.36054	Q101.6527	Q9.941254	Q5382.150	Q16.09701
#1	Q10.24979	Q52.67744	Q28.75558	Q99.00317	Q10.11326	Q5337.409	Q15.98404
#2	Q9.975325	Q52.87984	Q29.96550	Q104.3023	Q9.769248	Q5426.892	Q16.20998
Errors	QC Fail	QC Fail	QC Fail	QC Fail	QC Fail	QC Fail	QC Fail
Value	20.00000	100.0000	50.00000	200.0000	6.000000	500.0000	30.00000
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-6.53967	Q40.54725	Q5218.416	Q31.88556	Q11.06334	Q4808.383	23.76707
#1	-3.36424	Q41.09887	Q5189.269	Q34.58487	Q10.77397	Q4960.876	Q26.66843
#2	-9.71511	Q39.99563	Q5247.562	Q29.18625	Q11.35271	Q4655.891	20.86572
Errors	NOCHECK	QC Fail	QC Fail	QC Fail	QC Fail	QC Fail	QC Pass
Value		80.00000	500.0000	10.00000	20.00000	1000.000	20.00000
Range		25.00000	25.00000	25.00000	25.00000	25.00000	25.00000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	Q54.28027	Q62.64735	Q-.436919	Q-.232692	Q2.797120	Q.2590423	14.88321
#1	Q53.93195	Q62.08181	Q-.514741	Q.3049595	Q3.688727	Q.3794596	14.62031
#2	Q54.62859	Q63.21288	Q-.359097	Q-.770343	Q1.905512	Q.1386251	15.14611
Errors	QC Fail	QC Fail	QC Fail	QC Fail	QC Fail	QC Fail	NOCHECK
Value	100.0000	40.00000	15.00000	5.000000	25.00000	25.00000	
Range	25.00000	25.00000	25.00000	25.00000	25.00000	25.00000	
Elem	2/Pb	1/Se	2/Se	2V			
Avge	7.470398	33.13585	31.26030	52.11625			
#1	7.859858	32.95104	35.40167	52.11757			
#2	7.080938	33.32065	27.11893	52.11494			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
Value							
Range							

Method: TRACEV2 Sample Name: IAICSAI
 Run Time: 11/07/07 07:37:59
 Comment: UG/L
 Mode: CONC Corr. Factor: 1

Operator:

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	493195.3	.2650737	-4.72272	.7769329	-.720283	5.461289	541286.8
#1	493038.9	-2.99507	-2.32789	.7478373	-.719338	5.245316	541952.9
#2	493351.7	3.525222	-7.11756	.8060287	-.721228	5.677263	540620.6
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500000.0	.0000000	.0000000	.0000000	.0000000	.0000000	500000.0
Range	50000.00	20.00000	20.00000	5.000000	2.000000	6.000000	50000.00
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	1.903435	1.690514	5.827585	203700.0	-5.55281	535122.4	1.529005
#1	1.781712	1.944477	6.057188	204058.2	-3.49649	535791.3	1.352415
#2	2.025158	1.436552	5.597982	203341.7	Q-7.60912	534453.4	1.705595
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	200000.0	.0000000	500000.0	.0000000
Range	5.000000	5.000000	10.00000	20000.00	6.000000	50000.00	5.000000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	30.30829	2.350106	8.330620	10.12620	.3917891	-216.091	5.407697
#1	29.89285	2.060864	9.326654	11.35791	.5675275	-181.061	8.962829
#2	30.72373	2.639347	7.334586	8.894501	.2160506	-251.122	1.852566
Errors	NOCHECK	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass	QC Pass
Value		.0000000	.0000000		.0000000	.0000000	.0000000
Range		10.00000	250.0000		3.000000	2500.000	20.00000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	-.311735	19.17041	7.106440	1.094929	3.439692	5.705621	29.58047
#1	-.423557	19.15922	7.144944	1.039267	3.121105	5.792382	32.82233
#2	-.199912	19.18161	7.067937	1.150591	3.758279	5.618860	26.33861
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	20.00000	15.00000	5.000000	25.00000	25.00000	
Elem	2/Pb	1/Se	2/Se	2V			
Avge	-23.1195	17.80772	6.285320	9.136084			
#1	-21.6560	20.93629	6.568592	9.066444			
#2	-24.5831	14.67915	6.002048	9.205723			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
Value							
Range							

Method: TRACEV2 Sample Name: IBICSABI

Operator:

Run Time: 11/07/07 07:46:21

Comment: UG/L

Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	494193.4	602.3205	98.55746	497.8449	512.4199	958.3492	535087.9
#1	494259.8	601.0716	98.03004	497.6064	509.6905	958.2194	535203.2
#2	494126.9	603.5694	99.08490	498.0834	515.1493	958.4790	534972.6
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500000.0	600.0000	100.0000	500.0000	500.0000	1000.000	500000.0
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	499.7013	500.1910	547.0458	202309.8	47.99661	532993.1	528.6079
#1	499.1304	500.3398	546.5437	202178.6	52.36148	532840.0	526.4421
#2	500.2724	500.0423	547.5479	202441.0	43.63173	533146.1	530.7737
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	200000.0	50.00000	500000.0	500.0000
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	539.7025	950.2368	5942.795	54.28516	220.4616	10665.29	99.61626
#1	539.4435	949.5424	5941.591	49.61083	220.1687	10648.42	93.98822
#2	539.9615	950.9312	5943.998	58.95948	220.7545	10682.16	105.2443
Errors	NOCHECK	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass	QC Pass
Value		1000.000	5000.000		200.0000	10000.00	100.0000
Range		20.00000	20.00000		20.00000	20.00000	20.00000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	520.9122	1051.077	1080.407	1007.091	1062.704	1023.705	77.34059
#1	520.7424	1049.608	1078.966	1004.238	1058.235	1023.172	77.57132
#2	521.0820	1052.547	1081.847	1009.944	1067.174	1024.238	77.10986
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	1000.000	1000.000	1000.000	1000.000	1000.000	
Range	20.00000	20.00000	20.00000	20.00000	20.00000	20.00000	
Elem	2/Pb	1/Se	2/Se	2V			
Avge	33.32450	55.19861	53.82837	553.0514			
#1	39.75644	49.02068	49.90585	552.9970			
#2	26.89256	61.37655	57.75089	553.1057			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
Value							
Range							

Method: TRACEV2 Sample Name: CVCCV5
 Run Time: 11/07/07 07:54:44
 Comment: UG/L
 Mode: CONC Corr. Factor: 1

Operator:

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avg	51516.07	516.2258	525.6512	498.1031	52.70686	510.2855	105449.7
#1	51563.32	514.3379	522.5897	499.3156	52.45250	510.3197	105065.7
#2	51468.82	518.1137	528.7127	496.8906	52.96123	510.2513	105833.6
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	50000.00	500.0000	500.0000	500.0000	50.00000	500.0000	100000.0
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avg	515.4865	525.0455	527.4096	52083.88	525.4071	108209.8	530.4868
#1	514.4658	522.5028	524.8810	51859.69	521.5552	107708.4	527.7034
#2	516.5072	527.5882	529.9382	52308.07	529.2590	108711.2	533.2701
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.0000	500.0000	500.0000	50000.00	500.0000	100000.0	500.0000
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avg	518.8894	505.1798	25575.35	524.7105	533.6692	100752.6	518.0448
#1	517.9787	506.6709	25488.16	521.8816	531.0950	100886.8	515.3115
#2	519.8002	503.6886	25662.53	527.5393	536.2434	100618.4	520.7781
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		500.0000	25000.00	500.0000	500.0000	100000.0	500.0000
Range		10.00000	10.00000	10.00000	10.00000	10.00000	10.00000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avg	530.3064	533.2395	531.0103	519.2319	533.6777	520.1823	522.2926
#1	527.6874	530.5179	530.0786	518.6155	529.7515	518.4894	521.2296
#2	532.9253	535.9611	531.9418	519.8483	537.6038	521.8752	523.3556
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	500.0000	500.0000	500.0000	500.0000	500.0000	500.0000	
Range	10.00000	10.00000	10.00000	10.00000	10.00000	10.00000	
Elem	2/Pb	1/Se	2/Se	2V			
Avg	526.9642	507.5097	533.3107	531.4579			
#1	521.7179	510.5356	527.5545	529.8439			
#2	532.2106	504.4838	539.0670	533.0719			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
Value							
Range							

Analysis Report

QC Standard

11/07/07 08:11:23 AM

page 1

Method: TRACEV2 Sample Name: BCCCCB5
 Run Time: 11/07/07 08:03:07
 Comment: UG/L
 Mode: CONC Corr. Factor: 1

Operator:

Elem	Al	Sb	As	Ba	Be	Cd	Ca
Avge	12.74543	-2.56382	-.820810	.0855243	-.237478	.0341895	72.21487
#1	23.54307	-.839172	-1.21245	.1241063	-.280181	.1600587	91.99585
#2	1.947796	-4.28847	-.429165	.0469423	-.194775	-.091680	52.43389
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	200.0000	20.00000	10.00000	15.00000	2.000000	5.000000	1000.000
Elem	Cr	Co	Cu	Fe	Pb	Mg	Mn
Avge	-.230817	.2612753	1.063722	4.498631	-.363495	30.54712	.2177330
#1	.0269021	.3262614	1.417717	5.526123	-.401320	42.09258	.2818588
#2	-.488537	.1962891	.7097267	3.471139	-.325669	19.00166	.1536073
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range	5.000000	5.000000	10.00000	100.0000	3.000000	250.0000	5.000000
Elem	Mn3441	Ni	K	Se	Ag	Na	Tl
Avge	-8.67045	.0145084	10.32241	-.471008	.4002359	58.43341	1.691916
#1	-11.0445	-.214226	9.854485	-2.02228	.5329992	-2.65000	.7201440
#2	-6.29640	.2432428	10.79034	1.080262	.2674726	119.5168	2.663687
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.0000000	.0000000	.0000000	.0000000	.0000000	.0000000
Range		10.00000	250.0000	5.000000	3.000000	2500.000	10.00000
Elem	V	Zn	B	Mo	Sn	Ti	1/Pb
Avge	-.018156	-.441278	.0958311	1.596451	.8845286	.0937296	2.164505
#1	-.462820	-.474676	-.597323	2.012357	1.818462	.0300275	2.809786
#2	.4265092	-.407880	.7889852	1.180544	-.049405	.1574317	1.519224
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.0000000	.0000000	.0000000	.0000000	.0000000	.0000000	
Range	10.00000	20.00000	15.00000	5.000000	20.00000	20.00000	
Elem	2/Pb	1/Se	2/Se	2V			
Avge	-1.62761	-2.49146	.5390944	.2581015			
#1	-2.00699	-2.64618	-1.71044	-.006902			
#2	-1.24823	-2.33673	2.788634	.5231051			
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK			
Value							
Range							

ICP ANALYSIS LOG

Instrument ID: ICAP 6500 (20072904)	Inst. Method: Nebulizer:	Analytical Batch No: 07/203

[illegible]

Source Solution Numbers			Post Digestion Spikes		
Sids.	Number	Sids.	Number	Spike	Post Digestion Spikes
S0	G-P-129-116-10	ICV	42173	4.4 mls of sample with 0.1 mls of	41513
S1	42105	CCV	42200	Samples:	
S2	42106	ICSA	42304	P5 710156-001-001-†	
S3	42109	ICSAB	42305	P5 710156-021-021-†	
S4	42110	LOW CK	42204	P5 710183-007-007-†	
S5	42111	LR	42008	P5 710183-027-027-†	
S6	42112	IS	42235	P5 710199-009-009-†	
				P5 710199-049-049-†	

Analyst: <u>MEC</u>	Date: <u>11/1/07</u>	Reviewed: _____	Date: _____

Sample Name: STD0 Acquired: 12/3/2007 12:39:09 Type: Cal
Method: TRACE(v2) Mode: IR Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00004	.00005	.00000	.00107	.00087	.00006	.00283
Stddev	.00001	.00000	.0000	.00001	.00001	.00000	.00052
%RSD	40.000	2.9758	1061.8	.97623	.71349	6.7414	18.347

#1	-.00003	.00005	-.00002	.00107	.00086	.00006	.00246
#2	-.00005	.00005	.00001	.00108	.00087	.00007	.00320

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.00002	-.00008	.00001	.0001	.00016	-.00221	.0022
Stddev	.00003	.00000	.00000	.0000	.00001	.00034	.0001
%RSD	106.17	.63032	5.4232	15.77	7.0675	15.317	5.270

#1	-.00004	-.00008	.00001	.0001	.00017	-.00245	.0023
#2	-.00001	-.00008	.00001	.0001	.00015	-.00197	.0021

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00002	.00001	-.00774	.00002	-.00017	.00005	.00004
Stddev	.00000	.00000	.00068	.00001	.00000	.00001	.00003
%RSD	16.224	9.7459	8.7221	26.190	1.8258	28.258	82.473

#1	.00002	.00001	-.00822	.00003	-.00017	.00006	.00002
#2	.00002	.00001	-.00727	.00002	-.00018	.00004	.00006

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00008	.00002	.00105	.00006	-.00002	-.00001	.00004
Stddev	.00001	.00001	.00002	.00002	.00001	.00002	.00001
%RSD	6.2239	54.756	1.5624	32.223	29.061	161.05	17.943

#1	.00008	.00003	.00104	.00008	-.00002	-.00002	.00004
#2	.00008	.00001	.00106	.00005	-.00002	.00000	.00003

Sample Name: STD0 Acquired: 12/3/2007 12:39:09 Type: Cal
 Method: TRACE(v2) Mode: IR Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	Cts/S
Avg	.00064
Stddev	.00001
%RSD	1.8740

#1	.00065
#2	.00063

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42807.	14884.	549270.
Stddev	358.	62.	3613.
%RSD	.83564	.41872	.65772

#1	43060.	14840.	551820.
#2	42554.	14928.	546710.

Sample Name: STD1 Acquired: 12/3/2007 12:42:21 Type: Cal
Method: TRACE(v2) Mode: IR Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Cd	Co
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00856	.34318	.00266	.01567	.19806	.02543	.09700	.04214
Stddev	.00003	.00486	.00001	.00002	.00016	.00007	.00011	.00006
%RSD	.32928	1.4160	.29045	.10666	.07968	.26201	.11533	.13507

#1	.00854	.34661	.00267	.01566	.19795	.02539	.09708	.04218
#2	.00858	.33974	.00265	.01568	.19817	.02548	.09692	.04210

Elem	Cr	Fe	Mn	Mo	Ni	Pb	Sb	Se
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00654	.36963	.03885	.02131	.02499	.00772	.00432	.00254
Stddev	.00002	.00370	.00010	.00002	.00002	.00005	.00006	.00002
%RSD	.35898	1.0022	.25042	.11121	.08962	.60951	1.3792	.83086

#1	.00652	.37225	.03878	.02133	.02497	.00775	.00428	.00256
#2	.00655	.36701	.03892	.02129	.02500	.00768	.00437	.00253

Elem	Si	Sn	Sr	Te	Ti	Tl	V	Zn
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00225	.00768	.43087	.00304	.02381	.00302	.00849	.07665
Stddev	.00000	.00000	.00115	.00003	.00010	.00002	.00001	.00001
%RSD	.02755	.03946	.26736	1.1352	.41732	.75115	.06801	.00729

#1	.00225	.00768	.43006	.00302	.02374	.00300	.00849	.07666
#2	.00225	.00768	.43169	.00307	.02388	.00303	.00849	.07665

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43224.	14950.	553140.
Stddev	70.	61.	2280.
%RSD	.16305	.40919	.41221

#1	43274.	14907.	554750.
#2	43175.	14994.	551530.

Sample Name: STD2 Acquired: 12/3/2007 12:45:29 Type: Cal
Method: TRACE(v2) Mode: IR Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Cd	Co
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.02141	.86370	.00658	.03744	.48580	.06382	.23978	.10472
Stddev	.00033	.01189	.00001	.00001	.00492	.00097	.00002	.00004
%RSD	1.5593	1.3767	.12422	.01553	1.0126	1.5163	.00632	.03415

#1	.02165	.87211	.00657	.03743	.48928	.06450	.23977	.10475
#2	.02118	.85529	.00659	.03744	.48233	.06313	.23979	.10470

Elem	Cr	Cu2199	Fe	Mn	Mo	Ni	Pb	Sb
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.01632	.0155	.91055	.09699	.05313	.06219	.01937	.01075
Stddev	.00027	.0001	.01352	.00153	.00001	.00001	.00009	.00000
%RSD	1.6348	.3603	1.4844	1.5815	.01879	.01728	.47738	.03958

#1	.01651	.0155	.92011	.09808	.05313	.06218	.01931	.01074
#2	.01613	.0154	.90099	.09591	.05312	.06219	.01944	.01075

Elem	Se	Si	Sn	Sr	Te	Ti	Tl	V
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.00627	.00547	.01893	1.0596	.00742	.06010	.00746	.02105
Stddev	.00005	.00009	.00001	.0118	.00000	.00096	.00002	.00031
%RSD	.79142	1.6491	.06135	1.1092	.00165	1.5997	.22009	1.4819

#1	.00631	.00553	.01892	1.0679	.00742	.06078	.00747	.02127
#2	.00624	.00540	.01894	1.0513	.00742	.05942	.00745	.02083

Elem	Zn
Units	Cts/S
Avg	.18955
Stddev	.00032
%RSD	.16953

#1	.18933
#2	.18978

Sample Name: STD2 Acquired: 12/3/2007 12:45:29 Type: Cal
Method: TRACE(v2) Mode: IR Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43312.	14939.	554530.
Stddev	38.	157.	8501.
%RSD	.08676	1.0517	1.5331
#1	43338.	14828.	548520.
#2	43285.	15050.	560540.

Sample Name: STD3 Acquired: 12/3/2007 12:48:52 Type: Cal
 Method: TRACE(v2) Mode: IR Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Ag	Al	As	B	Ba	Be	Cd	Co
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.04241	1.6839	.01291	.07217	.95881	.12642	.47210	.20647
Stddev	.00026	.0192	.00006	.00014	.00320	.00066	.00051	.00008
%RSD	.60977	1.1382	.47078	.19471	.33418	.51880	.10726	.04069

#1	.04260	1.6703	.01287	.07227	.96108	.12688	.47245	.20653
#2	.04223	1.6974	.01296	.07207	.95655	.12595	.47174	.20641

Elem	Cr	Cu2199	Fe	Mn	Mo	Ni	Pb	Sb
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.03237	.0303	1.7704	.19310	.10467	.12261	.03814	.02119
Stddev	.00015	.0001	.0193	.00106	.00002	.00018	.00007	.00004
%RSD	.47098	.2975	1.0915	.54891	.02385	.14883	.17363	.20466

#1	.03248	.0304	1.7567	.19385	.10468	.12274	.03809	.02122
#2	.03226	.0303	1.7841	.19235	.10465	.12248	.03819	.02116

Elem	Se	Si	Sn	Sr	Te	Ti	Tl	V
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.01228	.01070	.03723	2.0717	.01447	.11948	.01465	.04161
Stddev	.00007	.00001	.00008	.0048	.00004	.00049	.00005	.00022
%RSD	.55489	.12288	.20604	.23294	.29026	.40695	.32930	.53886

#1	.01223	.01071	.03729	2.0751	.01444	.11983	.01468	.04176
#2	.01233	.01069	.03718	2.0683	.01450	.11914	.01462	.04145

Elem	Zn
Units	Cts/S
Avg	.37489
Stddev	.00006
%RSD	.01690

#1	.37494
#2	.37485

Sample Name: STD3 Acquired: 12/3/2007 12:48:52 Type: Cal
Method: TRACE(v2) Mode: IR Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43489.	15183.	557000.
Stddev	17.	41.	1077.
%RSD	.03862	.27140	.19330
#1	43477.	15212.	556240.
#2	43500.	15154.	557770.

Sample Name: STD4 Acquired: 12/3/2007 12:52:16 Type: Cal
 Method: TRACE(v2) Mode: IR Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Ca	K	Mg2802	Na
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.5428	.09488	21.70	2.1974
Stddev	.0132	.00130	.23	.0203
%RSD	.85720	1.3671	1.071	.92567

#1	1.5334	.09396	21.54	2.1830
#2	1.5521	.09580	21.87	2.2118

Int. Std.	Y_3774
Units	Cts/S
Avg	14903.
Stddev	204.
%RSD	1.3713

#1	15047.
#2	14758.

Sample Name: STD5 Acquired: 12/3/2007 12:55:31 Type: Cal
 Method: TRACE(v2) Mode: IR Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Ca	K	Mg2802	Na
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3.8000	.19403	49.95	5.4065
Stddev	.0881	.00595	.62	.1192
%RSD	2.3181	3.0662	1.240	2.2054

#1	3.7377	.18982	49.51	5.3222
#2	3.8623	.19824	50.38	5.4908

Int. Std.	Y_3774
Units	Cts/S
Avg	15101.
Stddev	352.
%RSD	2.3282

#1	15349.
#2	14852.

Sample Name: STD6 Acquired: 12/3/2007 12:58:52 Type: Cal
 Method: TRACE(v2) Mode: IR Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Ca	K	Mg2802	Na
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7.6896	.50627	94.08	10.760
Stddev	.0059	.00233	.62	.023
%RSD	.07605	.45951	.6543	.21023

#1	7.6855	.50463	94.51	10.776
#2	7.6938	.50792	93.64	10.744

Int. Std.	Y_3774
Units	Cts/S
Avg	14547.
Stddev	29.
%RSD	.19826

#1	14526.
#2	14567.

Sample Name: ICV Acquired: 12/3/2007 13:02:12 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	411.97	5078.1	436.57	426.37	425.46	42.229	5178.1
Stddev	4.73	27.9	5.03	.58	4.73	.382	60.2
%RSD	1.1472	.54920	1.1518	.13668	1.1118	.90441	1.1625
#1	415.31	5097.8	440.12	426.78	428.81	42.499	5220.7
#2	408.63	5058.4	433.01	425.95	422.12	41.959	5135.5

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	41.826	434.70	417.26	406.8	5124.7	5180.9	F 5350.
Stddev	.107	1.11	4.29	.3	97.0	10.7	.58.
%RSD	.25519	.25533	1.0280	.0721	1.8935	.20677	1.080
#1	41.901	435.48	420.29	407.0	5193.3	5188.5	5390.
#2	41.750	433.91	414.22	406.6	5056.1	5173.3	5309.

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value							400.0
Range							10.00%

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	418.27	407.21	10591.	422.80	422.36	409.50	422.39
Stddev	5.26	.70	105.	.16	1.42	1.04	.83
%RSD	1.2567	.17202	.99284	.03830	.33617	.25331	.19560
#1	421.99	407.70	10666.	422.68	423.37	408.76	422.98
#2	414.55	406.71	10517.	422.91	421.36	410.23	421.81

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Sample Name: ICV Acquired: 12/3/2007 13:02:12 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	F 105.99	414.33	417.48	F 11.437	419.98	407.65	420.69
Stddev	.89	.94	2.14	.258	4.76	.92	4.04
%RSD	.84215	.22707	.51266	2.2526	1.1334	.22520	.95934
#1	106.62	415.00	418.99	11.255	423.34	407.00	423.54
#2	105.36	413.67	415.97	11.619	416.61	408.30	417.84
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	400.00			400.00			
Range	-10.000%			-10.000%			

Elem	Zn
Units	ppb
Avg	429.48
Stddev	1.38
%RSD	.32233
#1	430.46
#2	428.51

Check ?	Chk Pass
Value	
Range	

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43149.	14779.	546440.
Stddev	113.	140.	5257.
%RSD	.26229	.94909	.96205
#1	43069.	14680.	542720.
#2	43229.	14878.	550160.

Sample Name: ICB Acquired: 12/3/2007 13:05:30 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.23728	-6.5861	.11255	-1.3556	.01950	.00100	12.781	-.01327
Stddev	.10501	14.810	.61890	.3567	.00027	.00034	3.994	.04107
%RSD	44.255	224.87	549.87	26.315	1.3721	33.686	31.249	309.60

#1	.31153	3.8862	-.32508	-1.1034	.01969	.00076	15.605	.01578
#2	.16303	-17.058	.55019	-1.6078	.01931	.00124	9.9571	-.04231

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.11885	-.24626	-1.640	-1.6917	-16.199	F 13.00	.02521	.21274
Stddev	.12513	.16714	1.064	1.7418	31.048	.42	.05793	.13883
%RSD	105.28	67.872	64.91	102.96	191.67	3.256	229.77	65.258

#1	.20734	-.36444	-2.393	-2.9234	5.7553	13.30	-.01575	.11457
#2	.03037	-.12807	-.8871	-.46007	-38.153	12.70	.06617	.31091

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit						3.000		
Low Limit						-3.000		

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	116.53	-.19364	-1.2694	-.04593	-.96550	.29099	-.36051	.05048
Stddev	13.92	.09133	1.5789	2.7655	.77791	.40156	1.0931	.01939
%RSD	11.943	47.165	124.38	6021.3	80.570	138.00	303.21	38.417

#1	106.69	-.12906	-.15296	1.9096	-1.5156	.57493	-1.1334	.03677
#2	126.37	-.25823	-2.3859	-2.0015	-.41544	.00704	.41242	.06419

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: ICB Acquired: 12/3/2007 13:05:30 Type: QC
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-.31441	.07521	-.90163	-.21441	-.15768
Stddev	.66881	.01378	1.7044	.09244	.04237
%RSD	212.72	18.323	189.03	43.112	26.871

#1	-.78733	.08496	-2.1068	-.27978	-.12772
#2	.15851	.06547	.30355	-.14905	-.18765

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43106.	15316.	553540.
Stddev	43.	664.	985.
%RSD	.10004	4.3320	.17802

#1	43075.	15786.	552840.
#2	43136.	14847.	554230.

Sample Name: CCV Acquired: 12/3/2007 13:08:45 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	517.18	51538.	505.06	506.52	495.43	50.308
Stddev	3.08	334.	1.50	1.93	2.05	.313
%RSD	.59598	.64838	.29760	.38162	.41393	.62143

#1	515.00	51774.	506.13	507.89	493.98	50.087
#2	519.36	51301.	504.00	505.15	496.88	50.529

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca	Cd	Co	Cr	Cu2199	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	101760.	492.48	493.17	507.29	502.7	49874.
Stddev	472.	1.21	1.54	3.89	.3	299.
%RSD	.46391	.24542	.31205	.76672	.0510	.59962

#1	102100.	493.33	494.26	504.54	502.5	50085.
#2	101430.	491.62	492.08	510.04	502.9	49663.

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	K	Mg2802	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	25313.	F 104000.	498.92	501.63	102400.	494.27
Stddev	244.	664.	2.50	1.80	557.	.88
%RSD	.96534	.6387	.50196	.35803	.54393	.17886

#1	25486.	104400.	497.15	502.90	102790.	494.89
#2	25141.	103500.	500.69	500.36	102000.	493.64

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		500.0				
Range		10.00%				

Sample Name: CCV Acquired: 12/3/2007 13:08:45 Type: QC
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	490.49	510.45	501.80	525.73	494.78	498.83
Stddev	2.42	.54	3.18	2.59	.96	.79
%RSD	.49377	.10549	.63370	.49268	.19485	.15745
#1	492.21	510.84	504.05	523.90	495.46	498.28
#2	488.78	510.07	499.55	527.56	494.10	499.39
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	498.80	516.89	490.93	506.90	508.71
Stddev	3.60	3.47	1.58	2.88	1.89
%RSD	.72093	.67104	.32177	.56893	.37147
#1	501.34	514.44	492.04	504.86	510.04
#2	496.26	519.34	489.81	508.94	507.37
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42095.	14560.	536550.
Stddev	48.	84.	3633.
%RSD	.11430	.57498	.67706
#1	42061.	14501.	539120.
#2	42129.	14619.	533990.

Sample Name: CCB Acquired: 12/3/2007 13:12:14 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.00147	8.5227	-.71273	-2.5820	-.03728	.00278	9.6213	-.01305
Stddev	.41490	10.732	.51824	.4087	.00317	.00072	.5146	.12455
%RSD	28285.	125.92	72.712	15.830	8.5024	25.965	5.3483	954.26
#1	-.29191	16.111	-.34628	-2.2929	-.03953	.00227	9.9852	.07502
#2	.29484	.93400	-1.0792	-2.8710	-.03504	.00329	9.2575	-.10113

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.23465	-.39570	-.5298	.94284	-21.058	.0400	-.04081	.29335
Stddev	.09044	.07786	.8869	6.5884	101.56	.0993	.01474	.35190
%RSD	38.541	19.676	167.4	698.78	482.30	248.4	36.118	119.96
#1	.29860	-.34064	.0973	5.6015	-92.873	.1102	-.03039	.04451
#2	.17070	-.45075	-1.157	-3.7158	50.758	-.0302	-.05123	.54218

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	97.712	-.27816	.12474	.31922	-2.3195	-.38513	-.15947	-.00479
Stddev	4.529	.10664	.84933	.56249	2.8911	.39088	.85887	.00370
%RSD	4.6353	38.336	680.89	176.21	124.64	101.49	538.59	77.350
#1	94.509	-.20276	-.47583	.71696	-.27517	-.66152	-.76678	-.00217
#2	100.91	-.35357	.72530	-.07852	-4.3638	-.10873	.44785	-.00741

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 12/3/2007 13:12:14 Type: QC
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-2.3195	.09216	-.90003	-.10049	-.16443
Stddev	.1390	.00050	.27096	.28620	.10468
%RSD	5.9936	.54623	30.105	284.81	63.664

#1	-2.2212	.09251	-.70844	.10188	-.09041
#2	-2.4179	.09180	-1.0916	-.30286	-.23846

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43041.	15137.	545840.
Stddev	100.	435.	3330.
%RSD	.23209	2.8722	.61007

#1	42971.	15444.	543480.
#2	43112.	14829.	548190.

Sample Name: PQL Acquired: 12/3/2007 13:15:32 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	4.9317	206.22	19.513	12.851	5.0411	1.9867	1019.3	6.1890
Stddev	.0847	35.13	.151	.334	.0065	.0172	3.8	.1243
%RSD	1.7183	17.035	.77374	2.5993	.12856	.86349	.37499	2.0076
#1	4.8717	181.38	19.406	12.615	5.0457	1.9989	1022.0	6.2768
#2	4.9916	231.06	19.620	13.088	5.0365	1.9746	1016.6	6.1011

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	5.1221	4.9611	F 8.977	146.27	232.04	F 276.8	5.0492	5.5035
Stddev	.1040	.0090	.054	3.77	43.57	7.0	.0778	.2872
%RSD	2.0296	.18218	.6060	2.5755	18.777	2.520	1.5399	5.2176
#1	5.1956	4.9675	9.016	143.60	201.23	271.9	5.1041	5.3005
#2	5.0486	4.9547	8.939	148.93	262.84	281.7	4.9942	5.7065

Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value			5.000			5.000		
Range			20.00%			20.00%		

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2715.0	10.097	10.180	19.992	18.963	55.115	25.093	5.0169
Stddev	43.6	.367	1.221	.318	1.627	.321	.113	.0181
%RSD	1.6077	3.6328	11.996	1.5928	8.5778	.58169	.44876	.36139
#1	2745.8	9.8377	9.3165	19.767	20.114	54.888	25.172	5.0297
#2	2684.1	10.356	11.044	20.217	17.813	55.342	25.013	5.0041

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: PQL Acquired: 12/3/2007 13:15:32 Type: QC
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Te	Ti	Ti	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-2.0602	25.322	29.789	9.9263	21.107
Stddev	.8566	.270	1.134	.1674	.047
%RSD	41.581	1.0670	3.8062	1.6868	.22183

#1	-2.6659	25.131	30.590	10.045	21.074
#2	-1.4544	25.513	28.987	9.8079	21.140

Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43025.	14667.	549400.
Stddev	101.	67.	2510.
%RSD	.23382	.45417	.45688

#1	42954.	14620.	551180.
#2	43097.	14714.	547630.

Sample Name: ICSA Acquired: 12/3/2007 13:18:47 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	F -4.0166	512070.	F -26.391	11.726	-1.3203	-.03283
Stddev	.1148	14504.	2.529	.664	.0666	.01074
%RSD	2.8583	2.8323	9.5847	5.6600	5.0467	32.724
#1	-4.0978	501820.	-24.602	12.196	-1.2732	-.04043
#2	-3.9355	522330.	-28.179	11.257	-1.3674	-.02524
Check ?	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit	3.0000		20.000			
Low Limit	-3.0000		-20.000			

Elem	Ca	Cd	Co	Cr	Cu2199	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	480520.	-2.4347	3.2640	3.9057	F -15.12	186550.
Stddev	12924.	.6136	.2038	.1951	5.02	4854.
%RSD	2.6896	25.201	6.2445	4.9947	33.19	2.6020
#1	471380.	-2.0009	3.4081	3.7677	-18.67	183120.
#2	489660.	-2.8686	3.1199	4.0436	-11.57	189980.
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit					3.000	
Low Limit					-3.000	

Elem	K	Mg2802	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-61.204	F 491800.	3.9223	.75397	161.17	2.8138
Stddev	20.084	19170.	.5553	.62844	2.64	.0491
%RSD	32.814	3.897	14.158	83.351	1.6352	1.7447
#1	-75.405	478300.	4.3150	1.1983	163.03	2.8485
#2	-47.003	505400.	3.5296	.30960	159.30	2.7791
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		3.000				
Low Limit		-3.000				

Sample Name: ICSEA Acquired: 12/3/2007 13:18:47 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.4497	-2.6759	-16.183	-9.7864	.45437	F 6.5464
Stddev	7.4748	2.4373	5.743	1.2035	.00773	.0442
%RSD	305.13	91.083	35.490	12.297	1.7002	.67520

#1	7.7352	-.95247	-12.122	-10.637	.44890	6.5776
#2	-2.8358	-4.3993	-20.244	-8.9354	.45983	6.5151

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit						5.0000
Low Limit						-5.0000

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-21.018	14.977	.03018	.15234	-13.658
Stddev	1.295	.024	.31220	.08101	1.015
%RSD	6.1623	.16258	1034.5	53.175	7.4313

#1	-21.934	14.994	.25094	.09506	-12.940
#2	-20.103	14.960	-.19058	.20962	-14.376

Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	40277.	14760.	512410.
Stddev	89.	267.	3603.
%RSD	.21982	1.8084	.70314

#1	40214.	14949.	509860.
#2	40339.	14571.	514960.

Sample Name: ICSAB Acquired: 12/3/2007 13:22:00 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	208.17	512530.	84.330	998.03	496.00	479.89
Stddev	.26	4232.	1.669	.50	.61	1.62
%RSD	.12378	.82569	1.9790	.05056	.12298	.33657

#1	208.35	509540.	83.150	998.39	496.43	481.03
#2	207.99	515520.	85.510	997.68	495.57	478.75

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca	Cd	Co	Cr	Cu2199	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	482190.	929.24	463.59	488.41	F 448.5	187730.
Stddev	4578.	1.20	.16	.15	1.2	1657.
%RSD	.94933	.12881	.03462	.03030	.2761	.88283

#1	478950.	930.08	463.70	488.52	447.6	186560.
#2	485430.	928.39	463.48	488.31	449.3	188900.

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value					200.0	
Range					20.00%	

Elem	K	Mg2802	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	5202.0	F 512000.	487.98	976.83	10954.	927.93
Stddev	41.3	15120.	.81	.70	110.	.84
%RSD	.79460	2.952	.16509	.07172	1.0085	.09098

#1	5172.7	501300.	488.55	977.32	10876.	928.52
#2	5231.2	522700.	487.41	976.33	11032.	927.33

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		200.0				
Range		20.00%				

Sample Name: ICSAB Acquired: 12/3/2007 13:22:00 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	46.748	604.84	F 32.229	F 1230.8	951.44	503.22
Stddev	1.525	2.93	.857	.1	2.12	1.46
%RSD	3.2631	.48444	2.6595	.01215	.22299	.28984
#1	47.826	602.77	31.623	1230.9	949.94	502.19
#2	45.669	606.91	32.835	1230.7	952.94	504.25
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass
Value			50.000	1000.0		
Range			-20.000%	20.000%		

Elem	Te	Ti	Ti	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	177.02	1003.5	89.391	490.96	993.30
Stddev	.92	.2	1.782	.66	2.96
%RSD	.51884	.02107	1.9932	.13490	.29850
#1	176.37	1003.6	90.651	491.43	995.39
#2	177.67	1003.3	88.131	490.50	991.20
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	40285.	14482.	515720.
Stddev	15.	181.	368.
%RSD	.03679	1.2497	.07140
#1	40296.	14610.	515460.
#2	40275.	14354.	515980.

Sample Name: LR Acquired: 12/3/2007 13:25:35 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1052.4	-410.75	2112.0	5071.4	^F *****	499.90	36.206
Stddev	.9	43.82	6.8	15.3	----	1.05	10.257
%RSD	.08566	10.668	.31987	.30171	----	.21038	28.330

#1	1051.8	-379.76	2116.8	5082.2	^ ----	500.65	28.953
#2	1053.0	-441.73	2107.2	5060.6	^ ----	499.16	43.459

Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	Chk Pass	None
Value					10000.		
Range					-10.000%		

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2027.8	10077.	10385.	F 10300.	488920.	201.06	F 46.85
Stddev	4.3	26.	21.	29.	5144.	19.89	3.47
%RSD	.21204	.25732	.20350	.2861	1.0521	9.8903	7.412

#1	2030.9	10096.	10370.	10320.	492560.	215.12	49.31
#2	2024.8	10059.	10400.	10270.	485280.	187.00	44.40

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	None	Chk Fail
Value				1000.			1000.
Range				10.00%			-10.00%

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	9780.9	10039.	72.852	7614.5	20181.	5089.0	1993.7
Stddev	51.1	28.	7.348	28.3	64.	14.8	4.7
%RSD	.52292	.27508	10.087	.37209	.31879	.29104	.23429

#1	9744.7	10058.	78.048	7634.5	20227.	5099.5	1997.0
#2	9817.1	10019.	67.656	7594.5	20136.	5078.5	1990.4

Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Sample Name: LR Acquired: 12/3/2007 13:25:35 Type: QC
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	10810.	10090.	1983.0	306.09	10001.	2031.7	10298.
Stddev	26.	29.	3.1	8.19	58.	9.1	26.
%RSD	.24092	.29006	.15654	2.6748	.57658	.44807	.25138
#1	10791.	10111.	1980.8	300.30	9960.3	2038.2	10279.
#2	10828.	10070.	1985.2	311.88	10042.	2025.3	10316.
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Zn
Units	ppb
Avg	10043.
Stddev	26.
%RSD	.26094
#1	10062.
#2	10025.
Check ?	Chk Pass
Value	
Range	

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42059.	14553.	541980.
Stddev	78.	75.	689.
%RSD	.18661	.51377	.12710
#1	42003.	14500.	542470.
#2	42114.	14605.	541490.

Sample Name: PBLK Acquired: 12/3/2007 13:29:13 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.06088	21.372	1.6878	.22741	1.0942	.07505	20.419	.17612
Stddev	.53550	31.642	1.3201	.43720	.1538	.00043	8.377	.06975
%RSD	879.56	148.05	78.213	192.25	14.056	.57768	41.027	39.606
#1	-.31777	43.747	.75439	.53656	1.2029	.07474	14.495	.22544
#2	.43953	-1.0019	2.6213	-.08174	.98542	.07535	26.342	.12680

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.56461	.74406	-.5468	59.737	-74.434	F 23.08	1.0329	4.6868
Stddev	.16753	.18768	.6286	12.238	78.583	8.79	.1440	.8252
%RSD	29.672	25.224	115.0	20.486	105.57	38.09	13.943	17.606
#1	.68307	.87677	-.9913	51.084	-130.00	16.86	1.1347	5.2703
#2	.44615	.61135	-.1023	68.391	-18.867	29.29	.93107	4.1034

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit						3.000		
Low Limit						-3.000		

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	13.690	.07802	.40767	-.81665	-3.4557	9.8461	.34359	.20229
Stddev	13.511	.34135	.41848	.11249	.1138	2.2595	.14710	.04156
%RSD	98.693	437.55	102.65	13.774	3.2937	22.948	42.812	20.545
#1	4.1361	.31939	.11176	-.73711	-3.3752	11.444	.44760	.23168
#2	23.243	-.16336	.70358	-.89619	-3.5362	8.2484	.23958	.17290

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: PBLK Acquired: 12/3/2007 13:29:13 Type: QC
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Te	Ti	Ti	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-2.6356	1.2275	1.6217	.85464	-.37793
Stddev	.0799	.0616	.7408	.53913	.22797
%RSD	3.0327	5.0211	45.682	63.083	60.321

#1	-2.6922	1.2711	2.1455	1.2359	-.21673
#2	-2.5791	1.1839	1.0978	.47341	-.53913

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43988.	14823.	558430.
Stddev	59.	131.	4477.
%RSD	.13343	.88285	.80174

#1	44030.	14731.	555270.
#2	43947.	14916.	561600.

Sample Name: CCV Acquired: 12/3/2007 13:32:29 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	517.53	50328.	507.46	511.02	499.95	50.261
Stddev	4.71	746.	4.11	2.25	2.13	.468
%RSD	.91042	1.4823	.80911	.44074	.42541	.93067

#1	520.86	49801.	510.36	512.61	501.45	50.591
#2	514.20	50856.	504.56	509.43	498.44	49.930

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca	Cd	Co	Cr	Cu2199	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	99699.	495.45	496.96	504.98	506.7	48817.
Stddev	1822.	1.02	2.03	5.51	2.2	964.
%RSD	1.8272	.20686	.40923	1.0906	.4429	1.9757

#1	98411.	496.17	498.40	508.87	508.3	48135.
#2	100990.	494.72	495.53	501.08	505.1	49499.

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	K	Mg2802	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	24611.	F 100400.	500.38	507.13	101130.	498.38
Stddev	279.	878.	4.71	1.10	2284.	2.17
%RSD	1.1349	.8747	.94067	.21659	2.2590	.43507

#1	24414.	99790.	503.71	507.91	99510.	499.92
#2	24809.	101000.	497.05	506.36	102740.	496.85

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		500.0				
Range		10.00%				

Sample Name: CCV Acquired: 12/3/2007 13:32:29 Type: QC
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	495.19	515.51	505.75	528.99	498.97	500.56
Stddev	1.36	1.29	2.76	5.74	.95	2.39
%RSD	.27472	.25101	.54608	1.0852	.19132	.47711

#1	496.15	516.42	507.71	533.05	499.64	502.25
#2	494.23	514.59	503.80	524.93	498.29	498.87

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Te	Ti	Ti	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	500.68	515.97	494.89	506.92	514.48
Stddev	2.77	4.71	1.62	4.27	.89
%RSD	.55271	.91302	.32707	.84162	.17261

#1	502.63	519.30	496.03	509.93	515.11
#2	498.72	512.64	493.74	503.90	513.85

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42251.	15023.	541710.
Stddev	200.	203.	4646.
%RSD	.47263	1.3542	.85759

#1	42110.	15167.	538420.
#2	42392.	14879.	544990.

Sample Name: CCB Acquired: 12/3/2007 13:35:58 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.32972	-15.232	-.20007	-2.1497	-.02737	.00200	4.6485	-.03774
Stddev	.13933	16.348	1.9098	.6890	.00124	.00708	.0496	.07292
%RSD	42.256	107.33	954.56	32.051	4.5353	354.53	1.0662	193.22
#1	.23120	-26.791	-1.5505	-1.6625	-.02649	.00700	4.6835	-.08930
#2	.42824	-3.6716	1.1504	-2.6368	-.02825	-.00301	4.6134	.01382

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.08003	-.08076	.0799	-1.7235	-10.271	2.205	-.03813	1.2281
Stddev	.26331	.09527	1.454	1.0714	8.350	1.138	.03002	.0231
%RSD	329.03	117.97	1820.	62.166	81.293	51.60	78.741	1.8827
#1	.26622	-.01339	-.9484	-2.4812	-16.175	3.009	-.01690	1.2445
#2	-.10616	-.14813	1.108	-.96590	-4.3671	1.400	-.05936	1.2118

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	53.114	-.37593	-.60749	.14611	-.18227	.66497	.39269	-.00219
Stddev	15.227	.15121	.45718	2.6265	1.9950	.46903	.14190	.00085
%RSD	28.669	40.224	75.258	1797.7	1094.5	70.535	36.136	38.648
#1	63.881	-.26900	-.28421	2.0033	-1.5930	.99663	.49303	-.00159
#2	42.346	-.48285	-.93076	-1.7111	1.2284	.33331	.29235	-.00279

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 12/3/2007 13:35:58 Type: QC
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Te	Ti	Ti	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-2.0466	.08344	.97197	-.25806	-.12701
Stddev	2.3962	.05824	.60742	.16453	.02608
%RSD	117.08	69.792	62.493	63.755	20.536
#1	-.35226	.12462	.54246	-.14172	-.14545
#2	-3.7410	.04226	1.4015	-.37440	-.10857

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43385.	14953.	555610.
Stddev	54.	14.	774.
%RSD	.12467	.09556	.13933
#1	43347.	14963.	555060.
#2	43423.	14943.	556160.

Sample Name: IDL-1 Acquired: 12/3/2007 13:39:16 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.17636	20.683	-5.5459	-3.1523	-.03534	.01058	2.8182	.02548
Stddev	.13065	.850	.04497	.2444	.01993	.01238	.9484	.02769
%RSD	74.080	4.1111	8.1082	7.7530	56.393	117.02	33.654	108.68

#1	-.08398	20.082	-.52279	-2.9795	-.02125	.01934	2.1476	.04506
#2	-.26875	21.284	-.58639	-3.3252	-.04943	.00183	3.4889	.00590

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.14801	-.08453	-1.116	4.4273	-51.468	-1.676	-.04463	.45603
Stddev	.03423	.12496	.337	6.5607	32.759	.218	.00626	.07885
%RSD	23.129	147.82	30.17	148.19	63.649	13.01	14.036	17.290

#1	-.17222	-.17290	-1.354	-.21181	-28.304	-1.522	-.04906	.51179
#2	-.12380	.00383	-.8778	9.0664	-74.632	-1.830	-.04020	.40028

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	43.403	-.68691	-.89932	-.50430	-1.1026	-.21035	-.21706	-.01405
Stddev	24.027	.05532	1.5606	1.2824	2.0623	.51771	.93373	.00017
%RSD	55.358	8.0532	173.53	254.29	187.05	246.11	430.17	1.2185

#1	26.414	-.72603	-2.0029	-1.4111	-2.5608	-.57643	-.87730	-.01417
#2	60.393	-.64780	.20420	.40249	.35574	.15572	.44318	-.01393

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-3.7159	.07039	.57373	-.24613	-.08328
Stddev	.6838	.10051	.26335	.00984	.00442
%RSD	18.403	142.79	45.901	3.9976	5.3022

#1	-3.2324	-.00068	.75994	-.25309	-.08640
#2	-4.1995	.14146	.38751	-.23917	-.08015

Sample Name: IDL-1 Acquired: 12/3/2007 13:39:16 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43491.	14721.	552740.
Stddev	36.	133.	364.
%RSD	.08295	.90089	.06585
#1	43465.	14627.	552480.
#2	43516.	14815.	552990.

Sample Name: IDL-2 Acquired: 12/3/2007 13:42:32 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.12024	5.3817	.44377	-3.4840	.03558	.00646	.25319	.15338
Stddev	.01472	20.427	.54622	.1777	.00237	.00068	6.4714	.00480
%RSD	12.241	379.56	123.09	5.1001	6.6539	10.475	2556.0	3.1298
#1	.10983	19.826	.05753	-3.6096	.03725	.00598	-4.3228	.14998
#2	.13065	-9.0624	.83001	-3.3583	.03391	.00694	4.8292	.15677
Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.15723	.00531	-.2736	-6.5018	-60.082	-.3371	.03558	.40351
Stddev	.06942	.06423	.5026	7.5054	17.899	2.067	.05239	.22216
%RSD	44.155	1208.7	183.7	115.44	29.791	613.3	147.25	55.056
#1	.10814	.05073	.0818	-11.809	-47.425	-1.799	-.00147	.56060
#2	.20632	-.04010	-.6289	-1.1947	-72.739	1.125	.07262	.24642
Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	45.492	-.19260	-.16779	-.90842	-1.8744	.10859	-.28433	.01692
Stddev	4.172	.12249	1.4766	.14978	.9576	.30443	.52044	.00749
%RSD	9.1699	63.597	880.05	16.488	51.088	280.36	183.04	44.287
#1	48.442	-.10599	.87634	-.80250	-2.5515	-.10668	-.65234	.01162
#2	42.543	-.27922	-1.2119	-1.0143	-1.1973	.32385	.08367	.02222
Elem	Te	Ti	Tl	V	Zn			
Units	ppb	ppb	ppb	ppb	ppb			
Avg	-2.7028	.17674	-1.0180	.00804	-.05642			
Stddev	.1973	.09676	2.2060	.08573	.00925			
%RSD	7.2998	54.749	216.69	1067.0	16.403			
#1	-2.8423	.24516	.54183	-.05259	-.04987			
#2	-2.5633	.10832	-2.5779	.06866	-.06296			

Sample Name: IDL-2 Acquired: 12/3/2007 13:42:32 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43484.	15058.	548030.
Stddev	99.	291.	530.
%RSD	.22865	1.9355	.09665
#1	43554.	15264.	547660.
#2	43413.	14852.	548410.

Sample Name: IDL-3 Acquired: 12/3/2007 13:45:50 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.20854	-10.416	1.9588	-4.0564	-.06509	-.00374	1.5593	-.16122
Stddev	.03628	37.622	1.6366	.7329	.02583	.00882	1.7742	.04225
%RSD	17.397	361.21	83.548	18.069	39.689	235.74	113.79	26.207

#1	.23420	16.187	.80161	-3.5381	-.04682	.00249	.30470	-.19109
#2	.18289	-37.018	3.1161	-4.5746	-.08335	-.00998	2.8138	-.13134

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.14610	-.55794	-.8082	-5.2931	-.93.393	-3.086	.01434	.08146
Stddev	.24022	.17579	.5011	6.6505	8.783	.165	.01038	.14123
%RSD	164.42	31.507	62.00	125.64	9.4039	5.343	72.398	173.38

#1	.31596	-.43363	-1.162	-.59054	-87.183	-2.970	.00700	-.01841
#2	-.02376	-.68224	-.4538	-9.9957	-99.604	-3.203	.02168	.18133

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	63.546	.07728	-.38964	1.4038	.97162	-.22246	.04401	-.00145
Stddev	16.489	.27171	.60210	1.0206	2.9587	1.3227	.32618	.00590
%RSD	25.949	351.61	154.53	72.704	304.51	594.60	741.20	406.58

#1	75.205	-.11485	.03611	2.1255	3.0637	-1.1578	.27465	.00272
#2	51.886	.26941	-.81539	.68211	-1.1205	.71286	-.18664	-.00562

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-2.3466	-.03257	-1.5643	-.30432	.52373
Stddev	2.3854	.04657	1.1354	.24903	.18254
%RSD	101.65	142.97	72.577	81.832	34.855

#1	-4.0334	-.06550	-.76152	-.48041	.39465
#2	-.65991	.00036	-2.3672	-.12823	.65280

Sample Name: IDL-3 Acquired: 12/3/2007 13:45:50 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43422.	14930.	556010.
Stddev	68.	221.	3284.
%RSD	.15770	1.4819	.59056
#1	43374.	14774.	553690.
#2	43471.	15087.	558330.

Sample Name: IDL-4 Acquired: 12/3/2007 13:49:06 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.09114	-33.984	.19918	-4.4713	-.05896	-.00001	-6.0771	.08571
Stddev	.41073	5.817	1.6566	.2888	.01111	.00589	1.4368	.02900
%RSD	450.66	17.116	831.73	6.4582	18.845	59436.	23.643	33.838
#1	-.19929	-29.871	-.97224	-4.2671	-.06682	.00416	-7.0930	.10622
#2	.38157	-38.097	1.3706	-4.6755	-.05111	-.00418	-5.0611	.06520
Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.12400	-.17737	-1.028	-9.1518	9.8071	-3.928	-.09990	.04558
Stddev	.03483	.08681	.457	6.3923	38.964	.437	.00607	.41016
%RSD	28.092	48.941	44.39	69.847	397.31	11.13	6.0790	899.85
#1	-.14863	-.23875	-1.351	-13.672	-17.745	-3.618	-.10419	-.24444
#2	-.09937	-.11599	-.7056	-4.6318	37.359	-4.237	-.09560	.33560
Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	16.417	-.53749	-.23790	.95214	-.53097	-.44313	.10755	-.03437
Stddev	16.063	.31930	.40541	1.8363	2.7937	.12039	.30430	.00594
%RSD	97.843	59.405	170.41	192.86	526.16	27.167	282.93	17.281
#1	5.0589	-.31172	-.52456	-.34630	1.4445	-.35801	.32272	-.03857
#2	27.775	-.76327	.04877	2.2506	-2.5064	-.52826	-.10762	-.03017
Elem	Te	Ti	Tl	V	Zn			
Units	ppb	ppb	ppb	ppb	ppb			
Avg	-3.2046	.02600	.53181	-.12660	-.23951			
Stddev	1.4033	.01078	.75817	.00703	.08127			
%RSD	43.791	41.454	142.56	5.5540	33.932			
#1	-2.2123	.01838	-.00429	-.12163	-.29697			
#2	-4.1969	.03362	1.0679	-.13157	-.18204			

Sample Name: IDL-4 Acquired: 12/3/2007 13:49:06 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43442.	15228.	553740.
Stddev	119.	300.	2334.
%RSD	.27377	1.9731	.42149
#1	43358.	15440.	555390.
#2	43526.	15015.	552090.

Sample Name: IDL-5 Acquired: 12/3/2007 13:52:22 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.21213	-11.262	.66232	-4.8613	-.04269	.00961	.62944	-.01101
Stddev	.16047	5.432	.13909	.1523	.01499	.01328	7.8081	.10671
%RSD	75.649	48.231	21.000	3.1322	35.103	138.23	1240.5	968.80
#1	.32559	-7.4213	.76067	-4.7537	-.03210	.01900	6.1506	.06444
#2	.09866	-15.103	.56397	-4.9690	-.05329	.00022	-4.8917	-.08647
Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.03219	-.10894	-.0260	-4.3602	-68.099	-3.535	-.05276	.05027
Stddev	.35143	.07060	1.199	.7776	29.548	.016	.03342	.08399
%RSD	1091.6	64.809	4620.	17.834	43.390	.4481	63.340	167.08
#1	-.21630	-.05902	.8221	-4.9101	-88.992	-3.546	-.07639	-.00912
#2	.28069	-.15886	-.8740	-3.8103	-47.205	-3.524	-.02913	.10966
Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	18.734	-.63447	.02468	-4.43271	-.25261	-.45969	-.10854	-.01567
Stddev	3.617	.19724	2.4184	.08629	1.5793	.96005	.58378	.00135
%RSD	19.305	31.088	9797.8	19.941	625.19	208.85	537.85	8.5889
#1	21.291	-.77394	1.7348	-.37170	.86411	-1.1385	.30426	-.01663
#2	16.177	-.49500	-1.6854	-.49373	-1.3693	.21917	-.52133	-.01472
Elem	Te	Ti	Tl	V	Zn			
Units	ppb	ppb	ppb	ppb	ppb			
Avg	-1.5543	.10598	1.1209	-.14767	-.07373			
Stddev	1.7445	.02549	.7606	.11708	.10218			
%RSD	112.24	24.056	67.858	79.281	138.59			
#1	-.32074	.08795	1.6587	-.06489	-.00148			
#2	-2.7878	.12401	.58305	-.23046	-.14598			

Sample Name: IDL-5 Acquired: 12/3/2007 13:52:22 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43352.	15180.	551050.
Stddev	106.	191.	150.
%RSD	.24556	1.2607	.02716
#1	43427.	15315.	550950.
#2	43277.	15044.	551160.

Sample Name: IDL-6 Acquired: 12/3/2007 13:55:39 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.07042	-7.9693	-1.4892	-5.2403	-.09128	.00617	-.31894	.02960
Stddev	.31123	34.949	1.2703	.5400	.03303	.00209	2.0371	.11732
%RSD	441.93	438.55	85.295	10.304	36.183	33.905	638.69	396.35

#1	-.29049	-32.682	-.59104	-4.8585	-.06793	.00764	-1.7594	-.05336
#2	.14965	16.744	-2.3874	-5.6221	-.11464	.00469	1.1215	.11256

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.06628	-.50054	.2850	-10.365	-27.658	-3.678	-.06325	.05748
Stddev	.01186	.18106	.5038	2.607	13.488	.102	.00531	.18785
%RSD	17.887	36.174	176.8	25.156	48.769	2.782	8.3899	326.81

#1	-.07467	-.62857	.6413	-12.209	-18.120	-3.605	-.06700	.19031
#2	-.05790	-.37251	-.0712	-8.5213	-37.196	-3.750	-.05949	-.07535

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	28.527	-.16591	-1.2512	-.89823	-2.6672	-1.0309	.32428	-.02501
Stddev	1.244	.18251	.5880	.70291	.4590	.0707	.32382	.00123
%RSD	4.3622	110.00	46.991	78.255	17.207	6.8634	99.858	4.9188

#1	29.407	-.29496	-1.6670	-1.3953	-2.3426	-.98083	.55325	-.02588
#2	27.647	-.03686	-.83546	-.40120	-2.9917	-1.0809	.09530	-.02414

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-1.2286	.05508	-.59712	-.31747	-.22598
Stddev	.7911	.09632	1.1088	.00011	.09139
%RSD	64.388	174.86	185.69	.03433	40.441

#1	-.66920	-.01302	.18693	-.31755	-.29060
#2	-1.7879	.12319	-1.3812	-.31740	-.16136

Sample Name: IDL-6 Acquired: 12/3/2007 13:55:39 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43528.	15329.	555530.
Stddev	30.	354.	5947.
%RSD	.06859	2.3083	1.0706
#1	43549.	15579.	551330.
#2	43507.	15078.	559740.

Sample Name: IDL-7 Acquired: 12/3/2007 13:58:55 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.07639	-6.1146	.22489	-5.7633	-.06429	.00810	-5.7960	-.00145
Stddev	.05079	17.213	2.6844	.6893	.03473	.00163	6.1484	.05481
%RSD	66.477	281.50	1193.6	11.961	54.015	20.088	106.08	3775.2

#1	-.04048	6.0566	2.1230	-6.2508	-.03973	.00925	-1.4484	.03731
#2	-.11231	-18.286	-1.6733	-5.2759	-.08884	.00695	-10.144	-.04021

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.16670	-.37745	.1419	-10.486	-100.17	-3.728	-.05656	-.09211
Stddev	.01686	.12535	1.870	5.695	67.69	.219	.00902	.37168
%RSD	10.114	33.209	1318.	54.308	67.571	5.872	15.950	403.52

#1	-.15478	-.28882	-1.181	-14.513	-52.310	-3.573	-.06294	-.35492
#2	-.17862	-.46609	1.464	-6.4595	-148.03	-3.883	-.05018	.17071

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	24.541	-.30247	.04737	.66735	-.69776	-.57557	-.27048	-.02891
Stddev	10.597	.11601	.77247	.23382	3.3752	.25636	.19394	.00425
%RSD	43.181	38.354	1630.7	35.038	483.72	44.541	71.702	14.713

#1	17.048	-.38450	.59359	.50201	-3.0844	-.75684	-.40761	-.02590
#2	32.034	-.22044	-.49885	.83269	1.6889	-.39429	-.13334	-.03192

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	.64802	.02362	-.81255	-.18733	-.12217
Stddev	.85968	.03183	.94864	.16676	.09182
%RSD	132.66	134.74	116.75	89.017	75.152

#1	.04013	.04613	-1.4833	-.06942	-.18710
#2	1.2559	.00112	-.14177	-.30525	-.05725

Sample Name: IDL-7 Acquired: 12/3/2007 13:58:55 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43617.	15414.	560500.
Stddev	76.	685.	4277.
%RSD	.17408	4.4442	.76307
#1	43564.	15898.	557480.
#2	43671.	14930.	563520.

Sample Name: BLK027 Acquired: 12/3/2007 14:02:12 Type: QC
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.36626	35.891	-3.8602	5.1872	.27852	.03305	25.186
Stddev	.16880	24.108	.9680	.0467	.03286	.00551	2.776
%RSD	46.088	67.171	25.078	.90105	11.799	16.684	11.020

#1	.48562	52.938	-4.5447	5.2203	.25528	.03695	23.223
#2	.24690	18.844	-3.1756	5.1542	.30176	.02915	27.148

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.12995	-.01369	1.8656	-.4472	18.826	-32.700	2.296
Stddev	.05508	.20764	.4226	1.072	1.731	9.634	.158
%RSD	42.387	1517.0	22.652	239.7	9.1935	29.463	6.870

#1	-.09100	-.16051	1.5668	-1.205	20.050	-25.887	2.184
#2	-.16890	.13313	2.1644	.3108	17.603	-39.512	2.408

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.83734	.63568	24.833	-.59035	-.21698	2.0039	.97785
Stddev	.03835	.14424	10.735	.16547	1.1940	.4842	.31683
%RSD	4.5801	22.691	43.230	28.030	550.26	24.162	32.401

#1	.81022	.73767	32.424	-.70735	.62727	1.6615	.75381
#2	.86446	.53368	17.242	-.47334	-1.0612	2.3462	1.2019

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: BLK027 Acquired: 12/3/2007 14:02:12 Type: QC
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	F 14.294	F 27.766	.14441	-6.7274	1.7732	-3.9152	-.24710
Stddev	.406	.373	.01044	2.0976	.1019	.3478	.29935
%RSD	2.8421	1.3443	7.2262	31.179	5.7449	8.8841	121.14
#1	14.006	28.029	.13703	-5.2442	1.7011	-4.1611	-.45878
#2	14.581	27.502	.15179	-8.2106	1.8452	-3.6692	-.03543
Check ?	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	10.000	20.000					
Low Limit	-10.000	-20.000					

Elem	Zn
Units	ppb
Avg	4.5230
Stddev	.0771
%RSD	1.7047
#1	4.5775
#2	4.4685
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42026.	14311.	545020.
Stddev	217.	391.	2063.
%RSD	.51662	2.7295	.37858
#1	41873.	14035.	543560.
#2	42180.	14587.	546480.

Sample Name: BKS027 Acquired: 12/3/2007 14:05:30 Type: QC
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	107.40	10739.	106.18	1004.8	1066.9	52.913	10919.
Stddev	1.02	.	.54	.2	10.7	.292	40.
%RSD	.95368	.00026	.51194	.01575	1.0020	.55149	.36750
#1	108.13	10739.	105.79	1004.7	1074.5	53.120	10947.
#2	106.68	10739.	106.56	1004.9	1059.4	52.707	10890.

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	107.23	528.92	541.37	F 525.1	10640.	10501.	F 11200.
Stddev	.11	1.09	3.05	3.0	47.	68.	19.
%RSD	.10476	.20653	.56356	.5701	.44422	.65044	.1735
#1	107.31	529.69	543.53	527.2	10674.	10452.	11220.
#2	107.15	528.15	539.21	523.0	10607.	10549.	11190.

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail
Value				100.0			100.0
Range				20.00%			20.00%

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1068.4	548.63	11276.	539.21	1051.5	100.59	98.449
Stddev	9.5	.26	35.	.17	.7	1.09	.996
%RSD	.89141	.04716	.30776	.03179	.06929	1.0850	1.0114
#1	1075.1	548.81	11301.	539.09	1052.1	101.37	99.153
#2	1061.7	548.45	11252.	539.33	1051.0	99.823	97.745

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Sample Name: BKS027 Acquired: 12/3/2007 14:05:30 Type: QC
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	8639.3	564.65	F 1057.8	397.57	2161.9	103.42	543.05
Stddev	74.9	1.62	11.1	1.62	14.4	1.81	3.91
%RSD	.86681	.28665	1.0512	.40826	.66575	1.7524	.72061
#1	8692.2	565.80	1065.7	398.72	2172.1	104.70	545.82
#2	8586.3	563.51	1049.9	396.43	2151.7	102.14	540.29
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			500.00				
Range			20.000%				

Elem	Zn
Units	ppb
Avg	1057.8
Stddev	.2
%RSD	.02270
#1	1057.9
#2	1057.6

Check ?	Chk Pass
Value	
Range	

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42048.	14445.	544870.
Stddev	20.	54.	4809.
%RSD	.04700	.37517	.88263
#1	42034.	14483.	541470.
#2	42062.	14407.	548270.

Sample Name: S 710156-001-001-1/1 Acquired: 12/3/2007 14:08:57 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	12.414	38776.	1.5041	38.353	183.72	2.4153	3636.7
Stddev	.146	328.	.9621	.381	.53	.0053	20.5
%RSD	1.1773	.84519	63.966	.99411	.28811	.21972	.56402
#1	12.310	38544.	2.1844	38.084	183.35	2.4116	3622.2
#2	12.517	39007.	.82377	38.623	184.10	2.4191	3651.2
Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-2.5022	76.652	387.22	207.0	196330.	1719.7	1751.
Stddev	.0231	.053	.25	1.3	1803.	38.9	17.
%RSD	.92313	.06969	.06474	.6411	.91831	2.2635	.9694
#1	-2.4858	76.690	387.04	206.1	195050.	1692.2	1739.
#2	-2.5185	76.615	387.40	207.9	197600.	1747.2	1763.
Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	6586.3	3.8308	131.96	126.50	44.591	1.8800	-19.714
Stddev	34.0	.1231	26.27	.44	1.131	1.5403	2.640
%RSD	.51622	3.2131	19.906	.34525	2.5363	81.932	13.393
#1	6610.3	3.9178	150.53	126.19	45.391	.79085	-21.581
#2	6562.2	3.7437	113.39	126.81	43.792	2.9692	-17.847
Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	506.05	-14.027	71.978	-24.718	9351.7	3.3937	474.43
Stddev	2.82	.857	.152	5.320	12.2	3.7508	.71
%RSD	.55734	6.1101	.21094	21.524	.13011	110.52	.14983
#1	504.06	-14.634	71.870	-28.479	9343.1	.74150	473.93
#2	508.05	-13.421	72.085	-20.956	9360.3	6.0460	474.93

Sample Name: S 710156-001-001-1/1 Acquired: 12/3/2007 14:08:57 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	177.82
Stddev	.15
%RSD	.08161

#1	177.92
#2	177.71

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43404.	14888.	555620.
Stddev	61.	251.	1229.
%RSD	.14008	1.6831	.22120

#1	43447.	15065.	556490.
#2	43361.	14711.	554750.

Sample Name: CCV Acquired: 12/3/2007 14:12:19 Type: QC
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	519.21	50544.	508.82	508.91	498.94	50.395
Stddev	4.05	812.	.34	.15	3.77	.505
%RSD	.77941	1.6063	.06730	.03015	.75479	1.0030
#1	516.35	49970.	508.57	508.80	496.28	50.038
#2	522.07	51118.	509.06	509.02	501.60	50.753

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca	Cd	Co	Cr	Cu2199	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	100240.	496.99	498.10	507.80	509.7	49162.
Stddev	1740.	.06	.14	4.20	.0	842.
%RSD	1.7355	.01126	.02766	.82707	.0048	1.7120
#1	99008.	497.03	498.20	504.83	509.8	48567.
#2	101470.	496.95	498.01	510.77	509.7	49758.

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	K	Mg2802	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	24933.	F 100900.	501.92	507.81	102520.	500.38
Stddev	510.	2401.	4.38	1.31	1932.	.41
%RSD	2.0467	2.380	.87209	.25805	1.8844	.08278
#1	24572.	99170.	498.83	508.73	101160.	500.68
#2	25294.	102600.	505.02	506.88	103890.	500.09

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		500.0				
Range		10.00%				

Sample Name: CCV Acquired: 12/3/2007 14:12:19 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	495.88	517.70	508.06	527.62	503.28	500.89
Stddev	1.32	2.86	3.48	3.88	1.54	10.00
%RSD	.26616	.55199	.68503	.73469	.30517	1.9964

#1	496.81	519.72	510.53	524.88	504.36	493.81
#2	494.94	515.68	505.60	530.36	502.19	507.96

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	502.01	517.45	496.62	508.58	515.54
Stddev	.46	4.62	1.11	4.26	.43
%RSD	.09140	.89263	.22271	.83666	.08303

#1	502.33	514.18	497.40	505.57	515.85
#2	501.68	520.72	495.84	511.59	515.24

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42369.	14722.	543320.
Stddev	26.	127.	5939.
%RSD	.06188	.86273	1.0931

#1	42351.	14812.	547520.
#2	42388.	14632.	539120.

Sample Name: CCB Acquired: 12/3/2007 14:15:48 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.50134	10.186	-.50605	-5.8665	.05112	.00294	3.9285	.16292
Stddev	.28752	6.462	.35123	.0772	.02608	.00567	.8927	.11432
%RSD	57.349	63.441	69.405	1.3156	51.020	192.58	22.725	70.173
#1	.29803	5.6169	-.75440	-5.8119	.03268	.00695	4.5598	.08208
#2	.70464	14.756	-.25770	-5.9211	.06956	-.00106	3.2972	.24376

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.01467	.10595	-2.058	3.5417	-14.710	F 8.744	.07028	.66447
Stddev	.11678	.09656	.831	.1981	98.618	2.371	.05977	.22178
%RSD	796.10	91.134	40.37	5.5938	670.40	27.12	85.045	33.377
#1	-.06791	.03768	-1.470	3.6818	55.023	10.42	.02801	.82129
#2	.09725	.17423	-2.645	3.4016	-84.444	7.067	.11254	.50764

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit						3.000		
Low Limit						-3.000		

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	99.645	-.40255	.04303	-.80895	-.09242	.07623	.11399	.05367
Stddev	10.376	.43900	.32774	.09376	3.4776	.28237	.17512	.03282
%RSD	10.413	109.05	761.67	11.590	3762.9	370.42	153.63	61.150
#1	106.98	-.09213	.27477	-.87525	2.3666	-.12344	.23782	.03046
#2	92.308	-.71297	-.18872	-.74265	-2.5515	.27590	-.00984	.07688

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 12/3/2007 14:15:48 Type: QC
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-3.3195	.33971	-1.0576	-.20552	-.04664
Stddev	1.9735	.13378	.7463	.10607	.09379
%RSD	59.451	39.382	70.568	51.610	201.12

#1	-4.7150	.24511	-.52984	-.13052	.01969
#2	-1.9241	.43431	-1.5853	-.28052	-.11296

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43175.	14934.	551450.
Stddev	128.	427.	5028.
%RSD	.29609	2.8603	.91169

#1	43085.	15236.	547900.
#2	43266.	14632.	555010.

Sample Name: SP710156-001-001-1/1 Acquired: 12/3/2007 14:19:05 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	21.547	54937.	10.589	132.85	308.09	7.8223	4858.3
Stddev	.470	1248.	1.047	.94	.86	.0452	107.1
%RSD	2.1824	2.2720	9.8821	.70410	.27793	.57749	2.2033
#1	21.214	54054.	9.8495	132.19	307.49	7.7903	4782.6
#2	21.879	55819.	11.329	133.51	308.70	7.8542	4934.0
Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	8.1440	114.76	460.69	276.1	207090.	3144.0	3204.
Stddev	.1726	.15	1.11	1.4	4974.	25.0	73.
%RSD	2.1198	.12663	.23998	.4954	2.4020	.79584	2.285
#1	8.2661	114.65	459.91	275.2	203570.	3126.4	3152.
#2	8.0219	114.86	461.48	277.1	210600.	3161.7	3256.
Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	6163.1	49.699	1319.7	206.90	150.88	4.6578	-12.547
Stddev	52.1	.326	7.9	1.61	1.57	.3125	.237
%RSD	.84490	.65638	.60209	.77616	1.0391	6.7080	1.8875
#1	6126.3	49.929	1325.4	205.76	151.98	4.4369	-12.715
#2	6199.9	49.468	1314.1	208.03	149.77	4.8787	-12.380
Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	797.80	34.249	209.35	12.410	10743.	15.773	565.41
Stddev	.73	.646	.60	.557	120.	1.567	2.20
%RSD	.09209	1.8856	.28530	4.4890	1.1182	9.9361	.38848
#1	797.28	33.792	208.92	12.016	10658.	16.882	563.86
#2	798.32	34.705	209.77	12.804	10828.	14.665	566.97

Sample Name: SP710156-001-001-1/1 Acquired: 12/3/2007 14:19:05 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	309.13
Stddev	.05
%RSD	.01517

#1	309.17
#2	309.10

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42884.	14736.	547490.
Stddev	85.	222.	2280.
%RSD	.19776	1.5043	.41638

#1	42944.	14893.	549110.
#2	42824.	14579.	545880.

Sample Name: SD710156-001-001-1/1 Acquired: 12/3/2007 14:22:28 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	24.269	58944.	13.341	139.78	385.83	8.1389	5211.5
Stddev	.832	636.	.680	.68	2.38	.0406	56.5
%RSD	3.4292	1.0791	5.0992	.48566	.61771	.49852	1.0844
#1	23.680	58494.	13.822	139.30	384.14	8.1102	5171.6
#2	24.857	59394.	12.860	140.26	387.51	8.1676	5251.5
Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	7.8484	120.96	495.79	298.4	221900.	3317.4	3413.
Stddev	.0872	.45	3.85	.6	2688.	87.2	47.
%RSD	1.1107	.36996	.77625	.2082	1.2112	2.6282	1.384
#1	7.9100	120.64	493.07	298.8	220000.	3255.7	3379.
#2	7.7868	121.27	498.51	297.9	223800.	3379.0	3446.
Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	7261.9	50.647	1370.4	220.63	159.37	4.7014	-16.180
Stddev	58.4	.026	.6	.03	.62	.8709	2.187
%RSD	.80453	.05146	.04153	.01349	.38996	18.524	13.518
#1	7220.6	50.666	1370.0	220.61	158.94	4.0855	-14.634
#2	7303.3	50.629	1370.8	220.65	159.81	5.3172	-17.727
Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	815.78	34.459	221.72	11.061	11537.	15.520	602.67
Stddev	5.57	.122	1.62	2.716	23.	4.267	5.20
%RSD	.68300	.35308	.72983	24.559	.19655	27.493	.86279
#1	811.84	34.373	220.58	9.1403	11553.	12.503	599.00
#2	819.72	34.545	222.86	12.982	11521.	18.537	606.35

Sample Name: SD710156-001-001-1/1 Acquired: 12/3/2007 14:22:28 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	323.10
Stddev	.60
%RSD	.18476

#1	323.53
#2	322.68

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42878.	14564.	543140.
Stddev	13.	203.	3653.
%RSD	.02951	1.3933	.67263

#1	42886.	14707.	545730.
#2	42869.	14420.	540560.

Sample Name: PS710156-001-001-1/1 Acquired: 12/3/2007 14:25:51 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	63.964	40711.	98.207	116.71	208.74	13.934	9840.4
Stddev	.359	580.	2.433	.29	.79	.082	105.6
%RSD	.56049	1.4240	2.4773	.24660	.38007	.58961	1.0728

#1	64.218	41121.	96.487	116.91	209.30	13.992	9915.0
#2	63.711	40301.	99.927	116.51	208.18	13.876	9765.7

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	21.287	112.59	413.08	236.4	201080.	7796.7	8056.
Stddev	.436	.72	1.53	.4	2292.	24.9	78.
%RSD	2.0502	.64075	.37158	.1601	1.1399	.31884	.9622

#1	20.978	112.08	414.17	236.2	202700.	7779.1	8111.
#2	21.596	113.10	412.00	236.7	199460.	7814.3	8001.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	6618.2	39.696	6482.5	174.32	139.72	96.398	63.397
Stddev	41.0	.209	57.9	.49	.30	2.765	1.626
%RSD	.61987	.52746	.89309	.28211	.21126	2.8685	2.5653

#1	6647.2	39.844	6523.4	173.97	139.93	98.354	64.547
#2	6589.2	39.548	6441.5	174.67	139.51	94.443	62.247

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	6370.6	105.82	96.928	552.88	9341.4	122.09	499.61
Stddev	26.8	1.64	.291	.91	126.2	.24	3.11
%RSD	.42138	1.5456	.30031	.16517	1.3504	.19291	.62316

#1	6389.6	104.67	97.133	553.52	9430.6	122.26	501.81
#2	6351.7	106.98	96.722	552.23	9252.2	121.92	497.41

Sample Name: PS710156-001-001-1/1 Acquired: 12/3/2007 14:25:51 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	274.10
Stddev	.84
%RSD	.30616

#1	273.51
#2	274.70

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42842.	14418.	544700.
Stddev	10.	104.	2150.
%RSD	.02444	.71925	.39472

#1	42835.	14344.	543180.
#2	42850.	14491.	546220.

Sample Name: SE710156-001-001-1/1 Acquired: 12/3/2007 14:29:11 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.6150	7822.4	.34893	2.1188	36.937	.47259	740.51	-.53576
Stddev	.3641	31.1	1.2916	.1547	.177	.00148	9.30	.10688
%RSD	13.923	.39760	370.15	7.2999	.47986	.31273	1.2553	19.950

#1	2.3576	7800.4	-.56434	2.2282	37.062	.47155	733.94	-.61134
#2	2.8725	7844.4	1.2622	2.0095	36.811	.47364	747.08	-.46018

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	15.493	79.113	41.08	40371.	365.24	358.6	1350.7	.88977
Stddev	.020	.689	1.37	378.	34.99	1.4	6.8	.12679
%RSD	.13077	.87117	3.330	.93606	9.5807	.3929	.50362	14.250

#1	15.507	79.600	42.05	40103.	340.50	357.6	1355.5	.97943
#2	15.478	78.625	40.11	40638.	389.99	359.6	1345.9	.80012

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	44.823	25.497	9.1345	-.23871	-4.2114	107.58	-2.4567	14.327
Stddev	14.805	.124	.2035	.94534	.0218	.06	.8789	.067
%RSD	33.030	.48717	2.2276	396.02	.51726	.05476	35.773	.46565

#1	55.291	25.584	9.2784	.42974	-4.2268	107.62	-1.8353	14.374
#2	34.354	25.409	8.9906	-.90717	-4.1960	107.54	-3.0781	14.279

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-7.1509	1908.5	-1.1313	95.787	39.566
Stddev	.4054	14.1	.3378	.748	.065
%RSD	5.6687	.73759	29.863	.78117	.16475

#1	-7.4375	1918.5	-.89242	96.316	39.613
#2	-6.8642	1898.6	-1.3702	95.258	39.520

Sample Name: SE710156-001-001-1/1 Acquired: 12/3/2007 14:29:11 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43188.	14727.	551660.
Stddev	67.	179.	2183.
%RSD	.15411	1.2169	.39563
#1	43141.	14854.	550110.
#2	43235.	14600.	553200.

Sample Name: S 710156-002-002-1/1 Acquired: 12/3/2007 14:32:24 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.9615	38431.	-10.693	3.7600	44.626	2.7642	1964.7
Stddev	.3298	516.	.599	.1448	.044	.1045	16.0
%RSD	16.812	1.3436	5.6022	3.8516	.09825	3.7787	.81374

#1	-2.1947	38066.	-11.116	3.8624	44.657	2.8381	1953.4
#2	-1.7283	38796.	-10.269	3.6576	44.595	2.6903	1976.0

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-2.8013	9.1086	460.94	89.23	199820.	905.18	1589.
Stddev	.0882	.1040	1.19	.80	2441.	10.64	22.
%RSD	3.1488	1.1416	.25865	.8988	1.2213	1.1758	1.387

#1	-2.7389	9.1822	461.78	89.80	198100.	897.66	1573.
#2	-2.8637	9.0351	460.09	88.67	201550.	912.71	1605.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	580.57	3.0995	105.17	76.217	37.260	-.83967	-10.958
Stddev	.84	.0808	3.19	.133	.965	.34194	.099
%RSD	.14387	2.6083	3.0357	.17452	2.5892	40.723	.90444

#1	581.16	3.1566	102.91	76.123	37.942	-1.0815	-11.028
#2	579.98	3.0423	107.42	76.311	36.578	-.59788	-10.888

Elem	Si	Sn	Sr	Te	Tl	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	587.41	-17.045	50.138	-27.224	10869.	.11909	466.59
Stddev	1.21	.072	.065	1.817	45.	.48495	.35
%RSD	.20568	.42426	.12897	6.6736	.41511	407.20	.07596

#1	588.27	-17.096	50.183	-28.509	10901.	-.22381	466.84
#2	586.56	-16.993	50.092	-25.940	10837.	.46200	466.34

Sample Name: S 710156-002-002-1/1 Acquired: 12/3/2007 14:32:24 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	101.13
Stddev	.74
%RSD	.73523

#1	101.66
#2	100.60

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42985.	14629.	545680.
Stddev	100.	201.	2453.
%RSD	.23242	1.3711	.44946

#1	42915.	14771.	543950.
#2	43056.	14487.	547420.

Sample Name: S 710156-003-003-1/1 Acquired: 12/3/2007 14:35:42 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	5.1290	39453.	.24944	19.699	129.59	2.7447	3473.3
Stddev	.0692	643.	.19719	.856	.53	.0293	72.6
%RSD	1.3496	1.6305	79.052	4.3473	.40690	1.0658	2.0896

#1	5.1780	38998.	.38888	19.093	129.22	2.7653	3422.0
#2	5.0801	39908.	.11001	20.304	129.96	2.7240	3524.6

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-2.8915	32.458	442.28	202.9	201220.	1534.6	2482.
Stddev	.3882	1.205	1.41	6.7	3797.	108.9	46.
%RSD	13.425	3.7118	.31986	3.310	1.8872	7.0952	1.833

#1	-2.6170	33.310	441.28	207.7	198540.	1457.6	2449.
#2	-3.1659	31.606	443.28	198.2	203910.	1611.6	2514.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3840.7	3.6289	136.68	129.59	180.38	.84240	-17.798
Stddev	5.6	.1622	3.61	3.33	6.37	.23302	.260
%RSD	.14680	4.4689	2.6390	2.5681	3.5330	27.661	1.4610

#1	3836.7	3.5143	139.23	131.94	184.89	.67763	-17.981
#2	3844.6	3.7436	134.13	127.24	175.88	1.0072	-17.614

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	520.75	-16.531	97.367	-25.063	10476.	4.4802	530.06
Stddev	.34	.073	.315	1.850	36.	4.1714	2.14
%RSD	.06451	.43889	.32386	7.3822	.33909	93.107	.40408

#1	520.51	-16.480	97.144	-26.371	10501.	7.4298	528.55
#2	520.98	-16.583	97.590	-23.755	10451.	1.5306	531.58

Sample Name: S 710156-003-003-1/1 Acquired: 12/3/2007 14:35:42 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	191.49
Stddev	6.47
%RSD	3.3809

#1	196.07
#2	186.91

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42687.	14609.	542600.
Stddev	303.	265.	1409.
%RSD	.71028	1.8154	.25970

#1	42901.	14796.	543590.
#2	42473.	14421.	541600.

Sample Name: S 710156-004-004-1/1 Acquired: 12/3/2007 14:39:06 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.6534	32871.	-4.1977	13.872	119.15	3.2451	2659.7
Stddev	.7097	125.	2.1990	.319	.88	.1512	19.6
%RSD	42.921	.37978	52.387	2.3010	.74012	4.6596	.73787

#1	1.1516	32783.	-2.6427	14.098	118.53	3.3521	2645.9
#2	2.1552	32959.	-5.7526	13.646	119.77	3.1382	2673.6

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-3.4438	30.813	544.78	202.1	241390.	1408.5	2603.
Stddev	.0979	.153	.74	.9	1610.	25.5	2.
%RSD	2.8421	.49674	.13587	.4647	.66692	1.8096	.0928

#1	-3.3746	30.921	544.26	201.5	240250.	1426.5	2601.
#2	-3.5131	30.705	545.31	202.8	242530.	1390.5	2604.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2503.5	3.8855	87.230	116.25	65.964	-.22296	-13.394
Stddev	8.3	.0084	2.480	.84	1.430	1.5546	.626
%RSD	.33244	.21523	2.8426	.72502	2.1672	697.26	4.6773

#1	2497.6	3.8796	85.477	115.66	66.975	-1.3222	-12.951
#2	2509.3	3.8914	88.984	116.85	64.953	.87631	-13.837

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	507.75	-18.907	132.86	-28.515	12168.	2.5316	638.26
Stddev	2.46	.844	.74	1.495	105.	.2677	3.01
%RSD	.48490	4.4624	.56036	5.2444	.85989	10.575	.47115

#1	506.01	-18.310	132.33	-27.457	12242.	2.7209	636.14
#2	509.49	-19.504	133.38	-29.572	12094.	2.3423	640.39

Sample Name: S 710156-004-004-1/1 Acquired: 12/3/2007 14:39:06 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	203.50
Stddev	.64
%RSD	.31547

#1	203.96
#2	203.05

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42804.	14444.	547300.
Stddev	112.	117.	960.
%RSD	.26231	.80983	.17535

#1	42725.	14526.	547980.
#2	42884.	14361.	546620.

Sample Name: S 710156-005-005-1/1 Acquired: 12/3/2007 14:42:22 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-4.0096	34027.	-17.804	4.6989	49.974	3.8552	1922.6
Stddev	.4865	397.	2.068	.1359	.178	.0241	21.5
%RSD	12.134	1.1657	11.617	2.8912	.35558	.62429	1.1173

#1	-3.6656	33747.	-19.267	4.7949	49.848	3.8723	1907.4
#2	-4.3536	34308.	-16.342	4.6028	50.100	3.8382	1937.8

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-5.3434	12.743	504.12	119.8	301850.	523.48	1722.
Stddev	.0982	.481	2.39	.3	2236.	9.37	12.
%RSD	1.8372	3.7784	.47339	.2748	.74067	1.7902	.6733

#1	-5.2739	13.083	502.44	119.6	300270.	516.85	1714.
#2	-5.4128	12.403	505.81	120.0	303430.	530.10	1730.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	578.63	4.9290	55.774	92.427	53.119	-.23438	-10.707
Stddev	1.10	.1837	1.793	.102	.719	.63763	.860
%RSD	.19049	3.7259	3.2150	.11048	1.3537	272.05	8.0289

#1	577.85	5.0589	54.506	92.499	52.610	-.68525	-10.099
#2	579.41	4.7992	57.042	92.355	53.627	.21649	-11.315

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	735.88	-23.103	73.899	-37.472	14401.	-.32193	756.19
Stddev	3.22	.370	.290	2.196	.89.	.14983	1.27
%RSD	.43752	1.5999	.39311	5.8615	.61643	46.542	.16751

#1	733.60	-22.842	73.693	-39.025	14339.	-.21598	755.29
#2	738.15	-23.365	74.104	-35.919	14464.	-.42788	757.08

Sample Name: S 710156-005-005-1/1 Acquired: 12/3/2007 14:42:22 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	111.59
Stddev	1.00
%RSD	.89927

#1	112.30
#2	110.88

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42778.	14360.	546820.
Stddev	155.	16.	1167.
%RSD	.36147	.11030	.21343

#1	42668.	14349.	547640.
#2	42887.	14371.	545990.

Sample Name: S 710156-006-006-1/1 Acquired: 12/3/2007 14:45:40 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-4.9895	24196.	-22.956	4.1860	27.330	3.9766	1596.3
Stddev	.0296	390.	3.555	.4648	.477	.0962	9.7
%RSD	.59300	1.6127	15.485	11.104	1.7460	2.4201	.61058

#1	-4.9686	24471.	-20.443	3.8574	27.667	4.0447	1603.2
#2	-5.0104	23920.	-25.470	4.5147	26.992	3.9086	1589.4

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-6.3743	8.4333	505.11	105.4	346170.	244.67	1378.
Stddev	.2796	.1744	5.47	.2	5685.	41.89	19.
%RSD	4.3863	2.0684	1.0836	.2312	1.6422	17.119	1.379

#1	-6.5720	8.3099	508.98	105.6	350190.	274.29	1392.
#2	-6.1766	8.5566	501.24	105.2	342150.	215.06	1365.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	410.85	5.8036	66.919	67.697	56.684	-.21431	-10.813
Stddev	5.84	.0455	2.521	.528	.122	2.1760	1.289
%RSD	1.4203	.78393	3.7670	.78068	.21505	1015.4	11.921

#1	414.98	5.8357	68.701	68.071	56.770	-1.7530	-11.724
#2	406.73	5.7714	65.136	67.324	56.598	1.3244	-9.9015

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	607.15	-23.288	36.577	-41.360	14893.	1.1721	748.05
Stddev	7.62	.407	.470	2.353	118.	.9125	10.17
%RSD	1.2555	1.7469	1.2845	5.6896	.79428	77.854	1.3591

#1	612.54	-23.001	36.909	-39.696	14977.	1.8174	755.24
#2	601.76	-23.576	36.245	-43.024	14809.	.52685	740.86

Sample Name: S 710156-006-006-1/1 Acquired: 12/3/2007 14:45:40 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	83.395
Stddev	.796
%RSD	.95450

#1	82.832
#2	83.958

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42580.	14137.	547470.
Stddev	56.	173.	7868.
%RSD	.13052	1.2244	1.4372

#1	42619.	14014.	541900.
#2	42540.	14259.	553030.

Sample Name: S 710156-007-007-1/1 Acquired: 12/3/2007 14:48:59 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	6.5097	44326.	-3.2608	18.626	316.61	3.2299	4145.2
Stddev	.0269	4034.	2.6870	.077	.63	.0801	379.8
%RSD	.41326	9.1004	82.402	.41246	.19904	2.4800	9.1626

#1	6.5288	41474.	-1.3608	18.571	317.05	3.2865	3876.6
#2	6.4907	47179.	-5.1608	18.680	316.16	3.1732	4413.7

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.4186	63.072	317.09	200.3	171800.	1547.3	4651.
Stddev	.7932	.377	.26	.8	15965.	99.7	437.
%RSD	55.914	.59741	.08272	.4235	9.2930	6.4462	9.394

#1	-.85773	62.806	317.27	199.7	160510.	1476.7	4342.
#2	-1.9795	63.339	316.90	200.9	183090.	1617.8	4960.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3950.9	3.0128	240.80	177.33	64.305	.96996	-14.891
Stddev	1.0	.5712	19.47	1.27	.761	.48644	3.322
%RSD	.02538	18.959	8.0839	.71684	1.1837	50.150	22.307

#1	3951.6	3.4167	227.03	176.43	64.843	1.3139	-17.240
#2	3950.2	2.6089	254.56	178.23	63.767	.62600	-12.542

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	603.08	-20.915	48.594	-27.286	11985.	3.0282	451.42
Stddev	2.05	.425	.106	5.643	72.	2.6210	1.35
%RSD	.33924	2.0340	.21834	20.680	.60009	86.553	.29799

#1	604.53	-20.614	48.669	-31.276	12036.	4.8816	452.37
#2	601.64	-21.215	48.519	-23.296	11934.	1.1749	450.47

Sample Name: S 710156-007-007-1/1 Acquired: 12/3/2007 14:48:59 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	284.54
Stddev	.57
%RSD	.19946

#1	284.94
#2	284.14

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42631.	13831.	544410.
Stddev	69.	1210.	1789.
%RSD	.16120	8.7493	.32865

#1	42582.	14687.	543140.
#2	42679.	12976.	545670.

Sample Name: CCV Acquired: 12/3/2007 14:52:22 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	536.93	53101.	528.87	524.18	520.00	51.970
Stddev	.93	799.	3.23	1.80	1.77	.004
%RSD	.17395	1.5050	.60992	.34262	.33956	.00719

#1	537.59	53667.	531.16	525.45	518.75	51.968
#2	536.27	52536.	526.59	522.91	521.25	51.973

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca	Cd	Co	Cr	Cu2199	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	105500.	516.55	516.84	523.84	527.5	51738.
Stddev	1663.	.28	.27	.90	3.7	912.
%RSD	1.5759	.05489	.05250	.17157	.7075	1.7618

#1	106680.	516.75	517.03	523.21	530.1	52382.
#2	104330.	516.35	516.65	524.48	524.8	51093.

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	K	Mg2802	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	26375.	F 107200.	523.19	526.44	109440.	519.63
Stddev	344.	1830.	.50	.11	1831.	.24
%RSD	1.3060	1.707	.09518	.02018	1.6729	.04573

#1	26619.	108500.	523.54	526.37	110730.	519.80
#2	26132.	105900.	522.84	526.52	108150.	519.47

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		500.0				
Range		10.00%				

Sample Name: CCV Acquired: 12/3/2007 14:52:22 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	511.62	537.95	527.07	F 550.04	521.58	520.47
Stddev	1.48	2.08	5.12	2.13	.21	3.01
%RSD	.28889	.38585	.97050	.38683	.04116	.57838

#1	512.67	539.41	530.69	551.54	521.43	522.60
#2	510.58	536.48	523.46	548.54	521.73	518.34

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value				500.00		
Range				10.000%		

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	521.92	534.01	512.94	527.59	533.06
Stddev	.95	.32	1.16	.70	1.00
%RSD	.18131	.05989	.22680	.13271	.18695

#1	522.59	533.78	512.12	528.09	533.77
#2	521.25	534.24	513.77	527.10	532.36

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	41654.	14087.	532000.
Stddev	3.	205.	577.
%RSD	.00753	1.4556	.10846

#1	41656.	13942.	531590.
#2	41652.	14232.	532410.

Sample Name: CCB Acquired: 12/3/2007 14:55:52 Type: QC
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.01115	-10.901	1.3750	-6.2028	.03069	.01945	2.4303	.09692
Stddev	.35992	25.674	.1734	.5259	.06170	.00409	5.1644	.01352
%RSD	3227.6	235.52	12.609	8.4788	201.02	21.032	212.50	13.951

#1	.24335	7.2533	1.4976	-5.8309	-.01294	.01656	6.0821	.10648
#2	-.26565	-29.055	1.2524	-6.5747	.07432	.02234	-1.2214	.08736

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.15276	-.14674	-.5631	4.2728	14.904	F 3.095	.03753	.44006
Stddev	.13139	.10807	.7106	5.4799	45.452	.918	.09078	.27848
%RSD	86.017	73.646	126.2	128.25	304.96	29.68	241.89	63.283

#1	.24567	-.22316	-1.066	8.1476	-17.235	2.445	-.02666	.63697
#2	.05985	-.07033	-.0607	.39790	47.044	3.744	.10172	.24314

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit						3.000		
Low Limit						-3.000		

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	89.390	-.21040	-.53526	-1.6562	-1.3531	.05022	.38979	.03238
Stddev	27.045	.10428	.14525	1.7612	.4547	.18150	.41040	.03398
%RSD	30.254	49.562	27.137	106.34	33.606	361.41	105.29	104.94

#1	70.267	-.13667	-.63797	-2.9016	-1.0315	.17856	.09959	.00835
#2	108.51	-.28414	-.43255	-.41091	-1.6746	-.07812	.67999	.05640

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 12/3/2007 14:55:52 Type: QC
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Te	Ti	Ti	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-3.7461	.42155	-.10130	-.01561	-.05442
Stddev	.9764	.27487	.81038	.25452	.00759
%RSD	26.065	65.206	799.94	1630.2	13.949

#1	-4.4365	.22718	.47172	-.19559	-.05978
#2	-3.0556	.61591	-.67433	.16436	-.04905

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43315.	14968.	551720.
Stddev	141.	601.	163.
%RSD	.32625	4.0135	.02952

#1	43215.	15393.	551600.
#2	43415.	14544.	551830.

Sample Name: S 710156-008-008-1/1 Acquired: 12/3/2007 14:59:09 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.5770	45562.	-6.3672	13.165	160.32	3.0946	3912.5
Stddev	.4317	79.	.4980	.269	.35	.0306	.9
%RSD	16.753	.17274	7.8205	2.0402	.21829	.99013	.02339

#1	2.2718	45618.	-6.0151	12.975	160.07	3.0730	3913.2
#2	2.8823	45506.	-6.7193	13.355	160.57	3.1163	3911.9

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.02784	33.433	312.09	232.7	173790.	1398.9	4701.
Stddev	.03095	.199	1.68	2.2	1.	27.8	5.
%RSD	111.16	.59621	.53790	.9317	.00074	1.9884	.1040

#1	-.00596	33.574	310.90	231.2	173790.	1379.2	4697.
#2	-.04972	33.292	313.27	234.3	173780.	1418.5	4704.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2118.0	3.8695	258.83	142.60	133.53	3.0612	-11.374
Stddev	5.2	.1013	25.90	.36	.76	3.0306	2.258
%RSD	.24466	2.6169	10.005	.25120	.56560	99.002	19.851

#1	2114.3	3.7979	277.15	142.34	134.07	5.2042	-9.7773
#2	2121.7	3.9411	240.52	142.85	133.00	.91821	-12.970

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	680.47	-19.911	53.412	-28.765	12249.	2.5380	469.69
Stddev	1.50	.391	.221	.375	30.	1.7908	2.64
%RSD	.22061	1.9648	.41421	1.3044	.24760	70.559	.56206

#1	679.41	-19.635	53.256	-28.500	12227.	3.8043	467.82
#2	681.53	-20.188	53.569	-29.030	12270.	1.2718	471.55

Sample Name: S 710156-008-008-1/1 Acquired: 12/3/2007 14:59:09 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Zn
Units	ppb
Avg	258.08
Stddev	.57
%RSD	.21981

#1	258.49
#2	257.68

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42992.	14711.	554300.
Stddev	150.	44.	1496.
%RSD	.34941	.30151	.26990

#1	42886.	14743.	555360.
#2	43099.	14680.	553240.

Sample Name: S 710156-009-009-1/1

Acquired: 12/3/2007 15:02:28

Type: Unk

Method: TRACE(v2) Mode: CONC

Corr. Factor: 1.000000

User: admin

Custom ID1:

Custom ID2:

Custom ID3:

Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	4.6070	45013.	-5.5709	17.854	225.51	3.2405	4869.0
Stddev	.0578	712.	.2445	.670	.70	.0784	118.3
%RSD	1.2539	1.5815	4.3888	3.7546	.31168	2.4200	2.4308

#1	4.6478	44510.	-5.7438	17.380	225.01	3.2960	4785.3
#2	4.5661	45517.	-5.3981	18.328	226.00	3.1851	4952.7

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.80432	40.405	351.52	178.7	190500.	1448.4	2727.
Stddev	.20892	.001	.74	.2	3824.	8.2	49.
%RSD	25.975	.00295	.20942	.1384	2.0073	.56868	1.811

#1	-.65658	40.404	351.00	178.5	187790.	1442.6	2692.
#2	-.95205	40.405	352.04	178.9	193200.	1454.3	2762.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3125.2	3.6488	221.46	140.14	84.411	2.3705	-11.979
Stddev	4.3	.1925	11.83	.73	.216	.4753	1.631
%RSD	.13889	5.2750	5.3399	.52339	.25534	20.049	13.617

#1	3122.1	3.7849	229.82	139.62	84.564	2.0344	-13.133
#2	3128.2	3.5127	213.10	140.66	84.259	2.7066	-10.826

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	596.33	-20.276	75.135	-28.284	12616.	1.5583	508.59
Stddev	1.01	.432	.149	1.382	10.	1.7808	2.62
%RSD	.16922	2.1321	.19860	4.8875	.07864	114.28	.51545

#1	597.04	-20.582	75.029	-29.261	12623.	2.8176	506.73
#2	595.62	-19.970	75.240	-27.306	12609.	.29905	510.44

Sample Name: S 710156-009-009-1/1 Acquired: 12/3/2007 15:02:28 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	259.31
Stddev	.59
%RSD	.22820

#1	259.73
#2	258.90

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42983.	14745.	550220.
Stddev	48.	313.	883.
%RSD	.11156	2.1210	.16051

#1	42949.	14966.	550840.
#2	43017.	14524.	549590.

Sample Name: S 710156-010-010-1/1 Acquired: 12/3/2007 15:05:46 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.0893	47024.	-2.8186	7.4161	94.178	2.8777	2593.0
Stddev	.2367	202.	.4196	.2141	.067	.0350	5.8
%RSD	21.732	.42883	14.888	2.8865	.07145	1.2145	.22546

#1	1.2567	46881.	-3.1153	7.2647	94.226	2.8529	2588.9
#2	.92191	47166.	-2.5219	7.5675	94.131	2.9024	2597.2

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.97281	23.684	371.50	184.4	178790.	1158.4	2225.
Stddev	.04038	.066	1.41	2.0	498.	69.3	17.
%RSD	4.1511	.28065	.37863	1.078	.27864	5.9787	.7663

#1	-.94426	23.731	372.49	185.8	178440.	1109.5	2213.
#2	-1.0014	23.637	370.50	183.0	179140.	1207.4	2237.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1312.4	3.8425	159.26	130.77	134.23	3.0989	-8.7093
Stddev	1.9	.5285	16.33	.46	1.92	1.4435	.6694
%RSD	.14854	13.755	10.256	.34880	1.4291	46.580	7.6856

#1	1313.8	3.4688	147.71	131.09	135.58	2.0782	-8.2360
#2	1311.0	4.2162	170.81	130.45	132.87	4.1196	-9.1826

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	615.12	-18.150	38.505	-26.498	11839.	2.9842	474.39
Stddev	.48	.982	.069	.144	104.	.6209	.92
%RSD	.07745	5.4117	.17877	.54376	.87603	20.806	.19455

#1	614.78	-18.844	38.553	-26.396	11912.	3.4233	475.05
#2	615.46	-17.455	38.456	-26.600	11766.	2.5452	473.74

Sample Name: S 710156-010-010-1/1 Acquired: 12/3/2007 15:05:46 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	264.53
Stddev	.36
%RSD	.13737

#1	264.78
#2	264.27

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42820.	14530.	552710.
Stddev	57.	149.	395.
%RSD	.13341	1.0276	.07144

#1	42780.	14636.	552430.
#2	42860.	14425.	552990.

Sample Name: S 710156-011-011-1/1 Acquired: 12/3/2007 15:09:05 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	7.5867	53038.	-.24602	23.551	209.86	2.5374	4924.8
Stddev	.1475	140.	.15899	.195	.36	.0566	30.3
%RSD	1.9436	.26453	64.623	.82622	.17101	2.2307	.61566
#1	7.6910	52939.	-.35845	23.413	210.11	2.5774	4903.4
#2	7.4824	53137.	-.13360	23.688	209.60	2.4974	4946.3
Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.5387	52.898	392.42	261.3	198610.	2124.7	2701.
Stddev	.2002	.265	1.34	1.9	1208.	.2	8.
%RSD	13.011	.50091	.34183	.7166	.60801	.01139	.2952
#1	-1.3972	53.086	393.37	260.0	197760.	2124.9	2696.
#2	-1.6803	52.711	391.47	262.6	199470.	2124.6	2707.
Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	4245.0	7.3508	234.64	165.42	135.40	2.0007	-15.042
Stddev	71.2	.2418	16.51	.83	1.72	1.4493	5.354
%RSD	1.6763	3.2897	7.0370	.50072	1.2669	72.440	35.591
#1	4194.7	7.1798	246.31	166.01	136.61	3.0256	-18.828
#2	4295.4	7.5218	222.96	164.84	134.18	.97590	-11.257
Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	608.35	-15.191	77.986	-25.381	10186.	3.6465	456.07
Stddev	.73	.681	.127	.773	4.	.7732	1.00
%RSD	.11924	4.4824	.16230	3.0465	.03815	21.204	.21826
#1	608.87	-15.672	78.076	-25.928	10183.	3.0998	456.77
#2	607.84	-14.709	77.897	-24.834	10189.	4.1933	455.36

Sample Name: S 710156-011-011-1/1 . Acquired: 12/3/2007 15:09:05 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	237.21
Stddev	1.14
%RSD	.47890

#1	238.01
#2	236.41

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42596.	14638.	558260.
Stddev	124.	68.	1123.
%RSD	.29047	.46528	.20123

#1	42509.	14687.	559050.
#2	42684.	14590.	557470.

Sample Name: S 710156-012-012-1/1 Acquired: 12/3/2007 15:12:30 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	19.992	57610.	10.682	44.735	321.98	2.5058	2618.2
Stddev	.413	204.	3.150	.815	2.77	.0518	9.9
%RSD	2.0662	.35413	29.492	1.8229	.86182	2.0677	.37877

#1	20.284	57754.	8.4546	45.312	323.94	2.4692	2625.2
#2	19.700	57466.	12.910	44.159	320.02	2.5424	2611.2

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-2.1859	61.537	374.27	230.1	198290.	1877.6	1918.
Stddev	.1270	.086	1.72	.8	56.	14.8	2.
%RSD	5.8078	.14014	.45859	.3509	.02846	.78654	.0803

#1	-2.0962	61.476	375.49	230.7	198330.	1888.1	1919.
#2	-2.2757	61.598	373.06	229.6	198250.	1867.2	1917.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	9834.8	3.0384	203.85	174.01	68.305	-2.1748	-25.567
Stddev	240.2	.3699	4.07	.45	1.380	.6473	3.856
%RSD	2.4418	12.175	1.9945	.25700	2.0197	29.765	15.083

#1	10005.	3.2999	206.73	174.33	67.330	-2.6325	-28.294
#2	9665.0	2.7768	200.98	173.69	69.281	-1.7170	-22.840

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	617.48	-15.079	56.850	-24.903	9813.7	6.7797	457.67
Stddev	5.54	.380	.455	3.586	68.1	.5367	2.53
%RSD	.89740	2.5213	.80075	14.400	.69397	7.9169	.55287

#1	621.40	-15.348	57.172	-22.367	9861.8	6.4002	459.46
#2	613.57	-14.810	56.528	-27.439	9765.5	7.1592	455.88

Sample Name: S 710156-012-012-1/1 Acquired: 12/3/2007 15:12:30 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	180.73
Stddev	.46
%RSD	.25515

#1	180.40
#2	181.06

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42743.	14479.	548040.
Stddev	124.	90.	4601.
%RSD	.29018	.61974	.83960

#1	42656.	14543.	544790.
#2	42831.	14416.	551290.

Sample Name: S 710156-013-013-1/1 Acquired: 12/3/2007 15:15:54 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	33.261	55848.	15.586	67.848	407.58	2.5144	3462.7
Stddev	.232	1047.	3.414	.557	1.57	.0163	73.3
%RSD	.69734	1.8753	21.901	.82153	.38474	.64745	2.1176

#1	33.097	55107.	13.172	67.454	406.47	2.5029	3410.8
#2	33.425	56588.	18.000	68.242	408.69	2.5259	3514.5

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-2.0739	140.84	323.69	258.0	204850.	1925.6	2091.
Stddev	.1148	.77	1.12	.5	2368.	31.5	38.
%RSD	5.5350	.54533	.34710	.2047	1.1560	1.6360	1.809

#1	-1.9928	141.38	322.90	258.4	203180.	1903.3	2064.
#2	-2.1551	140.29	324.49	257.6	206520.	1947.9	2118.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	15441.	3.5287	187.59	170.13	100.54	.47457	-35.142
Stddev	93.	.6207	.73	.02	1.55	.83894	4.416
%RSD	.60502	17.589	.39021	.00913	1.5446	176.78	12.567

#1	15375.	3.9676	188.11	170.12	101.64	1.0678	-32.019
#2	15507.	3.0898	187.07	170.14	99.440	-.11865	-38.265

Elem	Si	Sn	Sr	Te	Ti	Ti	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	753.69	-14.549	71.037	-28.350	9862.5	9.8286	445.60
Stddev	2.27	1.125	.266	3.502	44.7	.0497	1.79
%RSD	.30064	7.7307	.37484	12.351	.45350	.50546	.40110

#1	752.09	-15.344	70.848	-30.826	9830.8	9.8637	444.33
#2	755.29	-13.753	71.225	-25.874	9894.1	9.7934	446.86

Sample Name: S 710156-013-013-1/1 Acquired: 12/3/2007 15:15:54 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	229.43
Stddev	1.19
%RSD	.51813

#1	230.27
#2	228.59

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42837.	14577.	554330.
Stddev	52.	203.	1532.
%RSD	.12224	1.3941	.27640

#1	42800.	14720.	555410.
#2	42874.	14433.	553240.

Sample Name: S 710156-014-014-1/1 Acquired: 12/3/2007 15:19:17 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.9806	42449.	-3.9578	10.650	101.03	2.9975	2571.6
Stddev	.0201	501.	.1318	.053	.08	.0327	22.9
%RSD	1.0141	1.1795	3.3301	.49997	.08293	1.0915	.88883

#1	1.9664	42095.	-3.8646	10.612	100.97	3.0207	2555.5
#2	1.9948	42803.	-4.0510	10.687	101.08	2.9744	2587.8

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-2.4405	23.783	501.57	175.8	207460.	1366.0	1639.
Stddev	.0536	.283	.49	.7	2976.	14.3	26.
%RSD	2.1943	1.1897	.09705	.3824	1.4344	1.0480	1.556

#1	-2.4026	23.583	501.23	175.3	205360.	1355.9	1621.
#2	-2.4783	23.983	501.91	176.3	209560.	1376.2	1657.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2110.9	4.0960	131.53	133.61	64.810	-.36577	-13.509
Stddev	3.3	.3219	8.25	.83	1.321	.34970	.326
%RSD	.15463	7.8577	6.2746	.62163	2.0382	95.606	2.4148

#1	2108.6	3.8684	125.69	133.02	65.744	-.11850	-13.739
#2	2113.2	4.3236	137.36	134.20	63.876	-.61304	-13.278

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	590.76	-18.512	40.354	-27.614	11749.	2.7032	559.92
Stddev	1.08	1.367	.110	1.188	28.	1.2946	1.54
%RSD	.18334	7.3822	.27166	4.3039	.23655	47.890	.27580

#1	589.99	-19.478	40.277	-26.773	11769.	3.6187	558.83
#2	591.52	-17.546	40.432	-28.454	11730.	1.7878	561.01

Sample Name: S 710156-014-014-1/1 Acquired: 12/3/2007 15:19:17 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	186.74
Stddev	1.19
%RSD	.63821

#1	185.89
#2	187.58

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43063.	14608.	550280.
Stddev	164.	176.	1150.
%RSD	.37973	1.2069	.20891

#1	43178.	14732.	549460.
#2	42947.	14483.	551090.

Sample Name: S 710156-015-015-1/1 Acquired: 12/3/2007 15:22:35 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	4.0863	38962.	-5.6071	11.615	67.547	2.3683	973.24
Stddev	.6668	1643.	1.4199	.572	.325	.0151	45.61
%RSD	16.317	4.2166	25.323	4.9230	.48173	.63679	4.6861

#1	3.6148	37801.	-6.6111	12.019	67.777	2.3577	940.99
#2	4.5577	40124.	-4.6031	11.211	67.317	2.3790	1005.5

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-2.2996	57.189	402.23	164.6	195760.	1196.9	1164.
Stddev	.1961	.123	1.10	.6	8214.	17.2	46.
%RSD	8.5259	.21451	.27374	.3585	4.1957	1.4388	3.991

#1	-2.1610	57.102	403.01	164.1	189960.	1184.8	1131.
#2	-2.4383	57.275	401.46	165.0	201570.	1209.1	1197.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2908.5	3.3753	133.11	106.48	26.815	.91127	-18.467
Stddev	12.3	.3127	15.53	.49	.522	.02712	2.785
%RSD	.42393	9.2647	11.667	.46213	1.9457	2.9758	15.081

#1	2917.2	3.1542	144.09	106.13	27.184	.93044	-16.498
#2	2899.7	3.5964	122.12	106.83	26.446	.89209	-20.437

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	588.62	-14.082	26.553	-26.278	9115.6	2.6647	477.27
Stddev	2.95	.361	.104	2.132	10.7	.3265	2.55
%RSD	.50099	2.5619	.39110	8.1122	.11766	12.254	.53360

#1	590.71	-14.337	26.626	-27.785	9123.2	2.4338	479.07
#2	586.54	-13.827	26.480	-24.771	9108.0	2.8956	475.47

Sample Name: S 710156-015-015-1/1 Acquired: 12/3/2007 15:22:35 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	157.58
Stddev	.41
%RSD	.26172

#1	157.87
#2	157.29

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42860.	14831.	550900.
Stddev	29.	482.	3379.
%RSD	.06751	3.2509	.61342

#1	42880.	15171.	548510.
#2	42839.	14490.	553290.

Sample Name: S 710156-016-016-1/1 Acquired: 12/3/2007 15:25:54 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.6261	48213.	-7.8667	-.00100	34.964	2.4580	859.46
Stddev	.0821	768.	1.2446	.14818	.093	.0250	13.95
%RSD	5.0501	1.5920	15.821	14876.	.26660	1.0189	1.6234

#1	-1.5680	48756.	-6.9866	.10378	35.030	2.4757	869.32
#2	-1.6841	47671.	-8.7467	-.10577	34.898	2.4403	849.59

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-2.4819	7.3445	435.70	83.15	190840.	693.84	994.6
Stddev	.0021	.2765	2.10	1.22	2813.	16.32	16.9
%RSD	.08525	3.7641	.48088	1.469	1.4740	2.3525	1.698

#1	-2.4834	7.1490	437.18	84.01	192830.	682.30	1007.
#2	-2.4804	7.5400	434.22	82.28	188850.	705.38	982.6

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	448.28	3.3187	97.981	86.530	18.602	-1.8262	-7.7837
Stddev	1.44	.0056	2.152	.880	2.780	.2197	.5969
%RSD	.32069	.16946	2.1967	1.0167	14.942	12.031	7.6693

#1	449.30	3.3148	99.503	87.152	16.637	-1.6709	-8.2058
#2	447.27	3.3227	96.459	85.908	20.568	-1.9816	-7.3616

Elem	Si	Sn	Sr	Te	Ti	Ti	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	603.98	-16.042	30.908	-24.614	10020.	.92664	421.11
Stddev	2.56	.420	.074	.016	148.	.16645	1.93
%RSD	.42303	2.6213	.24098	.06516	1.4804	17.963	.45781

#1	605.79	-15.744	30.960	-24.625	10125.	.80894	422.47
#2	602.18	-16.339	30.855	-24.602	9914.9	1.0443	419.75

Sample Name: S 710156-016-016-1/1 Acquired: 12/3/2007 15:25:54 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	80.540
Stddev	.125
%RSD	.15545

#1	80.451
#2	80.628

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42923.	14313.	548190.
Stddev	33.	149.	1718.
%RSD	.07603	1.0382	.31337

#1	42946.	14208.	546970.
#2	42900.	14418.	549400.

Sample Name: S 710156-017-017-1/1 Acquired: 12/3/2007 15:29:12 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.6436	29100.	-.38445	6.8842	64.479	2.0768	854.16
Stddev	.0122	572.	1.9779	.8907	.086	.0602	10.11
%RSD	.46080	1.9654	514.49	12.939	.13302	2.8997	1.1840

#1	2.6522	29504.	1.0142	7.5140	64.540	2.1194	861.31
#2	2.6350	28695.	-1.7831	6.2543	64.419	2.0342	847.01

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-2.2117	23.404	353.02	141.0	167220.	929.51	1396.
Stddev	.2405	.382	2.39	2.1	3159.	11.24	26.
%RSD	10.873	1.6319	.67670	1.463	1.8892	1.2096	1.836

#1	-2.3817	23.134	354.71	142.5	169450.	937.46	1414.
#2	-2.0416	23.674	351.33	139.6	164980.	921.56	1378.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2203.8	3.0177	46.742	94.237	22.823	-.65518	-11.136
Stddev	6.8	.0363	8.180	.037	2.104	2.7254	2.478
%RSD	.31025	1.2020	17.501	.03889	9.2211	415.98	22.248

#1	2208.7	3.0433	52.526	94.263	21.334	-2.5823	-9.3842
#2	2199.0	2.9920	40.958	94.211	24.311	1.2720	-12.888

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	432.74	-12.802	41.817	-20.657	8415.7	-.64556	424.99
Stddev	2.03	.129	.071	2.667	35.3	1.9793	.92
%RSD	.46815	1.0038	.16920	12.913	.42004	306.60	.21764

#1	434.17	-12.711	41.867	-18.771	8440.7	.75400	425.64
#2	431.30	-12.893	41.767	-22.543	8390.7	-2.0451	424.33

Sample Name: S 710156-017-017-1/1 Acquired: 12/3/2007 15:29:12 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	138.25
Stddev	.07
%RSD	.05018

#1	138.20
#2	138.30

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43005.	14312.	552840.
Stddev	166.	267.	1281.
%RSD	.38669	1.8632	.23169

#1	42888.	14124.	551930.
#2	43123.	14501.	553740.

Sample Name: CCV Acquired: 12/3/2007 15:32:30 Type: QC
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	529.04	51393.	518.61	512.73	509.61	51.535
Stddev	2.03	837.	4.35	1.95	3.65	.246
%RSD	.38335	1.6279	.83789	.38018	.71706	.47782

#1	527.61	50801.	521.68	514.11	507.03	51.361
#2	530.48	51985.	515.54	511.35	512.20	51.709

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca	Cd	Co	Cr	Cu2199	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	101300.	508.30	506.44	515.77	514.7	49610.
Stddev	1930.	1.28	.72	2.70	2.6	978.
%RSD	1.9055	.25111	.14154	.52415	.4986	1.9709

#1	99935.	509.21	506.94	513.86	516.5	48919.
#2	102660.	507.40	505.93	517.68	512.9	50301.

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	K	Mg2802	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	25255.	F 101700.	509.81	518.14	104140.	506.56
Stddev	336.	196.	2.34	1.27	1801.	.95
%RSD	1.3311	.1931	.45872	.24557	1.7297	.18671

#1	25017.	101500.	508.16	519.04	102870.	507.22
#2	25493.	101800.	511.46	517.24	105420.	505.89

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		500.0				
Range		10.00%				

Sample Name: CCV Acquired: 12/3/2007 15:32:30 Type: QC
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	507.46	525.62	518.09	539.13	511.20	511.57
Stddev	1.78	.71	1.31	2.72	.65	3.55
%RSD	.35074	.13585	.25311	.50520	.12742	.69322

#1	508.71	526.13	519.02	537.20	511.66	509.07
#2	506.20	525.12	517.16	541.05	510.74	514.08

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	509.51	525.98	509.29	518.34	521.47
Stddev	1.66	2.93	1.44	2.56	.74
%RSD	.32540	.55706	.28222	.49365	.14107

#1	510.68	523.91	510.30	516.53	521.99
#2	508.33	528.06	508.27	520.15	520.95

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42079.	14541.	538910.
Stddev	67.	165.	2715.
%RSD	.15831	1.1365	.50386

#1	42126.	14658.	540830.
#2	42032.	14424.	536990.

Sample Name: CCB Acquired: 12/3/2007 15:36:00 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.13690	.80917	-.24744	-8.4100	-.03019	.00430	4.7056	-.02207
Stddev	.19806	18.120	2.4027	.0930	.04063	.01272	3.9333	.00050
%RSD	144.68	2239.3	971.03	1.1053	134.58	295.99	83.587	2.2526

#1	-.00316	13.622	-1.9464	-8.3443	-.00146	.01330	1.9244	-.02171
#2	.27695	-12.003	1.4516	-8.4757	-.05891	-.00470	7.4869	-.02242

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.08203	-.06933	-.5655	2.4583	-82.092	1.494	.04638	.66819
Stddev	.13153	.09329	.7150	3.5820	10.328	.012	.01231	.22825
%RSD	160.36	134.56	126.4	145.71	12.582	.7783	26.530	34.159

#1	.17503	-.00337	-1.071	4.9912	-74.788	1.486	.03768	.82959
#2	-.01098	-.13530	-.0599	-.07454	-89.395	1.502	.05508	.50679

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	50.489	-.39939	.33146	-.74711	-1.9504	-.24742	.06573	.00197
Stddev	12.783	.17498	1.3095	.58344	1.4265	.31703	.34751	.00400
%RSD	25.318	43.812	395.06	78.093	73.139	128.14	528.72	202.90

#1	41.450	-.27566	-.59447	-1.1597	-.94173	-.47159	-.18000	-.00086
#2	59.528	-.52312	1.2574	-.33455	-2.9591	-.02324	.31145	.00480

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 12/3/2007 15:36:00 Type: QC
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-1.9971	.38547	-.91492	.01074	-.05294
Stddev	2.7703	.07630	.30181	.11025	.09760
%RSD	138.71	19.795	32.988	1026.7	184.37

#1	-.03823	.43942	-1.1283	.08869	.01608
#2	-3.9560	.33152	-.70151	-.06722	-.12195

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43133.	14306.	543980.
Stddev	214.	90.	1369.
%RSD	.49603	.62729	.25163

#1	42982.	14369.	543020.
#2	43285.	14242.	544950.

Sample Name: S 710156-018-018-1/1 Acquired: 12/3/2007 15:39:17 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-0.00612	27963.	-2.8096	4.7790	67.094	2.3153	941.66
Stddev	.53980	20.	6.4440	.3134	.432	.0442	.11
%RSD	8824.4	.07229	229.36	6.5584	.64322	1.9076	.01123

#1	-.38781	27949.	-7.3662	5.0006	67.399	2.3465	941.74
#2	.37558	27978.	1.7470	4.5574	66.789	2.2840	941.59

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-2.4723	19.766	430.64	142.1	197460.	851.98	1477.
Stddev	.0764	.249	3.08	.9	415.	83.20	3.
%RSD	3.0912	1.2618	.71418	.6374	.21042	9.7650	.2139

#1	-2.5264	19.589	432.81	141.5	197170.	910.81	1475.
#2	-2.4183	19.942	428.46	142.8	197760.	793.15	1480.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1363.4	3.4914	79.620	81.702	36.740	-.19155	-10.985
Stddev	9.2	.2595	14.417	.132	3.582	.89411	1.795
%RSD	.67629	7.4319	18.108	.16164	9.7484	466.79	16.338

#1	1369.9	3.3079	69.425	81.609	39.272	.44069	-12.254
#2	1356.8	3.6749	89.814	81.795	34.207	-.82378	-9.7157

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	420.20	-13.201	77.346	-19.683	9169.2	2.2814	491.47
Stddev	5.40	1.252	.620	1.640	121.4	.8939	3.45
%RSD	1.2846	9.4843	.80169	8.3306	1.3235	39.182	.70292

#1	424.02	-14.087	77.785	-20.842	9255.0	2.9134	493.92
#2	416.38	-12.316	76.908	-18.523	9083.4	1.6493	489.03

Sample Name: S 710156-018-018-1/1 Acquired: 12/3/2007 15:39:17 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	142.32
Stddev	.48
%RSD	.33612

#1	142.66
#2	141.99

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43070.	14272.	549340.
Stddev	115.	34.	4314.
%RSD	.26786	.23983	.78523

#1	42989.	14248.	546290.
#2	43152.	14296.	552390.

Sample Name: S 710156-019-019-1/1 Acquired: 12/3/2007 15:42:36 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-3.5132	22343.	-16.210	2.6456	38.732	3.4801	648.43
Stddev	.4923	2.	.292	.2259	.038	.0411	11.18
%RSD	14.014	.00743	1.8037	8.5387	.09836	1.1822	1.7248

#1	-3.1650	22341.	-16.004	2.8053	38.759	3.5092	640.52
#2	-3.8613	22344.	-16.417	2.4858	38.706	3.4510	656.34

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-4.0302	11.692	479.17	101.1	307370.	304.54	977.4
Stddev	.0326	.064	.29	1.3	1242.	44.95	.8
%RSD	.80957	.54510	.05967	1.315	.40418	14.759	.0818

#1	-4.0071	11.737	479.37	102.0	306490.	272.75	976.8
#2	-4.0533	11.647	478.96	100.1	308240.	336.32	977.9

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	436.66	5.0293	93.253	73.101	25.938	.79907	-11.758
Stddev	.23	.0446	3.868	.080	1.041	1.8289	3.807
%RSD	.05371	.88683	4.1482	.10968	4.0133	228.87	32.376

#1	436.50	5.0609	90.517	73.045	26.675	2.0923	-14.450
#2	436.83	4.9978	95.988	73.158	25.202	-.49413	-9.0662

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	572.88	-19.660	49.045	-30.889	13256.	-.35463	745.72
Stddev	.42	.209	.023	.205	54.	2.4631	.34
%RSD	.07377	1.0652	.04750	.66401	.41094	694.56	.04594

#1	572.58	-19.512	49.061	-31.034	13294.	1.3871	745.48
#2	573.17	-19.808	49.028	-30.744	13217.	-2.0963	745.96

Sample Name: S 710156-019-019-1/1 Acquired: 12/3/2007 15:42:36 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	91.862
Stddev	.176
%RSD	.19153

#1	91.987
#2	91.738

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43429.	14855.	557740.
Stddev	44.	92.	490.
%RSD	.10079	.62208	.08788

#1	43398.	14921.	558080.
#2	43460.	14790.	557390.

Sample Name: S 710156-020-020-1/1 Acquired: 12/3/2007 15:45:53 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-4.1340	37160.	-17.537	2.1706	18.665	3.3011	473.94
Stddev	.1320	74.	1.132	.2815	.045	.0700	3.22
%RSD	3.1922	.19972	6.4573	12.967	.23952	2.1209	.68040

#1	-4.2273	37213.	-18.337	1.9716	18.697	3.3506	471.66
#2	-4.0407	37108.	-16.736	2.3697	18.634	3.2516	476.22

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-5.0712	1.9077	556.54	73.38	373500.	198.55	311.9
Stddev	.0723	.5687	3.25	.09	1037.	12.44	.5
%RSD	1.4259	29.810	.58461	.1182	.27773	6.2648	.1730

#1	-5.1223	1.5056	558.84	73.32	374230.	207.34	312.3
#2	-5.0201	2.3098	554.24	73.44	372770.	189.75	311.5

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	259.42	5.9655	58.717	50.804	36.491	.85184	1.3935
Stddev	1.43	.5139	27.704	.149	.961	3.3964	2.6742
%RSD	.55056	8.6150	47.183	.29382	2.6339	398.72	191.90

#1	260.43	5.6021	78.307	50.909	37.170	3.2535	-.49744
#2	258.41	6.3289	39.127	50.698	35.811	-1.5498	3.2845

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	974.58	-20.415	23.582	-40.626	12948.	.74602	646.22
Stddev	4.65	.219	.120	.174	46.	1.1356	2.50
%RSD	.47691	1.0711	.50903	.42730	.35472	152.23	.38620

#1	977.86	-20.570	23.667	-40.749	12981.	1.5490	647.98
#2	971.29	-20.261	23.497	-40.504	12916.	-.05699	644.45

Sample Name: S 710156-020-020-1/1 Acquired: 12/3/2007 15:45:53 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	47.565
Stddev	.230
%RSD	.48332

#1	47.403
#2	47.728

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43120.	14676.	559500.
Stddev	30.	143.	2110.
%RSD	.06936	.97284	.37711

#1	43141.	14575.	558010.
#2	43099.	14777.	561000.

Sample Name: BLK 028 Acquired: 12/3/2007 15:49:11 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.1374	-18.816	-4.2203	.14436	.17880	.03149	29.744
Stddev	.1376	17.082	1.3511	.61269	.01727	.00338	1.722
%RSD	12.099	90.785	32.015	424.43	9.6600	10.730	5.7886
#1	1.2347	-30.895	-5.1756	-.28888	.19101	.02910	28.527
#2	1.0401	-6.7373	-3.2649	.57760	.16659	.03388	30.962

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.23093	-.20749	1.2944	-.4457	15.710	F 251.98	1.443
Stddev	.02352	.03644	.1060	1.040	.517	.30	.043
%RSD	10.186	17.561	8.1873	233.4	3.2889	.11818	2.967
#1	-.21430	-.18173	1.3693	.2898	16.075	252.19	1.413
#2	-.24756	-.23326	1.2195	-1.181	15.344	251.77	1.473

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit						250.00	
Low Limit						-250.00	

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	F 363.21	.11093	36.868	-.27684	-.68596	-.49337	-1.2822
Stddev	5.40	.06168	.673	.28544	.10005	1.3370	4.8540
%RSD	1.4855	55.606	1.8262	103.11	14.585	271.00	378.56
#1	367.02	.15455	37.344	-.07501	-.75671	-1.4388	-4.7145
#2	359.39	.06731	36.392	-.47868	-.61522	.45205	2.1501

Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	5.0000						
Low Limit	-5.0000						

Sample Name: BLK 028 Acquired: 12/3/2007 15:49:11 Type: QC
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	F 14.004	F 30.541	.14056	-6.4468	1.3468	-4.5012	-.73103
Stddev	.168	.845	.01699	.9306	.0131	.7667	.08472
%RSD	1.1976	2.7684	12.089	14.435	.97363	17.034	11.590
#1	13.885	31.139	.15257	-5.7887	1.3560	-3.9590	-.67113
#2	14.122	29.943	.12854	-7.1049	1.3375	-5.0433	-.79094
Check ?	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	10.000	20.000					
Low Limit	-10.000	-20.000					

Elem	Zn
Units	ppb
Avg	2.7346
Stddev	.0364
%RSD	1.3292
#1	2.7089
#2	2.7603
Check ?	Chk Pass
High Limit	
Low Limit	

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	41916.	14167.	543440.
Stddev	83.	20.	9027.
%RSD	.19793	.13859	1.6611
#1	41857.	14153.	537060.
#2	41975.	14181.	549830.

Sample Name: BKS 028 Acquired: 12/3/2007 15:52:30 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	107.66	10757.	110.02	1014.3	1096.1	53.411	10813.
Stddev	.74	159.	.09	2.0	6.9	.237	253.
%RSD	.68456	1.4754	.07860	.19877	.63347	.44356	2.3406

#1	107.14	10645.	110.08	1015.7	1101.1	53.244	10634.
#2	108.18	10869.	109.96	1012.9	1091.2	53.579	10992.

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	110.98	538.48	533.47	F 531.1	10640.	10190.	F 10840.
Stddev	.36	1.71	2.27	.6	231.	210.	245.
%RSD	.32889	.31841	.42513	.1145	2.1682	2.0590	2.264

#1	111.24	539.69	531.87	531.5	10477.	10042.	10670.
#2	110.72	537.27	535.07	530.6	10803.	10338.	11010.

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail
Value				100.0			100.0
Range				20.00%			20.00%

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1075.7	566.40	11415.	543.83	1084.3	104.60	100.79
Stddev	2.5	1.38	177.	.56	.8	.70	1.31
%RSD	.23619	.24415	1.5490	.10365	.07699	.67299	1.3045

#1	1073.9	567.38	11290.	544.23	1084.9	104.10	99.864
#2	1077.5	565.43	11540.	543.43	1083.7	105.10	101.72

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Sample Name: BKS 028 Acquired: 12/3/2007 15:52:30 Type: QC
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	8399.5	584.96	F 1077.1	408.64	2141.3	108.41	549.42
Stddev	38.3	1.54	4.1	2.53	9.8	.78	2.00
%RSD	.45630	.26401	.37831	.61840	.45768	.71774	.36367
#1	8372.4	586.05	1074.2	410.43	2134.4	107.86	548.01
#2	8426.6	583.86	1080.0	406.85	2148.2	108.96	550.83
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			500.00				
Range			20.000%				

Elem	Zn
Units	ppb
Avg	1061.8
Stddev	1.0
%RSD	.09382
#1	1062.5
#2	1061.1

Check ?	Chk Pass
Value	
Range	

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42034.	14750.	548780.
Stddev	36.	333.	879.
%RSD	.08609	2.2570	.16015
#1	42008.	14985.	549400.
#2	42060.	14515.	548160.

Sample Name: S 710156-021-021-1/1 Acquired: 12/3/2007 15:55:58 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3.3566	46020.	-7.6048	10.660	219.16	2.8939	1440.4
Stddev	.1143	33.	.1835	.402	2.00	.0396	8.5
%RSD	3.4043	.07115	2.4123	3.7726	.91229	1.3670	.59012

#1	3.2758	46043.	-7.7345	10.375	220.58	2.9219	1434.4
#2	3.4374	45997.	-7.4750	10.944	217.75	2.8660	1446.4

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.5101	47.794	311.76	117.2	157310.	885.78	2544.
Stddev	.0463	.170	2.06	1.0	168.	4.67	1.
%RSD	3.0646	.35652	.66210	.8836	.10690	.52719	.0488

#1	-1.4773	47.673	313.22	117.9	157430.	889.08	2544.
#2	-1.5428	47.914	310.30	116.5	157190.	882.48	2543.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2373.2	2.2829	159.11	170.23	14.666	.07954	-11.782
Stddev	21.4	.2891	4.04	.10	.397	.72487	.964
%RSD	.90233	12.665	2.5378	.06077	2.7055	911.31	8.1778

#1	2388.4	2.0785	156.25	170.16	14.386	.59210	-11.101
#2	2358.1	2.4874	161.96	170.30	14.947	-.43302	-12.463

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	558.24	-19.447	23.189	-23.869	11566.	3.8561	442.68
Stddev	5.05	.728	.248	.099	31.	1.9743	3.52
%RSD	.90517	3.7431	1.0677	.41459	.26972	51.198	.79437

#1	561.81	-19.961	23.364	-23.799	11588.	2.4601	445.17
#2	554.67	-18.932	23.013	-23.939	11544.	5.2522	440.20

Sample Name: S 710156-021-021-1/1 Acquired: 12/3/2007 15:55:58 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	154.71
Stddev	.26
%RSD	.16816

#1	154.52
#2	154.89

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43734.	14546.	564350.
Stddev	51.	56.	2799.
%RSD	.11624	.38537	.49606

#1	43698.	14586.	562370.
#2	43770.	14506.	566330.

Sample Name: SP710156-021-021-1/1 Acquired: 12/3/2007 15:59:17 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	14.926	71199.	8.1406	114.55	359.96	8.0163	2700.6
Stddev	.432	483.	1.4916	.66	1.27	.0727	.5
%RSD	2.8957	.67801	18.324	.57290	.35155	.90717	.01748

#1	14.620	71540.	7.0859	115.02	360.86	8.0677	2700.3
#2	15.232	70858.	9.1954	114.09	359.07	7.9649	2701.0

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	9.4405	107.31	402.67	186.4	176070.	2117.8	4079.
Stddev	.0934	.08	1.30	.5	1676.	26.1	35.
%RSD	.98904	.07041	.32400	.2744	.95176	1.2332	.8464

#1	9.5065	107.37	403.60	186.8	177260.	2099.3	4103.
#2	9.3745	107.26	401.75	186.1	174890.	2136.2	4055.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2732.1	53.515	1385.0	278.77	125.50	5.2391	-2.5607
Stddev	13.2	.140	5.3	1.05	.02	1.2580	.9893
%RSD	.48142	.26232	.38195	.37805	.01274	24.012	38.634

#1	2741.4	53.614	1388.8	279.52	125.51	6.1287	-1.8612
#2	2722.8	53.415	1381.3	278.03	125.48	4.3496	-3.2602

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	893.29	31.327	146.17	13.155	13346.	15.762	547.74
Stddev	6.84	.597	.50	4.793	68.	1.533	1.72
%RSD	.76603	1.9053	.33925	36.434	.50695	9.7293	.31404

#1	898.13	31.749	146.52	16.544	13394.	14.678	548.95
#2	888.45	30.905	145.82	9.7656	13298.	16.846	546.52

Sample Name: SP710156-021-021-1/1 Acquired: 12/3/2007 15:59:17 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	291.06
Stddev	.02
%RSD	.00651

#1	291.08
#2	291.05

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43474.	14476.	558610.
Stddev	.	102.	1773.
%RSD	.00083	.70381	.31746

#1	43475.	14403.	557360.
#2	43474.	14548.	559860.

Sample Name: SD710156-021-021-1/1 Acquired: 12/3/2007 16:02:33 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	14.536	74229.	6.4367	116.20	368.92	8.1900	2742.1
Stddev	.111	215.	.3760	.39	2.20	.0389	4.1
%RSD	.76125	.28975	5.8409	.33276	.59626	.47532	.14854

#1	14.615	74381.	6.1708	115.93	370.47	8.2175	2745.0
#2	14.458	74077.	6.7025	116.47	367.36	8.1624	2739.3

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	9.2481	109.51	410.58	195.1	182540.	2173.2	4383.
Stddev	.0554	.00	.89	1.3	734.	28.9	8.
%RSD	.59879	.00148	.21685	.6757	.40237	1.3289	.1724

#1	9.2873	109.51	411.21	196.0	183060.	2152.8	4388.
#2	9.2089	109.51	409.95	194.2	182020.	2193.7	4377.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2788.0	53.235	1392.4	289.07	128.96	4.6187	-4.7058
Stddev	11.0	.262	7.3	.04	.31	.3537	1.6152
%RSD	.39319	.49166	.52415	.01211	.24345	7.6579	34.323

#1	2795.8	53.420	1387.2	289.09	128.74	4.3686	-5.8480
#2	2780.3	53.050	1397.6	289.05	129.18	4.8688	-3.5637

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	980.61	31.210	148.61	12.046	13860.	15.909	563.51
Stddev	3.52	.676	.73	.395	119.	.780	2.66
%RSD	.35940	2.1645	.48979	3.2819	.86005	4.9034	.47183

#1	983.11	30.733	149.13	12.325	13944.	16.461	565.39
#2	978.12	31.688	148.10	11.766	13775.	15.357	561.63

Sample Name: SD710156-021-021-1/1 Acquired: 12/3/2007 16:02:33 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	298.03
Stddev	.04
%RSD	.01178

#1	298.00
#2	298.05

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43309.	14460.	558440.
Stddev	25.	34.	1930.
%RSD	.05668	.23837	.34554

#1	43327.	14436.	557080.
#2	43292.	14484.	559810.

Sample Name: PS710156-021-021-1/1 Acquired: 12/3/2007 16:05:48 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	48.652	47816.	82.156	84.543	243.11	12.891	6835.9
Stddev	.172	197.	3.479	.169	.50	.019	61.0
%RSD	.35403	.41269	4.2348	.19938	.20429	.14634	.89166

#1	48.774	47677.	79.696	84.662	242.76	12.878	6792.8
#2	48.531	47956.	84.616	84.424	243.46	12.904	6879.0

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	19.925	79.331	339.88	147.7	160130.	6177.2	8038.
Stddev	.006	.127	.07	.9	866.	8.5	32.
%RSD	.02889	.16032	.02204	.6205	.54056	.13718	.3929

#1	19.929	79.421	339.82	147.1	159520.	6171.2	8016.
#2	19.921	79.241	339.93	148.4	160740.	6183.2	8060.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2483.1	35.167	5778.1	214.20	102.47	85.658	62.527
Stddev	2.0	.094	72.5	.14	.76	2.079	.110
%RSD	.07938	.26744	1.2554	.06539	.74534	2.4276	.17523

#1	2481.7	35.233	5726.8	214.29	103.01	87.129	62.449
#2	2484.5	35.100	5829.4	214.10	101.93	84.188	62.604

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	5738.8	88.830	45.582	494.88	11844.	112.74	469.52
Stddev	.6	.914	.054	.05	33.	1.31	.76
%RSD	.01120	1.0288	.11951	.00937	.27978	1.1597	.16125

#1	5739.3	89.476	45.543	494.91	11821.	113.66	468.98
#2	5738.4	88.184	45.620	494.85	11868.	111.82	470.05

Sample Name: PS710156-021-021-1/1 Acquired: 12/3/2007 16:05:48 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	242.67
Stddev	.92
%RSD	.38028

#1	243.33
#2	242.02

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42988.	14361.	555200.
Stddev	173.	19.	1005.
%RSD	.40153	.13232	.18093

#1	42866.	14347.	555910.
#2	43110.	14374.	554490.

Sample Name: SE710156-021-021-1/1 Acquired: 12/3/2007 16:09:05 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.80249	10185.	.30029	-2.2067	48.254	.56070	307.03	-.45076
Stddev	.08626	68.	.13800	.7433	.115	.00348	2.37	.02732
%RSD	10.749	.66696	45.954	33.682	.23841	.62028	.77062	6.0611

#1	.74149	10137.	.20271	-2.7323	48.336	.55824	305.35	-.47008
#2	.86349	10233.	.39787	-1.6811	48.173	.56316	308.70	-.43144

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	10.138	70.488	26.39	34983.	124.70	566.4	527.11	.59218
Stddev	.082	.030	1.14	218.	43.80	2.1	.08	.10092
%RSD	.80839	.04292	4.325	.62345	35.124	.3692	.01503	17.042

#1	10.080	70.510	25.59	34829.	93.729	564.9	527.17	.66354
#2	10.196	70.467	27.20	35137.	155.67	567.9	527.06	.52082

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	36.342	37.505	2.6908	-.70368	-3.8613	129.89	-4.5912	5.0295
Stddev	8.454	.001	1.2990	1.7311	.3808	.79	.0713	.0201
%RSD	23.263	.00300	48.275	246.01	9.8611	.60912	1.5537	.39980

#1	30.364	37.504	3.6093	.52039	-4.1305	130.45	-4.5407	5.0153
#2	42.319	37.506	1.7723	-1.9278	-3.5921	129.34	-4.6416	5.0437

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-6.1465	2653.8	.49703	98.373	36.296
Stddev	.0377	2.9	.18331	.347	.019
%RSD	.61342	.11060	36.881	.35320	.05137

#1	-6.1198	2651.7	.62665	98.619	36.282
#2	-6.1731	2655.8	.36741	98.128	36.309

Sample Name: SE710156-021-021-1/1 Acquired: 12/3/2007 16:09:05 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43217.	14451.	552920.
Stddev	5.	85.	382.
%RSD	.01223	.58890	.06902
#1	43214.	14512.	553190.
#2	43221.	14391.	552650.

Sample Name: CCV Acquired: 12/3/2007 16:12:18 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	529.83	52230.	525.51	516.08	512.60	51.715
Stddev	3.06	304.	1.65	1.90	4.91	.380
%RSD	.57783	.58237	.31361	.36785	.95742	.73407

#1	527.66	52015.	526.67	517.42	509.13	51.447
#2	531.99	52445.	524.34	514.74	516.07	51.984

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca	Cd	Co	Cr	Cu2199	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	103200.	512.91	510.23	512.18	517.2	50597.
Stddev	624.	.72	1.43	3.06	2.0	323.
%RSD	.60418	.13974	.27949	.59672	.3780	.63825

#1	102760.	513.42	511.24	510.02	518.6	50368.
#2	103640.	512.40	509.22	514.34	515.8	50825.

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	K	Mg2802	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	25758.	F 102100.	509.54	523.70	106130.	507.50
Stddev	191.	307.	3.06	1.74	622.	1.27
%RSD	.74027	.3008	.60022	.33167	.58613	.24933

#1	25623.	101900.	507.38	524.93	105690.	508.40
#2	25893.	102400.	511.70	522.48	106570.	506.61

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		500.0				
Range		10.00%				

Sample Name: CCV Acquired: 12/3/2007 16:12:18 Type: QC
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	512.21	526.70	524.20	537.49	517.80	513.48
Stddev	1.78	.17	3.61	3.92	.53	7.32
%RSD	.34702	.03234	.68949	.72905	.10296	1.4249
#1	510.95	526.82	526.75	534.72	517.42	508.30
#2	513.46	526.58	521.64	540.26	518.17	518.65
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value Range						

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	514.67	524.05	515.08	520.21	521.89
Stddev	.29	3.53	2.15	2.87	.47
%RSD	.05540	.67450	.41806	.55244	.08980
#1	514.47	521.55	513.56	518.18	522.22
#2	514.87	526.55	516.60	522.25	521.56
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value Range					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42096.	14201.	540930.
Stddev	121.	93.	3328.
%RSD	.28673	.65467	.61530
#1	42011.	14267.	543290.
#2	42182.	14136.	538580.

Sample Name: CCB Acquired: 12/3/2007 16:15:47 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.11901	-13.349	-.80653	-9.3668	.01251	.01479	9.7449	.14013
Stddev	.16676	8.038	.39031	.2698	.01502	.00594	.6427	.04030
%RSD	140.12	60.216	48.394	2.8799	120.07	40.151	6.5956	28.756
#1	.23693	-19.033	-1.0825	-9.5576	.00189	.01899	10.199	.16863
#2	.00110	-7.6651	-.53054	-9.1761	.02313	.01059	9.2905	.11164

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.14797	-.15998	-2.043	1.6509	23.368	F 6.105	.01874	.44788
Stddev	.10654	.11216	.678	5.0637	38.192	.807	.00949	.12797
%RSD	71.999	70.110	33.22	306.72	163.44	13.22	50.657	28.572
#1	.22331	-.23928	-2.522	5.2315	50.374	6.676	.02545	.35739
#2	.07264	-.08067	-1.563	-1.9297	-3.6381	5.534	.01203	.53837

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit						3.000		
Low Limit						-3.000		

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	79.847	-.25039	-.45273	-.63734	-2.8226	-.01996	-.15766	.03110
Stddev	10.453	.13496	.85900	.50714	1.2697	1.5203	.47800	.03454
%RSD	13.091	53.900	189.74	79.571	44.983	7618.5	303.18	111.04
#1	87.238	-.34582	.15467	-.27874	-3.7205	-1.0950	.18034	.00668
#2	72.456	-.15496	-1.0601	-.99594	-1.9248	1.0551	-.49566	.05553

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 12/3/2007 16:15:47 Type: QC
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-2.9927	.32576	-1.0338	-.04669	.16396
Stddev	.4465	.05951	.0592	.04325	.05905
%RSD	14.920	18.267	5.7297	92.646	36.012

#1	-3.3085	.36784	-1.0756	-.01610	.12221
#2	-2.6770	.28369	-.99188	-.07727	.20572

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42893.	14096.	545080.
Stddev	51.	212.	2865.
%RSD	.11834	1.5020	.52558

#1	42929.	13947.	547110.
#2	42857.	14246.	543060.

Sample Name: S 710156-022-022-1/1 Acquired: 12/3/2007 16:19:05 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.5062	35692.	-5.3470	6.0239	113.52	2.2488	2470.1
Stddev	.1908	491.	.7375	.5617	1.86	.0732	71.2
%RSD	12.668	1.3744	13.793	9.3241	1.6368	3.2553	2.8807

#1	1.3712	35346.	-5.8685	6.4211	114.84	2.3006	2419.8
#2	1.6411	36039.	-4.8255	5.6267	112.21	2.1970	2520.4

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.51906	23.846	244.30	1556.	123490.	853.32	2595.
Stddev	.01953	.296	3.86	3.	1856.	96.95	35.
%RSD	3.7628	1.2399	1.5803	.1862	1.5029	11.362	1.363

#1	-.50524	23.637	247.03	1558.	122180.	921.87	2570.
#2	-.53287	24.055	241.57	1554.	124800.	784.76	2620.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1507.6	2.0284	162.78	102.01	83.278	1.7861	-11.565
Stddev	23.9	.2078	4.71	.23	2.157	1.4491	.453
%RSD	1.5867	10.246	2.8929	.22818	2.5896	81.130	3.9137

#1	1524.5	2.1754	159.45	101.84	81.753	.76146	-11.245
#2	1490.6	1.8814	166.11	102.17	84.802	2.8107	-11.885

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	497.94	-16.283	36.232	-21.717	9505.3	2.0001	361.42
Stddev	7.93	.045	.589	.470	194.3	1.8090	5.55
%RSD	1.5936	.27493	1.6256	2.1638	2.0438	90.444	1.5352

#1	503.55	-16.252	36.648	-22.049	9642.6	3.2792	365.34
#2	492.33	-16.315	35.815	-21.385	9367.9	.72096	357.50

Sample Name: S 710156-022-022-1/1 Acquired: 12/3/2007 16:19:05 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	285.13
Stddev	1.03
%RSD	.36278

#1	285.86
#2	284.39

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42755.	14313.	549510.
Stddev	161.	211.	9501.
%RSD	.37730	1.4773	1.7289

#1	42640.	14462.	542790.
#2	42869.	14163.	556220.

Sample Name: S 710156-023-023-1/1 Acquired: 12/3/2007 16:22:24 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	2.1027	23756.	-3.1951	3.9903	105.59	1.6871	1447.3
Stddev	.1098	182.	.4114	.6859	.01	.0388	3.2
%RSD	5.2192	.76616	12.876	17.190	.00699	2.2990	.21928
#1	2.0251	23885.	-2.9042	3.5053	105.59	1.6597	1449.5
#2	2.1804	23627.	-3.4860	4.4753	105.60	1.7146	1445.0

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.0297	23.171	199.10	87.12	107290.	573.36	1255.
Stddev	.1205	.540	.28	1.03	831.	46.90	7.
%RSD	11.701	2.3298	.14289	1.179	.77472	8.1801	.5773
#1	-1.1149	23.553	199.30	86.39	107880.	606.53	1260.
#2	-.94451	22.789	198.90	87.84	106710.	540.20	1250.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1790.0	1.8114	78.191	71.340	20.738	1.5361	-7.8742
Stddev	2.2	.2045	32.652	.194	.653	.3641	2.2803
%RSD	.12456	11.289	41.759	.27207	3.1496	23.703	28.959
#1	1791.6	1.6668	101.28	71.203	20.276	1.2786	-9.4866
#2	1788.4	1.9560	55.103	71.477	21.200	1.7936	-6.2618

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	384.71	-12.586	26.474	-18.324	7722.7	3.1490	300.33
Stddev	1.41	.089	.001	.911	36.3	1.1229	.81
%RSD	.36622	.70361	.00487	4.9707	.46969	35.660	.26974
#1	385.70	-12.524	26.473	-17.680	7697.0	2.3550	300.91
#2	383.71	-12.649	26.475	-18.968	7748.3	3.9430	299.76

Sample Name: S 710156-023-023-1/1 Acquired: 12/3/2007 16:22:24 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	121.65
Stddev	.02
%RSD	.01869

#1	121.67
#2	121.64

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43091.	14159.	549790.
Stddev	88.	69.	199.
%RSD	.20487	.48802	.03624

#1	43028.	14110.	549650.
#2	43153.	14208.	549930.

Sample Name: S 710156-024-024-1/1
 Method: TRACE(v2) Mode: CONC
 User: admin Custom ID1:
 Comment:

Acquired: 12/3/2007 16:25:43
 Corr. Factor: 1.000000
 Custom ID2: Custom ID3:

Type: Unk

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-36705	49222.	-6.2851	2.4040	88.529	2.9214	1552.1
Stddev	.09835	485.	.3426	.0483	.042	.0001	31.2
%RSD	26.794	.98612	5.4514	2.0071	.04743	.00384	2.0133

#1	-43659	48879.	-6.5274	2.3699	88.499	2.9215	1530.0
#2	-29751	49565.	-6.0428	2.4381	88.559	2.9213	1574.2

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.2983	19.935	323.65	110.7	154430.	790.45	2018.
Stddev	.1719	.248	1.62	.2	1276.	45.02	24.
%RSD	13.240	1.2445	.49998	.2108	.82602	5.6955	1.203

#1	-1.1768	19.759	324.79	110.6	153530.	758.61	2000.
#2	-1.4199	20.110	322.50	110.9	155340.	822.28	2035.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1047.5	2.7919	133.20	132.40	49.180	.14292	-9.4103
Stddev	2.4	.1872	8.33	.32	1.530	1.4307	.8672
%RSD	.22958	6.7067	6.2569	.24405	3.1110	1001.0	9.2150

#1	1049.2	2.9243	127.31	132.63	50.262	-.86875	-10.023
#2	1045.8	2.6595	139.09	132.17	48.098	1.1546	-8.7971

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	609.64	-20.294	33.079	-27.482	11885.	2.8267	437.95
Stddev	.24	1.180	.061	2.116	25.	.8038	.97
%RSD	.03912	5.8125	.18339	7.6993	.20842	28.436	.22259

#1	609.81	-21.128	33.122	-28.978	11902.	3.3951	438.63
#2	609.47	-19.460	33.036	-25.986	11867.	2.2584	437.26

Sample Name: S 710156-024-024-1/1 Acquired: 12/3/2007 16:25:43 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	166.88
Stddev	.15
%RSD	.09256

#1	166.98
#2	166.77

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43218.	14364.	552120.
Stddev	76.	102.	1707.
%RSD	.17518	.70795	.30916

#1	43164.	14436.	550910.
#2	43271.	14292.	553320.

Sample Name: S 710156-025-025-1/1 Acquired: 12/3/2007 16:29:02 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	4.8200	50069.	2.6214	13.285	138.17	2.4842	1881.9
Stddev	.1660	443.	1.4197	.082	1.43	.0338	2.1
%RSD	3.4434	.88410	54.158	.61536	1.0334	1.3621	.11258

#1	4.7026	49756.	3.6253	13.228	139.18	2.5082	1883.4
#2	4.9374	50382.	1.6176	13.343	137.16	2.4603	1880.4

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.9569	44.659	378.04	175.7	189930.	1378.7	1751.
Stddev	.1667	.330	3.39	1.0	1593.	93.6	16.
%RSD	8.5208	.73878	.89763	.5877	.83891	6.7916	.9276

#1	-1.8390	44.426	380.44	174.9	188810.	1312.5	1740.
#2	-2.0748	44.892	375.64	176.4	191060.	1445.0	1763.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3108.7	3.3161	176.14	143.22	43.754	-1.0372	-14.234
Stddev	33.7	.2535	.87	.83	.072	1.8331	2.111
%RSD	1.0853	7.6454	.49567	.58147	.16528	176.74	14.830

#1	3132.5	3.4954	175.52	142.63	43.806	-2.3334	-12.741
#2	3084.8	3.1368	176.76	143.81	43.703	.25901	-15.726

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	664.55	-15.236	35.842	-26.628	10194.	3.1036	453.97
Stddev	10.17	.772	.406	.064	78.	.8359	3.31
%RSD	1.5301	5.0644	1.1327	.24037	.76050	26.935	.72866

#1	671.74	-15.781	36.130	-26.583	10248.	3.6947	456.31
#2	657.36	-14.690	35.555	-26.673	10139.	2.5125	451.63

Sample Name: S 710156-025-025-1/1 Acquired: 12/3/2007 16:29:02 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	161.16
Stddev	.33
%RSD	.20694

#1	160.93
#2	161.40

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43584.	14577.	559650.
Stddev	11.	135.	4905.
%RSD	.02416	.92928	.87646

#1	43591.	14673.	556180.
#2	43576.	14481.	563110.

Sample Name: S 710156-026-026-1/1 Acquired: 12/3/2007 16:32:21 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	6.2160	30655.	4.6658	9.6822	68.287	1.2001	406.22
Stddev	.4646	684.	.5269	.4166	.774	.0368	6.56
%RSD	7.4736	2.2315	11.293	4.3028	1.1335	3.0650	1.6152
#1	6.5445	31139.	5.0384	9.9768	68.834	1.2261	410.86
#2	5.8876	30171.	4.2933	9.3877	67.739	1.1741	401.58
Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.1541	35.183	217.19	94.99	114860.	713.69	816.7
Stddev	.1826	.438	2.61	3.16	1860.	61.80	17.8
%RSD	15.826	1.2440	1.2009	3.331	1.6190	8.6599	2.174
#1	-1.2832	34.873	219.03	97.23	116170.	757.39	829.2
#2	-1.0249	35.492	215.34	92.75	113540.	669.98	804.1
Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3265.7	1.4471	96.513	77.167	15.992	.97929	-9.7699
Stddev	58.4	.1234	11.426	.770	.221	.19356	1.0209
%RSD	1.7896	8.5260	11.839	.99733	1.3814	19.765	10.449
#1	3307.0	1.5343	104.59	77.711	15.836	1.1162	-9.0481
#2	3224.4	1.3599	88.434	76.623	16.148	.84243	-10.492
Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	416.32	-10.077	12.313	-17.135	5872.5	.54620	265.46
Stddev	3.90	1.139	.151	.807	89.6	.23811	3.33
%RSD	.93779	11.303	1.2286	4.7101	1.5256	43.594	1.2542
#1	419.08	-10.883	12.420	-16.565	5935.8	.37783	267.81
#2	413.56	-9.2718	12.206	-17.706	5809.1	.71457	263.11

Sample Name: S 710156-026-026-1/1 Acquired: 12/3/2007 16:32:21 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	82.240
Stddev	.056
%RSD	.06755

#1	82.279
#2	82.201

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43438.	14452.	560170.
Stddev	6.	238.	6553.
%RSD	.01414	1.6490	1.1698

#1	43434.	14284.	555540.
#2	43443.	14621.	564800.

Sample Name: S 710156-027-027-1/1 Acquired: 12/3/2007 16:35:46 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	23.377	48426.	13.652	46.090	265.40	2.2904	2032.4
Stddev	.833	1164.	1.565	1.414	1.02	.0390	38.3
%RSD	3.5654	2.4029	11.463	3.0685	.38473	1.7012	1.8847

#1	23.966	47603.	12.546	47.090	266.12	2.3180	2005.3
#2	22.787	49249.	14.759	45.090	264.67	2.2629	2059.5

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.3293	103.59	303.59	207.4	185130.	1364.4	1587.
Stddev	.2809	.01	1.65	2.6	4487.	125.1	32.
%RSD	21.128	.01286	.54268	1.255	2.4237	9.1714	2.046

#1	-1.1307	103.60	304.76	209.3	181960.	1275.9	1565.
#2	-1.5279	103.58	302.43	205.6	188300.	1452.9	1610.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	10984.	2.8950	182.50	135.42	40.775	1.7763	-27.561
Stddev	129.	.0339	8.57	.24	.156	1.2532	1.656
%RSD	1.1749	1.1711	4.6959	.17783	.38346	70.547	6.0093

#1	11076.	2.8710	176.44	135.24	40.885	.89022	-28.732
#2	10893.	2.9189	188.56	135.59	40.664	2.6625	-26.390

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	692.23	-14.718	45.620	-22.900	9455.5	6.0756	422.11
Stddev	.62	.096	.269	2.920	10.8	.1999	1.43
%RSD	.09020	.65133	.58977	12.753	.11416	3.2906	.33883

#1	692.67	-14.651	45.810	-24.965	9463.1	5.9342	423.12
#2	691.79	-14.786	45.430	-20.835	9447.8	6.2170	421.10

Sample Name: S 710156-027-027-1/1 Acquired: 12/3/2007 16:35:46 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	187.77
Stddev	.31
%RSD	.16313

#1	187.99
#2	187.55

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43285.	14654.	562810.
Stddev	30.	267.	2549.
%RSD	.06834	1.8214	.45283

#1	43264.	14843.	561010.
#2	43306.	14465.	564610.

Sample Name: S 710156-028-028-1/1 Acquired: 12/3/2007 16:39:11 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.6619	40890.	.78578	5.6403	82.336	2.5542	1970.4
Stddev	.0094	968.	1.0677	.2269	.843	.0888	25.3
%RSD	.56232	2.3683	135.87	4.0219	1.0234	3.4776	1.2859
#1	1.6685	40206.	.03083	5.4799	82.932	2.6170	1952.4
#2	1.6553	41575.	1.5407	5.8007	81.740	2.4914	1988.3
Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.7693	21.280	474.19	162.1	197900.	1291.4	1388.
Stddev	.2409	.058	3.69	1.6	3555.	125.0	34.
%RSD	13.614	.27077	.77788	.9782	1.7961	9.6791	2.467
#1	-1.5989	21.320	476.80	163.2	195390.	1203.0	1364.
#2	-1.9396	21.239	471.58	161.0	200410.	1379.8	1412.
Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1636.9	2.9500	141.32	123.27	64.295	2.1618	-12.799
Stddev	16.1	.1427	4.65	.30	.959	1.9141	4.220
%RSD	.98453	4.8386	3.2917	.24708	1.4918	88.541	32.970
#1	1648.3	3.0509	144.60	123.06	64.974	3.5152	-15.783
#2	1625.5	2.8491	138.03	123.49	63.617	.80834	-9.8149
Elem	Si	Sn	Sr	Te	Ti	Ti	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	599.65	-16.824	31.908	-24.595	10749.	2.1891	524.59
Stddev	3.95	.199	.289	1.650	67.	2.8409	3.53
%RSD	.65794	1.1840	.90709	6.7066	.62256	129.77	.67385
#1	602.44	-16.683	32.113	-25.762	10796.	.18030	527.09
#2	596.86	-16.964	31.704	-23.429	10702.	4.1979	522.09

Sample Name: S 710156-028-028-1/1 Acquired: 12/3/2007 16:39:11 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	161.66
Stddev	.62
%RSD	.38659

#1	162.10
#2	161.21

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43146.	14503.	559340.
Stddev	99.	296.	5270.
%RSD	.22857	2.0425	.94222

#1	43077.	14713.	555610.
#2	43216.	14294.	563060.

Sample Name: S 710156-029-029-1/1 Acquired: 12/3/2007 16:42:30 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-80389	40387.	-5.6842	2.8844	59.226	2.7393	1471.3
Stddev	.07096	287.	1.1195	.0540	.050	.1110	2.0
%RSD	8.8268	.71016	19.696	1.8723	.08463	4.0527	.13636

#1	-85407	40184.	-6.4758	2.8462	59.262	2.8178	1472.7
#2	-75372	40590.	-4.8925	2.9226	59.191	2.6608	1469.8

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.7427	18.430	508.68	126.9	201500.	919.97	1651.
Stddev	.1588	.076	2.49	.7	1241.	21.23	7.
%RSD	9.1136	.41452	.49023	.5735	.61596	2.3072	.4332

#1	-1.6304	18.484	506.91	127.4	200620.	904.97	1646.
#2	-1.8550	18.376	510.44	126.4	202380.	934.98	1657.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	801.33	3.4189	102.68	123.04	22.155	.40870	-11.021
Stddev	.86	.0292	6.75	.05	2.293	1.3119	1.423
%RSD	.10702	.85494	6.5775	.04050	10.349	320.98	12.911

#1	800.72	3.4396	107.46	123.00	23.777	-.51893	-12.027
#2	801.93	3.3983	97.906	123.07	20.534	1.3363	-10.015

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	560.19	-18.220	25.495	-27.821	11187.	2.6728	526.92
Stddev	.82	.432	.016	4.817	9.	.8001	.34
%RSD	.14673	2.3718	.06218	17.315	.08135	29.934	.06380

#1	560.78	-18.526	25.484	-31.228	11193.	2.1071	526.68
#2	559.61	-17.915	25.506	-24.415	11181.	3.2386	527.15

Sample Name: S 710156-029-029-1/1 Acquired: 12/3/2007 16:42:30 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	160.66
Stddev	.70
%RSD	.43469

#1	161.16
#2	160.17

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43022.	14391.	557820.
Stddev	157.	71.	1560.
%RSD	.36472	.49561	.27969

#1	42911.	14442.	558930.
#2	43133.	14341.	556720.

Sample Name: S 710156-030-030-1/1 Acquired: 12/3/2007 16:45:49 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	43.206	49242.	26.151	84.543	455.02	2.3200	2146.7
Stddev	.100	620.	2.776	.171	1.09	.0045	19.1
%RSD	.23124	1.2582	10.616	.20281	.24038	.19218	.88953
#1	43.276	48804.	24.188	84.664	454.25	2.3168	2133.2
#2	43.135	49680.	28.114	84.422	455.79	2.3231	2160.2
Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.4430	149.32	341.59	284.6	206740.	1971.5	1590.
Stddev	.1414	.22	.15	.3	2957.	16.7	21.
%RSD	9.8003	.14751	.04300	.1227	1.4302	.84881	1.316
#1	-1.5430	149.48	341.70	284.4	204650.	1983.3	1575.
#2	-1.3430	149.17	341.49	284.9	208830.	1959.7	1605.
Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	19601.	3.1413	108.24	167.46	35.067	.64935	-42.227
Stddev	106.	.0197	5.14	.28	.760	1.2236	.223
%RSD	.53943	.62566	4.7470	.16726	2.1682	188.43	.52708
#1	19675.	3.1552	111.87	167.26	35.605	1.5146	-42.385
#2	19526.	3.1274	104.61	167.66	34.529	-.21585	-42.070
Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	608.65	-13.912	56.926	-28.033	9339.8	13.649	456.23
Stddev	.44	.672	.062	1.047	80.6	.829	.43
%RSD	.07256	4.8275	.10948	3.7333	.86274	6.0726	.09369
#1	608.96	-13.437	56.882	-28.773	9282.8	13.063	455.93
#2	608.34	-14.387	56.970	-27.293	9396.8	14.235	456.53

Sample Name: S 710156-030-030-1/1 Acquired: 12/3/2007 16:45:49 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	196.80
Stddev	.12
%RSD	.06297

#1	196.88
#2	196.71

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42897.	14598.	554870.
Stddev	77.	215.	63.
%RSD	.17863	1.4713	.01130

#1	42842.	14750.	554920.
#2	42951.	14446.	554830.

Sample Name: S 710156-031-031-1/1 Acquired: 12/3/2007 16:49:13 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	14.369	49284.	5.6482	28.894	137.82	2.3245	839.76
Stddev	.538	938.	.7452	.989	.31	.0278	14.03
%RSD	3.7424	1.9041	13.194	3.4226	.22363	1.1942	1.6706

#1	13.989	48621.	5.1213	28.195	137.60	2.3049	829.84
#2	14.749	49948.	6.1752	29.594	138.04	2.3441	849.68

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.6754	59.763	408.56	200.2	209450.	1397.7	1298.
Stddev	.3060	.176	2.49	.1	4228.	10.8	26.
%RSD	18.265	.29426	.60891	.0550	2.0188	.77197	1.968

#1	-1.4590	59.887	406.80	200.3	206460.	1390.0	1280.
#2	-1.8918	59.639	410.32	200.2	212440.	1405.3	1316.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	7073.4	2.7156	146.39	149.36	23.829	-.13264	-20.528
Stddev	18.8	.0263	26.33	.47	2.379	.07943	2.187
%RSD	.26563	.96994	17.988	.31320	9.9836	59.887	10.655

#1	7060.1	2.6969	127.77	149.03	25.511	-.18881	-18.981
#2	7086.7	2.7342	165.01	149.69	22.147	-.07647	-22.075

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	672.12	-15.181	21.416	-24.963	9543.0	2.0614	488.28
Stddev	1.09	.345	.080	2.718	.9	1.2132	1.51
%RSD	.16179	2.2694	.37165	10.889	.00941	58.854	.30860

#1	671.35	-14.937	21.360	-26.885	9543.6	2.9192	487.21
#2	672.89	-15.424	21.473	-23.041	9542.4	1.2035	489.34

Sample Name: S 710156-031-031-1/1 Acquired: 12/3/2007 16:49:13 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	156.58
Stddev	1.15
%RSD	.73437

#1	157.40
#2	155.77

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42938.	14515.	556660.
Stddev	8.	206.	2070.
%RSD	.01785	1.4183	.37183

#1	42932.	14660.	558130.
#2	42943.	14369.	555200.

Sample Name: CCV Acquired: 12/3/2007 16:52:37 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	526.05	51526.	531.76	517.10	503.99	51.718
Stddev	1.14	703.	1.11	.97	2.61	.014
%RSD	.21620	1.3641	.20804	.18707	.51736	.02708

#1	526.85	51029.	530.98	517.78	505.84	51.709
#2	525.24	52023.	532.54	516.42	502.15	51.728

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Ca	Cd	Co	Cr	Cu2199	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	101780.	515.82	510.06	507.78	517.1	49796.
Stddev	1667.	1.37	1.32	.43	1.2	843.
%RSD	1.6374	.26519	.25962	.08454	.2223	1.6927

#1	100610.	516.79	510.99	507.48	516.3	49200.
#2	102960.	514.85	509.12	508.08	517.9	50392.

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	K	Mg2802	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	25171.	F 100000.	504.53	527.08	104910.	506.15
Stddev	297.	2349.	1.04	.05	1699.	.34
%RSD	1.1785	2.349	.20611	.00901	1.6191	.06626

#1	24962.	98360.	505.26	527.12	103710.	506.39
#2	25381.	101700.	503.79	527.05	106110.	505.91

Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		500.0				
Range		10.00%				

Sample Name: CCV Acquired: 12/3/2007 16:52:37 Type: QC
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	515.81	526.56	526.28	533.96	520.12	506.17
Stddev	.88	1.69	2.10	.90	1.28	3.79
%RSD	.17008	.32039	.39897	.16807	.24551	.74825

#1	515.19	527.76	527.77	533.33	521.03	508.85
#2	516.43	525.37	524.80	534.60	519.22	503.49

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						
Range						

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	517.95	519.68	522.57	518.17	519.45
Stddev	.34	.02	3.66	.87	1.17
%RSD	.06492	.00455	.70008	.16755	.22583

#1	517.72	519.67	525.16	517.55	520.28
#2	518.19	519.70	519.99	518.78	518.62

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42188.	14349.	543600.
Stddev	21.	266.	274.
%RSD	.04886	1.8534	.05048

#1	42174.	14537.	543800.
#2	42203.	14161.	543410.

Sample Name: CCB Acquired: 12/3/2007 16:56:06 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.12585	30.704	.36864	-9.9046	.00057	.00858	15.902	.11558
Stddev	.57787	6.045	1.6438	.1047	.02658	.00753	1.884	.02917
%RSD	459.19	19.689	445.92	1.0566	4702.9	87.809	11.845	25.234
#1	.53446	34.978	-.79371	-9.8306	.01936	.00325	17.234	.13621
#2	-.28277	26.429	1.5310	-9.9786	-.01823	.01391	14.570	.09496

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.11005	-.22141	-.8019	9.0604	10.055	F 7.370	.09348	.42945
Stddev	.03825	.19713	.1820	3.8220	30.784	.571	.05580	.15335
%RSD	34.760	89.033	22.70	42.184	306.16	7.746	59.694	35.710
#1	.13710	-.36080	-.9306	6.3578	-11.713	7.774	.05402	.32101
#2	.08300	-.08202	-.6732	11.763	31.822	6.967	.13294	.53789

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit						3.000		
Low Limit						-3.000		

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	81.022	.08225	1.0585	-.97165	-2.6445	.05076	.60506	.02692
Stddev	22.715	.03060	.6512	.08245	.1276	.52193	.61413	.00608
%RSD	28.036	37.201	61.524	8.4854	4.8264	1028.2	101.50	22.579
#1	97.084	.10389	.59799	-1.0299	-2.5543	-.31830	1.0393	.03121
#2	64.960	.06061	1.5189	-.91335	-2.7348	.41982	.17081	.02262

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 12/3/2007 16:56:06 Type: QC
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Te	Ti	Tl	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-2.1207	.31389	-1.5064	.08408	.04165
Stddev	1.2911	.05997	1.3537	.10278	.00155
%RSD	60.884	19.107	89.867	122.24	3.7301

#1	-1.2077	.27148	-2.4636	.01140	.04055
#2	-3.0336	.35630	-.54915	.15675	.04274

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43059.	14018.	553980.
Stddev	95.	137.	135.
%RSD	.22117	.97745	.02441

#1	42992.	13921.	553880.
#2	43126.	14115.	554070.

Sample Name: S 710156-032-032-1/1 Acquired: 12/3/2007 16:59:23 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	6.6943	38560.	1.9238	12.164	56.784	1.5147	719.70
Stddev	.1458	283.	4.0625	.511	.130	.0228	9.36
%RSD	2.1776	.73505	211.16	4.2028	.22891	1.5041	1.3010

#1	6.5912	38761.	-.94876	11.802	56.692	1.4986	726.32
#2	6.7973	38360.	4.7965	12.525	56.876	1.5308	713.08

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.5687	34.064	318.14	144.5	153120.	896.32	948.1
Stddev	.0598	.216	1.45	.9	657.	63.98	4.4
%RSD	3.8103	.63361	.45453	.5893	.42911	7.1384	.4612

#1	-1.6110	34.216	319.16	143.9	153580.	941.56	951.2
#2	-1.5265	33.911	317.12	145.1	152650.	851.08	945.0

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	3705.6	1.9900	101.67	99.189	18.316	1.8900	-14.525
Stddev	15.9	.3651	4.51	.337	2.631	.1161	.199
%RSD	.42795	18.346	4.4403	.34012	14.362	6.1432	1.3667

#1	3694.4	1.7318	98.478	99.427	16.456	1.9721	-14.385
#2	3716.8	2.2481	104.86	98.950	20.176	1.8079	-14.665

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	477.33	-9.3912	19.758	-18.194	6492.5	3.6278	339.18
Stddev	.58	.3314	.005	1.990	31.6	.9790	.10
%RSD	.12166	3.5284	.02313	10.940	.48619	26.987	.03011

#1	477.74	-9.1569	19.754	-19.602	6470.2	2.9355	339.11
#2	476.92	-9.6255	19.761	-16.787	6514.9	4.3201	339.26

Sample Name: S 710156-032-032-1/1 Acquired: 12/3/2007 16:59:23 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	102.67
Stddev	.04
%RSD	.04289

#1	102.64
#2	102.70

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42816.	14143.	554160.
Stddev	48.	31.	148.
%RSD	.11269	.22141	.02677

#1	42781.	14121.	554050.
#2	42850.	14165.	554260.

Sample Name: S 710156-033-033-1/1 Acquired: 12/3/2007 17:02:48 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.91868	40431.	-5.0957	-.26017	35.116	2.1970	860.67
Stddev	.31878	160.	2.2253	.03868	.074	.0365	6.06
%RSD	34.700	.39568	43.670	14.866	.20948	1.6600	.70399
#1	-.69327	40544.	-6.6693	-.23283	35.168	2.1712	864.95
#2	-1.1441	40318.	-3.5222	-.28752	35.064	2.2228	856.39
Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-2.1200	15.270	420.10	123.9	187120.	690.25	1198.
Stddev	.0406	.336	.35	1.7	399.	20.20	.
%RSD	1.9168	2.1986	.08333	1.357	.21336	2.9269	.0020
#1	-2.1488	15.507	420.35	122.7	187400.	704.54	1198.
#2	-2.0913	15.032	419.85	125.1	186840.	675.96	1198.
Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	790.83	3.1758	85.785	102.48	17.225	-.27952	-7.3957
Stddev	1.29	.4894	15.439	1.08	1.458	.27033	2.8278
%RSD	.16304	15.411	17.997	1.0571	8.4633	96.712	38.236
#1	791.74	2.8298	96.702	103.25	18.256	-.47067	-9.3953
#2	789.92	3.5219	74.868	101.72	16.194	-.08837	-5.3962
Elem	Si	Sn	Sr	Te	Ti	Ti	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	667.07	-13.682	21.876	-21.340	9044.5	1.7854	430.52
Stddev	1.49	.427	.049	.456	10.1	1.3090	.67
%RSD	.22322	3.1214	.22533	2.1377	.11137	73.316	.15587
#1	668.12	-13.380	21.911	-21.018	9037.4	.85978	430.99
#2	666.01	-13.984	21.841	-21.663	9051.7	2.7109	430.05

Sample Name: S 710156-033-033-1/1 Acquired: 12/3/2007 17:02:48 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment: .

Elem	Zn
Units	ppb
Avg	122.46
Stddev	.18
%RSD	.15094

#1	122.60
#2	122.33

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42788.	13968.	551190.
Stddev	21.	34.	77.
%RSD	.05003	.24294	.01401

#1	42773.	13944.	551240.
#2	42803.	13992.	551140.

Sample Name: S 710156-034-034-1/1
 Method: TRACE(v2) Mode: CONC
 User: admin Custom ID1:
 Comment:

Acquired: 12/3/2007 17:06:08
 Corr. Factor: 1.000000
 Custom ID2:
 Custom ID3:

Type: Unk

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-3.6246	61406.	-14.825	.46758	46.066	3.6812	449.80
Stddev	.0316	1747.	4.029	1.0223	.259	.0179	9.36
%RSD	.87154	2.8445	27.180	218.63	.56224	.48714	2.0811
#1	-3.6470	60171.	-17.674	-.25528	45.883	3.6939	443.18
#2	-3.6023	62642.	-11.976	1.1904	46.250	3.6685	456.42
Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-3.5554	10.317	557.58	113.9	290190.	665.68	1076.
Stddev	.6283	.229	.78	.4	8164.	46.69	32.
%RSD	17.670	2.2180	.14057	.3507	2.8133	7.0140	2.932
#1	-3.1112	10.479	557.03	114.2	284420.	632.67	1054.
#2	-3.9997	10.156	558.14	113.6	295970.	698.70	1098.
Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	441.87	5.5636	78.144	103.07	27.414	-.14215	-9.2453
Stddev	2.17	.2319	9.383	.83	.794	2.9300	.9485
%RSD	.49121	4.1689	12.007	.80370	2.8956	2061.2	10.259
#1	440.34	5.7276	71.510	102.48	27.976	1.9296	-9.9160
#2	443.41	5.3996	84.779	103.66	26.853	-2.2139	-8.5747
Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	696.88	-22.114	60.359	-37.632	14312.	1.4698	618.92
Stddev	.32	.200	.323	6.336	29.	.7914	2.09
%RSD	.04599	.90636	.53564	16.837	.20272	53.843	.33749
#1	697.11	-22.256	60.130	-42.112	14333.	.91023	617.45
#2	696.66	-21.972	60.588	-33.152	14292.	2.0294	620.40

Sample Name: S 710156-034-034-1/1 Acquired: 12/3/2007 17:06:08 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	94.198
Stddev	1.472
%RSD	1.5624

#1	95.239
#2	93.157

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43008.	14303.	552860.
Stddev	269.	316.	662.
%RSD	.62632	2.2074	.11982

#1	42817.	14527.	553330.
#2	43198.	14080.	552400.

Sample Name: S 710156-035-035-1/1 Acquired: 12/3/2007 17:09:25 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.8704	32106.	-7.0437	1.8974	66.988	3.0099	2395.3
Stddev	.1428	72.	1.8232	.3172	.258	.0113	6.2
%RSD	7.6358	.22438	25.884	16.717	.38499	.37653	.25836

#1	-1.9714	32157.	-8.3329	1.6731	66.806	3.0180	2399.7
#2	-1.7694	32055.	-5.7545	2.1217	67.170	3.0019	2390.9

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-2.5629	16.018	411.66	145.6	245480.	719.77	1956.
Stddev	.0351	.404	.69	1.2	246.	35.75	14.
%RSD	1.3678	2.5238	.16760	.8478	.10016	4.9668	.7381

#1	-2.5877	16.303	411.17	144.7	245300.	745.05	1966.
#2	-2.5382	15.732	412.15	146.5	245650.	694.49	1946.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	589.86	3.5258	108.49	85.094	52.581	3.8617	-9.0743
Stddev	1.43	.0770	6.68	.069	.307	.0066	1.5557
%RSD	.24205	2.1832	6.1588	.08106	.58396	.17120	17.144

#1	588.85	3.4713	103.76	85.045	52.364	3.8571	-7.9743
#2	590.87	3.5802	113.21	85.143	52.799	3.8664	-10.174

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	612.28	-17.824	122.43	-29.357	12082.	1.4728	579.07
Stddev	1.89	.033	.28	2.445	83.	.1402	1.17
%RSD	.30786	.18389	.22520	8.3284	.68680	9.5195	.20153

#1	610.95	-17.847	122.24	-31.086	12023.	1.5719	578.25
#2	613.61	-17.800	122.63	-27.628	12141.	1.3736	579.90

Sample Name: S 710156-035-035-1/1 Acquired: 12/3/2007 17:09:25 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	129.64
Stddev	.63
%RSD	.48645

#1	130.09
#2	129.19

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43430.	14310.	562640.
Stddev	181.	70.	1318.
%RSD	.41600	.48778	.23428

#1	43303.	14261.	563580.
#2	43558.	14359.	561710.

Sample Name: S 710156-036-036-1/1 Acquired: 12/3/2007 17:12:43 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-2.1070	13992.	-7.1990	.60247	44.096	3.5162	550.49
Stddev	.1105	61.	.0994	.43554	.403	.0512	8.20
%RSD	5.2427	.43586	1.3805	72.292	.91310	1.4556	1.4895

#1	-2.0289	14035.	-7.2692	.91044	43.811	3.5524	556.29
#2	-2.1851	13949.	-7.1287	.29450	44.381	3.4800	544.70

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-3.3692	22.522	482.83	146.6	313530.	242.16	1557.
Stddev	.2259	.135	4.05	2.2	1872.	12.41	11.
%RSD	6.7039	.59862	.83882	1.526	.59710	5.1234	.6851

#1	-3.5289	22.427	479.96	148.1	314860.	233.39	1564.
#2	-3.2095	22.618	485.69	145.0	312210.	250.93	1549.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	689.86	5.1814	73.829	99.518	33.044	2.0842	-8.9688
Stddev	5.95	.3205	21.063	.547	2.648	1.5766	.8663
%RSD	.86307	6.1851	28.530	.54980	8.0120	75.644	9.6595

#1	685.65	4.9548	88.723	99.905	34.916	3.1991	-8.3562
#2	694.07	5.4080	58.935	99.131	31.172	.96941	-9.5814

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	433.21	-20.940	63.503	-33.161	14232.	-.55793	794.31
Stddev	4.85	.928	.452	.157	70.	1.7026	6.65
%RSD	1.1204	4.4308	.71178	.47366	.49410	305.15	.83762

#1	429.78	-20.284	63.183	-33.272	14182.	.64596	789.61
#2	436.64	-21.596	63.823	-33.050	14281.	-1.7618	799.02

Sample Name: S 710156-036-036-1/1 Acquired: 12/3/2007 17:12:43 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	147.05
Stddev	.69
%RSD	.46801

#1	147.54
#2	146.56

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43181.	14420.	563140.
Stddev	128.	95.	4386.
%RSD	.29644	.65591	.77876

#1	43091.	14354.	566240.
#2	43272.	14487.	560040.

Sample Name: S 710156-037-037-1/1 Acquired: 12/3/2007 17:16:02 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.8732	13183.	-8.6142	-.95540	42.795	3.5389	364.61
Stddev	.2604	12.	1.6505	.19521	.303	.0764	3.04
%RSD	13.901	.09033	19.161	20.432	.70865	2.1592	.83326

#1	-2.0573	13174.	-9.7813	-.81736	43.010	3.4848	366.76
#2	-1.6891	13191.	-7.4471	-1.0934	42.581	3.5929	362.46

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-2.3344	23.778	451.46	132.7	264780.	186.83	1610.
Stddev	.1174	.433	2.92	.1	2021.	13.10	9.
%RSD	5.0283	1.8208	.64619	.0616	.76319	7.0094	.5715

#1	-2.2514	23.472	453.52	132.7	263350.	196.09	1603.
#2	-2.4174	24.084	449.40	132.8	266210.	177.57	1616.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	579.17	3.7539	53.551	87.971	25.600	.17628	-11.320
Stddev	4.11	.0478	9.518	.245	.576	.26650	.523
%RSD	.70925	1.2746	17.774	.27845	2.2516	151.18	4.6222

#1	582.07	3.7877	46.820	87.798	25.193	.36473	-10.950
#2	576.26	3.7200	60.281	88.144	26.008	-.01216	-11.689

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	400.17	-23.388	72.217	-28.827	14461.	2.6441	757.60
Stddev	.05	.102	.476	2.797	157.	.1264	5.87
%RSD	.01260	.43462	.65938	9.7033	1.0870	4.7797	.77415

#1	400.14	-23.459	72.553	-26.849	14572.	2.7335	761.75
#2	400.21	-23.316	71.880	-30.805	14350.	2.5547	753.45

Sample Name: S 710156-037-037-1/1 Acquired: 12/3/2007 17:16:02 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	142.61
Stddev	.13
%RSD	.09359

#1	142.70
#2	142.51

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43156.	14446.	561760.
Stddev	57.	144.	4089.
%RSD	.13252	1.0001	.72786

#1	43197.	14549.	558870.
#2	43116.	14344.	564650.

Sample Name: S 710156-038-038-1/1 Acquired: 12/3/2007 17:19:20 Type: Unk
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.82245	66560.	-5.4831	.81104	286.85	2.2296	1330.8
Stddev	.17169	2017.	.4403	.29537	1.44	.0098	38.0
%RSD	20.875	3.0308	8.0300	36.419	.50051	.43836	2.8550

#1	.70105	65134.	-5.1718	.60218	287.87	2.2365	1303.9
#2	.94385	67987.	-5.7944	1.0199	285.84	2.2227	1357.6

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-1.0779	31.434	362.51	96.91	149540.	989.93	2265.
Stddev	.2034	.267	1.54	.60	4473.	87.12	68.
%RSD	18.869	.84972	.42555	.6190	2.9915	8.8010	2.986

#1	-.93406	31.245	363.60	96.48	146370.	928.32	2217.
#2	-1.2217	31.622	361.42	97.33	152700.	1051.5	2313.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1152.4	2.2067	211.07	192.37	15.297	-.37374	-9.8851
Stddev	6.1	.0596	3.75	.63	1.522	.21938	1.3931
%RSD	.52815	2.7006	1.7771	.32776	9.9525	58.697	14.093

#1	1156.7	2.2488	208.42	191.93	16.374	-.52886	-8.9000
#2	1148.0	2.1646	213.72	192.82	14.221	-.21862	-10.870

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	685.79	-14.757	27.264	-22.461	9109.6	1.7572	363.77
Stddev	2.52	1.105	.118	.316	60.2	1.0309	1.92
%RSD	.36818	7.4863	.43361	1.4078	.66078	58.665	.52646

#1	687.57	-15.538	27.348	-22.237	9152.2	1.0283	365.13
#2	684.00	-13.976	27.180	-22.684	9067.0	2.4861	362.42

Sample Name: S 710156-038-038-1/1 Acquired: 12/3/2007 17:19:20 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	91.097
Stddev	.029
%RSD	.03174

#1	91.077
#2	91.118

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43289.	14719.	566210.
Stddev	81.	319.	2697.
%RSD	.18825	2.1644	.47630

#1	43346.	14944.	564300.
#2	43231.	14493.	568120.

Sample Name: S 710156-039-039-1/1
 Method: TRACE(v2) Mode: CONC
 User: admin Custom ID1:
 Comment:

Acquired: 12/3/2007 17:22:39
 Corr. Factor: 1.000000
 Custom ID2:
 Custom ID3:

Type: Unk

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	32.507	56625.	11.580	61.712	1039.3	2.9775	4205.6
Stddev	.103	210.	.643	1.178	9.7	.0645	13.0
%RSD	.31827	.37116	5.5543	1.9092	.93544	2.1653	.30999

#1	32.580	56773.	11.125	62.545	1046.2	2.9319	4196.4
#2	32.434	56476.	12.034	60.879	1032.4	3.0231	4214.8

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.41355	122.33	241.92	267.0	150130.	2501.8	4159.
Stddev	.05224	.55	1.70	2.2	379.	35.3	12.
%RSD	12.631	.44565	.70349	.8086	.25253	1.4128	.2786

#1	-.45049	122.72	243.13	265.5	150400.	2526.8	4167.
#2	-.37661	121.95	240.72	268.6	149860.	2476.8	4151.

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	14836.	1.5297	247.21	264.08	28.995	-.06401	-32.960
Stddev	135.	.0781	7.22	.13	.364	1.3286	.346
%RSD	.90880	5.1047	2.9200	.04826	1.2541	2075.7	1.0490

#1	14931.	1.5849	242.11	263.99	28.738	-1.0035	-33.204
#2	14741.	1.4745	252.32	264.17	29.252	.87547	-32.716

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	641.59	-17.286	64.350	-25.489	10031.	9.6058	373.94
Stddev	4.13	.877	.447	.061	65.	.0334	2.34
%RSD	.64296	5.0733	.69426	.24087	.65214	.34742	.62586

#1	644.51	-17.906	64.666	-25.446	9984.8	9.6293	375.59
#2	638.67	-16.666	64.034	-25.532	10077.	9.5822	372.28

Sample Name: S 710156-039-039-1/1 Acquired: 12/3/2007 17:22:39 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	527.51
Stddev	1.58
%RSD	.29880

#1	528.62
#2	526.39

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	45466.	15004.	586250.
Stddev	106.	42.	4233.
%RSD	.23340	.27975	.72201

#1	45391.	14975.	583260.
#2	45541.	15034.	589240.

Sample Name: S 710156-040-040-1/1
 Method: TRACE(v2) Mode: CONC
 User: admin Custom ID1:
 Comment:

Acquired: 12/3/2007 17:26:09
 Corr. Factor: 1.000000
 Custom ID2: Custom ID3:

Type: Unk

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-41774	46104.	-6.7196	2.0849	82.048	3.3539	1518.6
Stddev	.24472	1060.	5.1349	.9445	.494	.0366	46.2
%RSD	58.582	2.2992	76.417	45.301	.60194	1.0922	3.0450
#1	-59078	45355.	-10.351	1.4170	82.397	3.3280	1485.9
#2	-24470	46854.	-3.0887	2.7527	81.699	3.3798	1551.3
Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-2.0650	26.198	500.93	127.4	218420.	872.27	1834.
Stddev	.0648	.186	2.43	1.1	5256.	14.87	47.
%RSD	3.1389	.71066	.48568	.8757	2.4064	1.7043	2.575
#1	-2.0192	26.330	502.65	128.2	214700.	861.76	1801.
#2	-2.1108	26.067	499.21	126.6	222140.	882.78	1868.
Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1013.9	2.9951	117.65	135.46	26.332	.25415	-10.820
Stddev	5.9	.2376	33.55	.35	.536	.42866	4.370
%RSD	.58319	7.9327	28.512	.26155	2.0354	168.66	40.389
#1	1018.0	2.8271	93.932	135.21	25.953	-.04896	-13.910
#2	1009.7	3.1631	141.37	135.71	26.711	.55726	-7.7297
Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	682.64	-22.415	31.202	-27.261	13185.	2.6317	583.26
Stddev	5.99	.483	.193	2.812	1.	.1403	4.43
%RSD	.87787	2.1561	.61796	10.315	.00496	5.3295	.75870
#1	686.88	-22.757	31.339	-29.249	13185.	2.5325	586.39
#2	678.41	-22.074	31.066	-25.272	13186.	2.7309	580.13

Sample Name: S 710156-040-040-1/1 Acquired: 12/3/2007 17:26:09 Type: Unk
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Zn
Units	ppb
Avg	148.24
Stddev	.82
%RSD	.55629

#1	148.82
#2	147.65

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	43105.	14158.	561450.
Stddev	46.	4.	1674.
%RSD	.10763	.03022	.29821

#1	43072.	14161.	560260.
#2	43138.	14155.	562630.

Sample Name: CCV Acquired: 12/3/2007 17:32:47 Type: QC
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	527.74	51224.	531.44	516.76	506.12	51.914	100870.
Stddev	2.86	2017.	1.81	1.21	8.81	.404	3479.
%RSD	.54235	3.9383	.33969	.23504	1.7415	.77745	3.4494
#1	525.72	49797.	532.71	515.90	499.89	51.629	98407.
#2	529.77	52650.	530.16	517.62	512.35	52.200	103330.

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Cd	Co	Cr	Cu2199	Fe	K	Mg2802
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	517.52	510.85	510.15	517.5	49231.	25171.	F 99360.
Stddev	.97	.20	4.00	3.1	1582.	827.	2565.
%RSD	.18744	.03926	.78443	.5917	3.2142	3.2859	2.582
#1	518.21	510.99	507.32	515.4	48112.	24586.	97540.
#2	516.84	510.71	512.98	519.7	50350.	25756.	101200.

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value							500.0
Range							10.00%

Elem	Mn	Mo	Na	Ni	Pb	Sb	Se
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	505.55	528.18	103680.	505.89	516.35	527.65	524.22
Stddev	2.37	.36	3055.	1.10	.00	2.27	3.06
%RSD	.46791	.06906	2.9461	.21687	.00074	.43040	.58438
#1	503.88	528.43	101520.	506.66	516.35	526.04	526.39
#2	507.22	527.92	105840.	505.11	516.36	529.25	522.06

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Sample Name: CCV Acquired: 12/3/2007 17:32:47 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Si	Sn	Sr	Te	Ti	Tl	V
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	533.84	520.98	509.71	517.99	523.57	522.26	519.36
Stddev	3.02	.03	4.22	2.16	3.51	2.52	3.21
%RSD	.56507	.00603	.82712	.41733	.67038	.48155	.61811
#1	531.70	521.00	506.73	516.46	521.09	524.04	517.09
#2	535.97	520.96	512.69	519.52	526.06	520.48	521.63
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Zn
Units	ppb
Avg	520.24
Stddev	.33
%RSD	.06426
#1	520.47
#2	520.00

Check ?	Chk Pass
Value	
Range	

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	42732.	14408.	551710.
Stddev	74.	443.	3375.
%RSD	.17406	3.0738	.61173
#1	42679.	14721.	554090.
#2	42784.	14095.	549320.

Sample Name: CCB Acquired: 12/3/2007 17:36:16 Type: QC
Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag	Al	As	B	Ba	Be	Ca	Cd
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	.21078	27.186	.08240	-10.611	-.00223	.00886	20.720	.11154
Stddev	.03241	22.384	1.1971	.477	.01292	.00257	1.490	.02672
%RSD	15.375	82.339	1452.7	4.4985	579.78	28.959	7.1935	23.953
#1	.18787	43.014	.92885	-10.274	.00691	.00705	21.774	.13043
#2	.23370	11.357	-.76404	-10.949	-.01137	.01068	19.666	.09265

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co	Cr	Cu2199	Fe	K	Mg2802	Mn	Mo
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	-.15570	-.15887	.1164	12.342	20.027	F 14.50	.07966	.34121
Stddev	.08516	.40909	.4171	5.554	92.482	.04	.00361	.19780
%RSD	54.697	257.49	358.4	45.000	461.78	.2564	4.5367	57.971
#1	-.09548	-.44814	.4113	16.269	85.422	14.47	.07711	.20134
#2	-.21591	.13040	-.1785	8.4147	-45.367	14.52	.08222	.48108

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit						3.000		
Low Limit						-3.000		

Elem	Na	Ni	Pb	Sb	Se	Si	Sn	Sr
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	87.169	-.03803	-.58315	-.60707	1.1420	-.77766	.41565	.05138
Stddev	25.909	.13398	1.0960	1.2950	.3883	.57359	.06074	.00290
%RSD	29.723	352.26	187.95	213.31	34.000	73.758	14.613	5.6515
#1	105.49	.05671	.19184	.30860	.86746	-.37207	.37270	.05343
#2	68.848	-.13278	-1.3581	-1.5227	1.4166	-1.1832	.45860	.04933

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 12/3/2007 17:36:16 Type: QC
 Method: TRACE(v2) Mode: CONC Corr. Factor: 1.000000
 User: admin Custom ID1: Custom ID2: Custom ID3:
 Comment:

Elem	Te	Ti	Ti	V	Zn
Units	ppb	ppb	ppb	ppb	ppb
Avg	-2.8217	.35978	-.16826	-.05908	.19767
Stddev	.1072	.07636	.10296	.18032	.04719
%RSD	3.8001	21.223	61.192	305.20	23.874

#1	-2.7459	.41377	-.09546	.06842	.23104
#2	-2.8975	.30579	-.24107	-.18658	.16430

Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	Y_2243	Y_3774	Y_3774-2
Units	Cts/S	Cts/S	Cts/S
Avg	44381.	14549.	568120.
Stddev	87.	549.	6352.
%RSD	.19696	3.7723	1.1181

#1	44319.	14937.	563620.
#2	44443.	14161.	572610.

Metals Preparation & Sample Description Log

Prep: 200.7 / 3005A / 3020A / 3050B / 3010A / ILC03.1 / ILM04.1 / ILM05.3 / ILM05.4

Date: 10-24-2007

Batch No.: 202-0273

Analyst: D-J-C

Comments: MOD BLOCK DIGESTION (SOIL)

Reviewed by: /0

Date: 12/17/11

Spike Witness: PR

Pep. Seq: 101635

GPL Work Order No.	Sample	Frac	Size mL (g)	Final Vol. (mL)	Matrix S, W Other	Color Before R, Bl, Y, G, O, V, W, Colorless, Br, Grey, Bk.	Color After	Clarity Before or Soil Texture	Clarity After Clear, Cloudy, Opaque	Soil Artifacts or Water pH
1 BLK	027		1.00	1.00	S				Clear	—
2 BKS	027		1.00							—
3 71015B	001	001-1	1.13		SOIL	brown	yellow	Medium		—
4	MS		1.16							
5	MSD	✓	1.22							
6	002	002-1	1.14							
7	003	003-1	1.18							
8	004	004-1	1.24							
9	005	005-1	1.15							
10	006	006-1	1.16							
11	007	007-1	1.18							
12	008	008-1	1.16							
13	009	009-1	1.21							
14	010	010-1	1.16							
15	011	011-1	1.19							
16	012	012-1	1.18							
17	013	013-1	1.22							
18	014	014-1	1.19							
19	015	015-1	1.19							
20	016	016-1	1.21							
21	017	017-1	1.16							
22	018	018-1	1.21							
23	019	019-1	1.15							
24	✓ 020	020-1	1.22	✓	✓	✓	✓	DEG - 101635	✓	✓
LCS ID/ Amt. Added (ml, g): 0.2 ml (40P27, 40P28, 40P29)						HNO3(1+1) ID: GP-257-164-02				
Spiking ID / Amt. Added (ml): 0.2 ml (40P27, 40P28, 40P29)						HNO3(conc) ID: GP-129-11-08				
(0 ml 1% HNO3, 10 ml H2O2 conc, 7 ml H2O, 10 ml HCL conc)						HCl(conc) ID: GP-129-11-07				
Temperature C: 44°C						HCl(1+1) ID: —				
						Peroxide ID: GP-129-10-12				

Metals Preparation & Sample Description Log

Prep: 200.7 / 3005A / 3020A / (3050B) 3010A / ILC03.1 / ILM04.1 / ILM05.3 / ILM05.4

Date: 10-24-2007

Batch No.: 202-028

Analyst: D-S-S Comments: MOD BLOCK DIGESTION (SOIL)

Reviewed by: LD Date: 12/3/07 Spike Witness: RC Pep. Seq: 101607

GPL Work Order No.	Sample	Frac	Size mL (g)	Final Vol. (mL)	Matrix S, W Other	Color Before	Color After	Clarity Before	Clarity After	Soil Artifacts
						R, Bl, Y, G, O, V, W, Colorless, Br, Grey, Bk.		or Soil Texture	Clear, Cloudy, Opaque	or Water pH
1 BLK	028		1.00	100	S				clear	—
2 BKS	028		1.00							—
3 710152	021	021	1.16		SOIL	brown	yellow	Medium		—
4	MS		1.19							
5	MSD	✓	1.22							
6	022	022	1.21							
7	023	023	1.15							
8	024	024	1.22							
9	025	025	1.23							
10	026	026	1.22							
11	027	027	1.19							
12	028	028	1.18							
13	029	029	1.27							
14	030	030	1.25							
15	031	031	1.23							
16	032	032	1.22							
17	033	033	1.20							
18	034	034	1.23							
19	035	035	1.18							
20	036	036	1.24							
21	037	037	1.16							
22	038	038	1.26							
23	039	039	1.26							
24	✓ 040	040	1.19	✓	✓	✓	✓	D-S-S - 10-24-2007	✓	
LCS ID/ Amt. Added (ml, g): 0.2 ml (40827, 40828, 40829)						HNO3(1+1) ID: GP-037-164-02				
Spiking ID / Amt. Added (ml): 0.2 ml (40822, 40828, 40829)						HNO3(conc) ID: GP-129-11-08				
10 ml 1:1 HNO3, 10 ml HNO3 conc, 7 ml H2O2, 10 ml H2O2						HCl(conc) ID: GP-129-11-07				
Temperature C: 74°C						HCl(1+1) ID: —				
						Peroxide ID: GP-129-10-12				

Metals Preparation & Sample Description Log

Prep: 200.7 / 3005A / 3020A / 3050B / 3010A / ILC03.1 / ILM04.1 / ILM05.3 / ILM05.4

Date: 10-27-2007

Batch No.: 202-029

Analyst: D-S-S Comments: MOD BLOCK DIGESTION (SOIL)

Reviewed by: RA Date: 11-7-07 Spike Witness: RB Pep. Seq: 101636

GPL Work Order No.	Sample	Frac	Size mL (g)	Final Vol. (mL)	Matrix S, W Other	Color Before R, Bl, Y, G, O, V, W, Colorless, Br, Grey, Bk.	Color After	Clarity Before or Soil Texture	Clarity After Clear, Cloudy, Opaque	Soil Artifacts or Water pH
1 BLK	29		1.00	100	S				Clear	-
2 BKS	29		1.00							-
3 71015B	041	041 1/4	1.15		Soil	Brown	Yellow Medm.			-
4	MS	041 1/4	1.19							
5	MSD	041 1/4	1.26							
6	042	042 1/4	1.16							
7	043	043 1/4	1.20							
8	044	044 1/4	1.23							
9	045	045 1/4	1.23							
10	046	046 1/4	1.19							
11	047	047 1/4	1.22							
12	048	048 1/4	1.23							
13	049	049 1/4	1.23							
14	050	050 1/4	1.22							
15	057	057 1/4	1.16							
16	052	052 1/4	1.21	✓	✓	✓	✓	✓	✓	✓
17										
18										
19										
20										
21										
22										
23										
24										

LCS ID/ Amt. Added (ml, g): 0.2 ml (40827, 40828, 40829)	HNO3(1+1) ID: 6P-057-164-02
Spiking ID / Amt. Added (ml): 0.2 ml (40827, 40828, 40829)	HNO3(conc) ID: 6P-129-11-08
10 ml 1:1 HNO3, 10 ml H2O, 7 ml H2O, 10 ml H2O	HCl(conc) ID: 6P-129-11-07
Temperature C: 94°C	HCl(1+1) ID: -
	Peroxide ID: 6P-129-10-12



GPL Laboratories, LLLP
Percent Solids Determination Log

Method Title: CLP_SOLIDS Analyst: Keita Namory
Method Reference: Percent Solids by CLP Reviewed By/Date:
Analytical Balance ID: Saratorius CP153 Analytical Batch: 108394
Date/Time In (Oven): 12/03/2007 08:35 Oven Temperature: 105C
Date/Time Out (Oven): 12/04/2007 08:35 Oven Temperature: 105C
Dessicator Temp: 22C % Humidity (<20%): 11%

Drying Oven Temp Maintained at 103-105C

SDG	Lab Sample ID	Client Sample ID	Weight of Dish	Weight of Wet Sample + Dish	Weight of Dry Sample + Dish	Percent Moisture	Percent Solids	RPD (<20)
711153	711153-001-001-1/1	NS-MRS01-SS-02-01	1.3190g	10.4630g	8.4320g	22.2%	77.8%	
711153	711153-001-001-1/1D	NS-MRS01-SS-02-01	1.3340g	10.4660g	8.6760g	19.6%	80.4%	3.3
711153	711153-002-002-1/1	NS-EDT-SS-02-05	1.3300g	10.9420g	9.0020g	20.2%	79.8%	
711155	711155-001-001-1/2	DUP1SS	1.3280g	10.5060g	8.7600g	19.0%	81.0%	
711155	711155-002-003-1/2	DUP2SS	1.3200g	10.8750g	8.3130g	26.8%	73.2%	
711156	711156-005-011-1/2	NAL-RC-SS-02-01	1.3290g	10.9110g	8.8630g	21.4%	78.6%	
711156	711156-006-013-1/2	NAL-RC-SS-02-02	1.3270g	10.3830g	7.7750g	28.8%	71.2%	
711156	711156-007-015-1/2	NAL-RC-SS-02-03	1.3220g	10.6550g	8.4770g	23.3%	76.7%	
711156	711156-016-037-1/2	NAL-SB-SS-02-02	1.3250g	10.3830g	7.9580g	26.8%	73.2%	
711156	711156-017-039-1/2	NAL-SB-SS-02-01	1.3270g	10.6670g	9.0400g	17.4%	82.6%	
711156	711156-018-041-1/2	NAL-SB-SS-02-03	1.3180g	10.5030g	9.6600g	9.2%	90.8%	
711156	711156-019-043-1/2	NAL-FS-SS-02-02	1.3140g	10.3670g	8.6290g	19.2%	80.8%	
711156	711156-020-045-1/2	NAL-FS-SS-02-01	1.3270g	10.8860g	9.1150g	18.5%	81.5%	
711156	711156-021-047-1/2	NAL-BG-SS-02-02	1.3320g	10.1410g	9.0630g	12.2%	87.8%	
711156	711156-022-049-1/2	NAL-BG-SD-02-03	1.3140g	10.3920g	8.3120g	22.9%	77.1%	
711156	711156-023-051-1/2	NAL-BG-SS-02-01	1.3300g	10.2700g	8.2020g	23.1%	76.9%	

Sample ID	Class	Method	Q	Anal Date	Tech	SEQ No.	Multip	M Prep	R Client	A	B	C	Calculate	Meth	Col	Col	C	Perce	Last Qc Sample
1																			
2																			
3																			
4	711153-001-0	SMP	CLP_SOLIDS	12-04-07 08:3	1300-34	108394	00000	S	Y NS-MR	1.31900	10.46300	8.43200	77.7887	1.0000			1	22.21	
5	711153-001-0	AMD	CLP_SOLIDS	12-04-07 08:3	1300-34	108394	00000	S	Y HS-MR	1.32400	10.46600	8.67600	80.3986	1.0000			1	19.60	
6	711153-002-0	SMP	CLP_SOLIDS	12-04-07 08:3	1300-34	108394	00000	S	Y NS-ED	1.32000	10.34200	9.00200	79.8169	1.0000			1	20.15	
7	711155-001-0	SMP	CLP_SOLIDS	12-04-07 08:3	1300-34	108394	00000	S	Y DUP-15	1.32900	10.50500	8.75000	80.9762	1.0000			1	19.02	
8	711155-002-0	SMP	CLP_SOLIDS	12-04-07 08:3	1300-34	108394	00000	S	Y DUP-25	1.32000	10.57500	8.31300	73.1565	1.0000			1	26.81	
9	711156-005-0	SMP	CLP_SOLIDS	12-04-07 08:3	1300-34	108394	00000	S	Y HAL-RC	1.32900	10.51100	8.86300	78.6266	1.0000			1	21.37	
10	711156-006-0	SMP	CLP_SOLIDS	12-04-07 08:3	1300-34	108394	00000	S	Y HAL-RC	1.32700	10.38300	7.77500	71.2014	1.0000			1	28.80	
11	711156-007-0	SMP	CLP_SOLIDS	12-04-07 08:3	1300-34	108394	00000	S	Y HAL-RC	1.32200	10.55500	6.47700	76.6635	1.0000			1	23.34	
12	711156-016-0	SMP	CLP_SOLIDS	12-04-07 08:3	1300-34	108394	00000	S	Y HAL-SE	1.32500	10.38300	7.95800	73.2251	1.0000			1	26.77	
13	711156-017-0	SMP	CLP_SOLIDS	12-04-07 08:3	1300-34	108394	00000	S	Y HAL-SB	1.32700	10.55700	9.04000	82.5803	1.0000			1	17.42	
14	711156-018-0	SMP	CLP_SOLIDS	12-04-07 08:3	1300-34	108394	00000	S	Y HAL-SB	1.31800	10.50300	9.66000	90.8220	1.0000			1	9.18	
15	711156-019-0	SMP	CLP_SOLIDS	12-04-07 08:3	1300-34	108394	00000	S	Y HAL-FS	1.31400	10.36700	8.62900	80.8019	1.0000			1	19.20	
16	711156-020-0	SMP	CLP_SOLIDS	12-04-07 08:3	1300-34	108394	00000	S	Y HAL-FS	1.32700	10.88600	9.11500	81.4730	1.0000			1	18.53	
17	711156-021-0	SMP	CLP_SOLIDS	12-04-07 08:3	1300-34	108394	00000	S	Y HAL-B	1.33200	10.14100	9.06300	87.7625	1.0000			1	12.24	
18	711156-022-0	SMP	CLP_SOLIDS	12-04-07 08:3	1300-34	108394	00000	S	Y HAL-B	1.31400	10.39200	8.31200	77.0875	1.0000			1	22.91	
19	711156-023-0	SMP	CLP_SOLIDS	12-04-07 08:3	1300-34	108394	00000	S	Y HAL-B	1.33000	10.27000	8.20200	76.8680	1.0000			1	23.13	

Description (90)	A n	Sample Id (92)	ST Sam	Method (94)	Results (95)	RL Raw (96)	R Results	Multiplier (99)	Reporti ng	Raw Unit	nFinal Result	Sort Order	spk Amount	% Recover	Raw Final (110)
Percent Solids	4	AN711153-001-001-1	SMP	CLP_SOL	77.79	1.0000	77.7900	00000000	PER	PER	77.7900	0	0.0000	0.00	77.7900
Percent Solids	5	AN711153-001-001-1	MD	CLP_SOL	80.4	1.0000	80.4000	00000000	PER	PER	80.4000	0	0.0000	0.00	80.4000
Percent Solids	6	AN711153-002-002-1	SMP	CLP_SOL	79.82	1.0000	79.8200	00000000	PER	PER	79.8200	0	0.0000	0.00	79.8200
Percent Solids	7	AN711155-001-001-1	SMP	CLP_SOL	80.98	1.0000	80.9800	00000000	PER	PER	80.9800	0	0.0000	0.00	80.9800
Percent Solids	8	AN711155-002-003-1	SMP	CLP_SOL	73.19	1.0000	73.1900	00000000	PER	PER	73.1900	0	0.0000	0.00	73.1900
Percent Solids	9	AN711156-005-011-1	SMP	CLP_SOL	78.63	1.0000	78.6300	00000000	PER	PER	78.6300	0	0.0000	0.00	78.6300
Percent Solids	10	AN711156-006-013-1	SMP	CLP_SOL	71.2	1.0000	71.2000	00000000	PER	PER	71.2000	0	0.0000	0.00	71.2000
Percent Solids	11	AN711156-007-015-1	SMP	CLP_SOL	76.66	1.0000	76.6600	00000000	PER	PER	76.6600	0	0.0000	0.00	76.6600
Percent Solids	12	AN711156-016-037-1	SMP	CLP_SOL	73.23	1.0000	73.2300	00000000	PER	PER	73.2300	0	0.0000	0.00	73.2300
Percent Solids	13	AN711156-017-039-1	SMP	CLP_SOL	82.58	1.0000	82.5800	00000000	PER	PER	82.5800	0	0.0000	0.00	82.5800
Percent Solids	14	AN711156-018-041-1	SMP	CLP_SOL	90.82	1.0000	90.8200	00000000	PER	PER	90.8200	0	0.0000	0.00	90.8200
Percent Solids	15	AN711156-019-043-1	SMP	CLP_SOL	80.8	1.0000	80.8000	00000000	PER	PER	80.8000	0	0.0000	0.00	80.8000
Percent Solids	16	AN711156-020-045-1	SMP	CLP_SOL	81.47	1.0000	81.4700	00000000	PER	PER	81.4700	0	0.0000	0.00	81.4700
Percent Solids	17	AN711156-021-047-1	SMP	CLP_SOL	87.76	1.0000	87.7600	00000000	PER	PER	87.7600	0	0.0000	0.00	87.7600
Percent Solids	18	AN711156-022-049-1	SMP	CLP_SOL	77.09	1.0000	77.0900	00000000	PER	PER	77.0900	0	0.0000	0.00	77.0900
Percent Solids	19	AN711156-023-051-1	SMP	CLP_SOL	76.87	1.0000	76.8700	00000000	PER	PER	76.8700	0	0.0000	0.00	76.8700

	Description (90)	Sample Id n (92)	Flag (111)	V at (113)	Rpd Limit	N	mdl (125)	S	Retention Time	LCL (131)	UCL (132)	Mois ture	Final Reporting	Final MDL (139)	Valid Comments (145)	Anal Multiplier
1	Percent Solids	AN711153-001-001-1		0	1	1	1.0000		1.000		22.21	1.000	1.000000			1.000
2	Percent Solids	AN711153-001-001-1		3	1	1	1.0000		1.000		19.6	1.000	1.00000			1.000
3	Percent Solids	AN711153-002-002-1		0	1	1	1.0000		1.000		20.18	1.000	1.00000			1.000
4	Percent Solids	AN711155-001-001-1		0	1	1	1.0000		1.000		19.02	1.000	1.00000			1.000
5	Percent Solids	AN711155-002-003-1		0	1	1	1.0000		1.000		26.81	1.000	1.00000			1.000
6	Percent Solids	AN711156-005-011-1		0	1	1	1.0000		1.000		21.37	1.000	1.00000			1.000
7	Percent Solids	AN711156-006-013-1		0	1	1	1.0000		1.000		28.8	1.000	1.00000			1.000
8	Percent Solids	AN711156-007-015-1		0	1	1	1.0000		1.000		23.34	1.000	1.00000			1.000
9	Percent Solids	AN711156-016-037-1		0	1	1	1.0000		1.000		26.77	1.000	1.00000			1.000
10	Percent Solids	AN711156-017-039-1		0	1	1	1.0000		1.000		17.42	1.000	1.00000			1.000
11	Percent Solids	AN711156-018-041-1		0	1	1	1.0000		1.000		9.18	1.000	1.00000			1.000
12	Percent Solids	AN711156-019-043-1		0	1	1	1.0000		1.000		19.2	1.000	1.00000			1.000
13	Percent Solids	AN711156-020-045-1		0	1	1	1.0000		1.000		18.53	1.000	1.00000			1.000
14	Percent Solids	AN711156-021-047-1		0	1	1	1.0000		1.000		12.24	1.000	1.00000			1.000
15	Percent Solids	AN711156-022-049-1		0	1	1	1.0000		1.000		22.91	1.000	1.00000			1.000
16	Percent Solids	AN711156-023-051-1		0	1	1	1.0000		1.000		23.13	1.000	1.00000			1.000

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